FACULTY REPORTS

Faculty of Humanities
Faculty of Health Sciences
Faculty of Science
Faculty of Commerce
Faculty of Law
Faculty of Engineering & the Built Environment
Centre for Higher Education Development
Members of the faculty continue to contribute to outstanding scholarship in the arts, social sciences, and creative and performing arts, and this research report provides rich evidence of the wide spectrum of research and creative activity produced in the faculty, in the form of journal articles, books and book chapters, conference papers, compositions, exhibitions, and performances.

Dean’s Report


Solo exhibitions by colleagues in the Michaelis School of Fine Art and the Centre for Film and Media Studies include Surveys (From the Cape of Good Hope) by Jane Alexander, R-A-T: an associative ordering by Fritha Langerman, Division of the World by Pippa Skotnes, This is a True Story by Penny Siopis, Community Punching Bags by Johann van der Schijff, Remnants & Ancestors: Anarchives of Krotoa and Anne Barnard by Carine Zaayman, and The Kings Map: Francois Le Vaillant in Southern Africa 1781–1784 by Ian Glenn.

The department in the faculty that produced the greatest number of peer-reviewed, accredited journal articles in 2012 is the newly formed School of African and Gender Studies, Anthropology, and Linguistics (AXL) within which are located two of the faculty’s four DST/NRF SARChI Chairs, and, more recently, two Mellon research chairs. Last year was the first in the existence of AXL and the very high level of publication and postgraduate supervision, as well as the concentration of research chairs in this new school, is evidence of a high-quality critical mass of very productive scholars. AXL is followed by the School of Languages and Literatures, Sociology, Psychology, Education, and the Department of English Language and Literature. The faculty now has 69 NRF-rated researchers (up by 10 since 2011), of whom 25 are B-rated and five are A-rated: professors David Chidester (Religious Studies), Rajend Mesthrie (Linguistics), and Mark Solms (Psychology), Distinguished Professor Philippe-Joseph Salazar (Rhetoric Studies) and Emeritus Professor John de Gruchy (Religious Studies).
The development of new postgraduate programmes is nourished by research activity, which simultaneously contributes substantially towards the augmentation and support of research. A substantial grant from the AW Mellon Foundation has enabled the faculty to mount a new honours programme in Curatorship, driven by the Centre for Curating the Archive and the Michaelis School of Fine Art. The Department of Political Studies is contributing to UCT’s new Graduate School for Development Policy and Practice (both the MPhil and the Executive course programmes) and other new postgraduate programmes on offer include master’s degrees in Documentary Arts, in African Cinema, and in Screenwriting, and a new Honours programme in Romance Languages and Literature. The faculty committed substantial resources during 2012 to renovating space for postgraduate students, in order to promote a vibrant postgraduate research culture on campus.

During 2012, we confirmed the appointment of Professor Lungisile Ntsebeza as the AC Jordan Chair in African Studies. The faculty also raised a substantial grant from the AW Mellon Foundation to appoint two research chairs in the Humanities, which will be filled in early 2013.

We are proud of colleagues and students who won prizes in 2012. Professor Kelwyn Sole won the 2012 Thomas Pringle Award for Poetry, awarded by the English Academy of Southern Africa for the best poem, Cape Town (TM), published in a South African journal in the last three years. Professor Sole also launched a new 76-page book of poetry, Absent Tongues. The 2012 UCT Creative Works Award was won jointly by professor Gavin Younge and professor Michael Godby.

A new research centre was launched at the end of 2012, the Centre for African Language Diversity (linked to the African Language Archive), under the leadership of Dr Matthias Brenzinger. The centre has been set up to document endangered languages, especially in Southern Africa, and to become a node for scholarship and research in African languages.

The large research clusters or ‘hubs’ in the faculty – the Centre for Social Science Research (with its constituent units, the Democracy in Africa Unit, the AIDS and Society Research Unit, and the Sustainable Societies Research Unit), the Institute for Humanities in Africa, and the Gordon Institute for Performing and Creative Arts – as well as the four DST/NRF SARChI Chairs, continue, in their different ways, to promote scholarship through publications, performances and exhibitions, postgraduate supervision, and the organising of seminars and colloquia.

Departments and units within the faculty have been greatly enriched by the contributions of a large number of international visitors during 2012. These visitors contribute to seminars and colloquia, participate in research collaborations, and form networks with colleagues working in the global north and south.

The faculty continues to benefit handsomely from the Emerging Researcher Programme, the Vice-Chancellor’s Strategic Fund, and the University Research Committee block grant and travel funding and we are grateful for the ongoing support from UCT’s Office of Research and Innovation.
DOCTORAL GRADUATIONS

S. ALKEMA (MUSIC)
Conductors of the Cape Town Municipal Orchestra, 1914–1965: a historical perspective
Supervised by Professor J. May

A.M. BANGENI (EDUCATION)
Negotiating writing: a case study of the transition of English second-language Social Science graduates to postgraduate professional disciplines
Supervised by Associate Professor R. Kapp

K. BARKER (FILM AND MEDIA STUDIES)
Sex, soap and social change: an examination of the elements underlying the successful application of entertainment-education
Supervised by Dr T. Bosch

A.-J. BETHKE (MUSIC)
Contemporary musical expression in Anglican churches of the Diocese of Cape Town: Developments since the liturgical, theological and social revolutions of the twentieth century
Supervised by Dr M. Bezuidenhout

J.M. BOREL-SALADIN (SOCILOGY)
Testing the social polarization hypothesis in Johannesburg, South Africa
Supervised by Professor O. Crankshaw

E.K. BOTHA (EDUCATION)
Discourses of language acquisition and identity in the life histories of four white South African men fluent in IsiXhosa
Supervised by Dr C. McKinney

A.A. CROWE (EDUCATION)
Supervised by Associate Professor R. Laugksch and Professor T. Dunne

J.F. DE SOUSA JUNIOR (SOCILOGY)
Networks, [mis]trust, and Pentecostal conversion: Narratives of divergent pathways among small black entrepreneurs in Tshwane
Supervised by Professor J.G.B. Maree

S.F. DEWING (PSYCHOLOGY)
Evaluating the implementation of options for health in the Western Cape: an intervention aimed at increasing ARV adherence and reducing sexual risk among people on ARVs in Cape Town, South Africa
Supervised by Professor J. Louw and Dr C. Mathews (Public Health and Family: Medical Research Council)

M.J. EVANS (FILM AND MEDIA)
Transmitting the transition: media events and post-apartheid South African national identity
Supervised by Associate Professor I.E. Glenn

M.J. FLEISHMAN (DRAMA)
Remembering in the Postcolony: refiguring the past with theatre
Supervised by Professor N. Worden

Faculty of Humanities
T.-L. GRANT (EDUCATION)
Scenario pedagogy: a negotiated, multimodal approach to developing professional communication practices in Higher Education
Supervised by Dr A. Archer

P. GRASSOW (RELIGIOUS STUDIES)
“Settlers, Missionaries and Converts”: a theological case study of the missionary activity of William Shaw in the Eastern Cape
Supervised by Emeritus Professor J. Cochrane

E.T. GXUBANE (SOCIAL DEVELOPMENT)
Exploration of residential diversion within a restorative justice framework in the management of young sex offenders in South Africa
Supervised by Associate Professor D. Cooper and Dr R. Graser (retired)

A. HUNMA (EDUCATION)
The exploration of a performative space to nurture EAL international students’ writer identities at a South African university
Supervised by Dr L. Thesen

M.V. MACABELA (LANGUAGES AND LITERATURES)
Country and city: a study of autobiographical tropes in Ncumisa Vapi’s novel Litshona Liphume
Supervised by Adjunct Professor T. Dowling

R. MACDONALD (ENGLISH LANGUAGE AND LITERATURE)
Reading restitution in District Six: law, discourse and ‘governmentality’
Supervised by Professor J. Higgins

L.M.D. MAGALHãES (MUSIC)
An annotated catalogue of works for piano duet: a supplement to Cameron McGraw’s Piano Duet Repertoire
Supervised by Professor H. Hofmeyr

A. MARNEWECK (DRAMA)
Plot 99: towards a feminine semiotic: spiritual and sexual emergence(s) in women’s puppetry and visual performance
Supervised by Associate Professor J. Pather and Associate Professor J. Bennett

W.F.T. MINNAAR (LANGUAGES AND LITERATURES)
’n Herwaardering van Olga Kirsch se oeuvre: identiteit, moederskap en ballingskap aan die hand van die psigoanalitiese teorieë van onder andere Sigmund Freud, Jacques Lacan en Julia Kristeva
Supervised by Professor J. Hambidge

N.N. MKHIZE (SOCILOGY)
Private game farms and the tenure security of farm workers and dwellers in Cradock – implications for tenure reform in South Africa
Supervised by Professor L. Ntsebeza

M.L. MOLEFE (EDUCATION)
A study of life sciences projects in science talent quest competitions in the Western Cape, South Africa, with special reference to scientific skills and knowledge
Supervised by Associate Professor R. Laugksch

K.L. MORREIRA (ENGLISH LANGUAGE AND LITERATURE)
Social change, class formation and English: a study of young black South Africans with “Model C” school backgrounds
Supervised by Professor R. Mesthrie
G. NCUBE (HISTORICAL STUDIES)
The making of rural health care in colonial Zimbabwe: a history of the Ndanga Medical Unit, Fort Victoria, 1930–1960s
Supervised by Professor H. Phillips

S. NGALE (RELIGIOUS STUDIES)
From Tsonga to Mozambicanidade: civil religious dynamics in Mozambican nationalism
Supervised by Professor D. Chidester

A.M. NKWAKE (SOCIAL DEVELOPMENT)
An examination of childcare practices and perceptions amongst employed Ugandan males and their working spouses in the Kampala and Mpigi districts
Supervised by Dr C. O’Brien and Mrs S. Sturgeon

D.T. NOGUEIRA-GODSEY (RELIGIOUS STUDIES)
Spirit and economy: Pentecostalism and the Afterlives of Max Weber
Supervised by Professor D. Chidester

S. O’CONNELL (AFRICAN STUDIES)
Tonal landscapes: re-membering the interiority of lives of apartheid through the family album of the oppressed
Supervised by Associate Professor N. Shepherd and Professor A. Bogues (African Studies, Brown University)

A.E. OKECH (AFRICAN GENDER INSTITUTE)
Building nations: discourses on widow inheritance amongst the Luo in Kenya
Supervised by Associate Professor J. Bennett

A.A. PLATTS (RELIGIOUS STUDIES)
Jacques Demida, the Sacred Other and Seventh-day Adventism: stumbling on the creative play of différance in Genesis
Supervised by Emeritus Professor J. Cochrane

S. RAVENGAI (DRAMA)
Subalternity and the negotiation of a theatre identity: performing the Postcolony in alternative Zimbabwean theatre
Supervised by Associate Professor G. Morris

P. SILBERT (EDUCATION)
The imagined learner in neoliberal times: constructions of the South African learning subject in education policy discourse and school practice
Supervised by Dr H. Jacklin

N. XULU (SOCIOLOGY)
Supervised by Professor A. Sitas
School of African and Gender Studies, Anthropology & Linguistics

Research Report 2012
DIRECTOR: PROFESSOR JANE BENNETT

African Studies Section
(Including the Centre for African Studies)

DIRECTOR OF CENTRE: PROFESSOR LUNGISILE NTSEBEZA, AC JORDAN CHAIR IN AFRICAN STUDIES
HEAD OF SECTION: ASSOCIATE PROFESSOR NICK SHEPHERD

Profile

The goals of the African Studies Unit and the Centre for African Studies are to encourage and co-ordinate teaching and research in the various fields concerned with people in Africa, as well as developing African Studies graduate courses and programmes. We also provide service courses for non-Humanities students, such as Engineers and Architects, at both undergraduate and postgraduate levels. At the core of our teaching and research is our intellectual project of examining the ways in which knowledge of Africa has been constructed in a range of discourses that cut across a number of disciplines. Within this forum, our courses cover themes such as the representation of Africa across a number of media in both popular culture and in academic disciplines. In this regard, we provide a critical understanding of how knowledge in and about Africa has been filtered through the colonial library. In addition, the Centre’s activities include producing our journal, Social Dynamics, holding regular seminars, workshops and forums for debate and providing a venue for performances, art exhibitions and film.

Statistics

Permanent and long-term contract staff

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Students

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Research Fields and Staff

PERMANENT AND LONG-TERM CONTRACT STAFF
Associate Professor Harry Garuba
Associate Professor Nick Shepherd
Professor Lungisile Ntsebeza
Professor Crain Soudien
Dr Herman Chitonge
Mr Nkululeko Mabandla

EMERITUS PROFESSORS
Professor Brenda Cooper (MA Birmingham) (PhD Sussex)

HONORARY PROFESSOR
Professor Anthony Bogues (Brown University, USA)

HONORARY RESEARCH ASSOCIATES
Louise Green (University of Stellenbosch)
Kylie Thomas (Rhodes University)

VISITING RESEARCH ASSOCIATES
Cheryl-Ann Michael (University of Western Cape)
Steven Robins (University of Stellenbosch)
Fiona Ngarachu (University of Southampton, UK)
Ghirma Negash (Ohio University, USA)
Isaac Ndlovu (University of Venda)

POSTDOCTORAL FELLOWS
Jeremiah Arowosegbe

Contact Details

Postal Address: Harry Oppenheimer Institute Building, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 2308
Fax: +27 21 650 3579
E-mail: cas-africas@uct.ac.za
Web: http://www.africanstudies.uct.ac.za
Anthropology Section

HEAD OF SECTION: PROFESSOR FRANCIS NYAMNJOH

Section Profile

The Department’s research has a wide theoretical range with a particular, but not exclusive, focus on southern Africa. Study areas include child labour, citizenship, domestic dynamics, ethnicity, gender and sexuality, marginality, memory, migration, narrative, urban processes, violence, Truth and Reconciliation. Other topics include comparative pedagogies, identity construction, medical anthropology, anthropology of knowledge, anthropology of the environment.

Departmental Statistics

Permanent and long-term contract staff

| Professors          | 2 |
| Associate Professors | 2 |
| Senior Lecturers    | 2 |
| Lecturers           | 2 |
| Technical and Clerical Staff | 1 |
| Total               | 9 |

Honorary staff

| Honorary Professors | 4 |
| Honorary Research Associates | 20 |
| Total               | 24 |

Students

| Post-Doctoral | 1 |
| Doctoral     | 24 |
| Master’s     | 27 |
| Honours      | 15 |
| Undergraduate| 843 |
| Total        | 910 |

Research Fields and Staff

DR DIVINE FUH

Joined the University of Cape Town in March 2012 from the University of Basel in Switzerland where he was senior researcher at the Chair for Research and Methodology in the Institute for Sociology. His research mainly focused on questions relating to youth, agency and transitions in West and Southern African cities with particular thematic focus on consumption, popular culture, sports, masculinities, elites, space and transnational citizenship. He is currently researching on how young people contribute towards transforming urban communities in Johannesburg and Cape Town, and how they make youth an end rather than stagnated transitional stage?

DR LESLEY GREEN

Anthropology of knowledge; anthropology of the environment; lowland South America; cultural astronomy; public archaeology; ethnographic research methodologies.

PROFESSOR CAROLYN HAMILTON

Carolyn Hamilton is the National Research Foundation (NRF) Professor in Archive and Public Culture at the University of Cape Town and a member of the Public Life of Ideas Research Network. Formerly director of the Constitution of Public Intellectual Life Research Project and the Graduate School for the Humanities at the University of the Witwatersrand, she has published widely on history and theory of archive; ethnography of memory work; the production of history; the history of pre-industrial southern Africa; the public life of ideas; public culture.

DR SUSAN LEVINE

Child labour; children’s health; visual anthropology; political economy; medical anthropology; gender and sexuality; HIV/AIDS; community development.

DR HELEN MACDONALD

Violence, narrative, scepticism and the everyday, pluralistic health, and magico-religious knowledge, witchcraft in India, transformation in Higher Education

PROFESSOR FRANCIS NYAMNJOH

Joined the University of Cape Town in August 2009 from the Council for the Development of Social Science Research in Africa (CODESRIA), where he served as Head of Publications from July 2003 to July 2009. Dr Nyamnjoh is a 2010 B2 NRF rated researcher, and a fellow of the Cameroon Academy of Science since August 2011. He is currently researching “ICTs, Mobility and Marginality”, and has published widely on globalisation, citizenship, media and the politics of identity in Africa. He has also published ethnographic novels.

ASSOCIATE PROFESSOR FIONA ROSS

Ethnographies of/and the Marginal. Domestic worlds; violence, loss and the recuperation of social worlds; gender, testimony and voice; truth and reconciliation.

ASSOCIATE PROFESSOR ANDREW SPIEGEL

Housing and migration patterns and family relationships; urban water and sanitation management - South Africa; comparative pedagogies; racism; history of South African anthropology.
Contact Details
Postal address: School of African & Gender Studies, Anthropology & Linguistics. Anthropology Section, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 3678
Fax: +27 21 650 2307
E-mail: san-socanth@uct.ac.za
Web: http://www.socanth.uct.ac.za/

Gender Studies Section
(Including the African Gender Institute)

DIRECTOR OF INSTITUTE: ASSOCIATE PROFESSOR JANE BENNETT
HEAD OF SECTION: DR HELEN SCANLON

Profile
Gender Studies offers an undergraduate major in Gender Studies, a postgraduate Honours programme in Gender and Transformation, and Master’s and PhD level programmes in Gender Studies. Faculty research interests cover questions of African feminist theory, militarism and transitional justice law and policy, women’s peace-building activism, the psychology of violence, sexual and reproductive rights, histories of movement building, and queer politics.

The Gender Studies undergraduate programme offers a broad-based introduction to fundamental theoretical research in the field, with a special interest in African contexts. The Honours programme is geared towards providing participants with excellent grounding in the kinds of research training needed to work in fields which draw heavily on gender analysis and theory (such as development, conflict studies, sociology and social anthropology).

The section regularly hosts academics and visitors; last year, Gender Studies hosted (with the AGI) visits from Professor Sylvia Tamale, from Makerere University, and Yaba Badoe, an international film-maker.

The AGI’s mission is to contribute to the attainment of gender justice in Africa by participating, through research, networking, and capacity-building in the transformation of inequitable institutions and social practices. The AGI’s work is directed through four themes: sexual and reproductive health and rights; feminist processes in e-technologies; transitional justice, peace activism and gender; and gender, entrepreneurship and livelihoods. Each theme’s work is driven by four interlocking principles: the importance of driving strong research, the integration of capacity-building work in all our projects, the value of working in partnerships within and beyond the university, and the need to support robust public intellectual debate. The AGI also published Feminist Africa, a DHET-accredited academic journal.

Departmental Statistics
Permanent and long-term contract staff

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Students

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Research Fields and Staff

DR HELEN SCANLON
Head of Section: Gender and history, transitional justice and peace building, women’s human rights

ASSOCIATE PROFESSOR JANE BENNETT
Gender-based violence and conflict; African feminist theory; representation; sexuality and queer studies

MS YALIWE CLARKE
Gender conflict and peace-building; gender analysis and development; African feminisms.

DR ADELENE AFRICA
Women perpetrators of violence, gendered representations of violence, feminist methodologies.

MS MARION STEVENS
Honorary Research Associate, women’s health, sexual and reproductive health and rights, most at risk and marginalized populations and health systems.

DR TIM MURITHI
Honorary Research Associate, Gender, peace and security in Africa; African Union Solemn Declaration on Gender Equality; Gender-based violence, transitional justice and the International Criminal Court; Feminist critical theory.
Contact Details
Postal address: Gender Studies Section, School of African/Gender Studies, Anthropology and Linguistics, University of Cape Town, Private Bag X3, Rondebosch, 7701
Tel: +27 21 650 2970
Fax: +27 21 650 4840
E-mail: genderstudies@uct.ac.za
Web: http://web.uct.ac.za/org/agi/
http://www.feminstafrica.org
http://www.gwsafrica.org
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Research Fields and Staff
Contact Details
Postal address: Linguistics section, University of Cape Town, Private Bag X3, Rondebosch, 7701, South Africa
Tel: +27 21 650 2847
Fax: +27 21 650 3150
Web: www.linguistics.uct.ac.za
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Research output

Authored books


Edited books


Chapters in books


**Articles in Peer-reviewed Journals**


Doctoral dissertations


Master’s degrees (by research)

Thipe, T. 2012. “We are all products of history, but each of us can choose whether or not to become its victims” an exploration of the discourses employed in the formation of the Women’s National Coalition. MSOCSc in Gender Studies. 200pp. Supervised by Professor J. Bennett.


Department of Drama

Research Report 2012
(Including the Little Theatre)

HEAD OF DEPARTMENT: PROFESSOR MARK FLEISHMAN

Departmental Profile

Research in the Drama Department is conducted through the creation of new theatre works, directing, performance practice, and applied theatre. Research enquiries develop out of and feed into the teaching and directing processes for Acting for the Camera, Television drama, Theatre Making, Community Theatre, Acting, Dance Theatre, Applied theatre, Site Specific performance and the development of mixed media theatre and performance works. Research projects are sometimes created in conjunction with other arts practitioners, e.g. visual artists and/or musicians. Many projects are located in the profession through staff links with contemporary South African theatre, performance and dance companies. Partnerships or links with theatre, drama
and dance projects in local communities have further enriched the research possibilities within the department. Globally, the research work of the department has been performed across all five continents.

Postgraduate enrolments continue to increase, offering increased research opportunities, and the department seeks to strengthen both the studio work and documentation of research through seminar papers, debate, submissions for publication and the development of new theatre works and practices at postgraduate level. The Department, with the support of the NRF, is actively exploring ways of presenting and assessing practice as research in conjunction with departments in other South African universities, and in conversation with international universities.

Departmental Statistics

Permanent and long-term contract staff

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Research Fields and Staff

Permanent staff

**PROFESSOR MARK FLEISHMAN**
Head of Department; interactive dramaturgy; Staging History/Performing the Archive; migration

**ASSOCIATE PROFESSOR GEOFFREY HYLAND**
New processes for acting; directing (theatre, dance, opera)

**MS MWENYA KABWE**
Theatrical exploration of Afropolitan subject positions; site specific, devising

**ASSOCIATE PROFESSOR GAY MORRIS**
Township theatre and Applied Theatre for education, community and social Development

**ASSOCIATE PROFESSOR JAY PATHER**
Choreography: mixed and new media / site-specific / urban landscape and architecture; African, indigenous and intercultural knowledges

**MR SABATA SESIU**
Black/African theatre; Theatre for community Development; Theatre/Drama in education; Creative writing; Theatre making

**MS JACQUI SINGER**
Emerging female playwrights; image-based theatre

**ASSOCIATE PROFESSOR CHRISTOPHER WEARE**
Director of the Little Theatre; interrogating systems of dependence versus creative freedom

**MS SARA MATCHETT**
Psychophysical approaches to theatre making and performance

**MS SANDRA TEMMINGH**
Contemporary Afrikaans theatre

**MS LIZ VAN BREA**
Educational Drama and Theatre

Distinguished visitors

**PROFESSOR HAZEL BARNES, MELLON VISITING SCHOLAR**

**DR RUSTOM BHARUCHA**

**MS KIRTI JAIN, NATIONAL SCHOOL OF DRAMA, INDIA**

**DR ANURADHA KAPUR, NATIONAL SCHOOL OF DRAMA, INDIA**

Contact Details

Postal Address: Department of Drama, University of Cape Town, Rosedale Building, Hiddingh Campus, Orange Street, Cape Town, 8001
Telephone: +27 21 480 7121
Fax: +27 21 480 7106
E-mail: drama@uct.ac.za
Web: http://www.drama.uct.ac.za/
The Little Theatre

Research report 2012

DIRECTOR: ASSOCIATE PROFESSOR
CHRISTOPHER WEARE

PRODUCTION MANAGER: MR LUKE ELLENBOGEN

ADMINISTRATIVE ASSISTANT: NABEELAH KHAN

HEAD OF WARDROBE: MS LEIGH BISHOP

Unit Profile

The Little Theatre is an interfaculty unit run in association with the Drama Department. It provides theatre spaces and facilities for theatre research for departments within the University as well as opportunities for production for theatre, film, television companies and community groups. It has at its disposal the 250 seat proscenium arch Little Theatre, the flexible staging 70 seat Arena Theatre, the 60 seat Intimate Theatre, the Hiddingh Hall (flexible space), the 40 seat Playroom which is an experimental space and numerous outside spaces on the Hiddingh Campus as well as a scenery workshop, costume wardrobe, furniture and properties store. In addition to staging productions, the Little Theatre serves as an informal resource for past students and members of the public needing theatre information. Assistance is provided whenever possible.

Contact Details

Postal Address: Little Theatre, University of Cape Town, Little Theatre Workshop Building, Hiddingh Campus, Orange Street, Cape Town, 8001
Telephone: +27 21 480 7129
Fax: +27 21 480 7106
E-mail: littletheatre@uct.ac.za

Research Output

Articles in Peer-reviewed Journals


Creative works

Productions

Weare, C. 2012, “An Absolute Turkey”, Directing, Theatre, Student Actors, Little Theatre, (07/03/2012 - 17/03/2012).


Hyland, G. 2012, “Between” by Oskar Brown, Direction, Set and Costume Design, Theatre, Professional Actors, International Dublin Gay Theatre Festival, Ireland and English Theatre, Berlin, Germany (01/05/2012 - 31/05/2012)


Temmingh, S, 2012 “Leonce en Lena” Directing, Theatre, Student Actors, Cape Town, (27/03/2012 – 31/03/2012).


Singer, J, 2012 “Dreams of Clytemnestra”, Directing, Theatre, Student Actors, Little Theatre, Cape Town, (01/05/2012 – 14/05/2012).


Weare, C. 2012, “No Seriously! It’s Just Comedy” by Alan Committie, Directing, Theatre, Professional Actors, Theatre on The Bay, Cape Town, (04/12/2012 – 05/01/2013).


**Master’s degrees (by research)**


---

**School of Education**

**Research Report 2012**

(Including the Schools Development Unit (SDU) and the Centre for Applied Language and Literacy Studies and Services in Africa)

HEAD OF SCHOOL: ASSOCIATE PROFESSOR RÜDIGER LAUGKSCH

**School Profile**

The School of Education is a largely post-graduate interdisciplinary department with research activity across a number of important fields. These include studies in knowledge development and transfer (curriculum development, learning and acquisition, scientific literacy, mathematics, science and technology education, primary education, history education), policy and evaluation (research into school reform evaluation studies), student learning in higher education, and studies in race, culture, identity and language. A number of members of staff lead and participate in large collaborative research projects. Significant numbers of staff act as consultants to local and national government, to national commissions as well as to important education NGOs. A number of staff members are involved in materials development for a range of school learning areas.

**School Statistics**

**Permanent and long-term Contract Staff**

<table>
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<th>Position</th>
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**Honorary Research Associates: 2**

**Students**

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**Research Fields and Staff**

**Permanent Staff**

**MR NIGEL BAKKER**
Senior lecturer; English education; teaching; creativity; curriculum studies; humanities in the curriculum

**PROFESSOR PAM CHRISTIE**
Sociology of education; education policy; school organisation and change; ethics and social justice in education.

**DR ZAIN DAVIS**
Senior lecturer; language and mathematics; textual analysis; the functioning of pleasure in the structuring of pedagogic discourse; continuing professional development of mathematics teachers

**PROFESSOR PAULA ENSOR**
Mathematics education; sociology of education, especially with respect to curriculum and pedagogy; teacher education; higher education studies; qualitative research methodology
MR DAVID GILMOUR
Senior lecturer; economics of education; education and the labour market; educational planning; educational evaluation; social theory and education

DR JOANNE HARDMAN
Senior lecturer; learning; cognition; computer mediated learning; neuroscience

ASSOCIATE PROFESSOR ANNEMARIE HATTINGH
Physical science teacher education, with a special focus on curriculum design for authentic learning in problem-based learning environments; teacher effectiveness in constraining contexts; doctoral learning communities of practice

DR URSULA HOADLEY
Senior lecturer; curriculum, teachers work and the sociological study of pedagogy

DR HEATHER JACKLIN
Senior lecturer; sociology of education; education policy; education and space/locality; education and gender; learner progress and achievement

MS SHAHEEDA JAFFER
Lecturer; mathematics education, sociology of curriculum and pedagogy, teacher education

ASSOCIATE PROFESSOR RÜDIGER LAUGKSCHE
Scientific literacy or public understanding of science; professional development of science teachers; policy issues related to the provision of teaching and learning in the natural sciences; teaching and learning in biology

DR CAROLYN MCKINNEY
Senior lecturer; language and literacy in education, multilingualism in education, Identity/subjectivity and learning

PROFESSOR JOHAN MULLER
Curriculum studies; epistemology; sociology of knowledge; school reform; higher education policy

ASSOCIATE PROFESSOR KARIN MURRIS
Programme Leader PGCE Foundation Phase. Philosophy of Education, Philosophy with Children, Child and Childhood Studies, Children's Literature, School Ethics, Ethical Decision-making, Censorship, Corporal Punishment, Early literacy.

DR AZWIHANGWISI MUTHIVHI
Senior lecturer; developmental psychology; cognitive development; primary schooling, culture and classroom teaching and learning

ASSOCIATE PROFESSOR MASTIN PRINSLOO
Socio-cultural studies in literacy and language, including early childhood, schooling, adult education and electronic media

ASSOCIATE PROFESSOR ROB SIEBÖRGER
History education; curriculum studies; assessment; materials development; teacher education

PROFESSOR CRAIN SOUDIEN
Sociology of education; race, class and gender; policy shifts in education

DR CLARE VERBEEK
Senior lecturer; Literacy; teaching reading and writing in the early years; family literacy; foundation phase teaching; adult and community education; models for teacher development.

Research Associates

DR MIGNONNE BREIER
Higher education; academic work; professions and professional education; recognition of prior learning; research capacity development; missionary education

DR JEANNE GAMBLE
Vocational education, sociology of work

EMERITUS PROFESSOR PETER KALLAWAY
Education and development, education policy, history of education

DR ROBERT MORRELL
Masculinities, gender and education, fatherhood and parenting, violence

Distinguished Visitors

PAUL DOWLING
Institute of Education, London

LORRAINE LING
La Trobe University, Australia

ANNA STETSENKO
City University of New York, USA

MARK WICKENS
Brock University, Niagara, Ontario, Canada

MICHAEL YOUNG
Institute of Education, London
Contact Details
Postal Address: School of Education, University of Cape Town, Private Bag, Rondebosch, 7701
Telephone: SA (21) 650 2769
Fax: SA (21) 650 3489
E-mail: rudiger.laugksc@uct.ac.za

Research output

Authored books

Edited books


Chapters in books


Soudien, C.A. 2012. The challenge of thinking: the unarticulated transformational imperative? In R. Venter and F. Tolmie (eds), Transforming Theological...


Articles in Peer-reviewed Journals


Peer-reviewed published conference proceedings


Department of English Language and Literature
Research report 2012
(Including the Centre for Creative Writing)

HEAD OF DEPARTMENT: ASSOCIATE PROFESSOR CARROL CLARKSON

Departmental Profile
Members of the department are engaged in research over a wide area, ranging from the literature of the European Renaissance to that of contemporary South Africa. Genres covered include drama, poetry and prose, travel writing, and autobiography. Some of the finest writers in the country teach creative writing at undergraduate and graduate level.

Departmental Statistics

Permanent and long-term contract staff

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<th>Position</th>
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<td>Professors Emeriti</td>
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Students

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</table>

Research Fields and Staff

**DR PETER ANDERSON**
Poetry, romanticism to modernism, history and literature, 19th-century Cape literature, culture and society, especially the eastern frontier.

**DR MARY BOCK (HONORARY RESEARCH ASSOCIATE)**
Analysis of verbal and non-verbal aspects of discourse, critical discourse analysis, narrative analysis with particular reference to the language and structure of testimonies from the Truth and Reconciliation Commission.

**DR MBONGISENI BUTHELEZI**
Teaching and research interests: Oral poetry, oral storytelling, imperialism and colonialism, historical fiction, Africa and the diaspora.

**ASSOCIATE PROFESSOR CARROL CLARKSON (HEAD OF DEPARTMENT)**
Post-apartheid South African fiction, literary theory, especially deconstruction and language philosophy as it relates to jurisprudence and contemporary South African fine art.

**EMERITUS PROFESSOR J.M. COETZEE**
A novelist, essayist, linguist, translator

**DR VICTORIA COLLIS-BUTHELEZI**

**ASSOCIATE PROFESSOR IMRAAN COOVADIA (DIRECTOR: CENTRE FOR CREATIVE WRITING)**
Eighteenth- and nineteenth century English and American literature, and contemporary fiction.

**EMERITUS PROFESSOR DOROTHY DRIVER (HONORARY RESEARCH ASSOCIATE)**
Topics/authors in South African literature and colonial literature; the construction/deconstruction of the ‘feminine’ subject in language and literature.

**ASSOCIATE PROFESSOR RODNEY S. EDGECOMBE**
Shakespeare; Herbert; Marvell; Pope; the age of sensibility; Keats; Dickens; selected contemporary novelists and poets.

**EMERITUS PROFESSOR GAIL FINCHAM**
Modernism, particularly Joseph Conrad; postmodern fiction; narrative theory; postcolonial fiction and theory.

**EMERITUS PROFESSOR GEOFFREY HARESNAPÉ (HONORARY RESEARCH ASSOCIATE)**
Shakespearean poetry and drama; topics/authors in South African literature in English; topics/authors in early 20th-century English poetry; certain other topics/authors by consultation.

**DR DERRICK HIGGINBOTHAM**
Late Medieval and Early Modern English Theater, Literary History, Genres, and Cultural Change, Shakespeare and his contemporaries, Queer Theory/LGBT Studies Feminist Theory, Marxism, Materialism, and the New Economic Criticism

**PROFESSOR JOHN HIGGINS**
Literature and society in the 18th century; literature and society in the 20th century; theories of representation; psychoanalysis and cinema; Raymond Williams.
EMERITUS PROFESSOR GEOFFREY HUGHES (HONORARY RESEARCH ASSOCIATE)
The history of English; historical semantics; sociolinguistics; the language of Shakespeare and Chaucer.

MR BRIAN S. LEE (HONORARY RESEARCH ASSOCIATE)
Medieval English and Latin literature; British literature to the end of the Victorian period.

DR CHRISTOPHER OUMA
New diasporic African fiction and focused on childhood as a set of ideas for engaging with contemporary African identity formation. In looking at the recurrent figures, images and memories of childhood the study engages with a range of ideas around memories, archives, chronotopes, heritages, legacies, traditions and genealogies of identity and identity-making.

DR PETER KNOX-SHAW (HONORARY RESEARCH ASSOCIATE)
The literature of cross-cultural encounter with particular reference to the Romantic and post-Romantic periods; Jane Austen and the Enlightenment; 18th-century studies.

PROFESSOR DAVID SCHALKWYK
Shakespeare; literature and society between 1580 and 1660 including non-Shakespearean drama and poetry; literary theory: especially Marxism, Derrida, Saussure, Bakhtin/Voloshinov and feminism; philosophy and literature (especially Wittgenstein); pastoral and politics from 1580-1750; South African prison writing.

PROFESSOR KELWYN SOLE
South African literature (especially black literature); African oral literature; history, narrative and fictionalisation; science fiction; Milton; stylistic and ideological changes in 17th-century poetry.

DR ERIC STRAND
20th-century American literature, but also involves American Studies due to an interest in central symbols such as the “frontier,” understood as a free space where one can reinvent oneself outside the norms of conventional society.

DR HEDLEY TWIDLE
South African literatures in an African context, the colonial and postcolonial and Natural history writing.

DR SANDY YOUNG
Early-modern literature and thought; Trans-atlantic colonial literature and theory; the compilation as a form; Travel writing; South African women’s prison writing and feminist theory; Narrative and testimony.

Contact Details
Postal address: Department of English Language and Literature, University of Cape Town, Private Bag X3, Rondebosch, 7701, South Africa
Tel: +27 21 650 2836/4535/5472
Fax: +27 21 650 2080
Web: http://web.uct.ac.za/depts/english/
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Research output
Chapters in books


Articles in Peer-reviewed Journals


Creative writing

Novels


Centre for Film and Media Studies
Research Report 2012
( Including the Centre for Rhetoric Studies)
DIRECTOR: ASSOCIATE PROFESSOR LESLEY MARX

Centre Profile
The Centre for Film and Media Studies, based in the Faculty of Humanities, was established in March 2003.

The aims of the Centre are:
• to enable students at undergraduate and postgraduate levels to pursue research in film and television studies and media studies more broadly and
• to offer students training as creative practitioners in a choice of screen production, radio journalism, screenwriting, print journalism and digital media;
• to extend, intensify and enrich students’ intellectual, creative and practical training and equip them to make key contributions both to scholarship and to the film and media industries;
• to foster cutting-edge research in film, television and media that has especial relevance to Africa, and to South Africa’s place both continentally and globally;
• to strengthen ties with similar institutions, scholars and practitioners locally and abroad.

The Centre offers majors in i) Media & Writing and in ii) Film & Television Studies. In addition, we offer, on competitive entry during the second year, five options for a programme in Film and Media Production, with choices between screen production, radio, screenwriting, print journalism and interactive media.

We offer Honours, MA and PhD level degrees in film and television studies, media theory and practice and in rhetoric. We also offer interdisciplinary Honours and MA level degree programmes in political communication.

The staff of the Centre engage in a wide variety of exciting formal and creative research in, for example, African and South African cinema, radio in South Africa, audience analysis, political communication, rhetoric studies, youth culture, new approaches to film history, film and identity, adaptation theory and practice, screenwriting and video gaming.

Centre Statistics
Permanent Staff

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<td>Distinguished Professor</td>
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<td>Senior Lecturers</td>
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<td>Technical staff</td>
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<td>Administrative staff</td>
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Students

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<th>Level</th>
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</table>

Research Fields and Staff

DR TANJA BOSCH
Community radio, citizen media and communication for development; health communication, critical theory and cultural studies; qualitative research methods; radio studies and new media.

ASSOCIATE PROFESSOR MARTIN BOTHA
South African cinema, cinema and marginality, the representation of gays/lesbians in cinema, Queer Theory.

DR WALLACE CHUMA
Contemporary journalism and the public sphere, critical political economy of media, media policy and regulation, and media and political transition in Southern Africa.

DR MARTHA EVANS
Media events and the coming of television to South Africa, media and national identity, the TRC as a South African media event.

PROFESSOR IAN GLENN
Media in the new South Africa, liberal Afropessimism, political communication, media technologies and the literature of exploration, François Le Vaillant.

ASSOCIATE PROFESSOR ADAM HAUPT
Youth and media, theories of empire and film, intellectual property, racial identity politics, gender and representation, counter-culture.

ASSOCIATE PROFESSOR LESLEY MARX
African Cinema, British cinema, American Studies, the interface between American and South African history and culture, topics in film theory, genre and adaptation.
DR MUSAWEKOSI NDLOVU
Political communication and political marketing, youth and news media studies.

DR IAN RIJSDUIK
Film and history, Terrence Malick, environment and film.

DISTINGUISHED PROFESSOR PHILIPPE-JOSEPH SALAZAR
Multi-disciplinary research in public rhetoric, deliberative democracy and argumentative culture.

DR IBRAHIM SALEH
Political communication and political marketing, youth and news media studies

DR ALEXIA SMIT
Affect and visceral displays of the body on contemporary British and American television. Television aesthetics across a range of television genres and formats.

DR MARION WALTON
Literacy and access to technology in South Africa, and on developing semiotic models that can explain user experience of computer games and the Web.

Contact Details
Postal address: Centre for Film and Media Studies, Arts Building Room 204, University Avenue, Rondebosch, 7701
Tel: +27 21 650 3373
Fax: +27 21 650 4828
Web: http://www.cfms.uct.ac.za
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Centre for Rhetoric Studies
DIRECTOR: PHILIPPE-JOSEPH SALAZAR, DISTINGUISHED PROFESSOR OF RHETORIC
URC POSTDOCTORAL RESEARCH FELLOW: DR SERGIO ALLOGGIO

Centre Profile
The Centre was founded in 1995, as an academic response to the establishment of democracy in South Africa, and in the wake of a large international conference on “Persuasion and Power” held in July 1994. The Centre is unique on the Continent and concerns itself with multi-disciplinary research in public rhetoric, deliberative democracy and argumentative culture. Its pioneering role is recognized by the International Encyclopedia of Communication (Blackwell, 2008).

The Centre was awarded a 5-year endowment from the A W Mellon Foundation to support its graduate recruitment (Mellon-UCT Scholarships in Rhetoric Studies).

A detailed description of the Centre’s research activities and publications (including the African Yearbook of Rhetoric) can be found on its dedicated Website: www.rhetoricafrica.org.

Research Output
Authored books


Chapters in books


Peer-reviewed published conference proceedings


Creative works

Exhibitions

Michaelis School of Fine Art

Research Report 2012
(Including the Centre for Curating the Archive)

DIRECTOR AND HEAD OF SCHOOL: ASSOCIATE PROFESSOR STEPHEN INGGS

School Profile

The Michaelis School of Fine Art is primarily involved in research in the field of fine art and the history and discourses of art. The School has a strong research and exhibition profile with all staff participating in both local and international exhibitions. These include exhibitions curated along various themes, major international biennales, as well as individual one-person shows. There is an emphasis on the scholarly and creative interpretation and intellectualisation of artwork. This is reflected in catalogue publications, artists’ books and journal articles including Artworks in Progress, a journal published by the School. Staff are regularly invited to comment on issues relating to fine arts practice and write review essays in exhibition catalogues.

The School houses the Centre for Curating the Archive, a multidisciplinary research centre focussed on digital archives their exhibition and publication, directed by Pippa Skotnes. The CCA incorporates LLAREC (Lucy Lloyd Archive, Resource and Exhibition Centre) and the Katrine Harries Print Cabinet which publishes artists’ books and curates the University’s print collection. LLAREC also initiated an inter-departmental social responsibility project which runs from the UCT field station in Clanwilliam each year.

The major postgraduate degrees offered at the School include the PhD, Master of Fine Art, Master of Arts in Fine Art, Master of Arts in Art Historical Studies and Honours in Art Historical Studies. Students undertake advanced study in an aspect of art history, contemporary art discourse, studiowork disciplines or specialist interdisciplinary research.

School Statistics

Permanent and Long-term Contract Staff

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<th>Position</th>
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<td>Adjunct Associate Professor</td>
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<td>Workshop Assistant</td>
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Students

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<td>Total</td>
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Research Fields and Staff

PROFESSOR JANE ALEXANDER
Sculpture; photography; photomontage; video

EMERITUS PROFESSOR BRUCE ARNOTT
Fine art; sculpture

MS JEAN BRUNDRIT
Photography; lesbian sexuality; identity

MR KURT CAMPBELL
Graphic Design; Design History; 2d Animation; Postcolonial theory; Subaltern studies; philosophy of technology

MS ANNEMIE CONRADIE
Visual studies; commodification of culture; tourism, heritage and local economic development; relationships between theory and practice; body modification and performance.

EMERITUS PROFESSOR MICHAEL GODBY
19th century colonial artists; contemporary South African artists; documentary photography

ASSOCIATE PROFESSOR STEPHEN INGGS
Printmaking, photography, artists’ books and portfolios, particularly the influence of technology on practice; representation of objects and landscape

MS SVEA JOSEPHY
Photography; southern African Photography; contemporary art

MR ANDREW LAMPRECHT
Theory/Discourse in Art; curatorship
ASSOCIATE PROFESSOR FRITHA LANGERMAN
Printmaking; curatorship and display; art and science

MS VIRGINIA MACKENNY
Painting, video; visual theory; contemporary art

DR SIONA O’CONNELL
Visual studies; archives and memory

EMERITUS PROFESSOR MALCOM PAYNE
Video art; digital printmaking

PROFESSOR COLIN RICHARDS
Contemporary (South African) art practice; theory; history in global perspective

DR RAÉL JERO SALLEY
Painting; Modern and Contemporary Art History; Visual Theory and Discourse; African American Art; Theories of Black and African Diaspora

MR FABIAN SAPTOUW
Process Art; Materiality; Printmaking; History of bookmaking; Text/Image relationships

HONORARY PROFESSOR PENELPO SIOPIS
Critical practices in contemporary painting; shame and sexuality in visual art; psychoanalysis and art; archival film and narrative in video art

PROFESSOR PIPPA SKOTNES
Visual history and representation; curatorship and the archive; and bookarts

MS ANNA TIEDE
History of art collecting and museum policy; 19th century French art and society; the history of the print; history and theory of art training institutions.

MR JOHANN VAN DER SCHIJFF
Sculpture; interactive art installations; computer aided design and manufacturing

PROFESSOR GAVIN YOUNGE
Issues of ‘Re-wilding’ and ‘Hyperwilderness’ in international contexts; negotiating transnational trauma in sculpture and film

MS CARINE ZAAYMAN
New media; film theory; psychoanalysis and notions of subjectivity in art

Research output

Edited books


Chapters in books


Articles in Peer-reviewed Journals


Peer-reviewed published conference proceedings


Creative works

Exhibition catalogues, catalogue essays and works of a popular nature


Exhibitions

Solo Exhibitions

Alexander, J. 2012. Surveys (From the Cape of Good Hope). Curated by Pep Subiros. Savannah College of Art and Design Museum 02/12-05/12; Contemporary Art Museum Houston. 11/08/12-04/11/12.

Mackenny, V. 2012. Waymarker David Krut Projects, Montebello Design Centre, Cape Town. 03/11/12-01/12/12.


Curated Exhibitions


Salley, R. 2012. The Exuberance Project. Mandela Rhodes Gallery, Cape Town. 12/05/12 – 20/05/12.

Saptouw, F. 2012. Context. Michaelis Galleries. 16/02/12 – 07/03/12.

**Group exhibitions (Curated)**


Brundrit, J. 2012. *Home/Land: women, citizenship and photographs*. Process work from the Home/Land residency’. Design Centre, Loughborough University. 05/07/12 to 07/07/12.


Langerman, F. 2012. *Context*. Curated by Fabian Saptouw. Michaelis Gallery, Cape Town 16/02/12 to 07/03/12.


Richards, C. 2012. *If a Tree...*. Curated by Claire Butcher. Stevenson Gallery, Johannesburg. 05/07/12-03/08/12.


Siopis, P. 2012. *Trade Routes Over Time*. Curated by Joost Bosland. Stevenson Gallery, Cape Town. 04/04/12 to 12/05/12.


Siopis, P. 2012. *This is a True Story*. Frieze Art Fair and Prince Charles cinema, London. 11/10/12.


**Master’s degrees (by research)**


Viljoen, S. 2012. Avant lounge exotica: an investigation into the print magazine and interior living space as a meeting place of consumerist culture and personal subjectivities. MFA. 1-59. Supervised by S. Inggs.


Department of Historical Studies

Research Report 2012

HEAD OF DEPARTMENT: PROFESSOR NIGEL WORDEN

Department Profile

Research and research-linked scholarly work in the Department of Historical Studies concentrates mainly upon modern and contemporary history reflected through written, oral and visual sources, and is both lively and varied in focus. Fields of southern African investigation include environmental history, economic and social history, urban history, medical history, gendered history, the history of war and warfare, film and history, and the history of slavery. There is also a growing research focus on the Indian Ocean world and Africa's role within it and on comparative histories of the early Cape and Australian colonies. The rich research culture of Historical Studies at UCT is fertilised by close links with the Kaplan Centre for Jewish Studies and constantly expanding scholarly links nationally and into the African continent and beyond, and by an active complement of distinguished Honorary Research Associates.

The Centre for Popular Memory focuses on African oral history, research and advocacy while also developing audio-visual archival material for digital dissemination.

Its research respects the value of multi-lingual approaches in collecting, preserving and creating access to data, along with technologically relevant outputs through academic journals, exhibitions, film and other portable media platforms. The Centre’s African Oral history archive contains over 3000 recordings in 12 languages, many with full transcripts and translations.

Departmental Statistics

Permanent and long-term contract staff

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<td>Professors</td>
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Honorary staff

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Centre for Popular Memory

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Research Fields and Staff

ASSOCIATE PROFESSOR MOHAMED ADHIKARI
Genocide in settler societies; Coloured identity and politics in the 19th and 20th centuries.
PROFESSOR VIVIAN BICKFORD-SMITH
Urban history, Cape Town history, film and history; race and ethnic identity in South Africa.

DR SEAN FIELD
Popular memory, oral history, visual history and the archival location and dissemination of stories.

ASSOCIATE PROFESSOR SHAMIL JEPPIE
19th century Middle East and North Africa; District Six and Cape Flats history.

BODHISATTVA KAR
Cultural and intellectual histories (particularly histories of body and senses, objects and materiality, practices and customs, sentiments and emotions, and texts and concepts); transnational and comparative histories of colonialism

PROFESSOR ANNE MAGER
Twentieth century gendered history, gender and development; liquor in South Africa in the twentieth century.

ASSOCIATE PROFESSOR RICHARD MENDELSOHN
South African Jewish history; Film and history; Jewry in the South African War.

DR ASHLEY MILLAR
Early modern European views of and encounters with China; Enlightenment intellectual history

DR MAANDA MULAUDZI
Rural South African history focusing on land dispossession, agrarian change, identity and chieftainship with particular emphasis on Venda in the Northern Province.

PROFESSOR NIGEL PENN
The Cape north-western frontier in the 18th century; Khoisan history; Dutch colonial history; comparative Cape and Australian frontier history.

PROFESSOR HOWARD PHILLIPS
Medicine, health and disease in South Africa; history of higher education in South Africa.

PROFESSOR MILTON SHAIN
Comparative studies in South African and American Jewry; antisemitism; history of South African Jewry.

ASSOCIATE PROFESSOR LANCE VAN SITTERT
Environmental history.

PROFESSOR NIGEL WORDEN
Slavery and post-emancipation labour in the Western Cape; 18th century Cape Town; comparative social and cultural history of the Cape and Australia, c.1750-1850.

Contact Details
Postal address: Department of Historical Studies, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 2742
Fax: +27 21 689 7581
E-mail: Brenda.Beneke@uct.ac.za
Web: https://historicalstudiesuct.wordpress.com

Research output

Authored books

Edited books

Chapters in books
Field, S.P. 2012. "There your memory runs like a camera back": moving places and audiovisual oral histories from


Articles in Peer-reviewed Journals


Schools of Languages and Literatures
Research Report 2012

HEAD OF SCHOOL: ASSOCIATE PROFESSOR CLIVE CHANDLER

School Profile

The School of Languages and Literatures was formed in 2002 through the amalgamation of the Department of Southern African Languages and the Department of Modern and Classical Languages and Literatures. The School brings into one organisational unit the teaching of languages and literatures (excluding English Language and Literature) at the University of Cape Town.

We recognize the complexity of our position at the southern end of Africa, in a University which strives to be fully part of Africa and the wider world. The range of languages taught in the School and the research done by staff and students of the School reflect this.

The teaching and research area of the School is wide, covering language, literatures and cultural studies in Afrikaans, Arabic, Dutch, French, Business French, German, Classical Greek, Hebrew, Italian, Portuguese, Sotho, Spanish, and Xhosa, and Special Purposes teaching in Afrikaans and Xhosa. There is also a strong emphasis on the role that these languages and literatures and the cultures they embody, have played and continue to play in Africa. Research in the School also encompasses Literary Semantics, Literary Theory, Afrikaans Media Studies, Creative Writing in Afrikaans and Xhosa, Xhosa Lexicography, Historiography, Multimedia, Literature and the Internet, War Literature, Ancient Literature, Philosophy and Rhetoric, French literature from 17th century to the present, French Linguistics and Sociolinguistics, Teaching French as a Foreign Language, German Colonialism and Postcolonial Literature and Theory, Contemporary German Literature, Literary Theory and Women’s Studies, Italian and German post-war Cinema, Italian Literature of the 19th and 20th centuries, Asian Cinema, Italian Renaissance Literature, Modern and Ancient Hebrew Literature, Classical Arabic Literature and Islamic Studies, Modern Arabic Literature and Political discourse, and Hispanic Literature.

The School’s awareness of its location in Africa is reflected in many of its research projects. Among these are studies of language learning in the African context, Xhosa linguistics, African oral traditions and orature, Literature and Cinema in Francophone West Africa, the Translation of Southern African Literature into French, Sephardi Women Writers from the Maghreb, German Colonial Discourse in Africa and German Missionary Writings, Comparative Perspectives on German/Afrikaans Literature.

The School has a number of formal and informal links with universities elsewhere in Africa (e.g. National University of the Ivory Coast at Abidjan, University of St Denis in Réunion, University of Zimbabwe), and further afield (e.g. ENS Cachan – Grenoble 3 Stendhal, University of Bologna). The School is also a founder member of L’Ecole doctorale regionale (Afrique australe – Océan indien).

School Statistics

Permanent and long-term contract staff

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<th>Category</th>
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Students

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Honorary staff

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Research Fields and Staff

Permanent staff

ASSOCIATE PROFESSOR CLIVE CHANDLER
Director of School; ancient philosophy and rhetoric; Philodemus; Homer commentaries; madness in antiquity.

PROFESSOR JEAN-LOUIS CORNILLE
Section Head (French); 19th - 20th century French literature.

DR JAY CORWIN
Section Head (Spanish); Senior Lecturer; Latin American literature.

DR RUTH DE OLIVEIRA
Lecturer; didactics of French as a foreign and second language; French Linguistics.
MS SOMIKAZI DEYI
Lecturer; multilingualism in higher education with a particular focus on the teaching of mathematics and science in the home language.

DR TESSA DOWLING
Senior Lecturer; Second language teaching and learning; sociolinguistics.

ASSOCIATE PROFESSOR YASIN DUTTON
Section Head (Arabic); early Islamic law; early Koranic manuscripts; Islamic law in the modern world.

DR VANESSA EVERSON
Senior Lecturer; Women writers from the Maghreb (1990 onwards); translation; modern language methodology.

PROFESSOR JOAN HAMBIDGE
Section Head (Afrikaans); poetry; theory of literature and criticism; gender studies; creative writing.

MRS SONJA LOOTS
Lecturer; Afrikaans literature; Dutch literature; Afrikaans archive; commemorating the past; Afrikaans writers writing about apartheid; memory and history in Afrikaans prose; museum practices in recent Afrikaans novels; social anthropological approaches in Afrikaans prose.

DR PASQUALE MACALUSO
Lecturer; Modern Arabic literature; 20th century Syrian discourse; Arab nationalism.

MS ANNABELLE MARIE
Lecturer; didactics of foreign language and analysis of French literature, especially from the Caribbean and French-speaking Africa.

ASSOCIATE PROFESSOR ABNER NYAMENDE
African Literature; Oral Literature; Xhosa Clan Names.

MS RETHABILE POSSA
Lecturer; Sesotho Literature; Folklore, riddles and onomastics.

DR AZILA REISENBERGER
Section Head (Hebrew); Modern and Ancient Hebrew literature.

DR ROMAN ROTH
Section Head (Classics); Classical Archaeology and material culture of the Mediterranean world.

MS BRIGITTE SELZER
Section Head (German); Lecturer; German language and literature; woman/gender studies; satire; language skepticism 19th/20th century; turn-of-the-century literature; German Romanticism.

MR WILHELM SNYMAN
Lecturer; German and Italian 20th century literature and post-war cinema; Asian cinema; colonial literature and history of Asia and Africa; paedagogics of German & Italian.

DR MANTOA ROSE SMOUSE
Section Head (African Languages); Child language acquisition, Second language teaching.

MRS GAIL SOLOMONS
Senior Lecturer; paedagogics of Latin; language acquisition for second language speakers; the teaching of etymology.

ASSOCIATE PROFESSOR GIONA TUCCINI
Section Head (Italian); Medieval and Renaissance lyric poetry and prose; mysticism and religious writings; 20th century literature, cinema and drama.

PROFESSOR ETIENNE VAN HEERDEN
Historiography and fiction; Caribbean Dutch literature in the former Dutch colonies; theory of literature; creative writing; the Internet as educational medium.

DR IAN VAN ROOYEN
Lecturer; second language acquisition and teaching; special purposes language teaching; contemporary theory of metaphor.

PROFESSOR DAVID WARDLE
Roman history and historiography; Roman exemplary literature; Roman religion and ruler cult.

Distinguished visitors
Dr D Culpin, St Andrews, Scotland.
Professor Susana Chavez-Silverman, Pomona College, USA
Patrick Chamoiseau, Martinique
Professor Mei Zeng, Shandong Jiaotong University, China

Honorary Research Associates
Dr L. Gochin Raffaelli. Italian Literature.
Dr A Seba-Collett. French Literature
Associate Professor A. Wynchank. French Literature.

Research output

Authored books

Edited books


Chapters in books


Encyclopaedia entries


Articles in Peer-reviewed Journals


**Peer-reviewed published conference proceedings**


**Creative writing**

**Anthology of poems**

South African College of Music

Research Report 2012
DIRECTOR: DR MORNÉ BEZUIDENHOUT

College Profile
The South African College of Music pursues a wide range of musical activities. Besides musicology and composition, there is a strong instrumental and vocal tradition in the classical field, as well as a very active jazz department and a flourishing opera school. Ethnomusicology and practical African music studies are an important part of the department’s programme.

College Statistics

Permanent staff

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Honorary staff

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Research Fields and Staff

PROFESSOR HENDRIK HOFMEYR
Composition; orchestration; music theory and analysis

PROFESSOR MICHAEL ROSSI
Jazz: performance (woodwinds); composition; improvisation, history

PROFESSOR KAMAL KHAN
Opera

ASSOCIATE PROFESSOR FARIDA BACHAROVA
Violin performance; chamber music; orchestral studies; professional orchestral musician

ASSOCIATE PROFESSOR MIKE CAMPBELL
Composition and arrangement for jazz ensemble, stage band & symphony orchestra; big band jazz performance; electric bass

ASSOCIATE PROFESSOR VIRGINIA DAVIDS
Vocal performance (specialised in Verdi)

ASSOCIATE PROFESSOR FRANCOIS DU TOIT
Piano performance; chamber music; accompanying; recording

ASSOCIATE PROFESSOR SIDWIL HARTMAN
Vocal performance in oratorio opera, especially Puccini, Verdi and contemporary composers.

ASSOCIATE PROFESSOR ANRI HERBST
Music education; intercultural musicology; neuromusicology

ASSOCIATE PROFESSOR FRANKLIN LAREY
Piano performance; accompanying; chamber music

ASSOCIATE PROFESSOR BRAD LIEBL
Vocal performance (opera and Lieder), especially contemporary and rarely performed repertoire and composers.

ASSOCIATE PROFESSOR REBEKKA SANDMEIER
Opera and oratorio; music of the 15th, 19th and 20th century; historically informed performance

ASSOCIATE PROFESSOR ANDREW LILLEY
Jazz: theory; performance; ensemble; improvisation; contemporary music practice

ASSOCIATE PROFESSOR ALBIE VAN SCHALKWYK
Piano performance; chamber music; art song accompaniment and interpretation

DR MORNÉ BEZUIDENHOUT
Plainchant and liturgy

DR MARTIN WATT
Composition; orchestration; music theory and analysis

DR SYLVIA BRUINDERS
Ethnomusicological theory and methodology; African and African diasporic music; Musical practices and social history of the Western Cape
MR THEO HERBST
Theoretical research: Music Technology; Signal processing methods applied in musical analysis; Applied research: Musical Composition; Technology-based solutions for creative challenges

MR Darryl Andrews
Jazz Guitar Performance, Composition/Arrangement, Ensemble and Theory. Jazz: theory arrangement;

MR WILLIAM HAUBRICH
Brass studies

MR Michael Nixon
Ethnomusicology theory; music in popular culture; music of sub-Saharan Africa; music and society in South Asia; music and society in southern Africa

MR JASON REOLON
Jazz piano; performance; composition; recording

MS Becky Steltzner
Woodwinds, and particularly clarinets, in South African history and South African collections; copyright vs. public domain in sheet music and developing syllabi for disadvantaged communities; repertoire development in the woodwind and chamber music fields

MR Dizu Plaatjies
African music performance (specialised in the performance of indigenous music of the Eastern and Western Cape)

MR Patrick Tikolo
Vocal studies

MS Amanda Tiffin
Jazz Vocals, Performance, Composition, Arrangement, especially contemporary and jazz vocal arranging

MR James Grace
Classical guitar performance; chamber music

Research output

Authored books


Articles in Peer-reviewed Journals


Peer-reviewed published conference proceedings


Creative works

Arrangements


Tiffin, A. 2012. Afri-Dite. Commissioned by Lindie Lila. 5-part vocal ensemble; programmed backing; cello. 3.44.

Tiffin, A. 2012. Baby its Cold Outside (Loesser). Commissioned by: Faculty of Health Sciences Centenary. Vocal duet, jazz rhythm section, saxophone. 5 min.


Tiffin, A. 2012. Blessings. Commissioned by Lindie Lila. 6-part vocal ensemble, a cappella. 3.15.
Tiffin, A. 2012. Gayatri Mantra (Trad.). Commissioned by Lindie Lila. Part vocal ensemble; programmed backing; percussi. 4.48 min.

Tiffin, A. 2012. Gershwin medley (G & I Gershwin). Commissioned by: Faculty Of Health Sciences Centenary. Vocal solo, jazz rhythm section, saxophone. 3 min.

Tiffin, A. 2012. Goddess Fertility. Commissioned by Lindie Lila. 5 part vocal ensemble; acoustic guitar, cello. 3.14 min.

Tiffin, A. 2012. I Sing the Body Electric (Gore, M). Commissioned by: Faculty Of Health Sciences Centenary. 12-piece vocal ensemble, strings, 2 flutes, saxoph. 8 min.

Tiffin, A. 2012. In My Life. Commissioned by: Faculty of Health Sciences Centenary. 12-piece vocal ensemble, Violin, Rhythm Section. 5 min.

Tiffin, A. 2012. Lady Water. Commissioned by Lindie Lila. 5-part vocal ensemble; programmed backing, cello. 9.04 min.

Tiffin, A. 2012. Make You Feel My Love (Dylan). Commissioned: Faculty of Health Sciences Centenary. 12 piece- vocal ensemble, violin, rhythm section. 4 min.

Tiffin, A. 2012. May the Circle Be Open (Trad.). 7-part Vocal Ensemble, a cappella. 3.04 min.


Tiffin, A. 2012. Sisters of the Moon. 5-part vocal ensemble; programmed backing. 5.12min.

Tiffin, A. 2012. Starlights Keep. Commissioned by Lindie Lila. 5-part vocal ensemble; programmed backing, guitar. 5.49 min.

Tiffin, A. 2012. Tears On My Pillow (Bradford & Lewis). Commissioned by: Faculty of Health Sciences Centenary. 5-part vocal ensemble, rhythm section. 5 min.

Tiffin, A. 2012. The Heart of Life (Mayer, J.). 5-part Jazz Vocal Ensemble, a cappella. 3 min.

Tiffin, A. 2012. Thins Aint What They Used to Be (Ellington). 5-Part Jazz Vocal Ensemble, Jazz rhythm section. 4 min.


**Compositions**


Campbell, M.I. 2012. Soul March. Commissioned by: Mathambo Music Inc. Jazz Big Band. 3.5 min.


Bacharova, F.A. 2012. Cape Town Philharmonic Orchestra. Cape Town Castle 7,9,10 March. Leader/Concertmaster. 180 min. each


Bacharova, F.A. 2012. Standard Bank Jazz Festival. Grahamstown National Art Festival. Rhodes University, Grahamstown, 1, 2, 3 July. Soloist. 120 min. per performance

Bacharova, F.A., Stoltz, L., Chernev, K. and Gabriel, P. 2012. The Bacharova Quartet and Friends Concert, Symphony no. 104(Haydn-Solomon), The American Quartet in F (Dvorak), Adagio (Barber), Affirmation Dance (Noel Stokton), SONATA for VIOLIN and PIANO (Martin Watt)-World Premiere. Baxter Concert Hall, 18 September. Soloist. 90 min

Bacharova, F.A. 2012. The Odeon String Quartet Concert, String Quartet no.2(Borodin), Symphony no.104London arrangement for string quartet and flute(Haydn-Solomon),Affirmation Dance(Noel Stokton)-Word Premiere. Odeon Concert Hall, Bloemfontein, 16 August. Leader/Soloist. 120 min.


Campbell, M.I. 2012. Act 2, Mandela Trilogy. Cape Town Opera. Wales Millenium Centre, Cardiff Wales Millenium Centre, Cardiff 20, 21 June. Composer, arranger. 35 min


Du Toit, G.F. 2012. Concert Tour of Taiwan. Programme included works by Mendelssohn, Chopin, Scarlatti and Brahms. Cultural Centre Taichung. Keelung Concert Hall Keelung. Taipei University Taipei Cultural Centre Taichung, 13, 16 & 19 June. Soloist. 60 min


Du Toit, G.F., Larey, F. and Van Schalkwyk, A.A. 2012. 3 Piano Concert. Works included by composers such as Chabrier, Ravel and Bach. Baxter Concert Hall, Cape Town, 6 March. Pianist. 60 min.


Du Toit, G.F. 2012. Amigos Para Siempre, a three concert series with a uniquely Latin Flavour. Chisholm Recital Room (C7), SACM, UCT, 24 October. organizer and guitar duo partner. 70 min.

Du Toit, G.F. 2012. Amigos Para Siempre, a three concert series with a uniquely Latin flavour with flautist Bridget Rennie Salonen, soprano Vasti Knoesen and Mezzo
Soprano Marie-Claire de Villiers. Chisholm Recital Room (C7), SACM, UCT. 31 October. organizer and guitar duo partner. 80 min.

Grace, J. 2012. Amigos Para Siempre, a three concert series with a uniquely Latin Flavour with Saudiq Khan. Chisholm Recital Room (C7), SACM, UCT, 17 October. organizer and guitar duo partner. 70 min.


Haubrich, W., Thompson, D. and Blake, M. 2012. Easter Service Brass. St. Michaels, Observatory, 8 April 2 December. trombone. 60 min.

Haubrich, W., Campbell, M.I., Lilley, A.C.P. and Andrews, D.I. 2012. Mike Campbell Big Band. Trinity, Kirstenbosch,
6 February, 18, 21 April, 7 June, 22 December. trombonist. 240 minutes


Haubrich, W. 2012. SACM Recruitment Workshops. Alexander Road High, Port Elizabeth, 19, 20 April. trumpet, flugelhorn, trombone. 2 days

Haubrich, W. 2012. SACM Staff Concert. Baxter Theatre, 14 February. Euphonium/sax duo. 5 min


Haubrich, W., Rossi, M.J. and Blake, M. 2012. Songfest German Band. German Club, Durban & Joburg Beerfest, 1, 29 January, 18 February, 15 April, 11-14, 27 Oc. trombonist. 240 min.


Hofmeyr, H.P., Stellenbosch University Choir, and van der Merwe, A. 2012. A sexta autem hora for 8-part choir. (a) World Choir Games, Cincinnati, USA, (b) Endler Hall, Stellenbosch; (a) 4-14 July; (b) 19 October. Composer. 4 min.


Hofmeyr, H.P., Kerrod, J. and Stoltz, L. 2012. Il poeta e lusignolo Version for flute and harp; Elegia for flute and harp. 3 performances for the Darling Voorkamerfest; several other performances, 31 August-2 September. Composer. 8 + 5 min.

Hofmeyr, H.P. and Pauw, M. 2012. Incantesimo for flute. (a) Casa Labia Morning Concert Series, Cape Town; (b) Mosselbay Arts Society, St. Peters Church, (a) 14 June; (b) 28 June. Composer. 4 min.


Hofmeyr, H.P., Akustika Chamber Singers, and Burger, C. 2012. Saulus in Damascum for 8-part choir. Spittal an der Drau Competition, Austria & various other performances, June 2012. Composer. 5 min.

Hofmeyr, H.P., Du Toit, G.F. and Stoltz, L. 2012. Sonata for Flute and Piano, Maball for flute and piano. School of Music, North West University; (b) Rhodes University; (a) 31 July; (b) 25 September; (c) 30 September. Composer. 14 + 7 + 4 + 4 min.

Hofmeyr, H.P. and Krawitz, J. 2012. Sonata for Piano. a) Infecting the City, Cape Town Station Concourse; (b) ? (c) Music in the City, Hiddingh Hall, Cape Town; (a) 8 March (1st performance), 9 March; (b) 17 Oct. Composer. 17 min.


Larey, F. 2012. Adamant Music School (USA), Faculty Recital. Waterside Hall, Adamant, Vermont, USA, 18 July. Soloist. 15 min.


Larey, F. 2012. Solo Recital. Baxter Concert Hall, 11 September. Soloist. 75 min

Larey, F. 2012. Solo Recital. Beethoven Room, Rhodes University, Grahamstown, 18 September. Soloist. 75 min


Liebl, L.B. 2012. Vocal Recital. Barry Walter Auditorium (St Norbert College-De Pere, Wisconsin, USA, 26 September. Baritone Soloist. 30 min


Rossi, M.J. 2012. Arcevia Jazz Festival. Istituto Comprensivo Anselmi, Arcevia, Italy, 28 July-3 August. soloist, ensemble player, lecturer. 5min

Rossi, M.J. 2012. Arcevia Jazz Festival. Istituto Comprensivo Anselmi, Arcevia, Italy, 28 July-3 August. soloist, ensemble player. 20min.

Rossi, M.J. 2012. Arrivo in Abruzzo, Buon Giorno Le Marche, Yearning. Fermo, Offida, Jesi, Arcevia, Italy, 4-8 August. composer, arranger. 15 min. x 4


Rossi, M.J. 2012. Arrivo in Abruzzo, Simba Samba, Should I? Forty Club, Buon Giorno Le Marche, Yearning, Night Fright!. Mahogany Room, Cape Town, 6-7 April. composer, arranger. 45min.


Rossi, M.J., Rustin, W., Momple, J. and Blass, D. 2012. Cape Dutch Connection. La Petite Ferme, Franschoek, 30 November, 21 December. soloist, ensemble player. 180min.

Rossi, M.J., Campbell, M.I. and Shout, D. 2012. Cape Town Alumni Big Band, Cape Town Big Band Jazz Festival. Baxter Concert Hall, UCT, Rondebosch, 5 June. soloist & ensemble player. 45min.


Rossi, M.J. and Di Clemete, G. 2012. Giorni Di Clemente & Mike Rossi. Teatro Torre di Passeri, Italy, Italy 24 November. soloist. 30min.


Rossi, M.J. and Campbell, M.I. 2012. UNISA International Jazz School. UNISA, Pretoria, 30 September & 6 October. soloist, conductor, ensemble player, lecturer. 6 days


Tiffin, A. 2012. a.s.k Trio Japan Tour 2012. Matsunaga, S (Japan); Kaptein, S (Holland) Bottazzo, F (Italy). Jiyo-Gakuen Concert Hall, Tokyo; Miyako Island, Alivila, Okinawa, 5 & 15 July. Vocalist, Pianist, Composer, Arranger. 60 90 min


Van Schalkwyk, A.A. 2012. Art songs for The Songmakers Guild: Ravel exotique. Histoires naturelles, Chansons madcasses, Cinq chansons populaires grecques, 2 Hebrac songs, Shhrazade (Ravel). Zanne Stapelberg (soprano), Minette du Toit-Pearce (mezzo), Bridget Rennie-Salonen (flute), Marla L Nassau Centre, Newlands, Cape Town, 3 June. Pianist (vocal accompanist) and presenter. 70 min.


Van Schalkwyk, A.A. 2012. Chamber music at St Andrews: Kegelstatt Trio for clarinet, viola and piano (Mozart), Overture on Hebrew themes (Prokofieff). Matthew Reid (clarinet), Karin Gaertner (viola), Suzanne Martens and Quentin Crida (violins), Peter. St Martins Church, Cape Town, 21 October. Pianist (chamber music). 25 min.


Van Schalkwyk, A.A., Larey, F. and Du Toit, G.F. 2012. Piano Extravaganza, music for 2 and 3 pianos: Variations on a theme by Beethoven (Saint-Sans), Scaramouche (Milhaud), Rapsodie espagnole (Ravel arranged Albie van Schalkwyk for 3 pianos). Baxter Concert Hall, Rondebosch, 6 March. Pianist (and arranger). 75 min.


Van Schalkwyk, A.A. 2012. The Songmakers Guild: Vnf Gedichte von Mathilde Wesendonck (Wagner), La canzone dei ricordi (Martucci), 3 songs (Sibelius). Elizabeth Frandsen (mezzo soprano), Erica Eloff (soprano). Nassau Centre, Newlands, 16 September. Pianist (vocal accompanist) and presented. 70 min.


Recordings


School of Dance

Research report 2012

DIRECTOR: G. M. SAMUEL

School Profile

Academic enquiry (analysis, documentation and publication) and creative scholarship (choreography, direction and performance) inform and constitute a significant and balanced part of the diverse outputs of our School. The participation of staff and students in a variety of dance projects at under- and postgraduate levels acknowledges the coordinate functions of opportunity and responsibility that motivate all UCT endeavour in Africa and universally. Art practice is our business, as referenced in a democratic, multicultural, [South] African society.

Particular awareness of the role of arts and culture in the collective, multicultural, national psyche - eg socio-political matters around integration – still drives many of our community-focused collaborations.

Highlights of the year include an award for the best international guest presentation at the International Theatre Schools Festival in Amsterdam, the Netherlands, and the editing and contribution of several essays by staff and alumni in the first and acclaimed South African post-apartheid publication of its nature. Other highlights include performances, installations, lecture demonstrations, publications, symposia and seminars as well as a range of collaborative engagements (productions and work exchanges) with the following national and international organizations:

Aardklop Kunstefees; Africa Tikkun; African Dance Theatre; African Theatre Association; Artscape; Battswood Arts Centre; Baxter Theatre; The Benesh Institute; Bishops Diocesan College; Bovim Ballet; Cambridge Scholars Publications; Cape Academy of the Performing Arts; Cape Celtic Dance Academy/Company; Cape Dance Company; Cape Junior Ballet Company; Cape Town City Ballet Company; Cape 300 Foundation; Cape Town International Ballet Competition; Cape Town Jewish Seniors; Caribbean Examination Council (Jamaica); Caribbean Journal of Education. (University of the West Indies, Jamaica); Cecchetti Society of Southern Africa; Cedar House School; Council on Higher Education (South Africa); Dance Factory; Dance For All; Dance Umbrella Festival (Johannesburg); Eastern Cape Dance Education Department; Edna Manley College of the Visual & Performing Arts (Jamaica); Elizabeth Ballet Academy (Penang, Malaysia); Elizabeth Sneddon Theatre (Durban); Embo Nangoku Arts Movement; Federal Academy of Ballet (Kuala Lumpur); Flatfoot Dance Company; Gordon Institute for Performing and Creative Arts; Greenapple Academy (Penang, Malaysia); Highlands House; Historic Schools Restoration Project; International Theatre Schools Festival Amsterdam; Irish Dance South Africa; Ikapa Dance Theatre; International Spanish Dance Society; Jazzart Dance Theatre; Irma Stern Museum, UCT; Jikeleza Dance Project; Klein Karoo Nasionale Kunstefees; KykNet, MNet; La Rosa Estudio de Baile Español; LeftfeetFIRST Dance Theatre; NasPers: Media 24. (Die Burger, Die Beeld); National Arts Council; National Creative Arts Youth Festival; National Society of Dance Teachers Association; Oude Libertas Amphitheatre; Rhodes University Drama Department; Royal Academy of Dance; SA College of Music; SA Dance Journal; SA Spanish Dance Society; Spier Hotel; Swiss Tennis Club, Cape Town; Temple University, Philadelphia, USA; Terpsichore Ballet Academy (Penang, Malaysia); Theatre Arts Admin Collective; Theatre Dance Association; Tshwane Education Department; Tshuwane University of Technology; UCT Drama Department; UCT Faculty of Health Sciences; UCT Graduate School of Business; Underground Dance Theatre; Union of Jewish Women (Cape Town); University of KwaZulu-Natal; University of North Carolina at Greensboro, USA; University of Stellenbosch Drama Department; University of Surrey Dance, Film & Theatre Department; University of the Witwatersrand; Vadhini Indian Arts Academy; Western Cape Celtic Dance Association; Western Cape Education Department; Western Province Dance Teachers Association; Wilvan School of Dance; Zebra Publishers; Zimbabwe National Trust.

Departmental Statistics

Permanent and Long-term Contract Staff

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Research Fields and Staff

Full-time Staff

**ASSOCIATE PROFESSOR R. BAUM**  
Performance ethnography; race/gender studies; dance/movement therapy

**MS D. CHEESMAN**  
Classical ballet; dance education; Western dance history

**MR D. FOURIE**  
Western dance musicology; performance

**DR E. GREYLING**  
Dance notation; dance ethnology; dance criticism; classical ballet; dance photography; dance videography; dance archives

**MS L. RAIZENBERG**  
Choreography; classical ballet; national dance; theatre technology; Western dance history  
Mr M. Rani  
African dance; choreography; African dance history

**MR G. M. SAMUEL**  
Choreography; classical ballet; direction; dance education; performativity

**MS L. WILSON**  
Contemporary dance; African diaspora dance; dance education; Western dance history

Part-time Staff

**DAME M. BECKER**  
Spanish dance: performance, choreography, tuition

**MS J. BOOYSEN**  
Contemporary dance: performance, choreography, tuition

**MS C. BOTHA**  
Contemporary dance: performance, choreography, tuition

**MS S. BOTHA**  
Dance education

**MS I. FREGE**  
Choreography; dance education

**MS K. JOHNSTONE**  
Contemporary dance; choreography; dance theory

**MR S. KOYANA**  
African dance: performance, choreography, tuition

**MS R. LEVY**  
Dance education

**MR T. PONDO**  
African music: performance

**EMERITUS ASSOCIATE PROFESSOR E. TRIEGAARDT**  
Classical ballet; direction/production

**MR MERVYN WILLIAMS**  
Ballet: performance, tuition

Contact Details

Postal address: School of Dance, University of Cape Town, Private Bag X3, Rondebosch, 7701  
Telephone: +27 21 650 2398/9  
Fax: +27 21 650 2494  
E-mail: Angie.Pearson@uct.ac.za  
Web: http://www.uct.ac.za/depts/ballet/staff.htm  
http://www.dance.uct.ac.za/

Research output

Chapters in books


Creative Work

Opera y Flamenco: Produced, directed and choreographed by M. Becker for UCT School of Dance. Baxter Concert Hall. Rosebank, Cape Town. 10 October 2012.


Three Solo Pieces: Choreographed by D. Cheesman for the Cape Town Eisteddfod. Sea Point Civic Centre. Sea Point, Cape Town. 1 - 13 May 2012.


Dance in the City 2: Co-ordinated and directed by D. Cheesman for a fundraising for the Zimbabwe National Trust Building. Artscape Opera House. Cape Town. 18 August 2012.


Opera y Flamenco: Co-organised and co-performed by D. Fouire for a collaborative production by the UCT SA College of Music and UCT School of Dance. Baxter Concert Hall. Rosebank, Cape Town. 10 October 2012.

Dancers Do It Musically: Produced and co-performed by D. Fouire for the UCT School of Dance. Rosebank, Cape Town. 26 October 2012.


Dancers Do It Musically: Co-performed by E. Greyling for the UCT School of Dance. Rosebank, Cape Town. 26 October 2012.


Surface: Choreographed and co-performed on location by C. Katzke with Roné Herbst and Teagan de Marigny for the GIPCA Dance for Film Workshop. UCT Hiddingh Hall Campus. Cape Town. (18 – 22 July); Screened at the Baxter Dance Film Festival. (11 August); Baxter Theatre. Rosebank, Cape Town. (12 October) 2012.


An Evening of Irish Dance: Compiled, directed and presented by L. Raizenberg for the Cape Celtic Dance Company as part of a series of collaborative dance presentations with UCT School of Dance. Baxter Concert Hall. Rosebank, Cape Town. 29 February 2012.


An Insight into Competitive Irish Dance: Lecture demonstration presented by L. Raizenberg with members of the Cape Celtic Dance Academy for the Cape Town City Ballet Open Day. UCT School of Dance. Rosebank, Cape Town. 31 March 2012.

Vivaldi Variations: Choreographed by L. Raizenberg for Pas Classique, for Cape Junior Ballet in collaboration with UCT School of Dance. Baxter Concert Hall. Rosebank, Cape Town. [25 April]; for Dance in the City, Artscape Opera House. Cape Town. [8 August]; Bellville Civic Centre. Bellville, Cape Town. 7 September 2012.

Dance by Nature: Produced and directed by L. Raizenberg with original choreographies by second year UCT dance students. Baxter Concert Hall, Rosebank, Cape Town. 6 June 2012.

UCT Dance – A Journey from Past to Present: Directed, co-ordinated and co-choreographed by L. Raizenberg for a UCT School of Dance tour. Frascati 1 Theatre, International Theatre Schools Festival, Amsterdam, Netherlands. 23 - 29 June 2012.

A Brief Encounter and Tan Bi: Choreographed by L. Raizenberg for UCT School of Dance programme A Journey from Past to Present tour to Amsterdam, Netherlands. 23 – 29 June 2012.


Dance UCT 2012, Unknown Spaces: Co-choreographed by L. Raizenberg for the UCT School of Dance annual production, Baxter Concert Hall, Rosebank, Cape Town. 8 - 10 November 2012.

Coal Train: Choreographed by M. Rani for a UCT School of Dance tour. Frascati 1 Theatre, International Theatre Schools Festival, Amsterdam, Netherlands. 23 - 29 June 2012.


Dance Across the Floor: Directed by G. M. Samuel for the UCT School of Dance. Baxter Concert Hall, Rosebank, Cape Town. 21 March 2012.

Amajuba: Choreographed by M. Rani and performed by senior students of African dance for the UCT School of Dance annual production Dance UCT 2012, Unknown Spaces. Dance UCT 2012, Unknown Spaces for Baxter Concert Hall, Rosebank, Cape Town. 8 - 10 November 2012.

Sing the Body Electric: Directed and co-choreographed by G. M. Samuel for the UCT Faculty of Health Sciences collaborative centenary production co-presented by the UCT Faculty of Health Sciences, the South African College of Music and the UCT School of Dance. Baxter Concert Hall. Rosebank, Cape Town. 14 May 2012.

Dance UCT 2012, Unknown Spaces: Directed by G. M. Samuel for the UCT School of Dance. Baxter Concert Hall, Rosebank, Cape Town. 8 - 10 November 2012.


Coppélia: The roles of Dr Coppélius and the Burgomaster performed by M. Williams for the CTCB. Artscape Opera House. Cape Town. Durban Playhouse 2012.

Quando, Quando, Quando: Choreographed by M. Williams for CTCB's Italian Affair. January 2012.

The Nutcracker: The roles of Drosselmeyer and Mr. Stahlbaum performed by M. Williams for the CTCB. Artscape Opera House. Cape Town. 2012.

The Body Electric (Ensemble Finale): Choreographed by L. Wilson for the UCT Faculty of Health Sciences collaborative centenary production Sing the Body Electric co-presented by the UCT Faculty of Health Sciences, the South African College of Music and the UCT School of Dance. Baxter Concert Hall. Rosebank, Cape Town. 14 May 2012.

Jetlagged: a dance film produced by L. Wilson, co-directed by R. Antrobus and V. Lupuwana, choreographed by K. Johnstone, and co-performed by L. Wilson, for the GIPCA Dance and Film workshop. Filmed on location at UCT Hiddingh Campus. Cape Town. Screened at the Baxter Dance Film Festival. Baxter Theatre. Cape Town. 11 August 2012.


Department of Philosophy Research Report 2012
HEAD OF DEPARTMENT: PROFESSOR DAVID BENATAR

Departmental Profile
The Department of Philosophy is established in the Faculty of Humanities. The Department focuses on analytical philosophy, offering courses in the Philosophy of Mind, Moral and Political Philosophy, Philosophy of Language, Epistemology, Logic, Aesthetics, Applied Ethics, Philosophy of Science and Critical Thinking.

Departmental Statistics

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<td>Professors</td>
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Research Fields and Staff

Permanent staff

PROFESSOR DAVID BENATAR
Moral philosophy; applied ethics; social philosophy

DR GREG FRIED
Aesthetics; philosophy of mathematics

DR ELISA GALGUT
Aesthetics; philosophy of literature; philosophy of psychology; philosophy of psychoanalysis

DR JACK RITCHIE
Philosophy of science, naturalism, analytic metaphysics

DR JEREMY WANDERER (LEAVE OF ABSENCE FROM JULY 2012)
Epistemology; philosophy of mind; philosophy of language

PROFESSOR BERNHARD WEISS
Realism and anti-realism; philosophies of language, logic and mathematics; early analytical philosophy

Visiting Lecturers

DR LAURENCE BLOOM
Ancient Philosophy, Kant, History of Metaphysics, and Ethical and Political Philosophy

Contact Details
Postal address: Department of Philosophy, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 3316
Fax: +27 21 650 5203
E-mail: philosophy@uct.ac.za
Web: http://www.philosophy.uct.ac.za

Research output

Authored books

Articles in Peer-reviewed Journals


Our department is home to one of the bigger postgraduate programmes and boasts a lively and cosmopolitan postgraduate student community. Our postgraduate programmes provide students with a firm academic foundation in political theory, comparative politics; international relations; South African politics; public administration; and public policy, amongst others. Students are encouraged to pursue more specialised study under the close supervision and guidance of faculty.

Our undergraduate courses remain a popular choice and the department is one of the largest departments in the Faculty of Humanities at UCT.

Staff and students both comprise a vibrant and intellectually engaged community and you are most welcome to join us.

Departmental Statistics

Permanent and long-term contract staff

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Honorary staff

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Students

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Research Fields and Staff

Permanent staff

DR JOHN AKOKPARI
Senior Lecturer: African politics; international relations; political economy; comparative politics.

PROFESSOR ANTHONY BUTLER
Politics & public policy in South Africa, including political funding, theories of the state, policy uncertainty, party systems, the politics of HIV/AIDS policy, and black economic empowerment in SA.
PROFESSOR ROBERT CAMERON
Senior Lecturer: Comparative local government politics & administration; public sector reform; public administration thought

MR ZWELETHU JOLOBE
Lecturer: Comparative politics; international relations; African politics; political violence; revolutions; contemporary South African politics; democratisation

PROFESSOR ROBERT MATTES
Senior Lecturer: Democratisation; political behaviour; public opinion; survey research; research methodology; comparative politics

DR VINOTHAN NAIDOO
Senior Lecturer: Public administration, with a special interest in comparative public administration and development management.

ASSOCIATE PROFESSOR ANDREW NASH
Senior Lecturer: South African political thought; the history of political thought in the West; the making of a global political vocabulary

MS LAUREN PAREMOER
HIV/AIDS Treatment Politics; Social citizenship; Welfare regimes in the Global South; Theories of Rights and Justice; Discourse Analysis.

DR THIVEN REDDY
Senior Lecturer: Comparative politics; South African politics; regime transition and democratisation; political party systems and political parties; post-colonial theory and identity politics

DR KAREN SMITH
Senior Lecturer: International Relations theory; the developing world (Africa in particular) as an object of IR study and an agent of IR knowledge; South Africa and India as regional powers in the global South

MS RAENETTE TALJAARD
Senior Lecturer: Public Policy

PROFESSOR ANNETTE SEEGERS
Head of Department: Conflict; security; civil military relations in Southern Africa; security among Southern African states; the role of armed forces in democratization.

DR HARRY STEPHAN
Senior Lecturer: International relations; international politoeconomy; comparative governance; international law and organisation.

Emeritus Professors
Emeritus Professor Robert Schrire
International political economy; globalisation; South African politics

Emeritus Professor André du Toit
Intellectual history of South African political thought & traditions; political ethics, ideologies & discourse; philosophical reflections on the Truth and Reconciliation Commission; narrative interpretation of political violence in South Africa

Guest Lecturers
Ms Laura Freeman
Lecturer: International relations; conflict; humanitarian aid; international political economy; political philosophy

Mr Markus Korhonen
Lecturer: Developmental states; democracy and democratisation; politics and development in Botswana.

Contact Details
Postal Address: Department of Political Studies, University of Cape Town, Private Bag X3, Rondebosch, 7701
Physical Address: Department of Political Studies, University of Cape Town, Room 5.33, Leslie Social Science Building, University Avenue, Rondebosch 7700
Telephone: +27 21 650 3381
Fax: +27 21 650 3799
E-mail: hum-politics@uct.ac.za
Web: http://www.uct.ac.za/depts/politics

Research output
Authored books


Edited books
Chapters in books


Encyclopaedia entries


Articles in Peer-reviewed Journals


Department of Psychology
Research Report 2012
HEAD OF DEPARTMENT: PROFESSOR MARK SOLMS

Departmental Profile

The Department of Psychology has strengths and interests in various research areas, including social and cultural issues pertinent to social change in the Southern African context, basic and applied topics in the brain and cognitive sciences, and a variety of topics in clinical psychology theory and practice. Additional strengths include - but are not limited to - health psychology, gender, intergroup relations, child development, policy development in mental health, programme evaluation, and trauma studies.

Departmental Statistics

Permanent and long term contract staff

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Research Associate: 1

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Research Fields and Staff

Permanent Staff

DR FLORETTA BOONZAIER
My research interests are in critical social psychology (raced, classed, gendered and sexual subjectivities) and in the social psychology of gender. My continuing work involves the examination of gender-based violence through a critical feminist psychological lens, especially constructions of masculinity and femininity, social responses to intimate partner violence in the South African context, sex work/prostitution in South Africa and broader representations of gender and sexuality in childhood and young adulthood.

PROFESSOR DON FOSTER
Most areas of social and critical psychology: South Africa identities (gender / racial/ class); violence and perpetrators of violence; intergroup relations, history of SA psychology.

DR DEBRA KAMINER
The psychological effects of trauma, in particular the impact of continuous and multiple trauma exposure; and interventions to enhance youth resilience, civic participation and empowerment in contexts of adversity and violence.

DR SHOSE KESSI
My research interests are in social and critical psychology. I am interested in issues of identity, representations, consciousness, community empowerment and social change. My focus is on qualitative research in general and participatory action research in particular through the use of multimedia methods such as Photovoice.

DR DESPINA LEARMOUTH
My research areas are based in the area of clinical and community health psychology, particularly the synthesis of social and community knowledge with western medical knowledge to increase health behaviour adherence. I am also involved in empowerment projects and work with street-based sex workers and their clients.

WAHBIE LONG
The history of South African psychology particularly insofar as it relates to present-day imperatives around transformation.

PROFESSOR JOHANN LOUW
Two major research areas: firstly, in the history of psychology focusing on: historiography; historical developments in psychological interventions and practices; the history of South African psychology; professionalisation. A second major area of interest is in programme evaluation: programmes in drug and alcohol prevention; violence prevention in schools and information technology in education.

DR SUSAN MALCOLM-SMITH
Main research interest centers on how evolutionarily conserved emotion systems impact on adaptive social function and social cognition. Ongoing projects focus on neuroscientific and neuropsychological investigations of empathy, attachment, and social function in healthy normal populations as well as in psychiatric conditions and developmental disorders.

MS ANASTASIA MAW
Psychological trauma and application of trauma theory in southern African context; working with gender based violence; training and consultation models in psychology.
DR PROGRESS NJOMBORO
Interested in investigating cognitive deficits in neuropsychiatric samples and their relationship to apathy symptoms and related disorders of goal-directed behaviour. Keen on using lesion studies and brain imaging techniques to map out the underlying functional and neural substrates of these negative symptoms.

DR NOKUTHULA SHABALALA
The role of psychology in health care especially in service delivery within primary health care settings, the management of HIV/AIDS and other sexually transmitted infections at various levels, gender issues and race and identity in contemporary South Africa.

PROFESSOR MARK SOLMS
Neuropsychology – research and clinical; brain mechanisms of dreaming, emotion, motivation; psychological mechanisms of confabulation and anosognosia syndromes.

MS LEIGH SCHRIEFF
Current research involves the implementation and evaluation of an intervention aimed at the remediation of attention deficits following traumatic brain injury (TBI) in children; interest in the broader topic of paediatric TBI in a South African context; paediatric neuropsychology research and rehabilitation; Social Psychology; contact theory and intergroup relations.

ASSOCIATE PROFESSOR SALLY SWARTZ
Discourse studies including psychotic speech, language & gender, language and power, language & psychotherapy; conversation analysis; history of psychiatry, including history of South African lunatic asylums; treatment of the insane in South Africa before 1940; social history of insanity in colonial settings.

DR KEVIN THOMAS

PROFESSOR COLIN TREDOUX
Social psychology (contact theory, social influence); psychology and law (all aspects, but especially eyewitness research, child witness research, legal decision making, false memory syndrome); cognitive psychology (face recognition); methodology and statistics. Philosophy of psychology.

DR CATHERINE WARD
Violence prevention from the perspective of children’s development, and particularly in public health approaches to this – in developing evidence-based approaches to violence prevention that have a wide reach and are effective in improving children’s development and reducing their likelihood of becoming aggressive.

DR LAUREN WILD
Processes of risk and resilience in school-age children and adolescents, including (1) family stress (e.g., family conflict and parental HIV/AIDS), caregiving and child adjustment, and (2) identifying factors associated with risk behaviours in adolescents.

DR PEDRO WOLF
Evolutionary psychology (life history theory, assortative mating); methodology and statistics; program evaluation; cross cultural research.

Contact Details
Postal address: Department of Psychology, University of Cape Town, Private Bag X3, Rondebosch 7701
Tel: +27 21 650 3417
Fax: +27 21 650 4104
E-mail: rosalind.adams@uct.ac.za
Web: http://web.uct.ac.za/depts/psychology/
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Research output

Authored books

Edited books

Chapters in books


Encyclopaedia entries


Articles in Peer-reviewed Journals


**Department of Religious Studies**

**Research Report 2012**

(Including the Institute for Comparative Religion in Southern Africa, the Research Institute on Christianity and Society in Africa, and the Centre for Contemporary Islam)

HEAD OF DEPARTMENT: PROFESSOR ABDULKADER TAYOB

**Departmental Profile**

The Department of Religious Studies maintains a strong research profile through its staff and its three research institutes. The Department houses the Institute for Comparative Religion in Southern Africa (ICRSA), directed by Professor David Chidester, which is engaged in research on religion, religions and religious diversity; the Research Institute on Christianity and Society in Africa (RICSA), directed by Emeritus Professor James Cochrane, which is involved in research on the social impact of Christianity in South Africa and the African continent; and the Centre for Contemporary Islam (CCI), directed by Dr Andrea Brigaglia, which has undertaken interdisciplinary projects, including international research on Islamic law in Africa, Islamic publics in Africa, and the presidential legacy project on the manuscript archives of Timbuktu. Still under the co-direction of Emeritus Professor Cochrane, the International Religious Health Assets Programme (IRHAP, previously ARHAP) now with its UCT Hub office in the School of Public Health and Family Medicine in the Faculty of Health Sciences, researches various issues on the interface between religion and public health in Africa and beyond. These research initiatives of the Department have proved to be particularly important for the research development of the many postgraduate students employed by them and have also served to attract national and international researchers to the Department. The Department features two NRF A-rated researchers, Professor David Chidester and Emeritus Professor John de Gruchy, the latter of whom is retired but remains an active researcher associated with the Department. In addition the Department publishes the Journal for the Study of Religion and the Journal for Islamic Studies, which is accredited by the Department of Education, and the Annual Review of Islam in South Africa.

**Departmental Statistics**

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<tbody>
<tr>
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**Honorary staff**

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**Students**

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**Research Fields and Staff**

**DR LOUIS BLOND**
Continental Philosophy, Contemporary Jewish Philosophy, Jewish Religious Discourse and Critical Theory

**DR ANDREA BRIGAGLIA**
Islam in Africa; Sufism, religious literature and scholarly networks in 20th century’s Nigeria, Qur’anic exegesis in West African languages

**PROFESSOR DAVID CHIDESTER**
History of religions; religion in North America; religion in South Africa

**EMERITUS PROFESSOR JAMES COCHRANE**
Religion; globalisation; public health; society; Africa; migration

**EMERITUS PROFESSOR JOHN DE GRUCHY (SENIOR SCHOLAR)**
Christian theology, Bonhoeffer; South African Church; theological aesthetics; reconciliation; public theology; missionary history
DR ANNIE LEATT  
Buddhist studies, theories and practices of post-colonial secularism, Asian theories of body, personhood and self-cultivation, political philosophy, critical theory

DR ASONZEH UKAH  
Religion and Globalisation; Transnational Religion; Media and Material Culture of African Pentecostalism; Popular Culture of Pentecostalism; Pentecostal Advertising; Faith and Films; Urbanism and Sacred Space

ASSOCIATE PROFESSOR SA’DIYYA SHAIKH  
Islamic intellectual history; Qur’anic studies; hermeneutics; Sufism; Islam and gender; women in religion; feminist theory; religion; sexuality and reproductive health

PROFESSOR ABDULKADER TAYOB  
Religion Education; Islam and public life; intellectual trends in modern Islam

ASSOCIATE PROFESSOR CHARLES WANAMAKER  
Socio-rhetorical Interpretation; Socio-rhetorical Commentary on 1 Corinthians; Cognitive Science and the Study of Early Christianity

ADJUNCT ASSOCIATE PROFESSOR MUNEEF FAREED  
Islamic law, economics, Islam and development

RESEARCH ASSOCIATE  
Dr Lyn Holness  
Rethinking faith and its imagery in the light of contemporary developments, notably in science and inter-faith issues; a holistic understanding of researcher development

Highlights from 2012

Book launches:

In December 2012, the Department of Religious Studies hosted a launch of the research report South African Muslim Women: Sexuality, Marriage and Reproductive Choices. The outline outlines the major findings of a quantitative study on South African Muslim women’s views of Islam and lived experiences pertaining to these matters. All participants, local community organizations, NGO’s working in the Muslim community as well as local media (newspapers and radio) were invited to attend the launch. Approximately 100 individuals attended. At the launch, the research team presented the major findings of the research, followed by a panel discussion on the significance of our research findings. The following panelists gave a short presentation related to particular research findings: Dr Rashied Omar (Chairperson Western Cape Religious Leaders Forum), Mwalima Mansura Africa (Islamic Unity Convention), Fatima Noordien (Muslim Youth Movement), and Shamsunnsisa Sablay (The Islamic Network). Research booklets were made available to all attendees and additional copies were given to local organizations and NGO’s.

Wild Religion is a wild ride through recent South African history from the advent of democracy in 1994 to the euphoria of the football World Cup in 2010. In the context of South Africa’s political journey and religious diversity, David Chidester explores African indigenous religious heritage with a difference. As the spiritual dimension of an African Renaissance, indigenous religion has been recovered in South Africa as a national resource. Wild Religion analyzes indigenous rituals of purification on Robben Island, rituals of healing and reconciliation at the new national shrine, Freedom Park, and rituals of animal sacrifice at the World Cup. Not always in the national interest, indigenous religion also appears in the wild religious creativity of prison gangs, the global spirituality of neo-shamans, the ceremonial display of Zulu virgins, the ancient Egyptian theosophy in South Africa’s Parliament, and the new traditionalism of South Africa’s President Jacob Zuma. Arguing that the sacred is produced through the religious work of intensive interpretation, formal ritualization, and intense contestation, Chidester develops innovative insights for understanding the meaning and power of religion in a changing society. For anyone interested in religion, Wild Religion uncovers surprising dynamics of sacred space, violence, fundamentalism, heritage, media, sex, sovereignty, and the political economy of the sacred.

A special issue of the Journal for Islamic Studies was published on Islamic Reform and Public Life in 2012. The peer-reviewed articles were based on some of the papers presented at the International Conference on Islamic Reform and Public Life in Africa in 2012. These essays suggest some interesting comparisons between Islamic reform movements in various political contexts. From the colonial state to the modern Moroccan Kingdom, these movements are shaped in local politics. Secondly, the articles suggest that reform is not a static concept, but open to creative and malleable interpretation. Finally, reform is not limited to Muslim debate and discourse. It is widely debated in global publics, as the meaning and role of religion in public life becomes critical in a global, and increasingly interactive world.

Conferences hosted:

The Department of Religious Studies hosted an international conference in December 2011, on Theorizing Experience, Subjectivity and Narrative in Studies of Gender and Islam. This conference brought together renowned international and local feminist scholars of gender and feminist scholars of Islam in South Africa. The intellectual project of this conference was to explore critically the connections between Muslim women’s experiences and feminist theory and methodology in order to enable the
expansion and development of Islamic feminist theory and methodology. Papers from the conference will be published in a special journal issue.

The Department of Religious Studies hosted an international conference in October, 2012, on Biographies of Religious Engagement: Islamic Activism in Psychological Perspective. Given the widespread significance and interest in Islamic activism in public life, this conference put the focus on activists and their biographical trajectories over two or three decades. Papers from this conference will be published in a special journal issue.

Visits by scholars from elsewhere:

Professor Gordon Mitchell of Hamburg University joined us as A. W. Mellon Visiting Fellow in the second half of 2012. He presented a series of undergraduate lectures and post-graduate seminars on inter-cultural education through art. He also addressed Western Cape teachers on teaching religion at a workshop on 15th September, 2012.

Contact Details

Postal Address: Department of Religious Studies, University of Cape Town, Private Bag X3, Rondebosch, 7701
Tel: +27 21 650 5818
Fax: +27 21 689 7575
Email: tasneem.wise@uct.ac.za
Web: http://web.uct.ac.za/depts/religion/
Facebook: ReligiousStudiesUCT
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Research Output

Authored books


Edited books


Chapters in books


**Department of Social Development Research Report 2012**

**HEAD OF DEPARTMENT: ASSOCIATE PROFESSOR VIVIENE TAYLOR**

**Departmental Profile**

The Department of Social Development provides undergraduate social work education and training commensurate with the professional standards laid down by the South African Council for Social Service Professions. It also offers postgraduate specialist taught programmes in Social Development, Social Policy & Management, Probation & Corrections and Clinical Social Work. Postgraduate programmes by research are offered in Social Planning & Administration, Social Work and Social Development. As befits professional education, the Department maintains relationships with a wide variety of community-based organisations where students undergo professional practice based learning.

The Department places great importance on research. Current research interests of the Department include social policy and social protection systems, the social development of emergent communities, clinical intervention strategies, restorative justice, research on gender inequalities and social transformation, human development and capabilities as pathways out of poverty & social exclusion, social work in prisons, child & youth care, social administration and planning, and HIV/AIDS care strategies.

The Department is also involved in a number of extension services at both national and international levels. The Department collaborates with the Western Cape Provincial Government by providing the specialist social work honours courses in the treatment of substance abuse disorders. International research and comparative work is encouraged. At present staff in the Department are involved in international research collaboration in the fields of comparative social policy in Africa, conflict resolution and community development, financial management of the third sector and mapping social protection systems in Africa.

**Articles in Peer-reviewed Journals**


Departmental Statistics

Permanent and Long-term Contract Staff

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<th>Position</th>
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<td>Adjunct Associate Professor</td>
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Students

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Research Fields and Staff

Permanent Staff

**ASSOCIATE PROFESSOR VIVIENE TAYLOR**
Social policy and social protection; human security and social and economic development with emphasis on governance, poverty and gender inequalities.

**ASSOCIATE PROFESSOR ANDRÉ DE V SMIT**
Organisational theory; management and administration; social policy; social security; resource allocation.

**ADJUNCT ASSOCIATE PROFESSOR ERIC ATMORE**
Organisational theory; leadership and management; non profit sector; early childhood development.

**DR MARGARET BOOYENS**
Youth development; social development; community development; poverty alleviation; leadership and management in non-profit organizations.

**DR CONNIE O’BRIEN**
Community development; mental health issues; cultural diversities; peace education; conflict resolution/mediation; spirituality/counselling; qualitative research.

**DR LEON HOLTZHAUSEN**

**DR JOHANNES JOHN-LANGBA**
Migration, climate change and health; HIV/AIDS; social policy and social protection; behavioral and community health, social and public health dimensions of mining; sexual and gender-based violence; psycho social well-being; quality of life; mental health; sexual and reproductive health/rights; and programme evaluation.

**MR THULANE GXUBANE**
Crime and society; probation and correctional practice; youth justice, juvenile offending and restorative justice.

**MRS FATIMA WILLIAMS**
Casework/psychotherapy; groupwork and group psychotherapy; human development; mental health; professional development.

**MR RONALD ADDINALL**
Clinical social work, sexology and psychosexual therapy, sexual health and rights, sexual minorities and human rights, and gender identity variance.

**ADMINISTRATIVE AND CLERICAL STAFF**
Ms Marguerite Armstrong – Administrative Officer
Mr Olando Jacobs – Senior Secretary

Contact Details

Postal address: Department of Social Development, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 3493
Fax: +27 21 689 2739
E-mail: Marguerite.Armstrong@uct.ac.za

Research output

**Chapters in books**


Articles in Peer-reviewed Journals


Doctoral dissertations

Master’s degrees (by research)


Department of Sociology

HEAD OF DEPARTMENT: ASSOCIATE PROFESSOR DAVID COOPER

DEPARTMENTAL PROFILE

The department has a team of active researchers with growing clusters of research groupings formed around staff members and their Master’s and PhD students. During the past few years a range of peer-reviewed journal articles but also a considerable number of books, research and consultancy reports, and public articles and presentations in the arena of national and local debate have been produced.

Research projects currently underway or recently completed in the Department, most with a South African and comparative focus, include work on: land tenure reform and traditional authorities; development of social movements; workers’ experiences of recent social change in South Africa; health policies and medical facilities with particular orientation to the HIV/AIDS pandemic; democracy and inequality in comparative perspective; industrial restructuring, unemployment, skills development and job creation; export agriculture and globalization; “race”, identity and diversity in South Africa; dynamics of corporate culture and managerial identity; organizational transformation; higher education transformation and research development; pedagogics in higher education; urbanisation, social dynamics and inequality; the nature of sociology; issues in social research methods; globalization, it’s meaning and impacts.

Professor Lungisile Ntsebeza’s NRF Research Chair is now in its fifth year of research activity and development. Professor Jeremy Seekings continues to serve as Director of the Centre for Social Science Research. Associate Professor Xolela Mangou is a member of the Editorial Board of Acta Academica and Associate Professor David Cooper serves on the Editorial Advisory Board of the Journal of Applied Social Science.

Departmental Statistics

Permanent and long-term contract staff

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<thead>
<tr>
<th>Position</th>
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<td>Admin and Clerical Staff</td>
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Students

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<td>Master’s</td>
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<td>Undergraduates</td>
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Research Fields and Staff

ASSOCIATE PROFESSOR DAVID COOPER
Research development in higher education; students in the South African higher education system; issues of engaged scholarships at universities.

PROFESSOR OWEN CRANKSHAW
Racial and class divisions; sociology of housing and labour markets and the relationship between urbanisation, housing and employment.
**DR JACQUES DE WET**  
Senior Lecturer; methodological issues in quantitative and qualitative research; social change and identities in post-Apartheid South Africa; people-centred development theory and practice.

**ADJUNCT ASSOCIATE PROFESSOR RAJEN GOVENDER**  
Political behaviour; capability approach; social justice; methodological issues in quantitative research.

**DR JOHANN GRAAFF**  
Senior lecturer; development theory; teaching sociology; rural education.

**DR JONATHAN GROSSMAN**  
Senior lecturer; development of workers’ movement; Marxist theory and practice.

**DR JUDITH HEAD**  
Senior lecturer; Poverty, inequality & public health; HIV/AIDS in SA & Brazil.

**EMERITUS ASSOCIATE PROFESSOR KEN JUBBER**  
Evolutionary theory; social theory; history of sociology, philosophy of sociological knowledge.

**ASSOCIATE PROFESSOR DAVID LINCOLN**  
International division of labour; plantation agriculture; development.

**ASSOCIATE PROFESSOR XOLELA MANGCU**  
Political Sociology; sociology of institutions; social theory; race, identity and culture; urban sociology.

**EMERITUS PROFESSOR JOHANN MAREE**  
Industrial relations and industrial strategy; worker participation: skills development.

**DR FRANK MATOSE**  
Senior Lecturer; Natural resource commons; co-management; biodiversity management and rural livelihoods; land reform and biodiversity conservation; Southern Africa.

**DR ELENA MOORE**  
Senior Lecturer; Sociology of the family and personal life; intergenerational relations; gender; research methods; biographical research methods.

**PROFESSOR LUNGISILE NTSEBEZA**  
Rural development; traditional authorities; land rights; rural/urban linkages; land and the struggle against poverty.

**DR AMRITA PANDE**  
Senior Lecturer; Globalization; gendered bodies and gendered work spaces; new reproductive technologies and women’s movement in the Global South.

**PROFESSOR JEREMY SEEKINGS**  
Political sociology; unemployment; social stratification & race; public policy; social movement; urban sociology.

**PROFESSOR ARI SITAS**  
Historical forms of deviance and social action; labour and livelihoods; industrialisation and work challenges in emerging powers; reconciliation and trauma; the labour movement in South Africa; migrant and marginal forms of labour.

**ADJUNCT ASSOCIATE PROFESSOR SHARLENE SWARTZ**  
Marginalized youth and development outcomes in contexts of adversity; social aspects of restitution and transformation; race and education; participatory and emancipatory research methods.

### Contact Details

Postal Address: Department of Sociology, University of Cape Town, Private Bag X3, Rondebosch, 7701  
Tel: +27 21 650 3501  
Fax: +27 21 689 7576  
E-mail: socio@uct.ac.za  
Web: http://www.sociology.uct.ac.za/  
UCT General enquiries: +27 21 650 9111  
UCT web: http://www.uct.ac.za

### Research output

#### Authored books


#### Chapters in books

and U. Bozkurt (eds), Beyond a Divided Cyprus, pp. 201-216. New Yord, USA: Palgrave Macmillan. ISBN 9780230338548.


Articles in Peer-reviewed Journals


Muyeba, S. and Seekings, J.F. 2012. Homeownership, privacy and neighbourly relations in poor urban neighbourhoods


O’Dwyer, C., Doyle, M., Moore, E. and Timonen, V. 2012. ‘We have all moved on’: how grandparents cope with their adult child’s relationship breakdown. Families, Relationships and Societies, 1(2): 223-241.


the Faculty of Humanities, a suite of academic programmes in library and information studies, ranging from the Postgraduate Diploma in Library and Information Studies to the PhD, with specialisation in academic and research libraries, and public libraries. Its particular subject foci are in impact analysis and assessment, and research librarianship. Staff research interests range over a wide number of important fields, ranging from the identification of skills sets for different contexts to performance measurement.

Centre Statistics

Staff

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Students

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Research Fields and Staff

**ASSOCIATE PROFESSOR JAYA RAJU**
LIS education and training, particularly its relevance to the African developing context; general/liberal arts education in the higher education context; Higher education information provision in the current knowledge context; Developing LIS skills statements

**ASSOCIATE PROFESSOR KARIN DE JAGER**
Library performance measurement and evaluation in academic and public libraries; establishing benchmarks for information literacy; databases

**ASSOCIATE PROFESSOR MARY NASSIMBENI**
Information society, information literacy; national library and information policy; performance measures for public libraries in South Africa

**DR J. GRETCHEM SMITH**
Communication of information; information need and use; subject analysis and control; indexing, classification and thesaurus construction; knowledge management

**PROFESSOR PETER G. UNDERWOOD**
Soft systems analysis; systems management; information systems design; change management; strategic management, information literacy

**DR CHARLES A. MASANGO (ASSOCIATE)**
Intellectual property rights (copyright); digital licensing agreements; contemporary copyright fair dealing management issues; First Sale Doctrine; public lending rights; indigenous traditional knowledge

Contact details

Postal address: UCT Libraries, University of Cape Town, Private Bag, RONDEBOSCH 7701, South Africa
Telephone: +27 (0)21 650 4546
E-mail: lisc@uct.ac.za
Web home page: http://www.lib.uct.ac.za/lisc/

Research output

**Authored books**

**Chapters in books**


Articles in Peer-reviewed Journals


In 2012, the CSSR consisted of a small Directorate, three research units, and additional individual personnel and small projects. The research units were the AIDS and Society Research Unit (ASRU); Democracy in Africa Research Unit (DARU); and the Sustainable Societies (Research) Unit (SSU). All permanent academic staff in the Centre have departmental appointments also.

Methodologically, CSSR research is empirical, but problem-driven. While we utilize both quantitative and qualitative strategies of data collection, our work is always based on systematic research designs with clear conceptualization of variables and transparent rules of operationalising variables, selecting cases and collecting and analyzing data analysis (in contrast to ad hoc fact collection or narrative description). After a reasonable period, collected data are turned into public access data sets. CSSR projects are usually team-oriented, bringing together multiple local and international researchers, and offering post-graduate students significant opportunities for hands-on training by involving them in all stages of projects. Research findings are presented and discussed at regular weekly seminars and published as CSSR Working Papers. Substantively, the CSSR conducts research in the broad areas of globalization, industrialization, democratization, development, poverty and public health.

AIDS and Society Research Unit (ASRU)
The AIDS and Society Research Unit (ASRU) supports research into the social and economic dimensions of AIDS in South and Southern Africa. Special emphasis is placed on exploring the interface between qualitative and quantitative research. Focus areas include: AIDS policy in South Africa, AIDS-stigma, sexual relationships in the age of AIDS, disclosure (of HIV-status to others), the interface between traditional medicine and biomedicine, the international treatment rollout, global health citizenship, the international treatment rollout, global health citizenship and leadership, AIDS treatment activism and the impact of providing antiretroviral treatment on individuals and households.

Democracy in Africa Research Unit (DARU)DARU supports students and scholars who conduct systematic research in the following four areas: public opinion and political culture in Africa and its role in democratization and consolidation; elections and voting in Africa; the development of legislative institutions; and the impact of the HIV/AIDS pandemic on democratization in southern Africa. DARU has also developed close working relationships with projects such as the Afrobarometer (a cross-national survey of public opinion in fifteen African countries) and the Comparative National Elections Project, which conducts post-election surveys over twenty countries across the world.

Centre for Social Science Research

Research Report 2012

DIRECTOR: PROFESSOR JEREMY SEEKINGS

Centre Profile

The Centre for Social Science Research (CSSR) is an interdisciplinary research centre at the University of Cape Town dedicated to conducting and building capacity for systematic, evidence based, policy-relevant, replicable social science research in South Africa, the region, and across Africa.
Sustainable Societies (Research) Unit (SSU) explores the social and institutional dimensions of economic development and the interaction between human society and the natural world. Focus areas include: winners and losers in South African economic growth and the interplay between ecological and economic concerns. The SSU was previously known as the Social Surveys Unit and still works on a number of survey projects, including the Cape Area Panel Study.

Centre Statistics

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<tr>
<th>Professors, associate professors and lecturers, with departmental appointments</th>
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<tr>
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Research fields and staff

**PROFESSOR ROBERT MATTES (ALSO IN THE DEPARTMENT OF POLITICAL STUDIES)**
Director of the Centre for Social Science Research; Director of Democracy in Africa Research Unit; public opinion; democratization; electoral behaviour; social identity; legislatures; survey research

**PROFESSOR NICOLI NATTRASS (ALSO IN THE SCHOOL OF ECONOMICS)**
Director of the AIDS and Society Research Unit; AIDS; unemployment; inequality; social and economic policy; AIDS policy; AIDS denialism; AIDS conspiracy theory; defending HIV science

**PROFESSOR JEREMY SEEKINGS (ALSO IN THE DEPARTMENT OF SOCIOLOGY)**
Director of CSSR; political sociology (race and class; social attitudes, voting behaviour and political protest); comparative politics and political economy of public policy (especially education and welfare policy); democratic theory

**ASSOCIATE PROFESSOR RAJEN GOVENDER (ALSO IN THE DEPARTMENT OF SOCIOLOGY)**
Political behaviour, political deviance and political activism; welfare economics and the capability approach; household poverty dynamics; applied fiscal impact assessment; research methodology and advanced quantitative methods

**DR BEATRICE CONRADIE (ALSO IN THE SCHOOL OF ECONOMICS)**
Director of Sustainable Societies Unit; biodiversity and predators; farm labour markets; women in agriculture; wine industry mechanisation; irrigation farming; sustainability issues and environmental certification

**DR ELENA MOORE (ALSO IN THE DEPARTMENT OF SOCIOLOGY)**
Sociology of the family, family policy, gender and intimacy, intergenerational relations, feminist theories, biographical research methods.

**DR PEDRO WOLF (ALSO IN THE DEPARTMENT OF PSYCHOLOGY)**
Evolutionary psychology

**DR JOANNE WREFORD**
Research Fellow; relationships between Traditional African Healing (TAH) and biomedicine in HIV/AIDS interventions; TAH and HIV/AIDS; children, TAH and treatment for HIV/AIDS; traditional male circumcision/medical male circumcision and HIV/AIDS

**DR ELIZABETH GUMMERSON**
Post-doctoral research fellow: Demography and public policy (class, race, gender and policy effects on mortality and morbidity) poverty/inequality policies and their effect on health and wellbeing; education and health behaviour.

**DR KEVIN ONEIL**
Post-doctoral research fellow; International migration; migration and development; immigrant integration; migration policy; xenophobia; education and support for democracy.

**DR COLLETTE SCHULZ-HERZENBERG**
Post-doctoral research fellow: Elections, public opinion and voter behaviour; politics, groups and identity; party politics; democratization theory; legislative studies; corruption and governance.

**MR NATHAN GEFEN**
Manager, GroundUp: HIV and TB science and human rights, epidemiology particularly agent-based simulation of epidemics, parallel computer algorithms.

Contact Details

Postal address: Centre for Social Science Research, University of Cape Town, Private Bag, Rondebosch, 7701
Tel: +27 21 650 4656
Fax: +27 21 650 4657
Web: http://www.cssr.uct.ac.za
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Research Output

**Authored Books**

Edited books


Chapters in books


Articles in Peer-reviewed journals


Institute for Humanities in Africa (HUMA)

Research Report 2012

DIRECTOR: PROFESSOR DEBORAH POSEL

Centre Profile

The humanities have long been vital to the creative and critical energies of societies in the throes of profound change. HUMA – the Institute for the Humanities in Africa – is a new initiative at UCT, intended to create a space of dynamic interdisciplinary community for scholars and students in the humanities at large. Fostering top-end academic research, HUMA seeks also to draw on that work to nurture critical public debate, promoting UCT’s vision of itself as a civic university contributing to the making of democratic citizenship.

HUMA’s intellectual agenda is driven by two inclusive research themes ‘on being human’, and ‘circuits of consumption’, which inform and structure three primary objectives:

- to conduct and promote research that is historically grounded and theoretically engaged, with an eye to the ‘big’ theoretical and ethical questions that anchor South African issues in wider fields of experience and analysis. The combination of intellectual focus and breadth provided by HUMA’s research themes is intended to open up spaces for dialogue, collaboration and argument across disparate theoretical, epistemological and methodological traditions, and in ways that help examine the project of interdisciplinary work.

- to nurture the expertise and enthusiasm of graduate students interested in an academic career, through a combination of intensive and supportive doctoral supervision, and a broader programme of seminars, symposia and workshops that help develop the intellectual versatility and confidence which an academic career requires. A doctoral fellowship programme is central to the pursuit of this objective.

- to bring scholars and graduate students into conversation with interested publics, around issues of shared and topical concern. HUMA hopes to promote what public intellectuals in the humanities do best, which is to de-familiarise and unsettle established ways of seeing, think creatively about pressing social and political questions, and keep the imagination of alternative futures alive.

This mission is embedded in a particular understanding of our location in Africa. Africa is a landmass with a deep and complex history of connection and disconnection amongst its many inhabitants; being African means being party to formative relationships of connection and disconnection that shape the ways we think and act. Our scholarship and debate, then, will be positioned in Africa, even if the focus of our deliberations is not limited to the continent.

Centre Statistics

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Research fields and staff

Deborah Posel is a professor of sociology, an appointment that coincided with her taking up the position as HUMA’s founding director in January 2010. She has written and
published widely on aspects of South African politics and society during and beyond apartheid.

Shamil Jeppie is an associate professor in the Department of Historical Studies at the University of Cape Town. He was educated at the universities of the Western Cape, Cape Town and Princeton. A recipient of a Fulbright Scholarship, he also held a Chevening Scholarship while at Oxford University and has been a fellow of the Amsterdam Institute for Social Science Research.

Zethu Matebeni studied Sociology at the University of Port Elizabeth (now NMMU), the University of Pretoria and completed an interdisciplinary PhD at WISER, Wits University. Zethu’s wide research interests and publications cover: queer issues, sexuality, gender, race, HIV and AIDS, African film and cinema and popular culture.

Ilana van Wyk received her PhD from the Department of Anthropology and Sociology at the School of Oriental and African Studies in London. Her research focuses on the intersections between money and religion; she works on new forms of Christianity, in particular prosperity gospel and Pentecostal Charismatic Churches, and on the South African Lottery.

Contact Details
Postal address: Institute for Humanities in Africa, University of Cape Town, Private Bag, Rondebosch, 7701
Tel: +27 21 650 4592
Fax: +27 21 650 3949
Web: www.huma.uct.ac.za

Research Output
Authored books

Chapters in books


Articles in Peer-reviewed Journals


2012 marked the centenary of the Faculty of Health Sciences (FHS). It is therefore fitting that the achievements of the year were notable, and reflect the positive growth of the faculty over time.

In 2010, the agreed and stated aspiration of the Faculty of Health Sciences was to achieve a position among the top fifty health science faculties in the world by 2017. In 2012, five years ahead of target, we became the first tertiary institution from any developing country globally to be placed in the Top 50 of the Times Higher Education World University Rankings for clinical, pre-clinical and health universities. Our subject-specific ranking was strongly influenced, by research performance, with scores of 89% on citations and 96% on innovation. This accomplishment was particularly special, because it coincided with the faculty’s centenary celebrations during 2012, marking 100 years of extraordinary growth, achievement and excellence in advancing health. Among more than 70 centenary-branded events, during 2012 were research-centred activities that celebrated our collaborations (both within UCT and externally), as well as activities that centred around public engagement.

The inaugural Wolfson Memorial Colloquium, Generating Knowledge Against Poverty, was held in September, in recognition of contributions to the university by Lord Wolfson of Marylebone and the Wolfson Foundation. The keynote address, A New Agenda for Global Health, was delivered by Baron Peter Piot, Professor of Global Health and Director of the London School of Hygiene and Tropical Medicine, and the work of five top UCT scholars was profiled in this arena. The programme for this prestigious event included conferring four Young Investigators Best Publication Awards for 2011.

A centenary academic debate was hosted in December, on the topic Cholesterol is not an important risk factor for heart disease and current dietary recommendations do more harm than good. The lively presentations by proponent Professor Tim Noakes from the faculty and opponent Dr Jacques Rossouw of the National Institutes of Health in the USA were streamed live on the Internet to more than 1 000 people around the world and uploaded to YouTube. The faculty also hosted a community partnership event to encourage ongoing dialogue with the communities involved in our research, as well as a more focused community collaboration event, specifically highlighting the faculty’s work with the Masiphumelele population, Bringing science to the community. The centenary theme was also incorporated into research days hosted by a number of departments, and was highlighted during the 2012 inaugural lectures of FHS researchers, who included professors Anthony Figaji, Clive Gray, Valerie Mizrahi, and Carolyn Williamson.
The FHS makes a significant contribution to UCT's research income. We were awarded 496 contracts in 2012, to the value of R393 million. This is approximately 57% of UCT's total research income, and represents a decrease of 4% in contracts income from 2011. The FHS also contributes significantly, in terms of its publication record, which is very strong, both within UCT and in comparison with health sciences faculties at other South African universities. We have been increasing our publication count steadily over the last few years. Peer-reviewed, accredited journal output units for 2011 were 452, approximately 67% more than five years ago and 20% more than in 2010. The 2011 figure, reported in 2012, accounts for 40% of the university's total.

The faculty is home to 23 research groupings that are accredited by the University Research Committee, including nine Medical Research Council units. In the 2012 NRF rating application cycle, an additional 11 FHS researchers received new ratings, including the faculty's 11th A rating, when this recognition was given to Professor Jack van Honk (Department of Psychiatry and Mental Health). This increased our total number of rated researchers to 97, including 17 Y ratings. Eight of the 33 DST/NRF SARChI Chairs at UCT are within the FHS, reflecting our involvement in this research and human capacity development initiative of the Department of Science and Technology. Two significant NRF awards were also bestowed on researchers in the faculty during 2012: Professor Tim Noakes, of the MRC/UCT Research Unit for Exercise Science and Sports Medicine, received the NRF's Lifetime Achievement Award, and Professor Kelly Chibale, of the cross-faculty Institute of Infectious Disease and Molecular Medicine and the Department of Chemistry, received recognition as the NRF Champion of Research Capacity Development at Higher Education Institutions in South Africa.

As part of the faculty's efforts to foster successful researchers in the health sciences, 21 of our academics joined UCT's Emerging Researcher Programme during 2012. This capacity-building initiative provides research development grants, workshops, and mentoring to emerging researchers, which serves to strengthen their profiles and prepare them for future research leadership.

In 2012, the faculty was home to more than 1,500 postgraduate students, 325 of these being PhD candidates. A total of 444 FHS students received, between them, 762 scholarships, with a value in excess of R30 million. The faculty benefited particularly from a second round of awards (13 PhD, nine postdoctoral) from the Carnegie Corporation's Developing the Next Generation of Academics programme. During two graduation ceremonies, the faculty awarded 76 honours, 133 master's and 38 PhD degrees across a wide range of disciplines. In addition, 192 postgraduate diplomas, one MD and one Doctor of Science were conferred, bringing the total for the year to 442. This is the highest number of postgraduate degrees/diplomas ever awarded in one academic year by the faculty and was greater than the number of undergraduate degrees awarded. The faculty was home to 99 postdoctoral fellows during 2012, representing more than a third of UCT's 282. Between them, FHS postdoctoral fellows received 168 fellowships, valued at over R20 million. An inaugural Postdoctoral Research Day was held in November, and fellows from across the university were invited to increase awareness and encourage interaction between this contingent of UCT researchers. The day featured 14 oral and 20 poster presentations.

The growth of health research is being encouraged at all levels, and there is huge potential for inspiring undergraduate students to develop research skills. The annual FHS Undergraduate Research Day was held in October and included 12 oral presentations and 14 poster presentations selected from 34 entries. In total, 85 undergraduates from across the faculty participated.

Following the review of the FHS in 2011, the faculty formulated a Strategic Plan for Research in 2012. The strategic plan covers the period 2013–2020 and presents as its main aim ‘to advance and encourage research excellence within the FHS, within the context of the vision and mission of the Faculty and UCT, and thereby improve and promote our national and international standing as a research-led institution’. The ultimate goal is to improve the health of the people of South Africa and beyond. The faculty aims to achieve these targets via six key strategies: improving research infrastructure, building health research leadership and capacity for the future, enabling translation of research into public health impact, encouraging partnerships, increasing funding, and strengthening governance and raising standards.

In conclusion, 2012 was a busy and successful year for the faculty’s research enterprise. We witnessed the contribution of FHS research to the achievement of a position among the top fifty health science faculties in the world during our lively and productive centenary year. With the finalisation of the new Strategic Plan for Research, we look forward to the next year of industry, innovation, and knowledge generation in our faculty.
DOCTORAL GRADUATIONS

L. AHRENSTEDT (SURGERY)
Drug eluting hydrogels: design, synthesis and evaluation
Supervised by Dr D. Bezuidenhout and Professor A. Hult
(KTH Stockholm)

A.A. ALHAMUD (HUMAN BIOLOGY)
Implementation of anatomical navigators for real time motion correction in diffusion tensor imaging
Supervised by Associate Professor E. Meintjes

J. ASHMORE (PUBLIC HEALTH AND FAMILY MEDICINE)
Dual practice and equity in the availability of medical specialists in South Africa
Supervised by Professor L. Gilson

I.H. BURGER (HUMAN BIOLOGY)
A control system approach to subject specific prospective respiratory motion correction in cardiac MRI
Supervised by Associate Professor E. Meintjes

L.G. CLOETE (HEALTH AND REHABILITATION SCIENCES)
Developing appropriate Fetal Alcohol Spectrum Disorder (FASD) prevention initiatives within a rural community in South Africa
Supervised by Professor L. London and Professor L. van Niekerk (Stellenbosch University)

I. COOK (HUMAN BIOLOGY)
Voluntary physical activity: measurement and relationship to selected health parameters in rural black South Africans resident in the Limpopo Province, South Africa
Supervised by Professor E.V. Lambert and Professor M. Alberts (School of Health Science, University of Limpopo)

M. DAVIDS (MEDICINE)
Immunological studies in patients with extensively drug resistant tuberculosis
Supervised by Professor K. Dheda and Dr B. Nurse

G.M. DAVISON (CLINICAL LABORATORY SCIENCES)
The role of the immune system in the pathogenesis of myelodysplastic syndrome
Supervised by Professor N. Novitzky

L. DE MILANDER (HUMAN BIOLOGY)
Genetic factors associated with performance and exercise-associated weight loss in ironman triathletes
Supervised by Associate Professor M. Collins

K. DHANSAY (MEDICINE)
Isolation and identification of antimicrobial compounds from South African medicinal plants
Supervised by Associate Professor P. Smith and Professor K. Chibale

L. ESAU (CLINICAL LABORATORY SCIENCES)
Proliferative and survival pathways in oesophageal cancer
Supervised by Associate Professor D. Hendricks

T. GENADE (HUMAN BIOLOGY)
A study of neurodegeneration and neuroprotection in Nothobranchius guentheri
Supervised by Associate Professor D. Lang

J. GRAY (HUMAN BIOLOGY)
Lower back pain in adolescent fast bowlers
Supervised by Professor W. Derman, Dr K. Vaughan (Cape Ray) and Professor P. Hodges (University of Queensland)

Departments

Department of Anaesthesia
Department of Clinical Laboratory Sciences
Department of Health and Rehabilitation Sciences
Department of Human Biology
Department of Medicine
Department of Obstetrics and Gynaecology
Department of Paediatrics and Child Health
Primary Health Care Directorate
Department of Psychiatry and Mental Health
School of Public Health and Family Medicine
Department of Radiation Medicine
Department of Surgery
H.N. Hairwadzi (Medicine)
Autoimmune hepatitis: a clinical-pathologic study of the role of ethnicity, genetics, Type 1 interferons and dendritic cells
Supervised by Associate Professor W. Spearman, Associate Professor E. Shephard and Associate Professor C.W.N. Spearman

M.S. Hendricks (Human Biology)
The tackle in rugby union: understanding training and match behaviours to develop better coaching strategies for skill acquisition, performance and injury prevention
Supervised by Professor M.I. Lambert

M. Janse van Rensburg (Clinical Laboratory Sciences)
The role of the human papilloma virus E6 gene in cellular transformation
Supervised by Professor M.I. Parker

S.Z. Kalula (Medicine)
Prevalence of and risk factors for falls in older people in an urban community in South Africa
Supervised by Professor G.H. Swingler and Professor A.A. Sayer (University of Southampton, United Kingdom)

R. Kareithi (Psychiatry and Mental Health)
Performance of development NGOs in HIV prevention for young people
Supervised by Associate Professor C. Lund

S.R. Kleintjes (Psychiatry and Mental Health)
Participation of people with psychosocial disability in mental health policy development in South Africa
Supervised by Associate Professor C. Lund and Professor L. Swartz (Stellenbosch University)

K. Lamont (Medicine)
The role of melatonin in red wine-induced cardioprotection
Supervised by Associate Professor S. Lecour

E.E. Lekei (Public Health and Family Medicine)
Establishment of a comprehensive surveillance system for acute pesticide poisoning in Tanzania
Supervised by Professor L. London and Dr A.V.F. Ngowi (Muhimbili University, Dar-es-Salaam)

A. Lombard (Health and Rehabilitation Sciences)
The effect of sensory processing on the work performance of call centre agents in a South African context
Supervised by Associate Professor E. Duncan

L. Masson (née Roberts) (Clinical Laboratory Sciences)
The impact of sexually transmitted infections and inflammation in the female genital tract and blood on susceptibility to HIV-1 infection and disease progression
Supervised by Dr J. Passmore, Professor C. Williamson and Associate Professor F. Little

R. Matzopoulos (Public Health and Family Medicine)
The body count: using routine mortality surveillance data to drive violence prevention
Supervised by Professor J. Myers and Professor M.L. Thomson

A.J. Nicol (Surgery)
The current management of penetrating cardiac trauma
Supervised by Professor D. Kahn

R.S. Ntale (Clinical Laboratory Sciences)
The role of early cytotoxic lymphocyte (CTL) escape in the pathogenesis of HIV-1 subtype C infection
Supervised by Professor C. Williamson

H. Onya (Psychiatry and Mental Health)
Alcohol use among adolescents in high schools in Mankweng District, South Africa
Supervised by Associate Professor B. Myers and Professor D. Stein

A. Pandor (Clinical Laboratory Sciences)
An investigation into the molecular mechanisms underlying retinitis pigmentosa 17 with the view to developing novel gene-based therapies
Supervised by Professor R. Ramesar

S.P. Parihar (Clinical Laboratory Sciences)
A role of statins against listeria monocytogenes and Mycobacterium tuberculosis infection
Supervised by Professor F. Brombacher

G.E. Prinsloo (Human Biology)
The physiological effects of heart rate variability biofeedback during laboratory induced cognitive stress
Supervised by Professor W. Derman and Dr L. Rauch

F.C. Robertson (Human Biology)
Issues in the processing and analysis of functional NIRS imaging and a contrast with fMRI findings in a study of sensorimotor deactivation and connectivity
Supervised by Associate Professor E. Meintjes and Associate Prof T. Douglas

M.S. Shey (Child and Adolescent Health)
Determinants of innate immune responses to mycobacteria
Supervised by Professor W. Hanekom and Dr T. Scriba

K. Stinson (Public Health and Family Medicine)
Coverage of prevention of mother-to-child transmission services in Cape Town, South Africa
Supervised by Associate Professor L. Myer
J. SUN (SURGERY)
Using community members to assist life-threatening emergencies in violent, developing areas
Supervised by Professor L. Wallis

J. SWART (HUMAN BIOLOGY)
Perceptual cues in the regulation of endurance exercise
Supervised by Professor M.I. Lambert and Professor T. Noakes

D. TAYLOR (MEDICINE)
The use of combinations of chemosensitisers to reverse chloroquine resistance in mice infected with malaria
Supervised by Associate Professor P. Smith

R.N. THUKU (CLINICAL LABORATORY SCIENCES)
Structural analysis of C-terminal truncated mutants of the nitrilase from Rhodococcus rhodochrous J1
Supervised by Professor B.T. Sewell

L. WATSON (CLINICAL LABORATORY SCIENCES)
Novel cell models for the study of Spinocerebellar Ataxia type 7 pathogenesis and therapy in a South African patient cohort
Supervised by Professor J. Greenberg, Professor M. Wood (University of Oxford) and Associate Professor M. Weinberg (University of the Witwatersrand)

S. WIYSONGE (CLINICAL LABORATORY SCIENCES)
Building evidence for improving childhood immunisation coverage in Africa
Supervised by Professor G. Hussey and Professor B.D. Schoub (National Health Laboratory Services)

C.J. YATES (CLINICAL LABORATORY SCIENCES)
Mechanisms of chloride modulated activity in the C-domain of angiotensin-converting enzyme
Supervised by Professor E.D. Sturrock

L. ZEMBE (CLINICAL LABORATORY SCIENCES)
Investigating cross-clade immune responses in HIV-1 subtype C-infected Individuals from South Africa: Implications for HIV Vaccine Design
Supervised by Dr W. Burgers

C. ZHANG (MEDICINE)
Population pharmacokinetic models describing drug-drug interactions and variability in HIV infected South Africans on protease inhibitor-based antiretroviral regimens with and without tuberculosis
Supervised by Dr H. McIlreron, Dr P. Denti and Professor M.O. Karlsson (Pharmaceutical Biosciences, Uppsala University)

PATENTS
FILED APPLICATIONS

BACON, T. AND MCNAUGHTH, A.M.
Prosthesis with Underactuated Prosthetic Fingers.
PCT Patent Application PCT PCT/IB2012/056637

BLACKBURN, J.M., EVANS, M. AND SRIRAM, K.
A Method of Determining the Identity of Analyte Molecule Present in a Complex Sample.
PCT Patent Application PCT PCT/IB2012/056108

BRIJLAL, Y., JOHN, L.R. AND SIVARASU, S.
Hand Exoskeleton.
Provisional Patent Application South Africa 2012/08238

BURGER, I.H.
Method for Compensating for Respiratory Motion in Magnetic Resonance Imaging.
National Phase Patent Application South Africa 2012/06353

BURGER, I.H.
Method for Compensating for Respiratory Motion in Magnetic Resonance Imaging.
National Phase Patent Application United States 13/580,640

BURTON, S.G., DAVIDS, L.M. AND ZWANE, E.N.
A Hydroxytyrosol Compound.
National Phase Patent Application China 201080052708.1
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GRANTED APPLICATIONS

ACHARYA, K.R. AND STURROCK, E.D.
ACE N-Domain Crystal.
National Phase Patent Application Australia 2007/204226

ACHARYA, K.R. AND STURROCK, E.D.
Crystal (N-Domain).
National Phase Patent Application Europe 07700357.2

BEETON-KEMPEN, N., BLACKBURN, J.M. AND COULSON, L.B.
Cytochrome P450 Bioassay.

BERGMAN, N.J. AND MORGAN, B.E.
Neonatal Brain Well-being Monitor.
National Phase Patent Application South Africa 2011/03203

BURGER, I.H.
Method for Compensating for Respiratory Motion in Magnetic Resonance Imaging.
National Phase Patent Application Britain 1103067.3

BURTON, S.G., DAVIDS, L.M. AND ZWANE, E.N.
A Hydroxytyrosol Compound.
National Phase Patent Application South Africa 2012/02288

CHIBALE, K., NCHINDA, A.T. AND STURROCK, E.D.
Angiotensin I-Converting Enzyme (ACE) Inhibitors.
National Phase Patent Application Europe 06765437.6

Expression of Proteins in Plants.
National Phase Patent Application Europe 06740997.9

Expression of Proteins in Plants.
National Phase Patent Application South Africa 2008/03486

ILLING, N., STEIN, D.J. AND VAN HEERDEN, J.H.
A Method of Diagnosing a Mental State.
National Phase Patent Application South Africa 2011/06540

JOHN, L.R.
Non-invasive Deep Muscle Electromyography.
National Phase Patent Application South Africa 2011/09253

OPIE, L.H.
Compositions and Methods for Treating Heart Failure.
National Phase Patent Application South Africa 2011/01773
Department of Anaesthesia

HEAD OF DEPARTMENT: PROFESSOR JUSTIAAN LC SWANEVELDER

Departmental Profile

Clinical research

The arrival of the new Professor and Head of Department of Anaesthesia, Justiaan LC Swanevelder, signalled a new era of cardiovascular research in the Department. Professor Swanevelder is an international expert in the field of Transoesophageal (TOE) and Transthoracic (TTE) Echocardiography, and has played a central role in the development of this field, and formal guidelines for practice and accreditation in the United Kingdom. He is a prominent member of the European Association of Cardio-thoracic Anaesthesia (EACTA). His initial contribution has involved a paper on a suggested time course for accreditation in South Africa, as well as several case reports and an editorial on the subject. Several important collaborations have been established during 2012, involving teaching and research on TTE and TOE by visiting experts (Professors E Sloth, Denmark, A Dennis, Australia and J Ender, Leipzig), with a view to training and studies in both intraoperative and point of care echocardiography. Professor Swanevelder has also established a new laboratory research post. The first incumbent will collaborate with Professor Karen Sliwa in the Hatter Institute of Cardiovascular Research.

The Red Cross Hospital operating theatre complex continued to create an environment conducive to research, and this was evidenced by the publication of several instructive case reports, and several MMed dissertations. These include a completed pharmacokinetic study of the antimicrobial agent cefazolin during cardiopulmonary bypass. The Department of Pharmacology has developed an assay for cefazolin, which should facilitate several further important clinical trials. Important projects in thromboelastogstrophy (TEG) are ongoing, and Dr Owen Hodges is in the process of writing up his PhD on the use of TEG during burns surgery. Valuable guidelines have been published for pain management and sedation in children. A further study on the noninvasive measurement of haemoglobin in paediatrics, is nearly complete.

Obstetric Anaesthesia remains an important area of investigation. Ongoing projects involve spinal anaesthesia in preeclamptic parturients. One study has been completed on the effects of vasopressor therapy pre-delivery on neonatal acid-base status in patients with a non-reassuring fetal heart trace. A second study examines three aspects of spinal anaesthesia, namely stroke volume responsiveness prior to spinal anaesthesia, the haemodynamic effects of the vasopressor therapy prior to delivery, and the effects of various methods of administering oxytocin, including the interaction with an alpha-agonist. For this purpose, a non-invasive cardiac output device has been employed, using an algorithm based upon pulse wave form analysis. As part of these investigations, a collaboration was initiated with the Department of Anaesthesia of the University of Washington. This aspect of the study will examine the population characteristics of the adrenaline β2-haplotype in preeclamptic women. At the same time data would be collected on control healthy women. At least three MMed mini-dissertations will arise from this work. An abstract will be presented on stroke volume responsiveness in preeclampsia at the Obstetric Anaesthetists’ Association Annual Meeting in Bournemouth in May 2013. One of the investigators represented the Department at the Obstetric Anaesthetists’ Association annual 3 day course in London in November 2012. The leader of this research group, Professor RA Dyer, has received a B2 NRF rating on the basis of completed research in the period of review from 2004-2011.

Fluid therapy has continued to be a major area of interest within the Department. Studies on the anion composition of various intravenous fluids are ongoing, in collaboration with University College London. Further intravenous fluid therapy studies have included the development of a semi-automated fluid administration system for patients unable to maintain their own natural fluid balance. This project known as the “Quench” project is being developed jointly between the UCT and University College London Department of anaesthesia and critical care. A major systematic review has been published by Professor James, Professor Mythen (UCL), Professor van der Linden (Belgium) and Dr Richard Weiskopf (UCL) on the role of intravenous hydroxyethyl starch in the perioperative period. The conclusions of this review, together with the findings of the FIRST Trial, should inform the policy on use of the hydroxyethyl starches in the various settings of clinical practice at Groote Schuur Hospital. Professor James remains a very important contributor to research strategy and new protocol design in this and other areas.

The Department is an active research site for the international, multicentre POISE-2 trial of aspirin and clonidine for perioperative protection of high risk patients against perioperative myocardial events, and has recruited the second highest number of patients in South Africa. The South African principal investigator is Professor B Biccard,
from the Department of Anaesthesia, UKZN. The local site was initially set up by Professor M James. The lead author is Dr A Myburgh, with Drs O Porrill and A Emmanuel as co-investigators in 2012.

**MMed mini-dissertations**

The MMed programme for registrars is gathering momentum in the Department. Several projects are under way, and are listed below (Research Fields and Staff). Dr C de Jager has undertaken to provide training in the research process and methodology. In this regard, a formal course is envisaged, and all Consultant supervisors will be involved in the initiative, in order to increase the research capacity in the Department.

**Laboratory Research:**

The Department was involved in several areas of research in 2012. There are ongoing studies on coagulation, and an animal study of coagulation in a porcine model of acute liver failure. Transoesophageal echocardiography is being performed in baboons undergoing valve replacement. Further planned studies include the use of TEG to examine coagulation in HIV parturients, and in patients undergoing renal biopsy. The acquisition of the thromboelastometry device (ROTEM), will allow for more accurate diagnosis of causes of coagulation abnormalities. Lizel Immelman, our senior medical technologist, has been appointed to a permanent post and is performing an important research administrative role over and above her role in teaching and individual projects. She plays an important role in the teaching of the coagulation process and instruction on the use and utility of the TEG and ROTEM devices, which are based on viscoelastic changes during the clotting process.

**Collaboration**

Once again, junior consultants and registrars were encouraged to participate in research activities wherever possible, and scientific writing skills were also improved in this way. National collaboration has been strengthened, in particular with UKZN, where a study has been planned on biomarkers and echocardiography in patients with severe preeclampsia; effects of fluid loading, vasopressors and oxytocin; the genetics of preeclampsia; effects of vasopressors on cord gases. International collaboration continues, and is constantly expanding. The Department collaborates with the University College London Hospitals, Stanford University, the Rikshospitalet in Oslo, the University of Toronto, the University of Washington, and Glenfield Hospital, Leicester. In the field of echocardiography, important collaborations have been established with Professors E Sloth (Denmark), A Dennis (Australia), and J Ender (Leipzig). In the area of the difficult airway, new ties have been established with Dr D Miller of Guy’s Hospital in London.

**Research Fields and Staff**

**SWANEVELDER, JLC.**
Transoesophageal and transthoracic echocardiography (see above). Laboratory work on local anaesthetic toxicity in mice, employing TTE.

**JAMES, MF.**
Ongoing coagulation studies employing thromboelastography; blood transfusion and anaesthesia; crystalloid v colloid in trauma resuscitation; saline v balanced salts in perioperative management.

**DYER RA, REED AR, VAN DYK D, ARCACHE M, EMMANUEL A, SCHULEIN S, VORSTER A,**
Okaisabor O, K Timmerman.
Obstetric anaesthesia:
Cardiac output studies during spinal anaesthesia in patients with preeclampsia; effects of fluid loading, vasopressors and oxytocin; the genetics of preeclampsia; effects of vasopressors on cord gases.

**THOMAS J.**
Management of burns in children; pain management in children; Case reports; Fluid management in children; Noninvasive haemoglobin measurement; Pharmacokinetics of antimicrobial agents during cardiopulmonary bypass; Paediatric burns: Coagulation studies; Evaluation of the need for psychosocial services for paediatric burn patients at the RCWMCH.
See also further MMed supervision, below.

**HODGES O.**
Coagulation in patients with paediatric burns.

**MYBURGH A, HEIJKE SA.**
Transoesophageal echocardiography in cardiac anaesthesia. Point of care TTE.

**MYBURGH A, JAMES MF.**
POISE-2 trial

**LLEWELLYN R.**
Drug errors in anaesthesia.

**Contact Details**

Postal Address: D23 Department of Anaesthesia, New Groote Schuur Hospital, Anzio Road
Observatory, 7925, South Africa
UCT Telephone: SA (21) 406 6143
GSH Telephone:SA (21) 404 5004
Fax:SA (21) 406 6589
Email: justiaan.swanevelder@uct.ac.za; robert.dyer@uct.ac.za
Research output

Articles in peer-reviewed Journals


Department of Clinical Laboratory Sciences

Division Of Anatomical Pathology

HEAD OF DIVISION: PROFESSOR D GOVENDER

Division Profile

The Division of Anatomical Pathology has both diagnostic and academic components. The diagnostic laboratories form part of the National Health Laboratory Service (NHLS) complex at Groote Schuur and Red Cross War Memorial Children’s hospitals.

The Diagnostic laboratories are at both sites and provide a diagnostic surgical pathology, cytopathology and autopsy services to GSH, the academic hospital complex and associated hospitals and clinics in the Western Cape. The division also serves as a public and private tertiary referral and consultation centre for Anatomical Pathology.

These service commitments drive most of the research programmes that are patient and disease orientated. The Division has recently acquired a research laboratory and had 1 PhD, 4 MSc, 13 MMed, 1 BSc Hon, 1 MPhil (Paediatric Pathology) and 3 elective students during the reporting period. The Division has been involved in a range of research activities using a variety of techniques and continues to broaden its research base. The main research focus is in the field of molecular pathology pertaining to diseases that are common in South Africa and the Western Cape – these include various cancers, in particular those affecting disadvantaged population groups. Other research areas include tuberculosis, cardiomyopathy and foetal-alcohol syndrome.

The Division has been approached to provide support for Anatomical Pathology specialist training at the Universities of Botswana and Zambia.

The Division successfully hosted a Centenary Paediatric Pathology Day in September 2012. This coincided with the Faculty centenary celebrations. Several talks were delivered by international guests.
Collaborative Research

The Division has active collaborations internationally with the United Kingdom and continues to establish collaborations with other Academic Pathology departments in Africa. We have recently embarked on a joint breast cancer research project with the Aga Khan University in Nairobi. We are exploring similar collaborations with the Pathology department at the Muhimbili University of Health and Allied Sciences in Dar es Salaam.

There are internal collaborations with the departments of Surgery, Medicine, Cardiology, Obstetrics and Gynaecology, Radiation Oncology, Human Genetics and Medical Biochemistry.

Staff

Permanent and Long-term Contract Staff on UCT Establishment

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Permanent Joint Academic Staff on NHLS Establishment

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Honorary Staff

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Distinguished Visitors

Dr Marta Cohen – Sheffield University, UK
Dr Cynthia Kaplan – Boston, USA
Professor Jane Dahlstrom – Canberra, Australia
Dr Ronald de Krijger – Rotterdam, Netherlands
Dr Adrian Charles – Perth, Australia
Dr Irene Scheimberg – London, UK
Dr Megan Dishop – Aurora, USA
Dr Aurore Coulomb – Paris, France
Dr Sara Vargas – Boston, USA
Dr Victor Mudenda – Lusaka, Zambia
Professor Victor Wakwe – Port Harcourt, Nigeria
Dr Carl Albrecht – CANSA
Alice Victor – CANSA

Research Fields and staff

PROFESSOR DHIRENDRA GOVENDER
Pathobiology of cancers, especially breast cancer, gastrointestinal tract cancers and paediatric solid tumours.

ASSOCIATE PROFESSOR RICHARD NAIDOO
Molecular pathology and biomarkers in cancer.

ASSOCIATE PROFESSOR HELEN WAINWRIGHT
Foetal, perinatal & neonatal pathology, placental pathology, respiratory pathology including TB, cardiac pathology including cardiomyopathy and liver disease.

DR MAUREEN DUFFIELD
Neuropathology, renal pathology and electron microscopy.

DR MICHAEL LOCKETZ
Gastrointestinal tract pathology.

DR SHUMANI MALAKA
Breast, gynaecological and thyroid gland pathology.

DR KOMALA PILLAY
Paediatric pathology, lymphoma and fine needle aspiration cytology.

DR RAVEENDRA SOOKHAYI
Lymphoma and Soft tissue sarcoma

DR HUE-TSI WU
Gynaecological pathology and tissue microarrays.
Contact details
Division of Anatomical Pathology
Department of Clinical Laboratory Sciences
Level 4, Room 4.10, Falmouth Building
Faculty of Health Sciences
University of Cape Town
Anzio Rd
Observatory, 7925
SOUTH AFRICA
Tel: 021 406 6162
Fax: 021 404 7611
E-mail: Dhiren.Govender@uct.ac.za
Website: Anatpath.uct.ac.za

Department Of Clinical Laboratory Sciences
Division Of Chemical Pathology
(Including the Chemical Pathology sections of Groote Schuur Hospital and Red Cross War Memorial Children’s Hospital)

HEAD OF DIVISION: PROFESSOR DAVID MARAIS

Divisional Profile

The Division of Chemical Pathology comprises both academic and diagnostic sections. The academic section is located in the Faculty of Health Sciences and the diagnostic laboratories are based in NHLS core laboratory, Groote Schuur Hospital and and Red Cross Children’s Hospital. These offer a comprehensive dedicated routine chemical pathology diagnostic service to both adult and paediatric patients attending the Groote Schuur and Red Cross Children’s Hospitals. There is extensive clinical interaction with members of staff participating actively at the laboratory/ward interface by attendance at ward rounds and clinical meetings with the Division of Endocrinology, Porphyria service and the Lipid Clinic. The Division has a strong specialist diagnostics and research focus on metabolic disorders of acquired and familial aetiology. In addition, the Division has a proud historical tradition of basic science research that cascades down into registrar training. Teaching commitments address both undergraduate and postgraduate needs with a number of MSc, PhD and MMed students under current supervision. The Division is also actively involved in contributing to the teaching programmes of the Division of Medical Biochemistry and the Department of Molecular Cell Biology in the Faculty of Science.

Research activities cover the molecular cell biology of insulin signalling and insulin resistance, the molecular basis of metabolic disease in HIV/AIDS, identification of new biomarkers using proteomics, biochemical mechanisms of ion and drug pumps, the identification of new drug targets in Tuberculosis and Leishmaniasis, the molecular genetics of inherited metabolic disorders, mitochondrial myopathies and erythrocyte antioxidant biochemistry. Individual researchers have established international collaborations across the world. The Division is actively engaged in a number of outreach programmes across Africa. Strong academic links are in place with Walter Sisulu University and there are regular teaching/examining visits from academic staff of the Division of Chemical Pathology to Mthatha. A joint registrar training platform has been established with the University of Stellenbosch and joint academic activities take place regularly between the two Divisions. The Division also regularly hosts supernumerary staff from neighbouring SADC countries (currently Malawi and Zambia) for the purpose of postgraduate training. The Division has established itself as one of the premier Chemical Pathology academic units in Africa for training and research. The Division has held a number of training courses in laboratory methods and laboratory management and has become the preferred provider of these in Africa. In addition, the Division has an active academic programme which is comprised of CPD-accredited weekly journal clubs, seminars and clinical ‘grand rounds’. The Division has also established a tradition of hosting international guest lecturers under the auspices of the Visiting Lecturer’s fund.

The Division’s Research Laboratories and expertise have attracted junior and senior colleagues from other specialties and institutions who have been keen to interact with colleagues in the Division. In particular, these have included the Department of Medicine (Professor Bongani Mayosi), and Division of Medical Biochemistry (Professor Peter Meissner); the Department of Chemical Pathology at the University of Stellenbosch (Professor Rajiv Erasmus); Anatomical Pathology, University of Cape Town (Professor Dhiren Govender).

Distinguished visitors
Michael Livingston (04 Jan 2012)
Professor Gilles Lambert (12 March 2012)
Professor Neil Harris (02 April-13 April 2012)
Dr Ardie Viljoen (03 April)
Professor Ishwarlal Jialal (09 July 2012)
Professor TS Pillay (26 September 2012)
Dr Chantal de Chastellier (09 November 2012)
Professor Wim de Villiers (27 November 2012)
Dr Antonio Assane (04 December 2012)
Dr Eva Naiuea (04 December 2012)
Divisional Statistics

Permanent and Long-term Contract Staff

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Students

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</table>

Research Fields and Staff

Permanent Staff

**DR PETER A. BERMAN**
Principal Specialist; Insulin gene polymorphisms; red cell chemistry and biochemistry, urate metabolism, metabolic disorders, Oxalate metabolism and the influence of ascorbate on oxalate excretion; undergraduate and postgraduate teaching. Retired at the end of May.

**DR HELEEN VREEDE**
Senior Specialist; oversees routine laboratory service at GSH; method development; information technology;

**DR GEORGE VAN DER WATT**
Specialist; oversees routine laboratory and inherited metabolic disease diagnostic service at RXH; Chemical Pathology of HIV/AIDS; undergraduate and postgraduate teaching; paediatric biochemistry.

**DR FIERDOZ OMAR**
Oversees the routine diagnostic and molecular laboratory service at Groote Schuur Hospital in charge of the undergraduate teaching portfolio; Postgraduate teaching; Role of cell-free DNA in prenatal sex determination

**DR DAVID HAARBURGER**
Oversees the routine diagnostic laboratory service at Groote Schuur hospital and supports method development and diagnostic interpretation of IMD profiles at RXH. Undergraduate teaching portfolio; Postgraduate teaching. Proteomic markers of HIV, molecular genetics of androgen insensitivity syndrome, steroid profiling by LC MS MS.

**DR JUDY A. KING**
Medical Scientist (Principal); hypertension; renin; aldosterone; sodium channel mutations; routine diagnostic reviewing; undergraduate and postgraduate teaching

**DR E. PATRICIA OWEN**
Medical Scientist (Principal); inherited metabolic disease; homocysteine; mitochondrial DNA mutations; TPMT mutations; urea cycle disorders; hypertension; pre-eclampsia, epithelial sodium channel mutations; new born screening for glutaric acid uria type 1, postgraduate teaching

**MS FELICITY LEISEGANG**
Medical Scientist (Senior II); molecular genetics of galactosaemia; spinal muscular atrophy; cystic fibrosis; Western blotting in limb-girdle muscular dystrophy; TB-PCR; application of PCR to genetic screening; postgraduate teaching

**EMERITUS PROFESSORS**
Emeritus Professor Eric Harley
Purine and pyrimidine metabolism; comparative biology of red cell antioxidant systems, wildlife conservation, genetics, theoretical evolutionary genetics.
Emeritus Professor Mervyn Berman

**HONORARY PROFESSORS**
Professor Ishwarlal Jialal; Honorary Professor of Chemical Pathology and Medicine, University of Cape Town; Robert E. Stowell Endowed Chair in Experimental Pathology, Director of the Laboratory for Atherosclerosis and Metabolic Research, and Professor of Internal Medicine, Division of Endocrinology, Clinical Nutrition and Vascular Medicine, at the University of California, Davis, Medical Center.

Professor TS Pillay, MBChB Natal, PhD Cambridge UK, MRCPath UK

**GRADUATES 2012**
Dr Philip Fortgens (Pathologist)
Dr Ryan Benjamin (Pathologist)

Contact Details

Postal Address: Division of Chemical Pathology, Faculty of Health Science, Private Bag X3, Observatory, 7935
Telephone: +27 21 406 6192
Fax: +27 21 448 8150
E-mail: cpy-secretary@uct.ac.za
Web: http://web.uct.ac.za/depts/chempath/
**Department Of Clinical Laboratory Sciences**

**Computational Biology Group**

**HEAD OF GROUP: ASSOCIATE PROFESSOR NICOLA MULDER**

**Group Profile**

The University of Cape Town Computational Biology (CBIO) Group is the centre of Bioinformatics activities at the university. It was originally set up as a Node of the National Bioinformatics Network, which aimed to develop capacity in bioinformatics in South Africa, and to perform world-class bioinformatics research. The CBIO Group is located within the Institute of Infectious Disease and Molecular Medicine (IIDMM) in the Health Science Faculty, and integrates researchers interested in bioinformatics at the university. The group performs bioinformatics research and provides training and services in the discipline.

The mission of the UCT Computational Biology Group is to become an exceptional, internationally recognized research and training center, addressing the challenges of bioinformatics capacity development in South Africa.

CBIO has a large network of connections with other bioinformatics groups in Africa through the African Society for Bioinformatics and Computational Biology, and a pan African bioinformatics network for H3Africa (H3ABioNet). The group also has close ties with the African Institute for Mathematical Sciences (AIMS) by supervising student essays.

**Training Activities in the Group**

**Undergraduate and Postgraduate teaching**

The group teaches a module for Molecular medicine students and several modules for the Health Science Honours programme. It also coordinates the Health Science Honours Programme in Bioinformatics. However, the main focus of the group is on postgraduate education, and the group supervises a number of students (listed later). The CBIO staff also organize and teach on a national course program for postgraduate bioinformatics students.

**Graduations**

- Renaud Gajoux – PhD
- Holifidy Arisoa Rapanoel – Master’s with distinctions
- Boitumelo Mofolo – awarded Master’s degree, will graduate in 2013
- Arjun Khoosal – Honours degree
- Catherine Van Zyl – Honours degree
- Rebone Meraba – Honours degree
- Sasha Moola – Honours degree with distinctions

**Other Training Activities**

The CBIO groups runs short specialized workshops for researchers. In 2012 this included:
- High-throughput Biology and Human Genetics Course (Mauritius) Jan 2012
- Workshop on Population Genetics and Genomics (June 2012)
- UniProt and Tuberculist Workshop (November 2012)
- Microbiome Workshop (November 2012)
- Chipster Workshop (December 2012)

**Bioinformatics Service-Related Outputs**

Human Genetics Division: Ayton Meintjes and Gerrit Botha work as part of the group’s services team by providing support to other researchers. These include the following activities: Human Genetics Research Unit: Gerrit processed human exome data from 6 patients. He made use of the ICTS HPC (http://srvslnhpc001.uct.ac.za) to do quality control, alignment, post-processing and SNP calling. Visualisation was done with the Galaxy genome viewer together with IGV (Integrated Genome Viewer). He also processed full human genome data from 5 patients using the same hard-ware and tools, including SVA (Sequence Variant Analyzer). Ayton is working with Professor Ramesar from the Human Genetics Division on an AfriVariants database for local population genetics data.

Immunology Division: Gerrit worked with Heather Jaspan on analyzing her microbiome data on infants with HIV-infected mothers, and Ayton worked with Associate Professor Jo-Anne Passmore on array data her group generated on cervical samples.

Medical Biochemistry Division (Blackburn lab): assistance was provided with running large peptide blasts on the ICTS HPC cluster. Pre- and post-processing of data was done using customized tools in Galaxy on our local server.

Molecular and Cell Biology Department: EST data from the resurrection plant Xerophyta Humilis was assembled and genes were predicted. Assembled genes were annotated using a combination of tools such as InterProScan, Blast and Blast2GO. All modules from basecalling to annotation were integrated in our local Galaxy installation, so we can easily rerun the complete workflow. Gerrit also processed and assembled EST data from human, bats and mice. Some modules specific to this pipeline were developed and integrated in our Galaxy installation. Ayton provided support for analysis of array data for Maize and we performed function and path-way analysis on the results.
External collaborations: Ayton works with external collaborators on collecting, processing, storing and visualizing African human genetics variation data. He developed a population genetics module in Galaxy for mining the data. He is also supporting German collaborators on exon array and RNA-Seq data analysis. As part of a Swiss-SA collaboration, Gaston Mazandu’s work on predicting functions for M. tuberculosis hypothetical proteins is being fed into the TuberculList and Swiss-Prot databases.

Additional Achievements in the CBIO Group

Nicola Mulder has been awarded ~$12 million by the NIH through their H3Africa initiative to lead the development of a Pan-African Bioinformatics network involving over 35 partners in 15 African countries and the USA. The network will be responsible for providing bioinformatics infrastructure to support the NIH and Wellcome Trust funded Human Heredity and Health in Africa projects and for building bioinformatics capacity on the continent. Nicola was promoted to full member of the IIDMM in 2011 and received her first NRF rating at B3. She was also voted in as the next President of the African Society for Bioinformatics and Computational Biology, and joined the African Institute for Mathematical Sciences Executive Committee.

Dr Darren Martin received an NRF rating of B3, and was invited to give a plenary talk at the fourth plant virus ecology network conference in Montpellier, France. In addition, his PhD student Aderito’s first first-author paper was selected for the cover of the Journal of Virology. Finally, Darren’s computer program appeared in the virus epidemic disaster movie Contagion!

Group Members

Staff

Associate Professor Nicola Mulder (Head of Group)
Dr Darren Martin (Senior Lecturer)
Ayton Meinjies (Software Developer)
Gerrit Botha (Software Developer)
Cashifa Karriem (Administrator)

Students

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Contact details

Physical address:
UCT Computational Biology Group
Room N1.05
Werner Beit North Building Basement
Institute of Infectious Disease and Molecular Medicine
Anzio Rd
Observatory

Postal address:
UCT Computational Biology Group
Institute of Infectious Disease and Molecular Medicine
University of Cape Town Health Sciences Campus
Anzio Rd
Observatory
7925
South Africa
e-mail: info@cbio.uct.ac.za
web: http://www.cbio.uct.ac.za/
Tel: 021-406 6176
Fax: 021-650 6068

Clinical Laboratory Sciences
Division Of Forensic Medicine And Toxicology

( Including the Gender, Health and Justice Research Unit)

HEAD OF DIVISION: PROFESSOR LORNA J. MARTIN

Divisional Profile

A range of activities related to the role of Forensic Medicine in public policy and health promotion are being pursued. These relate specifically to violence against women and children, the role of drugs and toxins in deaths, and firearm injuries. The provision of a sustainable database on violence and injury in the Cape Town Metropole is being implemented as an urgent research priority. We provide inputs into the National & Provincial Injury Mortality Surveillance System (NIMSS & PIMSS).

A large component of operational activity of the Division of Forensic Medicine is that of service delivery. The academic staff are on the joint staff establishment of the University of Cape Town and the PGWC: Health; Forensic Pathology Services. This is a fairly new programme of the PGWC: Health, established in April 2006, when the responsibility of “mortuary services” was transferred to the Province from SAPS. We are responsible for the medico-legal investigation of death of all persons who die within the
Metropole, an area comprising approximately 4.5 million persons, stretching from Atlantis on the West Coast, the Peninsula, the City, to everything south of the N2 up to, but not including, Khayelitsha. Our clinical services are based at Salt River Mortuary and we perform approx 3,500 autopsies per annum. The Division does not yet have a dedicated research laboratory, but this should be established in 2011. We do provide a clinical teaching neuropathology laboratory with a specialist neuropathologist. This, together with the heavy investigative service load and a critical shortage of pathologists, has limited research activities within the Division, but this will change with the establishment of our research laboratory and our proposed Master’s course in Forensic Science (2012).

There are active collaborations with the departments of Anatomical Pathology, Surgery, Obstetrics and Gynaecology, Human Genetics, Paediatrics and Psychiatry; and EMS and the Law faculty.

**Divisional Statistics**

**Permanent and Long-term Contract Staff**

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<td>Senior Lecturer / Course Convener</td>
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<td>Chief Medical Technologist</td>
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**Students**

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**Research Fields and Staff**

**Permanent Staff**

**PROFESSOR L.J. MARTIN**

Head of Clinical Department & Professor: Management protocols for rape survivors; domestic homicide; monitoring implementation of rape law reforms; domestic violence guidelines for the health sector; epidemiology of female murder; aortic disease; indicators for the Lodox Statscan in children; age estimations for children using Lodox statscans; paediatric trauma and World Cup Soccer; National study of female and children homicide in South Africa; identification of areas for quality improvements in preventable trauma deaths at Groote Schuur Hospital.

**DR G.M. KIRK**

Head of Clinical Unit & Senior Lecturer: Sudden deaths in sport; firearm injuries; death notification; drug-related deaths; forensic histopathology; history of forensic medicine

**DR Y.Y. VAN DER HEYDE**

Senior Specialist & Senior Lecturer: The effects of pre-natal alcohol exposure; paediatric mortality; animal bites in children; early adolescent suicide, child homicide including child abuse; sudden unexpected death in childhood including SIDS.

**DR L. LIEBENBERG**

Senior Specialist & Senior Lecturer: Firearm fatalities and final judicial outcome; aortic disease project; mast cell Tryptase; case studies – curious deaths; atherosclerotic disease prevalence in the Cape Town population; Lodox X-ray application in the forensic setup.

**DR I.J. MOLEFE**

10 year retrospective study of epidemiology and analysis of injury patterns of femicide and rape homicide in Cape Town: A follow-up study.

**DR S. MAISTRY**

Deaths on Table Mountain: A retrospective analysis 2000-2011

**DR S. MFOLOZI**

Development of the NecroChronometer: determining the post-mortem interval using a combination of three methods and location-specific weather information

**DR E.B. AFONSO**

Identifying trends and risk factors for deaths in police custody in the Cape Town Metropole, 1999-2008

**DR A. KHAN**

SNP genotypes and skin tone variation in South Africa; male sexual assault; maternal deaths (a forensic perspective)

**Contact Details**

Postal Address: Division of Forensic Medicine and Toxicology, P O Box 13914, Mowbray, 7705
Telephone: +27 21 406 6110
Fax: +27 21 448 1249
E-mail: june.mehl@uct.ac.za; lornaj.martin@uct.ac.za
Web: www.forensicmedicine.uct.ac.za
Gender, Health And Justice Research Unit

DIRECTOR: ASSOCIATE PROFESSOR LILLIAN ARTZ

ACTING DIRECTOR: DR KELLEY MOULT (2012)

Unit Profile

The mission of this Unit is to improve service provision to victims of violence against women in South Africa through research, advocacy and education. Drawing together established researchers with a strong record of social-action research in disciplines including law, criminology, forensic sciences and pathology, gynaecology, and psychology, this Unit is the first of its kind in South Africa to respond to the pressing need for research and interventions that cross disciplines in support of our efforts to address the alarmingly high levels of violence against women in this country. The Unit fulfils its mission by conducting rigorous evidence-based research into:

South African women’s experiences of sexual and gender-based violence;
The responses of women, their communities and the criminal justice, health, and welfare systems to violence against women;
The intersections and disjunctures between health and criminal justice responses to violence against women;
The developmental context in which violence occurs, and the role of violence in perpetuating women’s under-development;
The implementation difficulties of translating ‘law on paper’ into ‘law in practice’ in health, criminal justice and medico-legal settings;
The development of indicators for monitoring the implementation of progressive legislation and compliance by criminal justice and health sector personnel with statutory duties;
Risk factors and women’s pathways to crime and experiences and impacts of female incarceration;
International and local models of best practice for addressing violence against women.

The Gender, Health and Justice Research Unit was awarded the University of Cape Town’s Social Responsiveness Award for 2009.

Research Fields and Staff

ASSOCIATE PROFESSOR LILLIAN ARTZ
Feminist legal theory; women and law reform; sexual offences; domestic violence; research ethics; the medical management of female survivors of violence; incarcerated women; prison reform and torture.

DR KELLEY MOULT
Feminist criminology; gender-based violence and policy; domestic homicide; forensics, the intersection of traditional and western justice systems, research methods.

YONINA HOFFMAN-WANDERER
International and comparative law; women’s socio-economic rights; religious and cultural rights; incarcerated women; sentencing.

DR STEFFI RÖHRS
Women’s rights, HIV/AIDS and gender-based violence; HIV/AIDS and the law; law reform.

KATE ASCHMAN
Policing and law enforcement; sexual offences and HIV; human rights; gender-based violence and incarcerated women.

TALIA MEER
Gender-based violence, women’s rights, LGBTI rights, access to justice, rural development, and political ecology

TSITSI MPOFU-MKETWA
Women’s empowerment, rural development, urban poverty, social justice and social inclusion.

CARMEN CORRAL-BULNES
Gender-based violence, incarceration, women’s mental health, domestic homicide and aggressive behaviour in intimate relationships.
Research Associates

Professor Jeanne Flavin (Fulbright Scholar – Fordham University)
The impact of the criminal justice system on women; social and civil rights of women; reproductive rights.

Helene Combrinck (University of the Western Cape)
Disability law and policy, domestic violence and disability.

Administration

Debbie Victor

Interns

Louise Carmody (Faculty of Law, UCT)
Chloë McGrath (Department of Criminal Justice, UCT)
Jenna Chai (University of Michigan)
Gabrielle Inglis (McMaster University, Canada)
Swantje Tiedemann (University of Hamburg)
Emma Backe (Vassar College, USA)
Lauren Gomer (University of Kent)

Contact Details

Postal Address: Gender, Health & Justice Research Unit, Entrance 1, Level 1, Falmouth Building, Faculty of Health Sciences, UCT, Anzio Road, Observatory, 7925
Telephone: +27 21 406 6024
Fax: +27 21 406 6020
E-mail: mrd-gender@uct.ac.za or kelley.moult@uct.ac.za
Web: http://www.ghjru.uct.ac.za

Department Of Clinical Laboratory Sciences

Division Of Haematology And Uct Leukaemia Unit

HEAD OF DIVISION: PROFESSOR NICOLAS NOVITZKY

Divisional Profile

Diagnostic Services

The Division of Haematology at Groote Schuur Hospital is a complex unit with multi-disciplinary activities that include outpatient clinics, admission beds as well as diagnostic and research laboratories. The clinical services are organised under the umbrella of the Department of Internal Medicine, while the laboratory diagnostic sections are under the broader organisation of the Department of Clinical & Laboratory Sciences and National Health Laboratory Service (NHLS).

The laboratory continues to offer comprehensive diagnostic testing for the diagnosis and management of all haematological malignancies. It also offers diagnostic services for a Comprehensive Haemophilia Centre, as well as to a number of tertiary / quaternary programs. This laboratory also acts as a tertiary referral centre for local hospitals and outlying clinics of the Western Cape, as well for referral samples from the Eastern Cape. The routine and molecular haematology laboratories were again successfully accredited by SANAS.

Teaching and Training

The department remains a primary teaching and training site for medical technologists, technicians, undergraduate medical students of the University of Cape Town and registrars (specialising postgraduate doctors) in Haematopathology and Clinical Haematology. Currently there are five haematology pathology registrars and one clinical pathology registrar who are enrolled in the UCT postgraduate program.

Dr Karen Shires continues to provide training in the molecular haematology course for haematology registrars and technologists together with Ms Iva Shankland. Dr Karen Shires and Ms Iva Shankland have provided PCR and DNA lectures/practicals for Anatomical Pathology registrars. Dr Karen Shires is part of a team who have developed the Molecular Forensic MSc course. She is the Forensic Genetics course convener.

Dr Shaheen Mowla is involved in the following Undergraduate Teaching: MBChB Intercalated Molecular Medicine course: Basic cell structure and function; Cell Cycle; Cell Stress responses and cell death mechanisms; Restriction Enzymes and Electrophoresis; MBChB Semester 2: Histology of the skin; MBChB Semester 3: Histopathology of the skin.

Consultant pathologists Drs Almero Du Pisani, Jessica Opie and Monalisa Ntobogwana as well as Mr Francois Barton have delivered training courses to NHLS technologists at NHLS Green Point Complex in Cape Town.
Divisional Statistics

Permanent and Long-term Contract Staff:

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Haematology Research Projects

**DR KAREN SHIRES**
Novel diagnostic, prognostic and MRD assays for haematological malignancies; cancer testis expression in Multiple Myeloma.

**PROFESSOR NICOLAS NOVITZKY**
Immunomodulation of stem cells for transplantation.

**DR SHAHEEN MOWLA**
Molecular Biology of Cancer; Burkitt’s lymphoma and HIV; Role of activation-induced cytidine deaminase in cancer; miRNA in cancer

**DR L A DU PISANI**
Malaria diagnosis, Western Cape, managed and the outcome.

**DR JESSICA OPIE**
HIV-Associated Burkitt Lymphoma and Antiretroviral Therapy; HIV-Associated Hodgkin Lymphoma.

Research Fields and Staff

**PROFESSOR NICOLAS NOVITZKY**
Haematopoietic stem cell biology; clonogenic assays; haematopoietic stem cell transplantation; immune reconstitution; haematological malignancies

**DR CECILE DU TOIT**
Haematopoietic stem cell transplantation; haematological malignancies; haemophilia

**DR ANDREW MCDONALD**
Haemophilia; thrombophilia; stem cell transplantation

**DR JESSICA OPIE**
Molecular biology of neoplasia: chronic myelogenous leukaemia; coagulation abnormalities

**DR KAREN SHIRES**
Molecular biology and diagnostics

**DR SHAHEEN MOWLA**
Minimal residual disease and flow cytometry.

**MRS RYGANA ABDULLA**
Cellular biology of neoplasia; clonogenic assays

Contact Details

Postal Address: 6th Floor, Chris Barnard Building, Anzio Road, Observatory, 7925
Telephone: +27 21 406 6154/404 3073
Fax: +27 21 448 8607
E-mail: Coleen.Fredericks@uct.ac.za
Web: http://web.uct.ac.za/depts/haem/
Clinical Laboratory Sciences
Division Of Human Genetics
Including the MRC/UCT Human Genetics Research Unit and CANSA's National Colorectal Cancer Research Consortium

HEAD OF DIVISION: PROFESSOR RAJ S. RAMESAR

Divisional Profile
The Division is unusual in that it conducts its business through three interacting 'institutions':

1. An extensive clinical service through the Provincial Government of the Western Cape;

2. Its laboratory diagnostic services through the National Health Laboratory Services, and

3. Its academic (research and teaching) activities through the University.

The UCT/MRC Human Genetics Research Unit was created while the Human Genome Project was underway. The mandate for this Unit was (i) primarily one of capacity development in the field of Genetics and Genomics, (ii) understanding the relevance of developments in genetics and genomics, as they may be applicable to South Africans, and (iii) the translation of research to the clinical environment.

An emphasis of this Unit is the investment in understanding the rich Human Diversity on our continent and relating this to disease and health. In this regard there has been a head-on engagement with state of the art high-throughput genetic studies of indigenous southern African population populations, which has resulted in the empowerment and capacity development of South African researchers in large scale data handling and analysis. This and other projects involve fruitful collaborations with other Unit directors, such as Professor Himla Soodyall, and colleagues in bioinformatics in the National Bioinformatics node at UCT. The Division is also involved in several Human, Hereditary and Health Africa projects in networks spanning the continent (www.h3africa.org), and which are funded by the National Institutes of Health (USA) and the Wellcome Trust (UK).

A further investment has been in taking genetics to the ‘clinical’ high street. A measure of relevance and success of the Unit in this regard, is its attraction to other mainstream clinical practitioners e.g. from the disciplines of Gastroenterology, Nephrology, Internal Medicine, Psychiatry, Surgery, and Dentistry (UWC) who are completing PhDs in Genetics, in this Unit. A substantial effort has been made into introducing genetics/genomics into the undergraduate MBChB curriculum and to specialist groups.

Divisional Statistics

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</tbody>
</table>
Research Fields and Staff

PROFESSOR RAJ S. RAMESAR (UCT/PGWC)
Head of Division and Personal Chair
Director: MRC Human Genetics Research Unit
Principal Investigator: Genetics of Bipolar Disorder; Genetics of Retinal Degenerative Disorders; Molecular Genetics of Complex Disorders; Pharmacogenetics – Adverse Drug Reactions in Cancers

PROFESSOR JACQUIE GREENBERG (UCT)
Principal Investigator: Genetics of Neurological Disorders; Genetics of Neuromuscular Disorders
Co-Principal Investigator: Genetics of Retinal Degenerative Disorders

EMERITUS PROFESSOR PETER BEIGHTON
Principal Investigator: Genetics Connective Tissue Disorders

HONORARY PROFESSOR MICHAEL HAYDEN
Co-investigator: Genetics of Neurological Disorders

HONORARY PROFESSOR WILMOT JAMES
Director: Africa Genome Education Institute; African Genomics, and Co-host: The Darwin Seminars

HONORARY PROFESSOR MATTHEW WOOD
Co-investigator: Genetics of Neurological Disorders

ASSOCIATE PROFESSOR AMBROISE WONKAM (UCT)
Principal Investigator: Phenotypic correlation of sickle cell anemia to genotypic variations; Genetics of Deafness

ASSOCIATE PROFESSOR COLLET DANDARA (UCT)
Principal Investigator: Pharmacogenomics

DR KAREN FIEGGEN (PGWC / UCT)
Senior Specialist: Principal Investigator: X- linked Mental Retardation; Bardet-Biedl Syndrome

MRS THERESA RUPPELT (NHLS)
Laboratory Manager: Cytogenetics

Contact Details
Postal Address:
Division of Human Genetics, Department of Clinical Laboratory Sciences, Level 3, Werner and Beit North Building; Institute for Infectious Diseases and Molecular Medicine, Faculty of Health Sciences, University of Cape Town, 7925, Observatory
Telephone: SA (21) 406 6297; Fax: SA (21) 406 6826/650 2010

Clinical Laboratory Sciences

Division Of Immunology

HEAD OF DIVISION: PROFESSOR CLIVE GRAY

Profile

The Division of Immunology is involved with a range of activities from identifying the basic mechanisms of immunity in infectious disease to laboratory diagnostic testing in the National Health Laboratory Services at Groote Schuur Hospital. The vision statement for the Division of Immunology is “Driving Science to promote World Health” and in 2012, a detailed strategic document outlining the next 5-10 years was formulated. Part of that mission is to formulate and introduce a revised immunology curriculum for MBChB undergraduate students at all years of their study. Numerous staff are also either Full or Associate members of the Institute of Infectious Disease and Molecular Medicine (IIDMM) and there is a very integrated relationship between the Division of Immunology and the IIDMM.

Basic Research: The Division houses the UCT/MRC Unit on Immunology of Infectious Diseases, an Allergy Section and the SARCHi chair on ‘Immunology of infectious diseases in Africa’. The Division has an internationally recognized expertise in generating transgenic mice, for use in a wide range of immunological studies applicable to communicable and non-communicable diseases. These have been used to make important advances in diseases, such as Tuberculosis, Bilharzia, African Trypanosomiasis, Candidiasis and cutaneous Leishmaniasis and have contributed significantly to identifying fundamental cellular and molecular immunological mechanisms. Together with international and national collaborations, these animal tools contribute to many advances in Immunology and other fields. Basic research in the Allergy Section has focused on the role of IL-4 and IL-13 in allergy as well as the application of novel assays to identify sensitivity profiles. There are very close ties with the South African component of the International Centre for Genetic Engineering and Biotechnology, providing a very strong genomics thrust to the Division.

Translational Research: There is also a strong clinical immunology emphasis in the Division, specifically in HIV and TB immunology where studies are underway to understand adaptive and innate immune responses during acute HIV infection and in infants exposed to HIV in utero and upon receiving different childhood vaccinations. Successfully funded grants have been garnered from the
Canadian Institute of Health Research and the South African Department of Science and Technology for investigating the link between breast-feeding practices and newborn infant immune activation status, which may mitigate EPI responses. Understanding the link between HIV-induced inflammation and autoimmunity, where peripheral tolerance has been broken, is also a new direction within the Division.

NHLS activities: The combined functions of the Laboratory for Tissue Immunology (LTI) and the Clinical Immunology and Allergy Laboratory are responsible for providing NHLS activities. The LTI is responsible for HLA class I and class II typing for solid organ and bone marrow/stem cell matching. The Laboratory also performs cross-matching and pre-formed antibody testing for renal transplantation. Accreditation of LTI with the European Federation of Immunogenetics (EFI) was awarded for a further three years in 2012. The Clinical Immunology and Allergy Laboratory performs routine diagnostic testing for autoantibodies and different allergies. The DOI plays a leading role in the Immunology Expert Committee, which has formulated a new workload model for immunology services within the NHLS. The major task for the Expert Committee over the next year will be to formulate a national immunology curriculum so that immunology can become a registered specialist discipline.

Teaching: The Division has an active teaching component in the medical undergraduate syllabus and provides cutting edge lectures on the basics of the immune system and integrates immunology concepts and principals with the case studies and problem based learning approach by the Faculty. More advanced courses are offered at the postgraduate level through the Honours in Infectious Disease and Immunology programme and the short semester Research Immunology Course for postgraduate students. The Division also holds workshop on infectious disease and immunology and specifically train students from other countries in Africa on advanced immunology related techniques and cutting-edge science.

International Links: There are very strong links between staff in the Division with international collaborators on all continents in both basic and applied research.

Divisional Statistics

Permanent & Long Term Contract Staff (UCT/NHLS)

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<th>Professors</th>
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<td>Associate Professors</td>
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| Lecturers                  | 2 |
| Research Staff             | 7 |
| Technical Staff            | 6 |
| Technical Support Staff    | 5 |
| Administrative Staff       | 2 |
| Total                      | 25 |

Students

| Postdoctoral                | 12 |
| Doctoral                    | 19 |
| Master’s                    | 10 |
| Honours                     | 5  |
| Total                       | 46 |

Staff Research Fields

Academic Staff

PROFESSOR CLIVE GRAY PHD
Wernher Beit Chair and HODv Immunology
Full member of the IIDMM; B rating by NRF; Research Profile: Immunology of HIV infection and specific T cell responses during acute infection.

PROFESSOR FRANK BROMBACHER, PHD
Professor of Immunology
UCT Fellow; SARCHi Chair, Director of an MRC Unit; ICGEB Coordinator & Group leader, Member of IIDMM; A1-rating by NRF; Research profile: Immunology of infectious diseases, including Tuberculosis, African Trypanosomiasis, Leishmaniasis, Bilharzia and other Helminth infections.

ASSOCIATE PROFESSOR MUAZZAM JACOBS, PHD
NHLS Medical Scientist and UCT Senior Lecturer; Full member of the IIDMM. Research profile: Understanding host pathogen interaction and associated immune mechanisms that bring about protection against tuberculosis infection.

DR BARBARA NURSE, PHD
NHLS Medical Scientist. Research profile: T cells in allergic diseases: Cytokine responses to allergen and mTB protein in atopic asthmatic children; Immune changes underlying successful immunotherapy; Investigation of the role of T cells in drug-responsive and extensively drug-resistant (XDR) tuberculosis.

DR WILLIAM HORSNELL PHD
UCT Lecturer in Immunology. Associate member of IIDMM. C2 NRF rating, Convener of IDI Honours postgraduate degree. Research profile: Immunity to helminth infections. Maternal and co-infection immunity. Acetylcholine signalling in the immune system.
DR HEATHER JASPN MD, PHD, FAAP
Senior Lecturer. Associate member of the IIDMM. Research Profile: Investigating immune activation, T cell immunity and susceptibility to HIV in infants.

Visiting Professors

PROFESSOR GUIDO FERRARI
Professor, Duke University Medical Center, Durham, North Carolina, USA
Identifying CD8+ T cell activation, functional profile, and memory differentiation during acute HIV infection and role in in determining HIV escape mutants.
Identifying epitope targeted by ADCC-mediating Antibody responses and their role in protection from infection.

PROFESSOR JIM ALEXANDER
Strathclyde University, Scotland

Postdoctoral Fellows

DR LYCIAS ZEMBE
Understanding CD8+ T cell recognition patterns in HIV infection

DR SURAJ PARIHAR
DR NASIEMA ALLIE

DR RETO GULER
Investigate using 4 different pathogens, i.e. Listeria monocytogenes, mycobacteria tuberculosis, mycobacteria bovis BCG, and Leishmania major

DR NATHALIE NIEUWENHUIZEN
Characterization of Anisakis Allergens

DR MARK BARKHUZEN:
The Role of Interleukin-12 in Pathogenic Trypanosome Infections

DR ROANNE KEETON
TB Immunology

DR FRANK KIRSTEN
Investigation of immune responses in different mouse models of allergic asthma

DR NAI-JEN HSU
Understanding TNF-TNFR signaling and its impact on microglia-neuronal cell interaction

DR TIROYAONE BROMBACHER
Neuro-immunological effects of Nippostrongylus brasiliensis on cognitive function.

DR ROANNE KEETON
The role of TNFR signalling in pulmonary tuberculosis

DR MOHLOPHENI MARAKALALA
Investigation of C-type lectin receptors in immunity to Candidiasis, Tuberculosis and Staphylococcus infections

DR JENNIFER CLAIRE HOVING
Asthma and Allergy

Distinguished Visitors

Harukazu Suzuki - Riken Institute-Japan
Bernhard Ryffel - CNRS France
Daniel Barber - Max Planck, Germany
Martin Bachmann - Cytos, Switzerland
Claudia Jakubzic - Virginia, USA
Mattias Svensson - Karolinska Institute, Sweden
Benjamin Marsland - ETH Zurich, Switzerland
Gordon Brown - Univ Aberdeen, UK
Luisa Martinez Pomaers - Univ Nottingham, UK
Jim Alexander - Univ Strathclyde, UK
Andrew Mcdonald - Univ Edinburgh, UK
Abhay Satoskar - Ohio State University, USA
Michael Pepper - University Of Pretoria, SA
Johanna Spaans - University of Ottawa
Stefan Magez - Vrije University, Belgium
Blanka Vidan-Jeras - Slovenia
Debra Rosa - CSIR
Gottfried Alber - Univ of Leipzig, Germany
Musa Mhlanga - CSIR, Pretoria
Thomas Heunig - University Wuerzburg, Germany
Abhay Satoskar - University of Ohio, USA
Bernhard Ryffel - University of Orleans, France
S. Barth - Univ. Fraeuenhofer, Germany

Contact details
Tel: 406-6616
Fax: 406-6029
Email: dhuraiyah.abdullatief@uct.ac.za

Clinical Laboratory Sciences

Division Of Medical Biochemistry

HEAD OF DIVISION: PROFESSOR PETER MEISSNER

Divisional Profile

The Division of Medical Biochemistry is a preclinical, basic science division in the UCT Faculty of Health Sciences and is associated, either wholly or partly, with a number of advanced research entities. Some such entities are laboratory research groups contained entirely within
Division, while some have certain components or personnel falling within the Division, affiliated to other Institutes or Departmental groupings.

Specifically: The Division incorporates the MRC/UCT Research Group for Receptor Biology (co-directed by Associate Professor Arieh Katz and Dr Colleeen Flanagan, ex-UCT now at WITS, and Professor Bob Millar, Senior Scholar in our Division); the UCT Structural Biology Research Group (directed by Professor Trevor Sewell); members of the Institute of Infectious Disease and Molecular Medicine (IIDMM) at UCT (Profs Sturrock, Blackburn, Meissner, Parker, Katz and Leaner); and the International Centre for Genetic Engineering and Biotechnology (ICGEB) (Professor Iqbal Parker).

Through 2012 there were 53 research postgraduate students registered for either Master’s or PhD (57 in 2011), and an additional 11 Honours students were based wholly in Medical Biochemistry for the duration of their research projects (April – November) (6 in 2011). The Division graduated 4 PhD and 2 MSc students during the course of 2012 (6 PhD and 3 MSc during 2011). Together with various scientific and academic staff our postgraduate students and 20 postdoctoral fellows (18 in 2011) continued to form the basis of a vibrant and on-going research thrust and culture in the Division, forming the core of our Divisional research strategy – out of which flows a contemporary and effective approach to teaching at both under- and postgraduate levels. During 2012 the Division and its’ affiliates published 56 papers in ISI accredited science journals and 2 book chapters. Research activities of the Division cover seven major areas:

1. GnRH receptors, signalling, structure – function and as a target for development of therapeutics for treatment of reproductive cancers (Katz & Millar labs);
2. Molecular mechanisms of cervical cancer and oesophageal cancer development and progression (Leaner, Hendricks and Parker labs)
3. Identification and characterisation of anticancer drugs in natural products (Hendricks lab);
4. Angiotensin converting enzyme (ACE) structure activity relationships and development of ACE inhibitors (drug design) for treatment of hypertension, congestive heart failure, myocardial infarction and renal disease (Sturrock lab);
5. Application of functional proteomics for diagnostics, drug and vaccine development for infectious disease and cancers (Blackburn lab).
6. Diagnostic, structure and function studies in the porphyrias and haem biosynthesis (Meissner lab – currently sited and staffed in the Dept. of Medicine)
7. Structural basis for differential regulation of glutamine synthetase in humans and the malaria parasite, structural studies on the nitrilase family of enzymes in the context of cancer, mycothiol synthetic pathway in Mycobacterium tuberculosis (Sewell lab- currently located on UCT upper campus)

Physical space for the Structural biology research Unit and the Porphyria labs remain a problem. Research staff members, fellows, postgrad students participated in many local and international conferences during the year. Our Division considers such travel essential and worthwhile in that they give rise to new collaborations and maintenance of established collaborations and lab research visits.

Selected Divisional Statistics

<table>
<thead>
<tr>
<th>Category</th>
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<td>Professors</td>
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<tr>
<td>Professor (emeritus) appointed as Senior Scholar</td>
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<td>Professors on establishment but working in affiliated Institutions</td>
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Honorary Staff

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Students & Fellows

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Research fields and staff

PROFESSORS
J M BLACKBURN, BSC (HONS) DPHIL OXON (SOUTH AFRICAN RESEARCH CHAIR)
Proteomics and genomics for diagnostics, drug and vaccine development for infectious disease and cancers

P N MEISSNER, BSC(MED)(HONS) PHD CAPE TOWN
(FELLOW OF UCT)
Haem biosynthesis, disorders of porphyrin metabolism

E D STURROCK, BSC (MED)(HONS) PHD CAPE TOWN
Angiotensin converting enzyme (ACE) structure activity relationships and drug design related to ACE inhibitors for treatment of hypertension, congestive heart failure, myocardial infarction and renal disease

B T SEWELL, MSC WITWATERSRAND, PHD LONDON.
Structural biology related to regulation of glutamine synthetase in humans and the malaria parasite, nitrilases in the context of cancer, mycothiol synthetic pathway in Mycobacterium tuberculosis

A A KATZ, PHD REHOVOT
Gonadotropin-Releasing Hormone (GnRH) receptors: function regulation and ligand receptor interactions; role of cyclooxygenases and prostaglandins in cervical cancer and uterine pathologies

R P MILLAR PHD, FRCPATH (CHEM), FRSE (LIFE FELLOW OF UCT)
Endocrine receptor and molecular biology

PROFESSORS (WORKING IN AFFILIATED INSTITUTES): M I PARKER, BSc(Hons) PhD Cape Town (MASSAf) (based in the International Centre for Genetic Engineering and Biotechnology – ICGEB, Cape Town) Cellular and molecular biology of cancer; Regulation of gene expression in cancer

ASSOCIATE PROFESSORS
DENVER HENDRICKS, BSC(HONS) PHD CAPE TOWN
Molecular biology of oesophageal cancer and development of novel chemotherapeutic drugs

VIRNA LEANER, BSC(HONS) PHD CAPE TOWN
Molecular mechanisms associated with the development and treatment of cervical cancer

CYNTHIA SIKAKANA, BS WESLEYAN PHD WISCONSIN-MADISON
Medical education, Metabolism of xenobiotics

HONORARY PROFESSOR
C. SEOIGHE, PHD DUBLIN
W-D SCHUBERT, PHD BERLIN

HONORARY ASSOCIATE PROFESSOR
LUIZ ZERBINI, MSC PHD SÃO PAULO BRAZIL

EMERITUS ASSOCIATE PROFESSOR
L R THILO, MSC UNIVERSITY OF PRETORIA DR RER NAT HEIDELBERG

HONORARY SENIOR LECTURERS
HENRY JABBOUR, PHD SYDNEY
G PROTEIN – COUPLED RECEPTORS IN REPRODUCTIVE BIOLOGY AND HIV
COLLEEN FLANAGAN, PHD CAPE TOWN
CYCLOOXYGENASES IN GYNAECOLOGICAL CANCERS

HONORARY RESEARCH ASSOCIATE
ARVIND VARSANI, PHD CAPE TOWN.

POSTDOCTORAL FELLOWS
PAULINE VAN DER WATT
ANDREW JM NEL
PUTUMA GQAMANA
BRANDY YOUNG
KATE HADLEY
YABING WANG
JEAN WATERMEYER
ARON ABERA
VICTOR FRANCIS
ROSS ANDERSON
CLAIRE NEWTON
JACQUELINE BRACHER
ROSS DOUGLAS
JEREMY WOODWARD
ALBERT ABRIE
SERAH KIMANI
LISELOTTE ANGUS
REBECCA TADOKERA
BEVERLEY VAN ROOYEN
ROBERT NDORIA THUKU

CHIEF SCIENTIFIC OFFICER
SYLVA SCHWAGER, MSC
PROTEOLYTIC PROCESSING OF MEMBRANE PROTEINS

RESEARCH ASSOCIATES AND MID-CAREER FELLOWS
KURT SALES, PHD (KATZ/MILLAR LAB, IIDMM)
GEORGIA SCHAEFER (PARKER LAB, ICGEB)
CATHERINE KASCHULA (PARKER LAB, ICGEB)
Contact Details
Division of Medical Biochemistry
Dept. of Clinical Laboratory Sciences
Level 6, Room 6.07, Falmouth Building
UCT Medical School
Anzio Rd
Observatory, 7925
Cape Town, SOUTH AFRICA
Tel: 021 404 7712 (Secretary)
021 406 6206 (Head)
Fax: 021 4066061
E-mail (Head): Peter.Meissner@uct.ac.za

Clinical Laboratory Sciences
Division Of Medical Microbiology
HEAD OF DIVISION: PROFESSOR MARK NICOL

Divisional Profile
The Division of Medical Microbiology (www.medmicro.uct.ac.za) encompasses a tertiary diagnostic microbiology service, provided by the National Health Laboratory Service, Groote Schuur Hospital and an active research programme based at the Health Sciences Campus.

We aim to conduct research that is relevant to the needs of diagnostic microbiology services and focused on important infectious diseases in South Africa. This includes work on the development and assessment of novel diagnostics for tuberculosis as well as on the transmission and molecular epidemiology of drug resistant pathogens within our hospitals. The latter work is conducted under the ambit of the Centre for Hospital, Tropical and Opportunistic Infections of the National Institute for Communicable Diseases. More recently, together with the Department of Paediatrics and Child Health, the Division has developed a programme of research focusing on the evolution of the microbiome in early childhood and the association between the microbiome and respiratory illness in young children.

The Division is the academic home of the highly regarded Molecular Microbiology Research Unit (www.mrc.ac.za/mycobacteriology/mycobacteriology) headed by Professor Valerie Mizrahi and Dr Digby Warner which aims to develop and apply genetic tools for the identification, validation and characterisation of novel drug targets and vaccine candidates for tuberculosis. The Division is also the home of Professor Gregory Hussey and Dr Charles Wiysonge who lead the ‘Vaccines for Africa’ Initiative (www.vacfa.com) which is a partnership of concerned individuals and organisations who have come together with the expressed purpose of increasing awareness of and promoting uptake of vaccines on the African continent.

The Division has been successful in attracting substantial research funding from the Wellcome Trust, EDCTP, National Institutes of Health, Carnegie Foundation, Howard Hughes Medical Institute and Bill and Melinda Gates Foundation in recent years.

The composition of the Division is complex with staff drawn from the University of Cape Town, Groote Schuur Hospital and Red Cross Children’s Hospital and the National Health Laboratory Service and National Institute for Communicable Diseases. This mix of pathologists, scientists and students offers the opportunity for creative, cross-disciplinary research.

Divisional Statistics
Permanent and Long-term Contract Staff

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<th>Position</th>
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<td>Administrative and Clerical Staff</td>
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<td>Project Manager</td>
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<td>Lab Manager</td>
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Honorary Staff

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Students

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<td>Undergraduates</td>
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<td>Total</td>
<td>433</td>
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</table>
Research Fields and Staff

Permanent Staff

PROFESSOR MARK P NICOL
Development and evaluating point-of-care tests for tuberculosis; the strain biology of Mycobacterium tuberculosis; the origin and evolution of the human microbiome in early childhood and its impact on respiratory illness.

PROFESSOR GREGORY HUSSEY
Understanding the dynamics of TB infection and disease in adolescents; the epidemiology of TB in infants and young children; evaluation of new TB vaccines

PROFESSOR VALERIE MIZRAHI AND DR DIGBY WARNER
Investigate fundamental aspects of the metabolism and physiology of Mycobacterium tuberculosis of relevance to tuberculosis drug discovery and drug resistance

DR ANDREW WHITEAW
TB diagnostics, molecular epidemiology and infection control

DR C BAMFORD
Laboratory detection of multi-resistant organisms; molecular epidemiology of hospital acquired infections; rational use of antibiotics and surveillance of antimicrobial resistance; appropriate use of microbiological investigations; microbiological diagnosis of tuberculosis

DR ELIYA MADIKANE
Mycobacterium tuberculosis drug discovery and development; population genetics of Acinetobacter baumannii and Staphylococcus aureus in Cape Town Hospitals; the nasopharyngeal microbiome in early childhood

Postdoctoral Fellows

DR WIDARAD ZEMANAY
Evaluation of novel diagnostic methods for tuberculosis in adults and children; evaluation of the impact of novel TB diagnostics on patient outcomes

DR ELLOISE DU TOIT
Household dust microbial burden and the development of recurrent wheezing in children in the Western Cape: a cohort study.

DR MAMADOU KABA
Molecular epidemiology of infectious diseases; the nasopharyngeal and stool microbiome in early childhood

Contact Details

Postal Address: Division of Medical Microbiology, University of Cape Town, Medical School, Anzio Road, Observatory, 7925
Telephone: +27 21 406 6727
Email: doris.moiola@uct.ac.za
Web: www.medmicro.uct.ac.za

Department Of Clinical Laboratory Sciences

Division Of Medical Virology

HEAD OF DIVISION: PROFESSOR CAROLYN WILLIAMSON

Divisional Profile

The Division of Medical Virology contributes to the diagnosis, treatment, prevention and eradication of viral diseases in South Africa through a diagnostic laboratory service together with a dynamic research programme.

Virology has a vibrant research programme focussing on: HIV-1 vaccine development; biomarkers of HIV acquisition; mechanisms of HIV-1 transmission and virological control; HIV-1 breakthrough infections in large vaccine and microbicide trials; Human Papillomavirus (HPV); HIV/TB co-infection; Hepatitis B and C; novel respiratory viruses; cytomegalovirus; and the development of new molecular diagnostic tests. The division hosts one South African Research Chair (NRF SARChI) (Professor Anna-lise Williamson, Vaccinology). High impact research findings.
in 2012 include a study elucidating the impact of HIV on the natural history of HPV genital infection; the finding that symptomatic vaginal discharge is a poor predictor of sexually transmitted infections and genital tract inflammation; that genital tract inflammation during early HIV-1 infection predicts higher plasma viral load set-point in women; elucidation of the role of HIV-1 cytotoxic T-cell escape on viral replicative fitness and disease progression; and identification of mechanism of creating an HIV-1 broadly cross-neutralizing neutralizing epitope through immune escape. Research is largely performed within the Institute of Infectious Diseases and Molecular Medicine.

The Virology Diagnostic Laboratory falls within the National Health Laboratory Service, and is located at Groote Schuur Hospital (GSH). It provides a comprehensive service to both GSH and Red Cross Children’s Hospital, and serves as a regional reference centre providing a clinical and diagnostic service to local teaching hospitals and surrounding public health clinics. The Diagnostic Laboratory is SANAS accreditation. Two viral outbreaks were investigated over the past year, one caused by influenza A virus in the Red Cross hospital ICU and a second due to respiratory syncytial virus infection.

The division contributes to undergraduate teaching and plays a major role in postgraduate training, and in 2012 hosted 43 postgraduate students and postdoctoral fellows.

Special awards / honours / promotions

Jo-Ann Passmore was promoted to Associate Professor. Carolyn Williamson became a member of the Academy of Sciences, South Africa
Carolyn Williamson become a member of Royal Society of South Africa
Narjis Thawer was awarded a DST fellowship for 2012 South African Women in Science awards

The following students graduates

Roman Ntale was awarded his PhD

Distinguished visitors

Mark Brockman from Simon Frasier University, Canada
Suresh Boppana and Dr Cecilia Hutto from the University of Alabama, Birmingham
Mike Cherry from the University of Stellenbosch had his sabbatical in the division
Bert Jacobs was a visiting Fulbright specialist from the Biodesign Institute at the Arizona State University.

Lyle McKinnon from the University of Toronto and Kenyan
AIDS Control Project, University of Nairobi
Saggio Pillay, CEO of NHLs
John Wherry from the NIH, USA
Bruce Walker from the Ragon Institute of MGH, MIT and Harvard, USA.

Divisional Statistics

Permanent and Long-term Contract Staff

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<table>
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Honorary Staff

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Students

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Research Staff and Fields

Emeritus Professor

PROFESSOR KEITH DUMBELL

Academic Staff

PROFESSOR CAROLYN WILLIAMSON (UCT/NHLS)
HIV-1 pathogenesis and prevention; Head of Division.

DR DIANA HARDIE (NHLS/UCT)
Molecular biology of Hepatitis B Virus – Head Diagnostic Virology Laboratory.

PROFESSOR ANNA-LISE WILLIAMSON (NHLS/UCT) – SOUTH AFRICAN RESEARCH CHAIR
Human Papillomavirus; HIV-1 vaccine development.

ASSOCIATE PROFESSOR JO-ANN PASSMORE (NHLS/UCT)
HIV/HPV Immunology.
DR WENDY BURGERS  
HIV Immunology and Pathogenesis

DR ROS CHAPMAN  
HIV Vaccines

DR GERALD CHEGE  
HIV Vaccines

DR NICOLA DOUGLASS  
HIV Vaccines / poxviruses

DR MARVIN HSIAO (NHLS/UCT)  
Clinical Virology, cytomegalovirus and molecular diagnostics

DR. STEPHEN KORSMAN (NHLS/UCT)  
Clinical Virology, Hepatitis B, molecular diagnostics and outreach

DR ZIZIPHO MBULAWA (NHLS/UCT)  
Human Pappilomavirus

DR HEIDI SMUTS (NHLS/UCT)  
Hepatitis C, Novel respiratory viruses.

DR ZIYAAD VALLEY-OMAR (NHLS/UCT)  
Molecular Epidemiology

Honorary Staff

DR ERICA ANDERSEN-NISSEN  
Research Associate; HIV vaccines

DR TIM TUCKER  
Senior Lecturer; HIV.

Research Staff

MELISSA-ROSE ABRAMS  
HIV Diversity and Pathogenesis.

CRAIG ADAMS  
HIV Vaccines.

BRUCE ALLAN  
Human papillomavirus.

DESIREE BOWERS  
HIV Vaccines.

KATRINA DOWNING  
HIV Vaccines/ Project manager/GLP.

SHIREEN GALANT  
HIV Vaccines.

HOYAM GAMIELDIEN  
HIV Immunology.

MURRAY LOGAN  
HIV Diversity and Pathogenesis.

JINNY MARAIS  
HIV Diversity and Pathogenesis.

TRACEY MULLER  
HIV Immunology and Pathogenesis.

CECILIA RADEMEYER  
HIV Diversity and Pathogenesis.

DEBBIE STEWART  
HIV Diversity and Pathogenesis/Project co-ordinator and GLP archivist

RUWAYHIDA THEBUS  
HIV Diversity and Pathogenesis.

NONKULULEKO NDABAMBI  
HIV Diversity and Pathogenesis.

DANIEL SHEWARD  
HIV Diversity and Pathogenesis.

Postdoctoral Fellows

DR DENIS CHOPERA  
HIV Diversity and Pathogenesis

DR ZEKARIAS GINBOT  
HIV Immunology and Pathogenesis

DR ZIZIPHO MBULAWA  
Human Papillomavirus

DR TRACY MEIRING  
Human Papillomavirus

DR NOBU BELO NGANDU  
HIV Diversity and Pathogenesis.

DR COBUS OLIVIER  
HIV Immunology

DR LINDI ROBERTS  
HIV Immunology
**Department of Clinical Laboratory Sciences**

**Research output**

**Authored books**


**Chapters in books**


Articles in peer-reviewed Journals


widespread testing of HIV vaccine candidates at a clinical trial site in Pretoria, South Africa. AIDS Research and Human Retroviruses, 28(9): 1131-1138.


Nieuwenhuizen, N., Kirstein, F., Jayakumar, J., Emedi, B., Hurdayal, R., Lopata, A.L. and Brombacher, F. 2012. Allergic airway disease is unaffected by the absence of IL-4-dependent alternatively activated macrophages. Journal of Allergy and Clinical Immunology, 130: 743-750.


Olesen, O.F. and Parker, M.I. 2012. Health research in Africa: getting priorities right. Tropical Medicine & International Health, 17(9): 1048-1052.


Paget, C., Ivanov, S., Fontaine, J., Renneson, J., Blanc, F., Pichavant, M., Dumoutier, L., Ryffel, B., Renaud, C.J.,


for HIV but not for cytomegalovirus-specific CD8+ T Cells. Journal of Immunology, 189(8): 3838-3847.


brothers reveal sites affecting conformation and coupling. 


Peer-reviewed published conference proceedings


Department of Health and Rehabilitation Sciences

Department Profile

The Department of Health and Rehabilitation Sciences is a multi-professional Department, and offers undergraduate and postgraduate programmes in Audiology, Speech and Language Pathology, Occupational Therapy, and Physiotherapy. The Department also offers Postgraduate Diplomas, Master's and PhD programmes in Disability Studies and Nursing.

2012 was a productive year with regard to research activities and graduation of postgraduate candidates. Professor Steve Ersser continues his appointment as an Honorary Professor to the Division of Nursing to develop collaborative research in dermatology nursing. Naeema Abrahams continues her appointment as an Honorary Associate Professor to the Division of Nursing for teaching clinical research methods. One staff members obtained her PhD (Lizhan Cloete). In addition, in 2012 the Department achieved the best throughput rate of postgraduate candidates to date, with one doctoral and 22 master's graduates. In 2012, the Department entered the second year of a five-year strategy to accelerate the throughput of staff doing PhDs. This programme has been supported by the Emerging Researcher Programme and the Research Office.

Researchers received funding for numerous research activities. Amsuda Sonday, Elewani Ramugondo and Madri Engelbrecht secured NRF grants. Fadia Gamieldien and Matumo Ramafikeng secured scholarships from Canon Collins Trust and Mellon respectively. Madie Duncan secured the final tranche of funding from SANPAD for a participatory development project for disability inclusion in deep rural villages in the Eastern Cape. Dr Wimpenny from Innovation Enterprise Centre at Coventry University, (UK) secured an applied research fellow grant from Coventry University for a cross contextual investigation of undergraduate mental health occupational therapy curriculum & entrepreneurship in collaboration with Madie Duncan and Loren Lewis. Romy Parker was awarded NRF Thuthuka funding to complete her PhD. Niri Naidoo, Gillian Ferguson and Vivienne Norman were awarded Research Development Grants. Pat Mayers and Una Kyriacos received funding from the URC to attend and present at the Nursing Education Tomorrow conference in the UK. Nicki Fouche received a URC Travel grant to visit The Netherlands. Douglas Newman-Valentine was selected to attend a PhD Proposal Development Programme that was run by SANTRUST, an organisation that specialises in...
supporting capacity development around PhD proposal development. SANTRUST (legal entity of SANPAD) is funded by Irish Aid and the NRF with the aim of building enhanced doctoral throughput capacity for the Nursing Sciences. Two parallel workshops were held for supervisors at each end of the course and these were attended by Sinegugu Duma and Pat Mayers.

Jennifer Jelsma received funding from the EuroQoL Foundation as well as from the NRF. Theresa Lorenzo received funding from the NRF Community Engagement Strategy Fund for the Disabled Youth Enabling Sustainable Livelihoods (DYESL) study, which investigates the strategies of disabled youth in sustaining their livelihoods. The Division of Disability Studies collaborated with Occupational Therapy departments of five universities in South Africa for this study. She also received funding from the URC Programme for Enhanced Research Capacity for a study that explores the capacity of community disability workers to address the needs of disabled youth. This study is being conducted in rural areas of Botswana, Malawi and Mpumalanga, South Africa. The study on the housing and support options for adults with intellectual disability in the Western Cape was completed as part of the postdoctoral research project by Judy Mckenzie. Theresa Lorenzo was awarded funding from the Vice Chancellor’s Strategic Fund to investigate disability inclusion in the curriculum of faculties at UCT. Jennifer Jelsma was awarded a travel grant from the Vice Chancellor’s Strategic Fund to be used for developing teaching and learning at Kigali Institute in Rwanda.

Elewani Ramugondo was awarded funding from the Vice Chancellor’s Strategic Fund for Internationalisation with an Afropolitan Niche to establish occupational therapy training in African countries, including Lesotho, Malawi, Namibia and Botswana. Sinegugu Duma is participating in the PLUME project. This is an initiative of FUNDISA (the Forum for University Nursing Deans in South Africa) and is funded by the NRF to develop lead researchers in all member universities.

The Department raised its international research profile in 2012. Staff members from the Division of Occupational Therapy presented work at the Occupational Therapy Association of South Africa Congress in Durban, as well as Towards Carnegie 3: Reducing Poverty and Inequality Conference in Cape Town. Madie Duncan participated in a panel presentation at a conference on South African Netherlands Academic Partnerships at the Institute of Social Studies (Erasmus University) in The Hague, Netherlands. Romy Parker won the prize for best poster for clinical research at the Pain, Mind and Movement IV pre-congress symposium of the World Congress on Pain. Trish Lang (master’s student) was awarded second prize for a free paper presentation at the Pain SA Congress on EMG activity in chronic neck pain.

Undergraduate student research was also well-represented. Occupational therapy students were were awarded the Marie & Vona du Toit prize for best student project in South Africa for a study on the perceptions of disability of people living in informal settlements in the Saldanha Bay sub-district, South Africa. Undergraduate physiotherapy students also won first and second prize for their presentations the Regional Inter-varsity Physiotherapy Research Forum; and second prize for a poster at the Faculty of Health Sciences Undergraduate Research Day.

There were numerous collaborative research activities and scholarly visits in 2012. Roshan Galvaan initiated a project of international cooperation entitled Occupational Therapy Education for Social Transformation (OTEST): a pilot co-operative inquiry. This project was funded in 2010/2011 by Higher Education South Africa together with the National Research Foundation of South Africa under the auspices of the Academic committee of the India-Brazil-South Africa trilateral Forum (IBSA, 2012). Madie Duncan served as one of 400 people internationally in the UN Grand Challenges for Global Mental Health in 2011 (published in 2012) adding an occupational perspective to this internationally significant policy initiative. Sinegugu Duma presented a workshop on sexual assault forensic nurses for UNEDSA project, based on a study of clinical competencies for forensic nurses. Doris Khalil conducted a study on violence in nursing at the Kwame Nkrumah University of Science & Technology. Pat Mayers continues to be involved in the UCT Knowledge Translation Unit on-going Practical Approach to Lung Health and HIV (PALSA Plus) project on an ad hoc basis. Jennifer Jelsma continues to serve as a member of the WHO Functioning and Disability Group and as a member of the EuroQoL Quality of Life Group. Romy Parker is the secretary of the International Pain and Movement Special Interest Group.

The Department continues to contribute to the development of the professions. Shajila Singh is the Chair of the Professional Board for Speech, Language and Hearing Professions, and is also Chair of the CPD Committee for the Health Professions Council of South Africa. Sinegugu Duma is Chair of the Accreditation Committee of the South African Nursing Council. Sheila Clow has continued to serve on the National Executive Committee of the Society of Midwives of South Africa. Helen Buchanan is president of the Occupational Therapy Association of South Africa. Madie Duncan serves as an ad hoc consultant to OTASA for drafting policy documents, which recently included position statements on re-engineering of PHC,
role & scope of OT, and groupwork practice on OT. She also served as one of 400 people internationally in the UN Grand Challenges for Global Mental Health in 2011 (published in 2012) adding an occupational perspective to this internationally significant policy initiative. Fadia Gamieldien (clinical educator) is on the Mental Health Advisory Committee for the Western Cape Department of Health. Roshan Galvaan initiated a project of international cooperation entitled Occupational Therapy Education for Social Transformation (OTEST); a pilot co-operative inquiry. This project was funded in 2010/2011 by Higher Education South Africa together with the National Research Foundation of South Africa under the auspices of the Academic committee of the India-Brazil-South Africa trilateral Forum (IBSA, 2012). The project included the participation of Dr. Shovan Saha from India and Dr. Sandra Galheigo from Brazil as co-researchers. Progress was made in 2012 towards joint publications. Michal Harty is a Member of Professional Association’s task team that works towards developing a strategy to facilitate research process for members of the South African Speech, Language and Hearing Professions, and has a VIO Grant with Vanderbilt Peabody College to develop research collaboration. Michelle Pascoe is Chief Editor of the South African Journal of Communication Disorders. Harsha Kathard, Vivienne Norman (co-Editor), and Lucretia Petersen are on the Editorial Board for the South African Journal of Communication Disorders. Harsha Kathard is on the Editorial Board for the South African Medical Journal. Michelle Pascoe also serves on the Editorial Board for Child Language Teaching and Therapy. Nicki Fouche remains as the Editor for Nursing Science for The Southern African Journal of Critical Care. Seyidele Amosun and Jennifer Jelsma are on the Editorial Board of the South African Journal of Physiotherapy, and Theresa Burgess is on the Editorial Board for the South African Journal of Sports Medicine. Pat Mayers is a member of the BMC Health Services Research Editorial Board.

**Department Statistics**

**Staff**

<table>
<thead>
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<th>Role</th>
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<tbody>
<tr>
<td>Professor</td>
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<tr>
<td>Associate Professor</td>
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<tr>
<td>Senior Lecturer &amp; Lecturer</td>
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<tr>
<td>Part-time Lecturer</td>
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<td>Clinical Educator</td>
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<td>Administrative and Clerical</td>
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**Students**

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<td>Master’s</td>
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<td>Postgraduate Diplomas</td>
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<td>Undergraduate</td>
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<td><strong>Total</strong></td>
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</table>

**Research fields and staff**

**PROFESSOR S.L. AMOSUN**
Non-communicable diseases; disability prevention and health promotion

**MS HELEN BUCHANAN**
Evidence-based practice; hand therapy; measurement instruments; rehabilitation in physical health; clinical reasoning and reflection

**DR THERESA BURGESS**
Muscle damage and endurance exercise; clinical sports physiotherapy; bioethics

**MS LIZAHN CLOETE**
Foetal Alcohol Spectrum Disorders; community development & occupational therapy in primary health care

**ASSOCIATE PROFESSOR SHEILA CLOW**
Midwifery; women's health care; intrapartum care; mentorship

**ASSOCIATE PROFESSOR SINEGUGU DUMA**
Interplay between HIV and gender-based violence; sexual assault; and curriculum development

**ASSOCIATE PROFESSOR EVE DUNCAN**
Poverty, occupation & psychiatric disability; disability inclusion through participatory development in deep rural communities

**MS EILEEN DU PLOOY**
Occupation based work practice; palliative care

**MS GILLIAN FERGUSON**
HIV, paediatric motor assessment and rehabilitation

**MS NICKI FOUCHE**
Lived experiences in the care of patients in the Intensive Care Units

**ASSOCIATE PROFESSOR ROSHAN GALVAAN**
Occupation-based community development practice; occupational justice; occupational choice; youth; OT curriculum and human rights
Best paediatric occupational therapy practice

Augmentative and Alternative Communication (AAC) and family-centred intervention practices

Rehabilitation of sports-related orthopaedic and neuromusculoskeletal conditions

Function in children with HIV/AIDS; health related quality of life; living conditions of people with disabilities; use of the ICF

Communication impairment; disability and service delivery

Role of biosciences in clinical nursing education; ophthalmic nursing; preparation of nurse educators

Disability rights and equity for youth and women; community based rehabilitation

Incontinence and sexual dysfunction amongst sexually abused persons; HIV and community empowerment

Intensive Care Unit management; cardio-pulmonary rehabilitation, TB

Mental health; support and training for primary health care providers/clinical nurse practitioners with special to HIV and ARV rollout; primary care practice teams

LGBTI health

Paediatric dysphagia and early intervention

Speech, language and literacy difficulties in school-aged children

Ototoxicity; otoacoustic emissions

Pain in HIV

Noise and public health

Promoting childhood play in context; play, learning & development outcomes for children on anti-retroviral treatment; the politics of human occupation

Inclusive education; profound multiple intellectual disability and quality of life

Early childhood intervention; parent training

Occupational health and wellness; promoting behaviour change; musculoskeletal injury management; evaluation and feedback methods to drive learning

Disability and employment

Health professionals’ attitudes towards mental health service users; disability, diversity and social change

The impact of physical activity on quality of life of persons with mental illness

Evaluating the effectiveness of The Shine Program for literacy development in grade 2 and 3 learners

Clinical education models and strategies; rehabilitation in neuro patients; soccer injury prevention at school level

Cochlear implants; bimodal fitting and FM use; balance disorders in cochlear implant recipients
TRAUMATIC BRAIN INJURY CARE PATHWAYS AFTER DISCHARGE; ASSESSMENT OF APHASIA IN SOUTH AFRICAN LANGUAGES

RIGHT HEMISPHERE COMMUNICATION DISORDERS INTERVENTION AND REFERRAL PATHWAYS; CEREBRAL PALSY AND COMMUNICATION

GROUP TEACHING IN CLINICAL PRACTICE; PAEDIATRIC CLINICAL PRACTICE

CLINICAL EDUCATION BEST PRACTICE MODELS AND GUIDELINES; DEVELOPING PROFESSIONAL AND REFLECTIVE PRACTITIONERS

FLUENCY, COMMUNITY BASED REHABILITATION; CLINICAL EDUCATION

Contact Details
Postal address: Department of Health and Rehabilitation Sciences, Faculty of Health Sciences University of Cape Town, Anzio Road, Observatory, 7925 Telephone: +27 21 406 6401 Fax: +27 21 406 6323 E-mail: debra.adams@uct.ac.za Web: http://www.health.uct.ac.za/departments/shrs/about/

Research output
Chapters in books


Articles in peer-reviewed journals


Peer-reviewed published conference proceedings


Doctoral dissertations


Master’s degrees (by research)


Dutton, M. 2012. The effects of scapulothoracic rehabilitation on shoulder pain in competitive swimmers. MSc Physiotherapy. Supervised by Burgess, T. and Parker, R.


Ghafari, N. 2012. A profile of the auditory function of children with TB receiving ototoxic medication at Brooklyn Chest Hospital. MSc Audiology. Supervised by Petersen, L., Rogers, C. and Singh, S.


Olivier, O. 2012. A comparison of treatment protocols for infants with motor delay. MSc Physiotherapy. Supervised by Ferguson, G. and Jelsma, J.


Department of Human Biology

The Department of Human Biology (HUB) includes Anatomy; Biological Anthropology; Biomedical Engineering and Medical Imaging; Cell Biology, Exercise Science and Sports Medicine; Healthcare Technology Management; Human Nutrition; Neurosciences and Physiology.

Professor Laurie Kellaway was an invited guest speaker at the Neuroscience Society of Nigeria (NSN) Conference held Calabar, Nigeria in 2012.

Professor Susan Kidson has been Deputy Dean and was acting Dean of the Faculty of Health Sciences during 2012. During this time she initiated the UCT Stem Cell Initiative along with Professor Jacquie Greenberg of Human Genetics. As part of this initiative Dr Robea Ballo spent two months at the James Martin Stem Cell Unit of the University of Oxford, UK, sharpening her skills in induced Pluripotent Stem Cell technology. She is now offering training in this technology at the Stem Cell laboratory in Cell Biology, to clinicians and postgraduate students at UCT who wish to use the technique in their projects. The team published their first stem cell paper in the SAMJ online in December 2012.

Professor Alan Morris began a 10 month sabbatical to the United States in September 2012 under a Fullbright Visiting Scholar Fellowship. He is currently based at Ohio State University as part of the ‘Global History of Health Project’ being led by Clark Larsen.

Researchers in the biomedical engineering programme and the MRC/UCT Medical Imaging Research Unit were active in many aspects of the research enterprise. Associate Professor Meintjes co-edited a book titled “Substance Use and Abuse in South Africa: Insights from Brain and Behavioural Sciences”. Dr Sudesh Sivarasu’s PhD - “Artificial High Flexion Knee for Eastern Lifestyles” - was published by a German publisher. Drs Lester John and Sudesh Sivarasu filed patent applications for deep muscle electromyography and rehabilitative robotics respectively, while they collaborated with student Yasheen Brijal on the patent for a hand exoskeleton. Professor Tania Douglas was an invited guest lecturer at the University of Minnesota and was invited to present a seminar to celebrate the South Africa-Germany Year of Science. Professor Douglas delivered a keynote lecture at the International Conference on Biomedical Signals, Systems and Images in Chennai, India. Dr Sivarasu delivered an invited lecture at the International Conference on Biomaterials, Implants and Tissue Engineering, also in Chennai. Dr Barak Morgan and his collaborators delivered a paper to the national congress - Towards Carnegie III: Strategies to Overcome Poverty and Inequality - held at UCT.

Professor Viv Russell was appointed Co-Editor-in-Chief of Behavioral and Brain Functions. She continued to serve
as Deputy Chief Editor of *Metabolic Brain Disease* and produced a Special Issue on neuroscience research in Southern Africa in 2012. Professor Russell was invited to give a seminar on her research on ADHD at the University of Massachusetts, USA, in October 2012. Hayley Tomes attended the IBRO school on Epigenetics, Environment and Behaviour in Kalifi, Kenya. Jacqueline Dimatelis, Jurgens van Zyl, Toni-Lee Sterley and Viv Russell attended the Society for Neuroscience meeting in New Orleans, USA in October. Jurgens van Zyl was awarded an IBRO Travel Fellowship to attend the Society for Neuroscience meeting in New Orleans.

Associate Professor Sharon Prince was invited to present a talk at the University of Oxford, in September. She received a C2 NRF Rating and was elected head of the Cancer Research initiative of South Africa (CARISA) breast cancer consortium. She was elected member of the NRF Specialist Committee for Health Sciences. The Prince Laboratory organised and hosted its second CANSA Shavathon, in conjunction with the Cancer Association of South Africa (Cansa).


Dr Alison September, Dr Mike Posthumus and Professor Malcolm Collins were invited to write a review which coincided with the opening of the Summer Olympics in 2012. The review was titled: Application of genomics in the prevention, treatment and management of Achilles tendinopathy and anterior cruciate ligament ruptures, published in Recent Patents on DNA and Gene Sequences 2012; 6: 216-223.

Dr Alison September was elected as committee member of the Association of South African Women in Science and Engineering (Western Cape) in December 2012, and chairs the Education portfolio.

Dr Julia Goedecke’s NRF rating was renewed and Professor Malcolm Collins’ and Associate Professor Andrew Bosch’s NRF ratings were increased, while Dr Mike Posthumous was rated for the first time. Associate Professor Malcolm Collins was promoted to full Professor in November 2012.

**Departmental Statistics**

**Permanent and long-term contract staff**

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**Students**

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**Research Fields and Staff**

**PROFESSOR LAURISTON KELLAWAY**

Head of Department; Models of neuroinflammation, stress and brain function, in vivo and in vitro visual cortical mechanisms.
PROFESSOR MALCOLM COLLINS
RUESSM: Chief Specialist Scientist, MRC; Biochemistry; Molecular biology; Genetics – applied to performance and injuries

PROFESSOR WAYNE DERMAN
RUESSM: Sport and Exercise Medicine, Skeletal muscle dysfunction in chronic disease; exercise training in chronic disease

PROFESSOR TANIA DOUGLAS
Director of the MRC/UCT Medical Imaging Research Unit (MIRU); biomedical engineering, image processing

PROFESSOR SUE KIDSON
Developmental biology; melanocytes and hypopigmentary disorders; eye development and glaucoma

PROFESSOR MIKE LAMBERT
RUESSM: Exercise training and recovery; Science applied to rugby, Co-ordinator of the Ex Sci Hons Course

PROFESSOR ESTELLE V. LAMBERT
RUESSM: Physical activity epidemiology and chronic diseases of lifestyle; obesity and chronic disease

PROFESSOR GRAHAM J. LOUW
Human growth; medical education; skeletal analysis

PROFESSOR ALAN G. MORRIS
Human evolution; forensic anthropology, skeletal biology of early peoples in southern Africa; history of physical anthropology

PROFESSOR TIMOTHY D. NOAKES
Discovery Health Chair of Exercise and Sports Science and Director of UCT/MRC Research and Exercise Medicine Research Unit
RUESSM: Regulation of exercise performance; sport and exercise medicine

PROFESSOR VIVIENNE RUSSELL
Neuropsychology: Development, stress, exercise and vulnerability to neuronal injury; Attention deficit hyperactivity disorder; Depression

PROFESSOR MARTIN P. SCHWELLNUS
RUESSM: Sport and Exercise Medicine, Co-ordinator of the MPhil Sport and Exercise Medicine programme

ASSOCIATE PROFESSOR ANDREW BOSCH
RUESSM: Fuel substrate metabolism, exercise training

ASSOCIATE PROFESSOR DIRK M. LANG
Nervous system development and degeneration; axon growth and regeneration. Head of the Confocal and Light Microscope Imaging Facility at UCT

ASSOCIATE PROFESSOR ERNESTA MEINTJES
MIRU: NRF chair; magnetic resonance imaging

ASSOCIATE PROFESSOR EDWARD OJUKA
RUESM: glucose disposal in muscle

ASSOCIATE PROFESSOR SHARON PRINCE
The cell and molecular biology of cancer and the identification of novel targets for anti-cancer drugs, with special focus on the T-box transcription factors Tbx2 and Tbx3.

ASSOCIATE PROFESSOR MARJANNE SENEKAL
Head: Division of Human Nutrition, Weight management and health interventions, dietary assessment, nutritional genomics

DR COLIN ANDREW
MIRU: Senior Lecturer (part-time); Biomedical signal processing

MS ELMi BADENHORST
Lecturer; medical education, underpreparedness and academic performance

MS SHARMILAH BOOLEY
Lecturer; Division of Human Nutrition; Nutrition, HIV/AIDS and quality of life; nutrition related behaviour change interventions for prevention and management of chronic diseases of lifestyle (school and work-place based)

DR KISHOR BUGARITH
Senior Lecturer; physiology, neurobiology of stress, neurobiology of food intake

MS DINAH CURLING
Lecturer (part-time) Division of Human Nutrition

DR LESTER M. DAVIDS
Senior Lecturer; redox and antioxidant biology; skin cancer, pigmentary disorders of the skin, vitiligo, hair follicle biology

MS ZARINA EBRAHIM
Clinical Educator (part-time); Division of Human Nutrition

DR JACQUI FRIEDLING
Lecturer; skeletal biology; physical anthropology, forensic anthropology
DR JULIA H. GOEDECKE
RUESSM: Specialist Scientist, MRC; Obesity in relation to disease risk; Exercise metabolism and sports nutrition

DR GENEY GUNSTON
Senior Lecturer; gross anatomy; clinical anatomy; medical education

DR ASFREE GWANYANYA
Senior Lecturer; cardiac pathophysiology, hypertrophy, ion channels

DR JANETTA HARBRON
Lecturer; Division of Human Nutrition; Obesity and other CDL intervention, Nutritional genomics; Sports nutrition.

MS FIONA HERRMANN
Clinical Educator (part-time); Division of Human Nutrition, risks for obesity development in SA communities, nutrition in palliative oncology

DR LAUREN HILL
Lecturer; Division of Human Nutrition, clinical dietetics; critical care, nutrition in surgical gastroenterology, gastrointestinal dysfunction, parenteral and enteral nutrition, oxidative stress and antioxidants

MS FATIMA HOOSSEN
Clinical Educator (part-time); Division of Human Nutrition

DR MARCIN JANKIEWICZ
MIRU: Lecturer. Cape Universities Brain Imaging Centre: Magnetic Resonance Imaging

DR LESTER JOHN
MIRU: Senior Lecturer and Software Specialist; Electromyography, Electroencephalography, Brain-Computer Interfacing, Medical Electronics & Devices

DR ROISIN KELLY-LAUBSCHER
Lecturer; Cardiovascular Physiology, arterial hemodynamics, cardioprotection, ischaemia-reperfusion injury

DR TRACY KOLBE-ALEXANDER
RUESSM: Senior Lecturer, Physical activity and health; Co-ordinator of the BSc (Hons) Biokinetics and MPhil (Biokinetics) courses

MS BAHEYA NAJAAR
Lecturer and clinical educator, Division of Human Nutrition, community nutrition, infant and young child feeding

MR MLADEN POLUTA
Senior Lecturer; Director: Healthcare Technology Management

DR DELVA SHAMLEY
Senior Lecturer; upper limb morbidity in breast cancer, molecular effects of adjuvant therapies in cancer

DR CHARLES P. SLATER
Senior Lecturer; anatomy, medical education

MR STEF STEINER
Lecturer; biomechanics

DR SUDESH SIVARASU
Lecturer, biomechanics, biomechatronics, medical devices & rehabilitation engineering

DR LIZ VAN DER MERWE
Senior Lecturer; ocular development and regeneration, vascular biology, pancreatic islet regeneration, 3-D microscopic image reconstruction.

DR CHRISTOPHER WARTON
Senior Lecturer; medical education, teaching materials, MRI analysis and cerebellar structure

Postdoctoral Fellows/Scientific and Research Officers, Research Associates

DR AMAAL ABRAMHS
Cell Biology: Research Officer. Role and regulation of the T-box transcription factor TBX3 during the cell cycle

DR YUMNA ALBERTUS-KAJEE
RUESSM: Research Officer. Electromyography in the the prevention of chronic disease in patients, and neuromuscular adaptations to exercise in athletes, commercial research.

DR ALI ALHAMUD
MIRU: Postdoctoral Fellow; magnetic resonance imaging

DR REYNA DEEYA BALLIM
Cell Biology: Postdoctoral Fellow. The identification of target genes of the transcription factor TBX2 which mediate its pro-proliferative activities in cancer and the elucidation of its crystal structure with a view to designing drugs that inhibit TBX2's oncogenic function

DR ROBEA BALLO
Cell Biology and genetics: Genetics of vitiligo.

DR IAN BURGER
MIRU: Postdoctoral Fellow; magnetic resonance imaging

MS SUSAN COOPER
Microscopy Unit: Technical Officer
MS GABI DE BIE
Scientific and Research Officer: knowledge and curriculum in the medical biosciences

DR KYLIE DE JAGER
MIRU: Postdoctoral Fellow; automated microscopy; medical devices

DR JACQUELINE DIMATELIS
Physiology: Postdoctoral Fellow. Neurophysiology: Development, stress, exercise and vulnerability to neuronal injury; Attention deficit hyperactivity disorder; Depression

DR CATHERINE DRAPER
RUESSM: Senior Research Officer. Social science aspects of physical activity as a means of health promotion and disease prevention. Evaluation of physical activity and sport-related programmes. Medical Education.

DR JANINE GRAY
RUESSM: Honorary lecturer. Cricket research – research co-ordinator for Cricket South Africa

DR MARTHA HOLMES
MIRU: Postdoctoral Fellow, neuroimaging

MR DAVID KARPUL
RUESSM: Research Officer: Biomechanics research, Manager of the Biomechanics Lab., electronics

DR DHESHNIE KESWELL
RUESSM: Postdoctoral Fellow, Obesity and diabetes research

DR TERTIUS KOHN
RUESSM: Senior Research Officer. Muscle biochemistry and exercise science

MR SRIRAM KRISHNAN
Development of a light microscope for automated identification of TB bacilli in ZN stained sputum smears

DR JACOLENE KROFF
RUESSM: Senior Research Officer: Manages, runs and supervises all research conducted in the Metabolic Lab.

DR WENDY KROGER
Postdoctoral fellow in cell biology: The molecular mechanisms by which the T-box transcription factor TBX3 contributes to tumourigenesis.

DR AMOD KULKARNI
Postdoctoral Fellow (Claude Leon Foundation). In vitro and in vivo neuro-pharmacokinetics and neuropharmacodynamics of natural neuroprotective agents.

DR ROBERT LAMBERTS
RUESSM: Honorary Research Officer Thermoregulation

DR LELANI MARAIS
Physiology: Postdoctoral Fellow. Neurophysiology: Development, stress, exercise and vulnerability to neuronal injury; Depression

DR BARAK MORGAN
MIRU: Behavioural, physiological and neuroimaging studies in affective neuroscience

DR LISA MICKLESFIELD
RUESSM: Senior Researcher/Honorary Research Fellow (Wits University). Bone health and physical activity

MS MWEETE NGLAZI
RUESSM: Research Officer. Epidemiology and biostatistics

DR MICHAEL POSTHUMUS
RUESSM: Senior Research Officer. Sports orthopaedic research

DR DALE RAE
RUESSM: Senior Research Officer: Circadian rhythms and performance; Commercial research division manager

DR LAURIE RAUCH
RUESSM: Research Officer: Neurobiology of exercise and regulation of the autonomic nervous system during peak performance

DR FRANCES ROBERSTON
MIRU: Postdoctoral Fellow; magnetic resonance imaging

DR ELSKE SCHABORT
RUESSM: Research Officer: Thermoregulation, Performance, Brain regulation of exercise; Commercial research

DR ALISON V. SEPTEMBER
RUESSM: Senior Research Officer. Molecular human genetics

DR JAMES SMITH
RUESSM: Research Officer: Diet, health, metabolism and exercise performance

DR JEROEN SWART
RUESSM: Honorary lecturer. Sport and Exercise Medicine

DR ROSS TUCKER
RUESSM: Central Governor research, Exercise training; Commercial Research division co-management
MRS. HENDRIENA VICTOR
Ruessm: Chief Scientific Officer: HPLC analysis, Laboratory support

Contact Details
Postal Address: Department of Human Biology, Health Sciences Faculty, Observatory, 7925, South Africa
Telephone: +27 21 406 6235
Fax: +27 21 448 7226
Email: Lauriston.Kellaway@uct.ac.za
Web: http://www.uct.ac.za/departments/humanbio/

Research output

 Authored books


Edited books

Chapters in books


Articles in peer-reviewed Journals


Baron, Y., Corre, S., Mouchet, N., Vaulont, S., Prince, S. and Galibert, M.D. 2012. USF-1 is critical for maintaining genome integrity in response to UV-induced DNA photolesions. Plos Genetics, 8(1): e1002470.


Nieuwenhuizen, N., Kirstein, F., Jayakumar, J., Emedi, B., Hurdalay, R., Horsnell, W., Lopata, A.L. and Brombacher, F. 2012. Allergic airway disease is unaffected by the absence of IL-4-dependent alternatively activated macrophages. Journal of Allergy and Clinical Immunology, 130: 743-750.


Peer-reviewed published conference proceedings


Patents


Doctoral dissertations

Burger, I. 2012. A control system approach to subject specific prospective respiratory motion correction in cardiac MRI. Supervised by Meintjes, E.M.

Cock, I. 2012. Voluntary physical activity: measurement and relationship to selected health parameters in rural black South Africans resident in the Limpopo Province, South Africa. Supervised by Lambert, E.V. and Alberts, M.


Master’s degrees (by research)


Hope, F. 2012. Rehabilitation outcomes of a lifestyle intervention program for chronic disease: medical insurer referred and funded patients versus self-initiated and self-funded patients. MPhil Biokinetics. 90pp. Supervised by Derman, E.


Miller, R. 2012. A computational study of post-infarct mechanical effects of injected biomaterial into ischemic myocardium. MSc (Med) Biomedical Engineering. Supervised by Franz, T.

Modak, G. 2012. Characteristics of dynamics associated with skeletal muscle contraction initiation by acetylcholine injection. MSc (Med) Biomedical Engineering. Supervised by Bugarith, K.H. and Kellaway, L.

Mudd, R. 2012. Exploring the range of motion between the acetabular component and the femoral component in hip resurfacing. MSc (Med) Biomedical Engineering. 116pp. Supervised by Vicatos, G. and Sivarasu, S.

Saleh, M. 2012. Methods and adaptations required to perform small-animal MRI scanning using a large bore clinical MRI. MSc (Med) Biomedical Engineering. 95pp. Supervised by Meintjes, E.M., Davies, N. and Franz, T.

Smit, S. 2012. Stress in the workplace: The contrasting effects of 10 minutes of listening to Chopin vs. heart rate variability biofeedback on autonomic reactivity and cognitive performance. MPhil Biokinetics. 70pp. Supervised by Rauch, L.


**Department of Medicine**

**HEAD OF DEPARTMENT: PROFESSOR B.M. MAYOSI**

**Departmental Profile**

The Department of Medicine is a large clinical department which plays a leading role in medical education and research, and provides clinical services to the communities of the Western Cape and, in the case of our highly specialised services, to patients throughout southern Africa. The Department consists of 21 clinical and service divisions, 11 major research units, and four affiliated departments of medicine at GF Jooste, New Somerset, II Military, and Victoria hospitals (www.medicine.uct.ac.za). Each day, members of the department treat an average of 2,000 patients in our clinics, admit about 100 patients to our hospital services and perform over 210 medical procedures. The department offers a number of highly specialised services that are unique nationally such as allergology, bone marrow, heart, kidney, and liver transplantation, cardiac electrophysiology, endobronchial ultrasound guided bronchoscopy, and double balloon enteroscopy for visualisation of the small bowel.

There approximately 80 registrars who are training in the department, 20 of whom are from other countries such as Botswana, Ghana, Kenya, Libya, Malawi, Namibia, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe. The department produces formularies and guidelines that are used in most health facilities in South Africa, such as the South African Medical Formulary and Primary Care 101.
Departmental Statistics

Permanent and Long-term Contract Staff

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<thead>
<tr>
<th>Category</th>
<th>Number</th>
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Honorary Staff

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Students

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Research Fields and Staff

See Divisions and Research Units within the Department

Contact Details

Postal Address:
Department of Medicine,
Faculty of Health Sciences
University of Cape Town,
Observatory 7925,
Cape Town
Telephone: +27 21 406 6200
Fax: +27 21 448 6815
E-mail: faiza.pearce@uct.ac.za

Divisional Statistics

Permanent and Long-term Contract Staff

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<thead>
<tr>
<th>Category</th>
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</table>

Research Fields and Staff

Associate Professor Stanley Ress
Immunology of tuberculosis; Autoimmunity

Contact Details

Postal Address:
Clinical Immunology Laboratory,
H47 Old Main Building,
Groote Schuur Hospital,
Observatory 7925
Telephone: +27 21 406 6201
Fax: +27 21 448 6815
E-mail: stan.ress@uct.ac.za

Department Of Medicine

Division Of Dermatology

HEAD OF DIVISION: ASSOCIATE PROFESSOR NONHLANHLA P. KHUMALO

Division profile

The Division’s training programme includes undergraduate teaching of 2nd to 6th year MBChB students. Postgraduate students include 8 registrars, 1 MRC fellow and 2 PhD fellows. The main research contributions of the Division are in the epidemiology, treatment and prevention of hair disorders and drug-induced skin injury.

Division Of Clinical Immunology

HEAD OF DIVISION: ASSOCIATE PROFESSOR S.R. RESS

Divisional Profile

The Division of Clinical Immunology undertakes a multidisciplinary activity that includes teaching of undergraduate and postgraduate students, evaluation of immune function in patients with suspected immune deficiency, and a translational research programme focussed on immunology of autoimmunity, HIV and TB.
Departmental statistics

Permanent and long term contract staff

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<td>(sessional, DOE funds)</td>
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<td>Research Staff</td>
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Students

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Research fields

Permanent staff

**ASSOCIATE PROFESSOR NONHLANHLA KHUMALO**
Professor Khumalo is NRF rated and runs the only academic hair research clinic in the country (with Dr. Laduma Ngwanya). Her research interests include the epidemiology and treatment of hair and scalp disorders that uniquely affect individuals with afro-textured hair. Her international collaboration studies use various research tools - scanning (and transmission) electron microscopy and amino acid analysis of hair. Current studies are investigating the link between folliculitis keloidalis nuchae and HIV transmission. She is also developing a hair classification tool that will be useful for elucidating the relationship between the pathogenesis of alopecia and hair phenotype.

**DR RANNAKOE LEHLOENYA**
Dr Rannakoe Lehloenya leads a study of the clinical, molecular and genetic aspects of severe cutaneous adverse drug reactions (SCAR). Intrinsic to this will be the development of a predictive model for ascribing causality to ensure safe drug reintroduction especially for antituberculosis treatment reactions. Several other closely related clinical studies include a follow up of patients to assess long term sequelae, evaluation of placenta and newborn following SCAR in pregnancy and the use of clobetasol to prevent nail sequelae of SCAR. The division has become the only African member of the international group, RegiSCAR, contributing cases to the group database, essential as the cause of these reactions in Africa is very different from Europe and Asia.

Department Of Medicine

Chronic Diseases Initiative In Africa (Cdia)

**DIRECTOR: PROFESSOR N.S. LEVITT**

Divisional Profile

The Chronic Diseases Initiative in Africa (CDIA), funded by the United Health Chronic Disease Initiative and the National Heart Lung Blood Institute (NHLBI), was launched in November 2009. It forms part of an 11 centre Global Health Initiative focussing on non communicable disease research in the developing world. CDIA comprises of a network of researchers drawn from the University of Cape Town, Stellenbosch University and the University of the Western Cape, along with the South African Medical Research Council, Harvard University and Shree Hindu Mandal Hospital, Tanzania, in addition to representatives from local and national Departments of Health. CDIA’s mission is to serve as a collaborating initiative for the development, evaluation and dissemination of methods and programmes to prevent chronic non-communicative diseases, and improve the quality of care for people with these diseases and their risk factors.

Research

Currently funded projects:

Develop, evaluate and implement integrated chronic disease management guidelines for primary care providers

Eden District Randomised, Controlled-Trial for Primary Care of Chronic, Non-Communicable Diseases (NCDs) is being conducted to test the effectiveness of a novel training approach based on a previously tested model of syndromic screening and management of patients with conditions such as chronic obstructive pulmonary disease, asthma, or TB. A written guideline (101 pages) has been prepared for the management of chronic diseases by primary care nurses and doctors. The trial will test whether the approach, previously shown to be effective for respiratory diseases including tuberculosis and HIV/AIDS, will remain effective when expanded to include the primary care management of other major categories of chronic diseases (hypertension, diabetes, depression).

To calibrate and validate a non-laboratory based screening tool for cardiovascular disease (CVD) risk prediction in South Africa

The predictive performance and risk discrimination of the non-laboratory-based risk score to five commonly used laboratory-based scores (Framingham CHD and
CVD, SCORE for low and high risk settings, CUORE) was evaluated in 11 South African cohorts, which represents all cross sectional studies conducted in the country over the past 25 years for which the necessary data were available.

Develop, evaluate and implement an economic model to assess the cost-effectiveness of interventions. This project aims to develop a CVD Prevention and Management Model that would allow us to predict CVD events accurately and be used in cost-effectiveness analyses comparing the use of different screening and intervention strategies.

Develop the capacity of community health workers, primary care facilities and managers in the area of chronic diseases. This project aims, in collaboration with the provincial DOH to define the role of a community health worker in caring for patients with NCDs and to develop suitable NCD training materials and tools for this group.

Develop, evaluate and implement lifestyle tools for the general public and patients.

"Putting Prevention into Practice" This project aims to produce and pilot a resource package for primary health care providers and community health workers to enable them to offer brief, best practice, behavioural change counselling in a variety of settings, on the topics of smoking; poor diet; obesity and overweight and lack of physical activity.

Develop, evaluate and implement new models for health education, communication and empowerment of patients. The evaluation, by means of a pragmatic cluster randomized controlled trial, the effectiveness of a group diabetes education programme delivered by health promoters with a guiding (motivational interviewing) style, in community health centres in Cape Town.

**Divisional Statistics**

**CDIA/UCT Permanent and Long-term Contract Staff**

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<tbody>
<tr>
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<td>Professor (Visiting)</td>
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<table>
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<tr>
<td>Professor Naomi Levitt</td>
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<tr>
<td>Professor Krisela Steyn</td>
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<tr>
<td>Mrs Kathy Murphy</td>
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<tr>
<td>Carmelita Sylvester</td>
<td>Centre Manager</td>
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<td>Susan Botha</td>
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**UCT Network Members**

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<tr>
<td>Professor Bangani Mayosi</td>
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<tr>
<td>Professor Eric Bateman</td>
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<tr>
<td>Professor Vicky Lambert</td>
<td>Professor</td>
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<tr>
<td>Professor Karen Sliwa-Hahnle</td>
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<tr>
<td>Associate Professor Alan Bryer</td>
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<tr>
<td>Dr Tracy Kolbe-Alexander</td>
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<td>Dr Lara Fairall</td>
<td>Senior Researcher</td>
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**NON-UCT Network Members**

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<tr>
<td>Professor Thandi Puoane (UWC)</td>
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</tr>
<tr>
<td>Professor Bob Mash (Stellenbosch)</td>
<td>Professor</td>
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<tr>
<td>Professor Debbie Bradshaw (MRC)</td>
<td>Professor</td>
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<tr>
<td>Professor Carl Lombard (MRC)</td>
<td>Professor</td>
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<tr>
<td>Dr Thomas Gaziano (Harvard)</td>
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<tr>
<td>Dr Kaushik Ramaya (Shree Hindu Mandal Hospital, Tanzania)</td>
<td>Senior Lecturer</td>
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<tr>
<td>Mr Jimmy Ledwaba (Provincial Government, Dept. of Health)</td>
<td>Other</td>
</tr>
<tr>
<td>Ms Unita Van Vuuren (Provincial Government, Dept. of Health)</td>
<td>Other</td>
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</table>

**Contact Details**

Postal Address: J47 Floor, Old Main Building, Groote Schuur Hospital
Telephone: +27 21 406 6572
Fax: +27 21 406 6513
E-mail: Carmelita.sylvester@uct.ac.za

**Department Of Medicine**

**Division Of Endocrinology And Diabetic Medicine**

HEAD OF DIVISION: PROFESSOR N.S. LEVITT

**Divisional Profile**

The Division provides an inpatient and outpatient clinical service and sub-speciality training in adult endocrinology and diabetes. It has close clinical links with Paediatric Endocrinology and Diabetes, Reproductive Endocrinology and Chemical pathology.
Research

The Division is involved in a wide range of research activities, interacts with a number of international and local collaborators and is a member of the recently established Chronic Disease Initiative in Africa. The primary areas of research are:

Metabolic consequences of antiretroviral therapy in HIV+ patients: Cross-sectional and longitudinal studies examining the metabolic consequences of HAART are underway. These are being funded by the World Diabetes Foundation and Department of Health.

Burden of disease: The contribution of diabetes and other chronic diseases to the overall burden of disease pattern in the South African context is being studied in collaboration with Dr Debbie Bradshaw, BOD Group, MRC. A cross sectional survey of diabetes and other cardiovascular risk factors in the Black African community in Cape Town has been completed.

Obesity: In collaboration with the Department of Human Biology, a number of studies are in progress. These examine the mechanisms underlying the aetiology of obesity and insulin sensitivity in black and white African women.

Addison’s Disease: Cardiovascular risk factors in Addison’s disease has been investigated in collaboration with the University of Gothenburg. The impact of glucocorticoid receptor polymorphisms on cardiovascular risk factors has been assessed in Addison’s disease.

Health Systems Research: The Division collaborates in projects being conducted by the Chronic Diseases Initiative in Africa. These include: a pragmatic cluster randomised trial of an integrated guideline for the management of diabetes and other chronic diseases is in primary care centre, a randomised controlled trial to evaluate the effectiveness of a group diabetic education programme using motivational interviewing in underserved communities; and the development of a resource package for primary health care providers and community health workers to enable them to offer brief counselling on lifestyle.

Divisional Statistics

Permanent and Long-term Contract Staff

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<tr>
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<td>Senior Registrar in Training</td>
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Research Fields and Staff

PROFESSOR N S LEVITT
Diabetes and hypertension health systems research, diabetes burden of disease, mechanisms underlying the metabolic sequelae of obesity, metabolic consequences of HAART

PROFESSOR K STEYN
Hypertension health systems research, burden of chronic disease and smoking in pregnancy

DR I L ROSS
National registry for Study of Addison’s Disease and polyglandular autoimmune syndrome

DR J DAVE
Incidence of osteoporosis and vertebral fractures in patients with inflammatory bowel disease Metabolic consequences of antiretroviral therapy

Contact Details

Postal Address: Divisions of Endocrinology and Diabetic Medicine, Department of Medicine, Faculty of Health Sciences, Observatory, 7925
Telephone: +27 21 406 6140
Fax: +27 21 406 6513
E-mail: susan.botha@uct.ac.za

Department Of Medicine

Division Of Gastroenterology
(Gastrointestinal Clinic)

HEAD OF GI CLINIC: PROFESSOR S THOMSON

Divisional Profile

The Gastrointestinal Clinic is a multi-disciplinary clinical unit consisting of Medical and Surgical components. This report primarily reflects the Medical component. The Clinic carries a large clinical load and offers a number of specialised services, with clinical and applied research interests in: Hepatobiliary disease; Colorectal disease; Oesophageal disease; Inflammatory bowel disease; H.pylori related disease; and Nutrition. The Clinic is involved in a number of collaborative research projects.
Divisional Statistics

Permanent and Long-term Contract Staff

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Students

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Research Fields and Staff

Dr Gill Watermeyer: Risk of malignancy in inflammatory bowel disease treated with Azathioprine or 6-Mercaptopurine; Predicting bad outcome in Crohn’s disease; drug trials – various

Dr Dion Levin: Bleeding Peptic Ulcer Disease; Helicobacter pylori testing.

Dr Sabelo Hlatshwayo: Achalasia.

Dr Mashiko Setshedi: Drug induced liver injury.

Contact Details

Postal Address: GI Clinic, E23, New Main Building, Groote Schuur Hospital, Observatory, 7925
Telephone: +27 21 404 3040
Fax: +27 21 447 0582
E-mail: sandie.thomson@uct.ac.za

Department Of Medicine
Division Of Haimatology and UCT
Leukaemia Unit

HEAD OF DIVISION: PROFESSOR N. NOVITZKY

Divisional Profile

The Division of Haematology at Groote Schuur Hospital is a complex unit with multi disciplinary activities that include outpatient clinics, admission beds as well as diagnostic and research laboratories. The clinical services are organised under the umbrella of the Department of Internal Medicine, while the laboratory diagnostic sections are under the broader organisation of the Department of Clinical & Laboratory Sciences and National Health Laboratory Service (NHLS). The Haematology section of the laboratory was accredited with SANAS 3 years ago and after review, this accreditation was confirmed last year.

Patients with elaborate clinical problems, bone marrow failure or requiring stem cell transplantation are referred from all provinces; particularly the Northern and Eastern Cape and particularly we receive referrals from foreign institutions in Sub-Saharan Africa. In addition, individuals with multiple myeloma and other lymphoproliferative disorders are treated together with the Department of Radiation Oncology in combined clinics. Of concern is that a substantial increase in the numbers of HIV related malignancies and particularly Burkitt’s lymphoma and leukaemia that have significantly strained our hospital beds.

The Division of Haematology provides training for both undergraduate and postgraduate students at the Medical Faculty. Registrars and consultants participate in undergraduate training, facilitating various modules focussing in blood disorders. At the postgraduate level, training is given at the level of Master's and PhD courses in cell biology as well as specialist training in haematopathology for medical graduates. In addition, within the Department of Clinical and Laboratory Sciences 3 divisions participate in the training provided to Clinical Pathology candidates. Regular experiential teaching and microscope tutorials are given to registrars in Haematopathology. Journal Clubs, seminars and group teaching is offered to Haematopathology, Clinical Haematology and general medical registrars. Interdepartmental meetings are held with academic staff from Tygerberg Hospital and Red Cross War Memorial Children’s Hospital. Faculty members from the division also regularly contribute to the teaching programmes of the basic sciences as well as Departments of Internal Medicine and Clinical and Laboratory Sciences.

In addition a University of Cape Town Leukaemia Unit established within the division, has now been reviewed and approved by the University Research Committee and will continue focusing its research work in the area of haemopoietic stem cell biology and stem cell transplant immunology. The research laboratory located at the medical school campus is well equipped to support undergraduate and postgraduate pathology and science students. Dr Shaheen Mowla has joined Dr Karen Shires to expand the molecular and cellular research in the Leukaemia Unit laboratory. The main objective will be to pursue further research into the area normal and malignant haematopoiesis, detection of minimal residual disease in patients with leukaemia, cellular therapies and stem cell transplantation.
Divisional Statistics
Permanent and Long-term Contract Staff

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<td>Senior House Officers</td>
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Students

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<td>Honours</td>
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Research Fields and Staff

PROFESSOR NICOLAS NOVITZKY
Haematopoietic stem cell biology; clonogenic assays; haematopoietic stem cell transplantation; immune reconstitution; haematological malignancies

DR CECILE DU TOIT
Haematopoietic stem cell transplantation; haematological malignancies; haemophilia

DR. ESTELLE VERBURGH
Myelodysplastic syndrome

DR MAUREEN STEIN
Haematopoietic stem cell biology

DR JESSICA OPIE
Molecular biology of neoplasia: chronic myelogenous leukaemia; coagulation abnormalities

DR KAREN SHIERES
Molecular biology and diagnostics

DR SHAHEEN MOWLA
Minimal residual disease and flow cytometry.

MRS RYGANA ABDULLA
Cellular biology of neoplasia; clonogenic assays

Contact Details
Postal Address: 6th Floor, Chris Barnard Building, Anzio Road, Observatory, 7925
Telephone: +27 21 406 6154/404 3073
Fax: +27 21 448 8607
E-mail: Coleen.Fredericks@uct.ac.za
Web: http://web.uct.ac.za/depts/haem/

Department Of Medicine
Division Of Hepatology
HEAD: ASSOCIATE PROFESSOR WENDY SPEARMAN

Divisional Profile
The Division of Hepatology runs the only dedicated liver clinic as well as the only state liver transplant programme in the country. We also run a Porphyria clinic.

The unit is referred patients from all provinces in South Africa as well as from neighbouring countries such as Zimbabwe and Namibia for assessment regarding the aetiology and management of both acute and chronic liver disease and suitability for liver transplantation. These referrals come from both the private and public sector.

We provide a direct call-in service telephonic to primary, secondary and tertiary medical centres regarding management of liver disease. The Liver unit works closely with the Surgical Hepatobiliary unit and collaborates with the Surgical Research laboratory.

The major areas of research include: viral hepatitis, autoimmune liver disease, immune abnormalities in liver disease, HIV and liver disease, porphyria, liver transplantation and development of bioartificial liver support devices.

The unit is actively involved in drawing up national guidelines for the management of Hepatitis B / HIV coinfection Hepatitis B and Hepatitis C.
Divisional Statistics

Permanent and Long-term Contract Staff

<table>
<thead>
<tr>
<th>Role</th>
<th>Count</th>
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<tr>
<td>Associate Professors</td>
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<tr>
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<tr>
<td>Technical Support Staff</td>
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Honorary Staff

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</table>

Research Fields and Staff

**H.N. HAIRWADZI**  
Autoimmune liver disease; viral hepatitis, bone disease in chronic liver disease

**M.W. SONDERUP**  
HIV and liver disease; viral hepatitis; porphyria

**C.W.N. SPEARMAN**  
Liver transplantation; viral hepatitis; paediatric liver disease, acute liver failure and bioartificial liver support devices

**M. SETSHEDE**  
Drug-induced liver injury

**M. KEW**  
Hepatitis; liver cancer

Contact Details

Postal Address: Division of Hepatology, Department of Medicine, University of Cape Town, Medical School, Observatory, 7925  
Telephone: +27 21 406 6394  
Fax: +27 21 448 6815  
E-mail: Wendy.Spearman@uct.ac.za

Institute Profile

The Albertina and Walter Sisulu Institute of Ageing in Africa (IAA) is a Cross-Disciplinary Group. The IAA represents a coalescence of institute – wide disciplines with a focus on ageing: specifically Geriatric Medicine; Geriatric Neurology; Geriatric Neuropsychology and Old Age Psychiatry. The International Longevity Centre–South Africa is incorporated in the Institute. The vision of the IAA is to be an academic, clinical, research and policy centre of excellence and relevance in Africa. Its mission is to facilitate the delivery of the highest standard of inter-disciplinary, in-context training for health and allied professionals and evidence-based clinical and social care for older people, whilst undertaking appropriate research and audit upon which policy and planning for older persons may be based. The mission is achieved through inter-disciplinary partnerships and teamwork, and human resources development within current legal, ethical and financial constraints. The IAA is a leader in the area of research on ageing in sub-Saharan Africa, and enjoys international recognition and acclaim.

Institute Statistics

Permanent and Long-term Contract Staff

<table>
<thead>
<tr>
<th>Role</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Professor</td>
<td>1</td>
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<tr>
<td>Senior Lecturers</td>
<td>5</td>
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<tr>
<td>Senior Scientific Officer</td>
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<tr>
<td>Medical registrars</td>
<td>2</td>
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<tr>
<td>Administrative and Clerical Staff</td>
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<tr>
<td><strong>Total</strong></td>
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Honorary Staff

<table>
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<tr>
<td>Visiting Researcher</td>
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<td><strong>Total</strong></td>
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Students

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</table>

Research Fields and Staff

**DR SEBASTIANA KALULA**  
Epidemiology of dementia; falls; quality of care.

**DR LINDA DE VILLIERS**  
Stroke risk factors and rehabilitation; post-discharge stroke community care.
PROFESSOR MARC COMBRINCK
NRF Research Chair in Clinical Neurosciences: neuro-inflammation and mechanisms of neuro-degeneration with specific reference to cognitive impairment in the elderly and in HIV-associated encephalopathy.

DR KEVIN G.F. THOMAS
Senior Lecturer, Department of Psychology: geriatric neuropsychology; dementia; impact of stress on memory; impact of life stressors on age-related cognitive decline.

ASSOCIATE PROFESSOR JOHN A. JOSKA
Senior Lecturer, Division of Neuropsychiatry, Department of Psychiatry and Mental Health: neurocognitive disorders in HIV infection.

Contact Details
Postal Address: The Albertina and Walter Sisulu Institute of Ageing in Africa, Faculty of Health Sciences, University of Cape Town, L51, Old Main Building, Groote Schuur Hospital, Observatory 7925, Cape Town, South Africa.
Telephone: +27 21 406 6211
Fax: +27 21 406 6846
E-mail: iaa-institute@uct.ac.za
Web: http://www.instituteofageing.uct.ac.za

Department Of Medicine
Division Of Nephrology And Hypertension

HEADS OF DIVISION: ASSOCIATE PROFESSOR B.L. RAYNER

Divisional Profile
Currently the new division offers a wide range of clinical services including chronic and acute dialysis, renal transplantation, assessment and treatment of a broad range of kidney disease and resistant hypertension, 24 blood pressure monitoring renal biopsies, prevention of chronic kidney, and cardiovascular risk assessment. The unit is supported by a dedicated team of transplant surgeons. Treatment is offered to both private and indigent patients. It also offers out reach programmes to Khayelitsha Community Health Centre and GF Jooste Hospital locally, and to George Hospital, the Northern and Eastern Cape.

There is active training programme for senior registrars in Nephrology and the unit is currently training 5 nephrology fellows. The division supports the Department of Medicine training of medical students, specialist physicians and professions allied to medicine. The division also supports training of renal technologists and the nephrology course for nurses.

The main academic research activities of the division relate to renal bone disease; systemic lupus erythematos (SLE); genetics of salt sensitive hypertension; diabetic nephropathy; classification, genetics, prevalence and treatment of HIV associated nephropathy; the genetics of ACE inhibitor related angioedema in black and coloured South Africans; treatment of renal artery stenosis due to atherosclerosis; vascular calcification in CKD stage 5 and its effects on central aortic BP; detection of vascular calcification; and the effects of antiviral treatment on BP in patients living with HIV.

Divisional Statistics
Permanent and Long-term Contract Staff and students

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<th>Position</th>
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<td>Part-time consultant</td>
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<td>Medical officers</td>
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Research Fields and Staff

ASSOCIATE PROFESSOR C.R. SWANEPOEL
HIV and the kidney – worked on the development of a HIV and renal disease classification. Principal researcher is Dr N Wearne.

DR Z BARDAY
Kidney transplantation

DR YVONNE TRINDER
Hypertension

DR IKE OKPECHI
Lupus registry; Quality of life in CAPD patients
ASSOCIATE PROFESSOR BRIAN RAYNER
Cardiovascular outcomes in renal atherosclerotic lesion (CORAL Study): A prospective, multi-center, unblinded, two-arm, randomized trial; Genetics of salt sensitive hypertension (PhD dissertation); PTH and low renin hypertension; The genetics of ACE inhibitor related angioedema in black and coloured South Africa

DR NICOLA WEARNE
Retrospective analysis of all HIV positive renal biopsies between 2004 and 2008 at GSH hospital; Prospective observational study of all HIV positive patients who undergo a renal biopsy at GSH hospital to establish best medical management, mortality and spectrum of disease; HIV related renal disease: Histological Classification; Randomised controlled study: Treatment of HIV +ve patients with confirmed HIVAN on renal biopsy with Corticosteroids; Epidemiology of renal dysfunction and chronic kidney disease in HIV positive HAART naive patients

Contact Details
Postal Address: E13 Groote Schuur Hospital, Observatory, 7925
Telephone: +27 21 404 3318
Fax: +27 21 404 5215
E-mail: mmcadi@pgwc.gov.za

Department Of Medicine
Division Of Neurology
HEAD OF DIVISION: ASSOCIATE PROFESSOR A. BRYER

Divisional Profile
A general clinical neurology service is operated at Groote Schuur Hospital. This provides a full range of clinical activities, including in-patients, consultative, and emergency services. Additionally, there is a clinical neurophysiology laboratory, a dedicated acute stroke unit, and specialised clinics for stroke, myasthenia gravis, HIV neurology, neuro-genetic disorder and epilepsy.

Areas of research include:
Stroke: A large cohort of stroke patients were followed up for 6 months post incident stroke to determine survival, disability and functional outcomes following their discharge from an acute stroke unit to community-based health care and rehabilitation. Factors predictive of poor outcome were identified. Data from this study are being used to develop a community based model of stroke care. An in-service training program for health care workers involved in stroke care in under-resourced settings is being developed. The new South African National Guideline for the management of acute ischaemic stroke and TIA has been published with substantial input from the GSH/UCT stroke Unit. A longitudinal study of HIV associated stroke to evaluate the underlying biological mechanisms (specifically endothelial dysfunction and ultrasonographic vascular phenotypes) has been undertaken.

Myasthenia gravis: Clinical and Laboratory-based research projects are focussed on improving therapeutic strategies and increasing understanding of disease pathogenesis.
b. A Multi-center, Randomized Study comparing Thymectomy to No Thymectomy in Myasthenia Gravis-International study NIH funded. On advisory committee.
c. The psychiatric manifestations in thymomatous MG (Dr Freeman, Psychiatry) Complement regulation in MG subjects with DAF promoter SNP and the effect of therapies. This work done by the Neurology Research Group in partnership with Human Biology laboratory. PI J Heckmann with Dr’s Amaal Abrahams and Sharon Prince. MSc student Ms J Auret.
d. TGFb polymorphisms and their association with extraocular muscle MG damage- in collaboration with Dr C Dandara, Human Genetics.

HIV/AIDS: Clinical and Laboratory-based research projects studying the risk factors for developing neuropathy in HIV-infected subjects.
a. Research collaboration with Endocrine (UCT) and Neurology (Emory University) – longitudinal prevalence study of HIV neuropathy and risk factors at the Crossroads CHC.
Dr Johan van der Watt, received the CIDRI Post Graduate Scholarship award to study inflammation in HIV- associated toxic neuropathy
b. Dr Chad Centner is studying Pyridoxine & NAT – 2 genotypes as risk factors for HIV- associated neuropathy.
c. Dr John- Randel Vermaak is studying the incidence of HIV- neuropathy since the cART regimen has changed from d4T to Tenofovir.
d. Collaboration with Dr’s Todd Hulgan (Vanderbilt University) and Dr P Sinxadi, Pharmacology, UCT to investigate mitochondrial DNA haplotype and susceptibility to HIV- associated toxic neuropathy by examining mitochondrial haplogroups and association with HIV- associated neuropathy in African subjects on d-drugs.
e. Dr Friedrich Thienemann is performing a retrospective analysis of demyelinating CNS disease in HIV- infected subjects.
f. Pilot project examining the efficacy and CSF drug penetration of cART in patient with neurological HIV-associated disease. Dr’s Thienemann, Vermaak and Decloedt (Pharmacology)

Dementia: A longitudinal study of cognitive impairment in the elderly, with an emphasis on the role of inflammation in the pathogenesis of Alzheimer’s disease. The study includes imaging techniques such as magnetic resonance spectroscopy (MRS) of the brain and volumetric MRI analyses of various brain regions.

Neurogenetics: A clinical and counselling service for patients with Huntington disease and familial spinocerebellar ataxia (SCA) with a study to find an appropriate SNP to target for SCA1 gene silencing and to knock down the expression of mutant Ataxin1.

Multi-media teaching: The use of clinical encounter simulations is being explored.

Drug trials: The division is active in phase 3 drug trials for Parkinson’s disease, epilepsy and multiple sclerosis.

Divisional Statistics

Permanent and Long-term Contract Staff

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<th>Position</th>
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<td>M. Med (Family Med)</td>
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<tr>
<td>MA (Neuropsychology)</td>
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Research Fields and Staff

ASSOCIATE PROFESSOR A. BRYER
Stroke; neuro-genetics.

DR E. LEE PAN
Health systems information technology; multi-media teaching.

ASSOCIATE PROFESSOR J. HECKMANN
Myasthenia gravis; HIV neurological disease, HIV neuropathy, neuro-immunology; neuro-genetics.

DR L. TUCKER
Epilepsy

DR K. BATEMAN
Tuberculotic meningitis

Contact Details

Postal Address: E8, New Groote Schuur Hospital, Observatory, 7925
Telephone: +27 21 404 3197/8
Fax: +27 21 406 6251
E-mail: alan.bryer@uct.ac.za

Department Of Medicine
Division Of Clinical Pharmacology

HEAD OF DIVISION: PROFESSOR GARY MAARTENS

Divisional Profile

The major research thrusts of the division are focused on drugs for malaria, tuberculosis and HIV. The research in these fields is broad and encompasses drug discovery, pharmacokinetics, pharmacogenomics, clinical trials, pharmacoepidemiology, and pharmacoeconomic evaluation. The analytical laboratory plays a key research role with small animal models for drug discovery and in patient samples for drug concentrations. A large multicentre malaria clinical research group headed by Professor Karen Barnes has secured substantial funding from the Gates Foundation and the Global Fund – this programme is at the forefront of translational malaria research in Africa. The MRC South African Traditional Medicines Research Group is a drug discovery programme: Professor Kelly Chibale, Dept Chemistry, UCT and Professor Peter Smith from our division are co-directors. Compounds with antimalarial, antibacterial (including antitubercular) and antifungal activity are identified and optimised from plants used in traditional medicine. The analytical laboratory has recently been awarded funding from NIH as an International Pharmacology Specialty Laboratory. Professor Helen McIlerson heads our clinical pharmacokinetic group, which conducts a series of pharmacokinetic studies evaluating antitubercular drugs, antiretroviral drugs, and the interaction between them in adults and children with funding from the Wellcome Trust, NIH, and MRC. Our collaboration on population pharmacokinetics with Uppsala University is ongoing and we have a pharmacometric laboratory to perform these complex analyses.
Divisional Statistics

Permanent And Long Term Contract Staff

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<td>Quality Assurance Manager</td>
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<td>Information Pharmacist</td>
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<td>Editor SAMF</td>
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<td>Clinical Trial Monitors</td>
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<td>Administrative and Clerical Staff</td>
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<td>Departmental Assistance</td>
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Honorary Staff

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<td>Honorary professor</td>
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Postgraduate Students

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Research Fields and Staff

GABRIELS, G.
Analytical chemistry, pharmacokinetics, traditional medicines, drug discovery and development, drugs and sport performance

MAARTENS, G.
Adherence to antiretroviral therapy; immunopathology & diagnosis of HIV-associated tuberculosis; pharmacoeconomic evaluation of antiretroviral therapy; pharmacogenomics of antiretrovirals

MCILLERON, H.
Pharmacokinetic-pharmacodynamic relationships of antitubercular and antiretroviral drugs; pharmacogenomics; population pharmacokinetics; drug interactions between antiretrovirals and rifamycins.

SMITH, P.J.
Mechanisms of antimalarial drug resistance; pharmacokinetics of anti-tuberculosis drugs; isolation of novel drugs from traditional medicines; development of new drug assays.

WIESNER, L.
Pharmacokinetics of antimalarial drugs; drug assay development; metabolite identification; drug formulation.

Contact Details

Postal Address: Division of Clinical Pharmacology, University of Cape Town, K45, Old Main Building, Groote Schuur Hospital, Observatory, 7925
Telephone: (021) 406 6286
Fax: (021) 448 1989
Email: gary.maartens@uct.ac.za

Department Of Medicine

Division Of Rheumatology

HEAD OF DIVISION: PROFESSOR ASGAR ALI KALLA

Divisional Profile

The Division of Rheumatology has several research interests relating to different aspects of the rheumatic diseases. Osteoporosis is an area of interest for many years and there is ongoing collection of longitudinal bone mineral density data in patients with rheumatoid arthritis (RA) and systemic lupus erythematosus (SLE). Age-related bone loss at different skeletal sites is being prospectively studied in collaboration with the Department of Nuclear Medicine and the Endocrine Unit. Recently, collaborative studies with the Division of Hepatology have been carried out to see the relationship between bone mineral density (BMD) and auto-immune hepatitis. Clinical drug trials are in progress.
to study the safety and efficacy of the newer biological DMARDs in RA and SLE. Recently, the trials of coxibs are concentrating on cardiovascular outcomes to a greater extent than their gastr-toxicity. We have also been looking at SLE genetics in collaboration with the Hepatology, with particular reference to the Vitamin D receptor and its role in the pathogenesis of auto-immune diseases. Newer areas of research include the study of chronic tophaceous GOUT; community aspects of diagnosing and treating rheumatic diseases at Community Health Centres; early rheumatoid arthritis; genetics of bone loss in SLE; and functional problems in ankylosing spondylitis.

Divisional Statistics

Permanent and Long-term Contract Staff

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<tr>
<th>Role</th>
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<tbody>
<tr>
<td>Professor</td>
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<td>Nurse practitioner</td>
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Honorary Staff

| Honorary Lecturers | 3 |

Students

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<td>Rotating Medical Registrar</td>
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<tr>
<td>Medical Officer</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>3</strong></td>
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</tbody>
</table>

Contact Details

Postal Address:
J47 Old Main Building,
Groote Schuur Hospital,
Observatory 7925
Telephone: +27 21 404 5422/2131 or 406 6514
Fax: +27 21 448 3253
E-mail: melanie.burger@uct.ac.za; kallaa@iafrica.com

Department of Medicine

Research output

Chapters in books


Articles in peer-reviewed Journals


Helgadottir, A., Gretarsdottir, S., Thorleifsson, G., ... Mayosi, B.M. 2012. Apolipoprotein(a) genetic sequence


Herrmann, C., Salas, P.F., O Patrick, B., De Kock, C., Smith, P.J., Adam, M.J. and Orvig, C. 2012. Modular synthesis of 1,2- and 1,1'-disubstituted ferrocenyl carbohydrate chloroquine and mefloquine conjugates as potential antimalarial agents. Organometallics, 31: 5748-5759.


Lotvall, J., Bateman, E.D., Bleecker, E., Busse, W., Woodcock, A., Follows, R., Lim, J., Stone, S., Jacques, L. and Haumann, B. 2012. 24-h duration of the novel LABA vilanterol trifenatate in asthma patients treated with


Shannon, J., Latib, A. and Colombo, A. 2012. Iatrogenic perforation of the medial circumflex artery following femoral venous cannulation for tanscatheter aortic valve...
replacement, presenting with retroperitoneal hematoma and successfully managed by percutaneous embolization and coiling. Catheterization and Cardiovascular Interventions, 80: 1002-1006.


Thelingwani, R.S., Dhansay, K., Smith, P., Chibale, K. and Masimirembwa, C.M. 2012. Potent inhibition of CYP1A2 by frutinone A, an active ingredient of the broad spectrum antimicrobial herbal extract from P.fruticosa. Xenobiotica, 42(10): 989-1000.


care and comprises participation in large, international, collaborative trials, cutting edge national research projects, self-initiated local and collaborative studies, as well as smaller individual projects. Several important clinical data bases have been established which provide valuable information in maternal medicine, gynaec oncology and reproductive medicine. In addition, our Undergraduate Teaching Unit is actively engaged in education research. Research supervision is provided at the level of MMed and MPhil dissertations and PhD theses to registrars, sub-specialist trainees and staff.

Obtaining an MMed has become a compulsory requirement by the HPCSA for specialist registration, which has greatly increased the need for research supervisors. Our Department has 25 funded registrars in specialist training and 13 supernumerary registrars (all self funded), the majority of whom are non-South African from Malawi.

**Staff and students**

**Permanent and long-term contract staff**

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<th>Professors</th>
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<td>Technical and Support Staff</td>
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**Students**

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**Research fields and staff**

**PROFESSOR SUSAN FAWCUS**
Maternal mortality; Perinatal mortality; Intrapartum asphyxia; Magnesium supplementation in pregnancy; Better Birthing Initiative. Calcium and pre-eclampsia trial, co-investigator Associate Professor JOHN ANTHONY.

Obstetric haemorrhage pilot project. Multicentre collaborative study. Co-investigator Associate Professor J Anthony.

**PROFESSOR ZEPHNE VAN DER SPUY**

Contraceptive and interceptive development; Polycystic ovary syndrome; Reproductive failure; Endocrine dysfunction in pregnancy; Menopause; Nutrition and reproductive health; Genetics of benign gynaecological conditions.

**ASSOCIATE PROFESSOR JOHN ANTHONY**
Thrombophilia; Eclampsia; Bioethics.

**ASSOCIATE PROFESSOR SILKE DYER**
Infertility: health-services in low-resource settings, psychosocial consequences, quality of life, HIV.

**ASSOCIATE PROFESSOR PETRUS STEYN**
Fertility Regulation and Reproductive Health, Development of Sexuality Education.

**ASSOCIATE PROFESSOR ATHOL KENT**
Medical education: Reproducible assessment procedures.

**DR SAADIQA ALLIE**
Obstetric hysterectomy; Teenage pregnancy.

**DR ANNE HORAK**
High risk obstetrics; Fetal cardiac abnormalities.

**DR STEPHEN JEFFERY**
Refractory overactive bladder syndrome: treatment, epidemiology; HIV and obstetric pelvic floor trauma; surgical repair of posterior compartment prolapse; interdisciplinary patient care.

**DR LYNELLE KENNETH**
IUCD in HIV pos women

**DR MUSHI MATJILA**
Fetal Anomalies: Antenatal Pyelectasis; Reproductive endocrinology in normal and abnormal pregnancies. PhD thesis (in process): “The role of Kisspeptin and cognate receptor GPR 54 in placentation”.

**DR NOMONDE MBATANI**
Uterine sarcomas: outcome of treatment; Treatment outcome and complications of gynaecological malignancy.
Dr Vanessa Perrott
Medical education.

Dr Greg Petro
Clinical epidemiology; Haemorrhage and transfusion in the obstetric patient; Termination of pregnancy.

Dr Linda Rogers
Vulval cancer, MRI Imaging in endometrial and cervical cancer, optimal management of early stage cervical cancer, outcome of ovarian cancer in developing countries.

Dr Leann Schoeman
High-risk obstetrics; Audit of clinical obstetric management; cardiac disease in pregnancy.

Dr Valentín Stefan
Haemorrhage and transfusion in the obstetric patient.

Dr Chantal Stewart
Fetal medicine; Women’s expectations of and attitudes to fetal anomaly scans; Preterm labour; Ultrasound screening for risk of pregnancy complications.

Dr Hetta van Zyl
Pre-eclampsia, eclampsia and complications; High risk obstetrics; Laparoscopic surgery; Caesarian section: prevalence and outcome.

Dr Linda Walmsley
Infertility: Quality of life, HIV

Sub-speciality trainees

Dr Tracey Adams: Gynaecological Oncology (Graduated 2012)
Dr Catherine Elliott: Maternal and Fetal Medicine
Dr Malika Patel: Reproductive Medicine (Graduated 2012)
Dr D Richards: Gynaecological Oncology

Teaching

Undergraduate

In 2012 there were 1229 students registered in the Faculty of Health Sciences over the 6 years of the MBChB course. The Department of Obstetrics & Gynaecology was responsible for tuition in Years 3, 4, 5 and 6 in both Obstetrics and Gynaecology.

Thus during 2012 approximately 800 students were taught by the O&G Department.

Awards and other major highlights

Professor Lynette Denny was awarded the Fellowship ad eundem of the Royal College of Obstetricians and Gynaecologists, London, UK.

Professor Lynette Denny awarded the South African Medical Association (SAMA) award for Extra-Ordinary service to Medicine.

Professor Lynette Denny President – International Society of Gynecologic Cancer, Chair FIGO Gynaecology Oncology Committee.

Professor Susan Fawcus promoted to Full Professor. Was invited as expert to WHO Maternal Surveillance and Response workshop for Anglophone African countries, Harare, Zimbabwe. Also served as advisor and Vice-Chairman at the Annual meeting of Scientific and Advisory Group of the Reproductive Health Research Unit of World Health Organisation, Geneva, Switzerland.

Professor Zephne van der Spuy appointed Emeritus Professor and Senior Scholar following her retirement as Professor and Head of Postgraduate Education. Awarded Honorary Fellowship from the Royal College of Physicians of Ireland. Part of the National Contraceptive Expert Committee which developed the new SA guidelines.

Dr Catherine Elliott graduated MMed (O&G): “Complications of anticoagulation in pregnant women with mechanical heart valves”. Supervisor: Dr L Schoeman.

Dr Kobby Essel graduated MMed (O&G): “A Study on knowledge of contraception”. Supervisor: Professor Z van der Spuy.

Dr Anne Horak graduated MMed (O&G): “An analysis of the Caesarean Section rate at Mowbray Maternity Hospital using Robson’s Ten Group Classification System”. (Awarded with distinction) and supervised by Professor S Fawcus.

Dr Viju Thomas graduated MMed (O&G): “Maternal selenium levels in recurrent pregnancy loss”. Supervisor: Professor Z van der Spuy.

Dr Lindi Vollmer was awarded the Daubenton Medal for the College of Medicine Part II FCOG (SA). Graduated MMed (O&G): “Teenage pregnancy: A review of patients accessing obstetric care in the peninsula maternal and neonatal service”. Supervisor: Professor Z van der Spuy.
General

Visitors to the Department included Professor John Guillebaud, Emeritus Professor, London UCL; Jody Steinhauser, University of CA, San Francisco; Professor W Utian; Professor S Lindow; Professor P Steer; Professor J Osborne; Professor C Wright and Professor Rafique Parkar from Kenya who assisted in developing laparoscopic operating skills.

Contact details

Professor Lynette Denny
Head: Department Obstetrics & Gynaecology
H45 Old Main Building
Groote Schuur Hospital
Observatory 7925
Tel: 27 21 404 4485 (secretary Jill Artlett) (w)
Fax: 27 21 448 6921
Email: lynette.denny@uct.ac.za

Research output

Chapters in books


Articles in peer-reviewed Journals


Peer-reviewed published conference proceedings


Department of Paediatrics and Child Health

The Department of Paediatrics and Child Health is a large department in the Faculty of Health Sciences, encompassing the field of general paediatrics as well as a full spectrum of paediatric medical subspecialties with several affiliated disciplines, comprising the School of Child and Adolescent Health. The Department platform includes Red Cross War Memorial Children’s Hospital, Groote Schuur Hospital, Somerset Hospital, Mowbray Maternity and Victoria Hospital. All paediatric registrars are now required to register for a MMed degree as part of their training.

The department has a wide breadth of research activities with a substantial research output especially in the areas of priority child health problems such as tuberculosis, pneumonia, infectious diseases and HIV. The department has an established clinical research unit at Red Cross War Memorial Children’s Hospital, which includes approximately 30 staff members funded on
grant support, mainly awarded by international funding agencies especially National Institute of Health (NIH) USA, European Developing Country Clinical Trials Partnership (EDCTP), Wellcome Trust UK, Global Alliance for Vaccines and Immunisation (GAVI) and the Bill and Melinda Gates Foundation. Current studies located in this clinical research unit include studies of childhood pneumonia, of pediatric TB and of HIV-associated illness. Other satellite clinical research sites have been established in secondary level and community based facilities, supported by this central unit. A recent highlight was a large 4 year award from the Bill and Melinda Gates Foundation for a birth cohort study, the Drakenstein Child Lung Health study to investigate the antenatal and early life determinants of child health with a focus on pneumonia. This has enabled the establishment of clinical research sites in the Drakenstein area, Paarl, and the undertaking of a multidisciplinary study that involves several departments and divisions in the Faculty of Health Sciences. There are 3 NRF rated researchers in the Department including one A-Rated person.

Departmental Profile

Professor and Head of Department and Director of the School of Child and Adolescent Health: Professor Heather Zar

General Paediatrics

- Emergency Unit
- Inpatient unit

Subspecialties:
- Adolescent Medicine
- Allergy
- Cardiology
- Critical Care
- Endocrine
- GIT
- Haematology/Oncology
- Infectious Diseases
- Neonatology
- Nephrology
- Neurodevelopment
- Neurology
- Pulmonology
- Rheumatology

Affiliated Disciplines
- Allied Health Sciences
- Dietetics
- Child & Adolescent Psychiatry
- Child Health Unit
- Children’s Institute
- Dermatology
- Nuclear Medicine
- Paediatric Anaesthesia
- Palliative Care
- Paediatric Pathology
- Paediatric Radiology
- Paediatric Surgery
- Poisons Centre
- South African Tuberculosis Vaccine Initiative (SATVI)-IIDMM

Department of Paediatrics and Child Health

Departmental Statistics

Permanent and long-term contract staff

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<th>Position</th>
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<td>Professors</td>
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Students

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</table>

Research Fields and Staff

A.C. ARGENT
Respiratory mechanics in croup; respiratory mechanics and endotracheal suctioning; electrical impedance tomography
and respiratory disease in the PICU; care practices and interpersonal relationships in ICU; quality of care and safety in the PICU; management of traumatic brain injury in PICU; HIV in the PICU; fluids in the critically ill; prevention of nosocomial infections including ventilator associated pneumonia and central line sepsis; viral infections in the PICU; cardiomyopathy/myocarditis in children; ethical issues in resource allocation in the PICU; severe sepsis and septic shock; “Pathways to care” for critically ill children; training and simulation training for healthcare workers working with critically ill or injured children.

**D.W. BEATTY**
Primary immune deficiency disorders; tuberculosis in childhood; paediatric infectious disease.

**H. BUYS**
Ambulatory, emergency and outreach care; paediatric HIV disease and nutrition; diarrhoeal disease.

**M. CARRIHILL**
Type 1 diabetes in the South African youth; Neonatal screening programmes; Disorders of sex development.

**A. DAVIDSON**
HIV-related malignancy; Brain tumours; the impact of ethnicity on ALL outcomes; Stem Cell Transplantation for Immunodeficiency.

**R. DE DECKER**
The 22q11.2 deletion syndrome; Warfarin: implementation and impact; Genetic associations of congenital heart disease.

**R. DE LACY**
Cystic fibrosis; gastroenterology.

**S. DELPORT**
Paediatric endocrinology; advance diabetes.

**F. DESAI**
Paediatric oncology.

**R. DIEDE RICKS**
Emergency paediatrics; Infectious Diseases.

**K. DONALD**
Developmental disabilities as they manifest and are managed in resource limited settings such as South Africa (including Cerebral palsy, Autism, Intellectual disability, genetic syndromes). Specific interests include the preventable causes of neurodisability such as alcohol and methamphetamine exposure, organophosphate poisoning and the neurological and neurocognitive complications of HIV.

**B.S. ELEY**
Primary immune deficiency disorders; paediatric tuberculosis; paediatric HIV/AIDS; paediatric infectious disease.

**P. GAJJAR**
Renal disease; paediatric organ transplantation especially infectious complications; paediatric hypertension including Takayasu’s Arteritis; acute renal failure and peritoneal dialysis; paediatric HIV nephropathy; adolescent medicine.

**E. GODDARD**
Paediatric liver disease; transplantation in children; immunology; paediatric infectious disease; paediatric gastroenterology and nutrition.

**M. HARRISON**
Neonatal epidemiology; infection control; neonatal outcomes.

**M. HENDRICKS**
Clinical Outcomes in children with rhabdomyosarcoma at Red Cross Children’s Hospital.

**M.K. HENDRICKS**
Child health, public health nutrition and child rights and nutrition.

**L. HENLEY**
Research ethics in general. Ethical and legal issues in research with children.

**J. HEWITSON**
Resource allocation and cardiovascular disease; Trisomy 21 and cardiovascular disease; surgical management of patients with a single ventricle.

**A. HORN**
Assessment and Management of Hypoxic Ischaemic Encephalopathy.

**S.M. KROON**
Mother-to-child transmission of HIV.

**M. LEVIN**
Genotypic and phenotypic features of allergic Xhosa children; Prevalence and associations of food allergy in unselected children in Cape Town and in the Eastern Cape; relationship between food allergy and atopic dermatitis; the impact of demographic, environmental, nutritional and infectious influences on the expression of allergy and atopy within the Drakenstein birth-cohort study; communication issues in management of asthma and allergy in indigenous people in South Africa.
J. LAWRENSON
Developing standards for echocardiographic screening of individuals to detect subclinical rheumatic heart disease; Thoracopagus conjoined twins; Cardiovascular disease in patients with HIV disease.

L. LINLEY
Kangaroo mother care; HIE and the effect of head cooling; ethical issues in neonatal care.

G. MOLLER
Neonatal jaundice

B. MORROW
Paediatric respiratory infections; nosocomial infections in the PICU; distribution of ventilation in children with and without lung disease; respiratory mechanics; cystic fibrosis; resource allocation in PICU; paediatric cardiopulmonary physiotherapy.

R. MULOIWA
Pertussis in children hospitalised with Lower Respiratory Tract Infection (LRTI).

S. NAIDOO
Aeroallergen sensitisation and the prevalence of asthma, allergic rhinitis, and eczema in children with Vernal Keratoconjunctivitis.

A. NDONDO
Hydatid disease of the spine; epilepsies in childhood; neurometabolic disorders; the ketogenic diet in the African context; Rett syndrome; optimal management of refractory status; non-polio enterovirus infections.

J. NUTTALL
Paediatric HIV/AIDS and tuberculosis; pharmacokinetics & dosing of antiretroviral and antitubercular drugs; performance of HIV rapid tests in children.

R. PETERSEN
Cerebral Palsy.

V. RAMANJAM
Phenotype, neuroimaging and neurocognitive characteristics of children with neurofibromatosis type 1; DAX1 mutation; investigating the prevalence, comorbidities and responses to different forms of medical therapy for children and adolescents with ADHD.

N. RHODA
Neonatal care in rural communities / third world countries; Outreach; Distance learning; Care of the ELBW in resource limited settings; neonatal planning to existing research interest.

M. RICHARDS
Developmental medicine

G. RIORDAN
Mitochondrial disease; ADHD.

P. ROUX
Paediatric HIV/AIDS; ethics; palliative care; early childhood development.

S. SALIE
Sepsis, HIV and fluid resuscitation.

B. SCHLEGEL
Tuberous sclerosis.

C. SCOTT
Paediatric Systemic Lupus Erythematosus; Juvenile Idiopathic Arthritis; Fibrodyplasia Ossificans Progressiva; HIV Arthropathy

A. SPITAELS
Paediatric endocrinology, metabolism and diabetes; social circumstances, diabetes control, intersex.

P. SPRINGER
Management and outcome in tuberculous meningitis; neurodevelopment in children with HIV/Aids (with Stellenbosch University).

G. SWINGLER
Systemic literature reviews.

C. THOMSON
Follow-up of the high risk infant; HIE and the effect of head cooling

L. TOOKE
Neonatal research including PMTCT; general paediatrics.

F. VAN BEVER DONKER
Botulinum therapy in cerebral palsy.

A. (NIKI) VAN NIEKERK
Neonatology and Neonatal cardiology.

A. VANKER
Indoor air pollution and tobacco smoke exposure and the effects on lung health. Determinants of childhood pneumonia.

K. WALKER
Department Of Paediatrics And Child Health

Affiliated Disciplines
Allied Health Sciences

HEAD OF UNIT: SAMEER RAHIM

Unit Profile

The Unit of Associated Paediatric Disciplines is multi-disciplinary, including all the paediatric therapy professions of Physiotherapy, Occupational Therapy, Dietetics/Nutrition, Speech Therapy, Audiology and Social Work. The Division undertakes undergraduate and postgraduate teaching and training in all aspects of paediatric care, both acute and chronic. The Division is active in conducting research in Paediatric fields, often collaborating with members of other Divisions. The individual departments also run departmental weekly and monthly CPD programs accredited by UCT.

Unit Statistics

Students

<p>| | |</p>
<table>
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<tr>
<td>Master's</td>
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Permanent and long-term contract staff (PGWC)

| Permanent staff (Full time) | 33 |
| Permanent staff (Part time) | 2  |
| Community service           | 4  |
| Total                       | 39 |

Undergraduate students: 66
Elective registered via UCT: 10
Postgraduate students (nursing and allied health): 107
Total: 183

Research Fields and Staff

Lezanne le Roux (Speech Therapy)
The Nature of Feeding and Swallowing Difficulties in the Paediatric Cerebral Palsy Population Who Have Had Videoflouroscopic Swallow Studies.

Social Work Department

- Collaboration between Child Safe social worker and UCT academics and students who undertake research projects and utilises the Childsafe Trauma Database.
• Child Abuse Data base development commenced in 2012.
• Extensive pain management related research undertaken by Rene Albertyn.
• Post Graduate studies 2013, X2 social work staff members registered for Master’s in social work
  Shihaam Cader and Bernadette Saayman [Dietitians] Case Series report of all patients receiving SMOF IV
  lipid at RCWMCH

Department of Paediatrics and Child Health

Affiliated Disciplines
Child And Adolescent Psychiatry

HEAD OF UNIT: DR WENDY VOGEL

Unit Profile

The clinical services associated with the Division of Child and Adolescent Psychiatry are offered in the following units: Outpatient Unit; Consultation-Liaison Unit; Parent-infant Mental Health Service; and Therapeutic Learning Centre (an in-patient unit for children under 13 years.) Training is provided for psychiatric registrars and clinical psychology interns. In addition, the Division offers a two-year M. Phil. (Child and Adolescent Psychiatry) degree, which leads to registration as a sub-specialist in Child and Adolescent Psychiatry with the Health Professions Council of SA. In addition, staff members in the Division supervise candidates for postgraduate degrees such as Master’s and Doctoral degrees. Research interests include adolescent and infant mental health, autism and ADHD, community mental health services research and behavioural manifestations of HIV infection.

Unit Statistics

Permanent and long-term contract staff

<table>
<thead>
<tr>
<th>Role</th>
<th>Count</th>
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<tbody>
<tr>
<td>Associate Professor</td>
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<td>Senior Lecturers</td>
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<tr>
<td>Lecturers</td>
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<tr>
<td>Emeritus Professor</td>
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<td>Honorary staff</td>
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<td><strong>Total</strong></td>
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<tr>
<th>Students</th>
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<tr>
<td>Master’s</td>
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<tr>
<td>Registrars Junior</td>
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<tr>
<td>Registrars Senior</td>
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<tr>
<td><strong>Total</strong></td>
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*MBChB students rotate through the Division

Research Fields and Staff

DR WENDY VOGEL:
Lecturer; ADHD and autism and service delivery.

BRIAN ROBERTSON
Emeritus Professor; child and adolescent psychiatric epidemiology; impact of violence on children; development of community mental health services; integration of mental health services at primary care level; youthful perpetrators of violent crime; cultural psychiatry and indigenous healers.

ASTRID BERG
Associate Professor; Senior lecturer and consultant, analytic psychotherapy; infant mental health; culture and mental health.

ROD ANDERSON
Senior Lecturer; analytic psychotherapy.

WILLEM DE JAGER
Senior Lecturer. Parent-child relational problems

NIC SHORTALL
Senior Lecturer; psycho social sequelae of chronic physical illness and medical student training / assessment.

JON YAKO
Senior lecturer; Cross-Cultural Child Development; Personality & Identity; Family Intervention Research, Social Psychology

MARIAN CAMPBELL
Senior Lecturer: The relationship between developmental and attachment theories and theory of mind leading to the ability in children and adolescents to symbolize and develop reflective functions.

PROFESSOR PETRUS DE VRIES
Sue Struengmann Professor of Child and Adolescent Psychiatry
Contact Details

Postal Address: Division of Child and Adolescent Psychiatry, School of Child and Adolescent Health, Red Cross Children’s Hospital, 46 Sawkins Road, Mowbray, 7700
Tel: +27 21 685 4103
Fax: +27 21 685 4107
Web: http://web.uct.ac.za/depts/ich
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Please refer to the Psychiatry and Mental Health Research Report for publications by members of the Division: Child and Adolescent Psychiatry.

Department of Paediatrics and Child Health

Affiliated Disciplines
Child Health Unit

DIRECTOR: ROTATING ACTING HEAD

Unit Profile

The Child Health Unit’s mission is to contribute to promoting equity in child health. The core business of the Unit is directed at children’s public health and community-oriented child health promotion, protection, care and rehabilitation.

The target of the Unit’s endeavours is those areas, which have a strong children’s public health and interdisciplinary focus, viz. child development and disability, community nutrition, infectious diseases and health policy and service development. The Unit has close links with the Children’s Institute.

Unit Statistics

Permanent and long-term contract staff

<table>
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<tr>
<th>Position</th>
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<tbody>
<tr>
<td>Associate Professor (part-time)</td>
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<tr>
<td>Emeritus Professor (part-time)</td>
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<tr>
<td>Specialist</td>
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<tr>
<td>Sub-specialist trainees</td>
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<td>Senior Lecturers (part-time)</td>
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Research Fields and Staff

J. SHEA
Health promotion and education; the adaptation and piloting of a behavioural intervention to support HIV+ women in the core domains of health, mental health, parenting and HIV prevention for use by non-governmental organizations; an assessment of the feasibility of intervention trials on tuberculosis prevention in schools in the Western Cape Province; development of a certificate course in clinical research.

Department of Paediatrics and Child Health

Affiliated disciplines
Children’s Institute
DIRECTOR: ASSOCIATE PROFESSOR SHANAAZ MATHEWS

Institute Profile

The Children’s Institute aims to contribute knowledge and understanding to promotion of policies which govern improvement of child well-being, and fulfillment of the rights of all South Africa’s children, with special emphasis on children rendered vulnerable by a range of difficult circumstances. It addresses the needs and rights of South Africa’s children through policy research, advocacy and education and other academic activities that contribute to improvement in the policy analysis, formulation, implementation and evaluation processes.

Institute Statistics

Permanent and long-term contract staff

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Students

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Research Fields and Staff

ASSOCIATE PROFESSOR SHANAAZ MATHEWS
Director; Children & violence, child protection, child abuse, gender policy, gender-based violence, evidence-based programming.

LIZETTE BERRY
Senior researcher; Child socio-economic rights indicators; child poverty.

DR ARIANE DE LANNY
Senior researcher; Youth and youth identity in rapidly changing, urban environments; Perceptions of opportunity structure; Education, identity and educational decision-making.

KATHARINE HALL
Senior researcher; Child poverty; socio-economic rights.

LUCY JAMIESON
Senior advocacy co-ordinator; Child rights; participatory democracy; governance; law reform & policy development.

HELEN MEINTJES
Senior Researcher; HIV/AIDS & children; alternative care; social policy; children’s participation; media

DR TENDAI NHENGA-CHAKARISA
Senior researcher; International law; human rights law; child rights; child labour; applying international children’s rights law in African cultural contexts; curriculum design & legal drafting.

PAULA PROUDLOCK
Senior Legal Researcher; Child rights; legislative review; law reform; democracy & governance; socio-economic rights for children.

Department Of Paediatrics And Child Health

Affiliated Disciplines

Paediatric Anaesthesia

HEAD OF UNIT: ASSOCIATE PROFESSOR JENNY THOMAS

Unit profile

The Unit of Paediatric Anaesthesia, a division of the Department of Anaesthesia (UCT) and SCAH, is responsible for the provision anaesthesia for all children, infants and neonates undergoing surgery or procedures at the Red Cross War Memorial Children’s Hospital (RCWMCH) and Maitland Cottage Children’s Home. This department also provides acute, chronic and palliative care services for the children at this hospital, as well as providing input into the Paediatric Intensive Care services. The Paediatric Pain Team is a multidisciplinary group which falls under Paediatric Anaesthesia, run by Professor Thomas. These include SRN Angeline Schrikker (nurse practitioner in pain) and a number of other volunteers from nursing, child and family psychotherapists, child life specialists, aroma therapy, physiotherapy and art therapy.

Staffing

The head of this clinical unit is Associate Professor Jenny Thomas, with the following fulltime paediatric anaesthesia specialists: Dr Graeme Wilson, Dr Rebecca Gray, Dr Karmen Kemp and Dr Kotie Bester. The other three specialists rotate on a regular basis between GSH, Maitland Cottage and RCWMCH. There are 5 positions for registrars in training at RCWMCH.

In addition to teaching, training and lecturing at both under graduate and postgraduate levels, members of the department have lectured nationally and internationally. They also teach and train members of other disciplines which include paramedics, nurses, surgeons, pharmacists, emergency medicine trainees and family medicine practitioners. Professor Thomas and Dr Myburgh also teach on APLS courses.

In this past year, Ms Melissa Williams has joined the staff to provide much-needed administrative assistance. This has made a considerable difference to the efficient functioning of our paediatric anaesthetic department.

Contact Details

Postal Address: Children’s Institute, University of Cape Town, 46 Sawkins Road, Rondebosch, 7700
Tel: +27 21 689 5404
Fax: +27 21 689 8330/1287
E-mail: info@ci.org.za
Web: www.ci.org.za
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za
Unit statistics

Permanent and long term contract staff

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Research fields and staff

ASSOCIATE PROFESSOR JENNY THOMAS
Acute and chronic pain management, palliative care, analgesia and sedation, burns, conjoined twins, paediatric trauma and orthopaedics, HIV and Aids, transplantation, neonatal anaesthesia and pain, general paediatric surgery, peri-operative behavioural disorders, paediatric peri-operative audits of deaths and critical adverse event reporting.

GRAEME WILSON
Paediatric pharmacology, total intravenous anaesthesia techniques, target-controlled anaesthesia, cardiothoracic anaesthesia.

REBECCA GRAY
Transfusion medicine, vascular access, premature infants, ultrasound application, cardiacs, general paediatric surgery and burns.

KARMEN KEMP
Cardiac anaesthesia, childhood malignancies, teaching.

KOTIE BESTER
Ultrasound and echocardiography applications in paediatric anaesthesia, modalities for analgesia and sedation, interventional radiology and MRI.

Supernumerary fellowships in paediatric anaesthesia have been running for a number of years and two Kenyan anaesthetists have trained here as well as numerous South Africans. The plan is to find funding for these to ensure sustainability for this training in paediatric anaesthesia.

A number of paediatric anaesthetists do sessions at RCWMCH, and these include Drs Owen Hodges (research in Burns blood transfusion techniques), Tony Butt, and David Kirsch.

Contact Details
Postal address: Division of Paediatric Anaesthesia, School of Child and Adolescent Health, University of Cape Town, Red Cross War Memorial Children’s Hospital, Klipfontein Road, Rondebosch, 7700, Cape Town, South Africa.

Tel: +27 21 6585003 / 6585105
Fax: +27 21 6585183
Web: http://web.uct.ac.za/depts/ich
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Department Of Paediatrics And Child Health

Affiliated Disciplines

Paediatric Dermatology

HEAD OF UNIT: ASSOCIATE PROFESSOR N. KHUMALO

Unit profile

The division’s only consultant runs the clinical service and is assisted by dermatology registrars from Groote Schuur Hospital for two clinics a week.

Professor Nonhlanhla Khumalo is NRF-rated and runs the only academic hair research clinic in the country (with Groote Schuur Hospital’s Dr Ngwanya). Her research interests include the epidemiology and treatment of hair and scalp disorders that uniquely affect individuals with afro-textured hair. Her international collaboration studies use various research tools - scanning (and transmission) electron microscopy and amino acid analysis of hair. Current studies are investigating the link between folliculitis keloidalis nuchae and HIV transmission. She is also developing a hair classification tool that will be useful for elucidating the relationship between the pathogenesis of alopecia and hair phynotype.

Permanent staff

<table>
<thead>
<tr>
<th>Position</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Professor</td>
<td>1</td>
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</tbody>
</table>
with UCT and supports State and Private Health Care facilities in the Western Cape and other provinces which do not have a dedicated Paediatric Nuclear Medicine Service. In addition, staff actively participate in the Division of Nuclear Medicine at Groote Schuur Hospital. Registrars from a number of institutions spend time at the Children’s Hospital as part of their training, as do radiography students from Groote Schuur Hospital. Other activities include participation in International Congresses and the College of Nuclear Physicians.

Statistics

Permanent and long term contract staff

<table>
<thead>
<tr>
<th>Role</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>Senior specialist</td>
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<tr>
<td>Part-time specialist / Emeritus Associate Professor</td>
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Students

<table>
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<tbody>
<tr>
<td>Registrars</td>
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<td>Total</td>
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</tr>
</tbody>
</table>

Research fields

Renal scintigraphy, “milk” scans in gastro-intestinal motility disorders, limb perfusion in children with vascular compromise due to infection or burns, PET/CT applications in children, and brain perfusion scintigraphy.

Contact Details

Postal address: Paediatric Nuclear Medicine, School of Child and Adolescent Health, University of Cape Town, Red Cross War Memorial Children’s Hospital, Klipfontein Road, Rondebosch, 7700, Cape Town, South Africa.
Tel: +27 21 6585367
Web: http://web.uct.ac.za/depts/ich
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Department Of Paediatrics And Child Health

Affiliated Disciplines

Paediatric Pathology

HEAD OF HISTOPATHOLOGY UNIT: DR K. PILLAY

Unit profile

The Unit of Paediatric Pathology is primarily an NHLS laboratory service unit to Red Cross Children’s Hospital and provides paediatric and neonatal services to other Western Cape Health Care Institutions. The pathology service functions as an amalgam of three sub units comprising: Anatomical Pathology, Chemical Pathology and Haematology. Undergraduate teaching activities are largely undertaken through equivalent disciplines at Groote Schuur Hospital and the Medical School of the University of Cape Town to medical and physiotherapy students. Postgraduate teaching is undertaken to MPhil (Paediatric Pathology), MMed (in all the pathology disciplines), and MSc and PhD students at UCT. Research activities are related to laboratory aspects of child health and molecular mechanisms underlying paediatric disease. Research also undertaken through collaborative projects with clinical colleagues, mainly in paediatrics and paediatric surgery.

Unit Statistics

Permanent and long-term contract staff

<table>
<thead>
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<th>Role</th>
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<tr>
<td>Senior Lecturers</td>
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<td>NHLS Staff</td>
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Students

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Research Fields and Staff

DR MARGARET H.G. SHUTTLEWORTH
Molecular genetics of paediatric leukaemias and neuroblastomas; paediatric myelodysplastic syndromes.

DR KOMALA PILLAY
Pathology of muscle; pathology of placentas from HIV positive patients; lymphomas.

DR GEORGE VAN DER WATT
Inherited metabolic disorders.
Contact Details
Postal Address: Paediatric Pathology, School of Child and Adolescent Health, University of Cape Town, Red Cross Children’s Hospital, Klipfontein Rd, Rondebosch, 7700
Tel: +27 21 658 5209
Fax: +27 21 658 5206
Web: http://web.uct.ac.za/depts/ich/ 
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Department Of Paediatrics And Child Health
Affiliated Disciplines
Paediatric Radiology
HEAD OF UNIT: DR. T. KILBORN

Unit profile
A clinical radiology department providing imaging to all divisions in the School, performing a total of approximately 42,000 examinations per annum. Imaging modalities include plain-film radiography, computed and digital radiography, digital fluoroscopy, ultrasound (including Doppler), computerised tomography (CT), magnetic resonance imaging (MRI), angiography and interventional radiology. The Division conducts a Postgraduate teaching program for three registrars registered for the M.Med (Diagnostic Radiology) at the University of Cape Town on an ongoing rotational basis and for one registrar registered at the University of Stellenbosch. An undergraduate lecture series in paediatric radiology is provided at 5th year level. Training in paediatric sonography is conducted for B.Tech (Ultrasound) students of the Cape Peninsula University of Technology.

In addition, the Division offers an annual Paediatric Radiology Fellowship, providing further training in the discipline for qualified radiologists. Fellows are registered for the University’s Postgraduate Diploma in Paediatric Radiology.

Unit Statistics
Permanent and Long-term Contract Staff

| Lecturers | 3 |
| Radiographers and Aux. Staff | 30 |
| Total | 33 |

Students

| PhD | 0 |
| Registrars/Master’s | 4 |
| Harry Crossley Fellow | 1 |
| Total | 5 |

Research Fields and Staff

T. KILBORN  
Oncology, HIV and TB, Pulmonary Imaging, Gastrointestinal, Neonatal Imaging

N. WIESELTHALER  
Neuro-imaging; orthopaedic imaging; interventional radiology

E. BANDERKER  
Cardiac and Chest imaging, Orthopaedics, Imaging in Trauma

Contact Details
Postal Address: Paediatric Radiology, School of Child and Adolescent Health, University of Cape Town, Red Cross Children’s Hospital, Klipfontein Rd, Rondebosch, 7700
Tel: +27 21 658 5104
Fax: +27 21 658 5101
Web: http://web.uct.ac.za/depts/ich/ 
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Department Of Paediatrics And Child Health
Affiliated Disciplines
Paediatric Surgery
HEAD OF UNIT: PROFESSOR A.J.W. MILLAR

Unit profile
The department functions as a tertiary health care centre for paediatric surgery for the University of Cape Town and the Red Cross War memorial Children’s Hospital. The department is a national/international centre for postgraduate paediatric surgical career development and is accredited with the HPCSA.
An extensive surgical outreach programme is in existence primarily to improve the surgical care of children at secondary and primary health care levels. The division is regarded as a national centre for minimally invasive surgery, surgical skills training, organ transplantation, specialized hepatobiliary surgery, neurosurgery, cardiothoracic surgery, oncology and burn care in children and for the separation of conjoined twins.

Research is being conducted in the department into a wide variety of aspects of paediatric surgical practice including gastrointestinal surgery, minimal invasive surgery, trauma care and prevention, liver and renal transplantation, renovascular hypertension, burn therapy, pain assessment and management, conjoined twins and common diseases of Africa including tuberculosis and HIV/AIDS. Financial support is received from the MRC, Pharmaceutical companies, private donations and from the Lombardi Government in Italy.

Unit Statistics

Permanent and long-term contract staff

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<th>Role</th>
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<tr>
<td>Professor</td>
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<td>Career Paediatric Surgical Registrars</td>
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<td>African Fellowship Training Programme</td>
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<tr>
<td>Karl Storz Fellowship Programme</td>
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<td>Research Technologists / Social Worker</td>
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<td>Administrative staff</td>
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Students

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<tr>
<td>Undergraduate</td>
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</table>

Research Fields and Staff

**PROFESSOR A.J.W. MILLAR**

Biliary atresia, choledochal cysts, liver transplantation, renovascular hypertension, non-transplant surgery for short bowel syndrome, oesophageal replacement with colon, hepatoblastoma, bilateral Wilms’ tumour, surgical management of intestinal failure

**EMERITUS PROFESSOR H. RÖDE**

Burn and nutrition research; short bowel syndrome; HIV/AIDS; oncology and trauma.

**EMERITUS PROFESSOR M.R.Q. DAVIES**

General paediatric surgical conditions.

**ADJUNCT PROFESSOR R.A. BROWN**

Gastrointestinal surgery; surgical endoscopy; constipation and gastro-intestinal polyposis.

**PROFESSOR A.B. VAN AS**

Traumatology; child accident prevention; vascular injuries; gastro-intestinal diseases.

**ASSOCIATE PROFESSOR A. NUMANOGLU**

Minimal invasive surgery; transplantation; HIV/AIDS and diseases of the gastro-intestinal tract, teaching with technology, web based outreach, neonatal surgery.

**S. COX**

The child sexual assault ‘epidemic’, Neonatal burns, surgical aspects of necrotising enterocolitis and other childhood general surgical conditions.

**DR A. ALEXANDER**

HIV/AIDS and surgical implications, surgical curriculum development, surgical research, urology, minimally invasive surgery.

**DR R. ALBERTYN**

Paediatric pain; rehabilitation and HIV/AIDS; web-based education.

**J. RAAD**

Manometry and gastro-enterology.

Director: ChildSafe (post vacant)
Child accident prevention.

Contact Details

Postal Address: Division of Paediatric Surgery, School of Child and Adolescent Health, University of Cape Town, Red Cross War Memorial Children’s Hospital, Rondebosch, 7700

Tel: +27 21 658 5012
Fax: +27 21 685 6632

Web: http://www.surgicalskills.co.za; http://www.scah.uct.ac.za/clinicalservices/surgery.html

UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za
Department Of Paediatrics And Child Health

Affiliated Disciplines

Poisons Centre

HEAD OF UNIT: DR C. ROBERTS

Unit profile

The Poisons Information Centre maintains and distributes the AfriTox poisons information database designed to help clinicians in Southern Africa treat poisoned adults and children. All types of potentially toxic substances are included with a particular accent on local South African trade names and natural toxins. The treatment protocols are tailored for the South African situation. The database is used at over 30 treatment centres countrywide and by both the other Poisons Centres, to underpin poisons advice given to health workers and the public. It is also distributed to centres in Botswana, Kenya, Mozambique, Nigeria and Zimbabwe.

The Poisons Emergency Telephone line is answered by the staff of the Poisons Information Centre during office hours on weekdays, and after hours in the Emergency Department of the hospital, using the AfriTox database.

The Centre collects data on all children seen at Red Cross Children’s Hospital with known or suspected poisoning.

Statistics

Permanent and Sessional Staff

| Medical officers | 2 |
| Pharmacists      | 2 |
| Total            | 4 |

Research Fields and Staff

All staff members are involved in data collection

Dr Kate Balme is responsible for case data on poisoning.

Contact Details

Postal Address: Poisons Information Centre, School of Child and Adolescent Health, University of Cape Town, Red Cross Children’s Hospital, Klipfontein Rd, Rondebosch, 7700
Tel: +27 21 658 5308
Fax: +27 21 658 5331
Email poisonsinformation@uct.ac.za

Department Of Paediatrics And Child Health

Affiliated Disciplines

SOUTH AFRICAN TUBERCULOSIS VACCINE INITIATIVE (SATVI)

HEAD OF UNIT: PROFESSOR WILLEM HANEKOM

Unit profile

SATVI’s vision is “A World Without TB”, while our mission is “Innovative And High-Quality TB Vaccine Research In Africa, To Impact The Global Epidemic”. To achieve its mission, SATVI has been testing 6 new TB vaccine candidates in 15 completed or ongoing clinical trials. SATVI also addresses other critical clinical, epidemiological, immunological and human genetic questions in TB vaccine development. A large focus of this research is on identification of markers in blood to indicate whether a person is at risk of developing, or protected against, TB disease (correlates or risk or of protection).

SATVI is the largest dedicated TB vaccine research group on the African continent, with a personnel complement of >100 and an annual budget of ~R70 million. Its success is evident from manuscripts published in high impact journals, funding support from multiple international funding agencies, invited presentations at international conferences and representation on multiple international policy bodies.

SATVI also has an active postgraduate academic training programme, with multiple PhD and Master’s students.

Particular highlights from 2012 included the first successful completion of an efficacy trial of a new TB vaccine, MVA85A, in nearly 50 years has been a prominent achievement. The group was also awarded a R41.6m grant from the Bill and Melinda Gates Foundation to identify correlates of risk of TB disease.

Divisional Statistics

Students and Postdoctoral Fellows

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Master’s</td>
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<tr>
<td>PhD</td>
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<tr>
<td>Postdoctoral Fellows</td>
<td>4</td>
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<td>Total</td>
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</table>
Staff

Permanent staff (Full time) 123
Permanent staff (Part time) 1
Total 124

Research Fields and Staff

Research Staff

WILLEM HANEKOM – DIRECTOR
TB vaccine development and testing; Correlates of risk of TB disease in infants, adolescents and adults; Immunopathogenesis of TB and of TB/BCG/IRIS in infants, adolescents and adults.

MARK HATHERILL – DEPUTY DIRECTOR FOR CLINICAL TRIALS AND EPIDEMIOLOGY
TB vaccine development and testing; Epidemiology and diagnosis of TB in infants, adolescents and adults.

THOMAS SCRIBA – DEPUTY DIRECTOR FOR IMMUNOLOGY
TB vaccine development and testing; Correlates of risk of TB in infants and adolescents; Immunopathogenesis of TB in infants, adolescents and adults; Assay development.

HENNIE GELDENHUYS
TB vaccine development and testing, including novel administration of vaccines; Epidemiology and diagnosis of TB in infants, adolescents and adults.

BENJAMIN KAGINA
TB vaccine development and testing; Assay development.

ANGELIQUE KANY KANY LUABEYA
TB vaccine development and testing; Epidemiology and diagnosis of TB in infants, adolescents and adults.

EDWARD MAKGOTHLO
Correlates of risk of TB disease in adolescents.

ELISA NEMES
TB vaccine development and testing; Correlates of risk of TB disease in infants; Immunopathogenesis of TB and of TB/BCG/IRIS in infants, adolescents and adults.

Adam Penn-Nicholson
TB VACCINE DEVELOPMENT AND TESTING; CORRELATES OF RISK OF TB disease in adolescents; Assay development.

MICHELE TAMERIS
TB vaccine development and testing; Epidemiology and diagnosis of TB in infants and adolescents; Drama as a vehicle for communicating research technology.

Contact Details

Postal Address: Wernher and Beit Building South, Anzio Road, Observatory 7925
Tel: +27 21 406 6791
Fax: +27 21 406 6693
Web: http://www.satvi.uct.ac.za
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Department Of Paediatrics And Child Health

Research output

Edited Books

Chapters in books


Health Sciences


Articles in peer-reviewed Journals


Argent, A.C. and Morrow, B. 2012. Chest physiotherapy: how does it work (if it does)? Pediatric Critical Care Medicine, 13(2): 238-239.

Argent, A.C. and Morrow, B. 2012. Infants with human immunodeficiency virus exposure or infection in the pediatric intensive care unit. Pediatric Critical Care Medicine, 13(5): 597-598.


Levin, M. 2012. Combination of inhaled steroid and long-acting beta-2-agonist therapy - use and limitations. Current Allergy & Clinical Immunology, 25(2): 72-75.


Nieuwenhuizen, N., Kirstein, F., Jayakumar, J., Emedi, B., Hurdayal, R., Horsnell, W., Lopata, A.L. and Brombacher, F. 2012. Allergic airway disease is unaffected by the absence of IL-4-dependent alternatively activated macrophages. Journal of Allergy and Clinical Immunology, 130: 743-750.


Primary Health Care Directorate
DIRECTOR/CHAIR: PROFESSOR STEVE REID

Vision
A Health Science Faculty that promotes equity and quality in health care, guided by the Primary Health Care Approach

Aim
To promote the primary health care approach in teaching, research, policy, health services and community engagement by the Faculty of Health Sciences

Objectives
• To integrate a Primary Health Care Approach into the Faculty of Health Sciences undergraduate and postgraduate curriculae
• To extend and develop the Faculty of Health Sciences clinical teaching platform in rural and primary care sites
• To deepen community engagement within the health service and the Faculty of Health Sciences curriculae
• To enhance the recruitment and support of students of rural origin in the Faculty of Health Sciences
• To increase inter-disciplinary research in health sciences

Mission
To promote equitable, comprehensive, compassionate and quality care at all levels of the health system by means of:
• the recognition of diversity and culture
• evidence-based practice and policy
• active health promotion
• community-based education
• strategic partnerships

Directorate Statistics
Permanent and long-term contract staff

<table>
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<th>Position</th>
<th>Number</th>
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<td>Senior Lecturers</td>
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<td>Lecturers</td>
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<td>Honorary Lecturers</td>
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<tr>
<td>Junior Research Officer</td>
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<tr>
<td>Recruitment Officer: Rural Students</td>
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<tr>
<td>Health Teaching Platform Coordinator</td>
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<tr>
<td>Site Facilitators</td>
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<td>NGO Facilitators</td>
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<tr>
<td>Site Coordinators</td>
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<tr>
<td>Facility Manager</td>
<td>1</td>
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<tr>
<td>Admin Staff</td>
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Research and Teaching Focus of Academic Staff

PROFESSOR STEVE REID
Chair & Director: primary health care; Collaboration for Health Equity through Education and Research; compulsory community service; family medicine; rural health; district health systems; community based services support & intermediate care policy; community oriented primary care; population based approaches to health; community based education; medical education; human resources for health; global consensus on social accountability; creativity and health; arts and healthcare

MR JAMES IRLAM
Senior Lecturer: primary health care; evidence-based practice; climate change and health
DR LAURAINA VIVIAN
Senior Lecturer: primary health care; medical anthropology; culture, psyche and illness; medical education; electromagnetic radiation health implications from cell phone technology

MRS JOHANNAH KEIKELAME
Lecturer: primary health care; health promotion; community needs assessment; patient and carers perspectives on epilepsy

MRS SARAH CRAWFORD-BROWNE
Lecturer: primary health care; culture, psyche and illness; psychological trauma; community based mental health programming

DR DES MICHAELS
Lecturer: primary health care; health promotion; integrated clinical practice; Collaboration for Health Equity through Education and Research; social accountability

MRS CLAUDIA NAIDU
Junior Research Officer: Collaboration for Health Equity through Education and Research; social accountability

Contact Details
Cha Johnston
Primary Health Care Directorate
Old Main Building, Groote Schuur Hospital
E47-25, Observatory, 7925
Telephone: +27 21 406 6031/6761
Fax: +27 21 448 5653
E-mail: cha.johnston@uct.ac.za
www.primaryhealthcare.uct.ac.za

Research output

Chapters in books


Articles in peer-reviewed Journals


Vivian, L.M.H. 2012. We didn’t do anything wrong, we tried our best, but they just died… we tried, we really tried: child deaths in the paediatric intensive care unit, Red Cross Children’s Hospital, Cape Town, South Africa. African Studies, 71(2): 287-303.


Department of Psychiatry and Mental Health

HEAD OF DEPARTMENT: PROFESSOR DAN J. STEIN

Departmental Profile

The Department of Psychiatry and Mental Health is strongly committed to strengthening the integration between services, teaching, and research. Clinicians in each of the Divisions of the Department (addiction psychiatry/psychology, child and adolescent psychiatry/psychology, consultation-liaison psychiatry/psychology, forensic psychiatry/psychology, general hospital psychiatry/psychiatric intensive care, intellectual disability, psychotherapy/neuroclinic, neuropsychiatry, psychopharmacology, and public and community mental health) are active in research in their particular areas. Thus clinical research in the Department covers key clinical problems that are relevant in the South African context, including behavioural and neuropsychiatric aspects of HIV/AIDS, substance use disorders (including fetal alcohol spectrum disorder), adolescent risk-taking behaviour, posttraumatic stress disorder, and mental health policy and services.

In addition, the Department plays a key role in several cross-departmental and cross-institutional research initiatives:

- The Brain-Behaviour Initiative (BBI) is one of UCT’s signature themes. The initial focus of the BBI was on trauma, but it has extended to include neuroHIV and substance use disorders. More details of the aims, methods, and partners, are available at - http://www.health.uct.ac.za/research/groupings/bbi/overview/
- The Adolescent Health Research Unit is examining adolescent risk-taking behaviour, predictors of school dropout, and violence in intimate adolescent relationships. Data analysis is in progress for two large school-based cluster randomised control trials of AIDS prevention.
- The Alan J Flisher Centre for Public Mental Health addresses a range of questions in mental health policy and implementation science, and offers advanced training in public mental health. The Centre currently conducts research in 8 low and middle-income countries in Africa and south Asia, including the Programme for Improving Mental health care (PRIME) (www.prime.uct.ac.za) and the Africa Focus on Intervention Research for Mental health (AFFIRM) (www.affirm.uct.ac.za) research and capacity building initiatives. Within the Centre, The Perinatal Mental Health Project (PMHP) contributes research on maternal mental health from its own service and training initiatives as well as in collaboration with other partners.

Departmental Statistics

Permanent and long-term contract staff

<table>
<thead>
<tr>
<th>Role</th>
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<tbody>
<tr>
<td>Professors</td>
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<td>Emeritus Professors</td>
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<td>Administrative and Clerical Staff</td>
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Honorary Staff

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Students

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<th>Category</th>
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<td>Postdoctoral / Clinical Research Fellows</td>
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<td>Master’s</td>
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</table>
Research Fields and Staff

Addiction Psychiatry/Psychology

Substance use in psychosis (Henk Temmingh), Substance use and anxiety disorders (Don Wilson); Interventions (Katherine Sorsdahl)

Child and Adolescent Psychiatry/Psychology
Adolescent risk behaviour (Cathy Mathews), infant mental health (Astrid Berg), evaluation of peer education interventions among adolescents (Sandra de Jager, Kathryn Pahl), partner violence prevention among adolescents (Chantel LeFleur-Bellerose, Anik Gevers), autism and pervasive development disorders (Petrus de Vries).

Consultation-Liaison Psychiatry/Psychology
Women’s mental health, stress and pregnancy (Bavanisha Vythilingum), liaison psychiatry and HIV (Jackie Hoare and Kerry Louw)

Forensic Psychiatry/Psychology
Mentally ill offenders and femicide (Sean Kaliski and Tania Swart)

General Psychiatry / Psychiatric Intensive Care
Social inclusion (Pete Milligan), bipolar disorder (Neil Horn), phenomenology of psychosis (Henk Temmingh).

Intellectual Disability
Fetal alcohol spectrum disorder (FASD) neurobehaviour and brain imaging (Colleen Adnams) Psychotherapy Intimate partner violence (Adele Marais)

Neuropsychiatry
Neurocognitive disorders and neuropsychiatry of HIV, brain imaging and HIV (John Joska; Carla Freeman), ARV initiation and adherence (John Joska and Kevin Stoloff)

Psychopharmacology
Pharmacological MRI, Evidence-based psychopharmacology (Dan Stein, Taryn Amos)

Public and Community Mental Health
Mental health policy and services (Crick Lund), Green psychiatry (John Parker)

Contact Details

Postal Address: UCT Department of Psychiatry and Mental Health, Groote Schuur Hospital, Observatory, Cape Town, 7925
Tel: +27 21 404 2174 or +27 21 4066566
Fax: +27 21 448 8158
Web: http://web.uct.ac.za/depts/psychiatry/
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Research output

Authored books


Edited books


Chapters in books


**Articles in peer-reviewed Journals**


Breuer, E., Stoloff, K., Myer, L., Seedat, S., Stein, D.J. and Joska, J. 2012. Reliability of the lay adherence counsellor administered substance abuse and mental illness symptoms screener (SAMISS) and the International HIV dementia scale (IHDS) in a primary care HIV clinic in Cape Town, South Africa. Aids and Behavior, 16: 1464-1471.


Cluver, L., Orkin, M., Gardner, F. and Boyes, M. 2012. Persisting mental health problems among AIDS-orphaned...


Harker Burnhams, N., Dada, S. and Myers, B.J. 2012. Social service offices as a point of entry into substance abuse treatment for poor South Africans. Substance Abuse Treatment Prevention and Policy, 7(22):


Thelingwani, R.S., Dhansay, K., Smith, P., Chibale, K. and Masimirembwa, C.M. 2012. Potent inhibition of CYP1A2 by frutinone A, an active ingredient of the broad spectrum antimicrobial herbal extract from Pfruticoso. Xenobiotica, 42(10): 989-1000.


discrimination and psychological well-being in the USA and South Africa. Ethnicity and Health, 17(1-2): 111-133.


Peer-reviewed published conference proceedings


School of Public Health and Family Medicine

Director

Professor Leslie London (until September 2012)
Professor Mohamed Jeebhay (incoming since October 2012)

Deputy Director: Associate Professor Derek Hellenberg (until September 2012)
Deputy Head for Public Health: Professor Mohamed Jeebhay (until September 2012)

School Profile

The School of Public Health and Family Medicine is a strong multidisciplinary department in the Faculty of Health Sciences. Its teaching, research and service extend to a wide range of settings and content areas consistent with the evolving disciplines of Public Health and Family Medicine.

The School celebrated its 40th birthday since the creation and filling of an Inaugural Chair in what was then called the Unit for “Comprehensive and Community Medicine” in the Department of Medicine in 1972, with a handful of staff complement compared to its growing staff complement currently standing at 186

The School is currently comprised of two Divisions – the Division of Public Health and the Division of Family Medicine, but initiatives are underway following a response to its 2009 departmental review to re-align its organisational design to encompass the broadening scope of its teaching and research activities

The Division of Public Health has a wide variety of service, policy, research and training activities. A focus continues to be the training of master’s and doctoral students in public health, as well as public health medicine and occupational medicine specialists. Along with a postgraduate diploma in health management, and postgraduate qualifications in Health Economics, these programmes train a wide range of public health professionals for leadership roles in the public sector. For example, Public Health Medicine registrars are placed at the Provincial Health Department Head Office, in its programmes directorate and in the various districts as well as providing support to the Chief Directorate for Strategy and Health Support, while Occupational Medicine registrars provide services in a range of tertiary clinics. The Occupational Medicine Clinic at GSH is the only public sector occupational diseases referral clinic in the Western Cape and one of three in the country.

The Division of Family Medicine has as its focus the training of primary level medical practitioners (family physicians) for the public sector. It also houses the pioneering South African programme in Palliative Medicine. The Division has staff on the joint establishment (with the PGWC Health Department) who have clinical, teaching and clinical governance responsibilities at a number of Community Health Centres and District Hospitals around the city. The Division began training Family Medicine registrars in February 2008 after family medicine was recognized as a specialty by the Health Professions Council of South Africa (HPCSA) in August 2007.

Teaching

The School runs a large postgraduate programme, including 7 postgraduate diplomas, 6 Master’s programmes, 3 professional Master’s programmes and a PhD programme. In 2012, there were 347 postgraduate students in the School including 27 PhD students. A total of 129 postgraduate students graduated in 2012, including 4 PhDs, 37 Master’s and 88 postgraduate diploma students. The Master’s in Public Health (MPH) is the School’s flagship public health
programme and the largest taught master's in the Faculty, with 171 students graduated over the past decade.

The MPH continues to attract widespread interest from potential applicants, particularly from other African countries. There were 237 applicants for 70 places in 2012, of which 71 were accepted. A record number of 30 students graduated in 2012 out of a total registration of 141. With appropriate resourcing, there is scope for an increased intake and increased throughput on this flagship programme. The Diploma in Health Management, also known as the Oliver Tambo Fellowship Programme, continued to graduate senior health managers from around the country under its new configuration as a joint programme offered with the Graduate School of Business. As the only Master programme in palliative medicine in Africa, the MPhil Palliative Medicine continues to attract students from South Africa and other countries in Africa.

The School is also playing an increasing role in the new undergraduate medical curriculum with the aim of producing medical professionals able to function effectively at the primary care level and imbued with an understanding of public health. Public Health and Health Promotion training to undergraduates take place in community-based settings and has been instrumental in pioneering community-placements for MBChB students at UCT. A number of initiatives are underway to develop off-campus teaching sites linked to Community Health Centres and district hospitals. The Family Medicine division has been closely involved in developing and supporting the new student learning centre at Vanguard Community Health Centre and the rural teaching venue at Vredenburg.

Research – overview

There are four URC-accredited research entities within the School, residing under the Public Health Division: Health Economics, Infectious Disease Epidemiology, Women's Health Research and Occupational and Environmental Health Research, as well as growing activities in Health Policy and Health Systems Studies and in Health and Human Rights. Research outputs in 2012 included 179 peer-reviewed journal publications (a 25% increase from 2011) and 10 book chapters. Total research grant and contract income to the School was R38 997 179 in 2012, a 40% increase from 2011 research income.

Furthermore, in addition to subsidy-attracting publications, academic staff participate in a range of provincial, national and international policy and produce a number of technical and policy papers. These contributions do not always find their way into peer-reviewed scientific journals, but which are integral to the department's service mission, reflecting the School's strong social responsiveness profile in applying research and scholarly activity as part of advocacy to promote the public's health.

The School's research mission is reflected in the wide range of research activities and the associated research outputs are notable for their multidisciplinary perspective. In infectious diseases and women's health, publications cover childhood and adult tuberculosis prevention, diagnosis and treatment; HIV epidemiology, transmission and treatment (including treatment outcomes, adherence and mortality); adolescent risk-taking behaviour and educational interventions; prevention of mother-to-child transmission of HIV infection; contraceptive services and women's reproductive health more broadly; economic analyses of tuberculosis and HIV services; HPV vaccination and cervical cancer prevention and health systems aspects of care related to TB and HIV. The integration of human rights considerations into public health policy and health systems practice receives attention in a number of publications. The department continues its role as a national leader in occupational and environmental health research with investigations into occupational allergy, pesticides, hazardous metals and lung disease due to mineral dust. Finally, the question of equity of resource allocation in health, and particularly in primary health care, continues to occupy researchers in health economics, who remain the leading South African source of peer-reviewed publications in this field.

The School has six NRF-rated researchers, including Dr Chris Colvin (Promising Young Researcher), Professor Aqiel Dalvie (Established Researcher), Professor Lucy Gilson (Internationally Acclaimed Researcher), Professor Mohamed Jeebhay (Internationally Acclaimed Researcher), Professor Leslie London (Internationally Acclaimed Researcher) and Professor Di McIntyre (Internationally Acclaimed Researcher).

Associate Professor Landon Myer was awarded the Southern African Association for the Advancement of Science (S2A3) British Association Silver Medal for 2012. The School also made its second award of the David Bourne prize for the best student in the MPH programme to Brian Allwood. The prize commemorates David Bourne, a demographer in the School who died in 2009, and whose death left a huge gap in the HIV research world. Henk Temmingh was awarded the Ethne Jacka prize for the top MPH dissertation by a graduating candidate in 2012. Dr Brynt Cloete was awarded the Geoff Campbell award for best DOH student passing with distinction. Dr Amy Burdzik was awarded the SASOM medal of excellence for obtaining a distinction in her dissertation and the CMSA national specialist examinations in occupational medicine.
Centre for Occupational and Environmental Health Research (COEHR)

The Centre’s aim is to be a principal centre of OEH research, teaching and training, occupational medical clinical services, policy advisory, technical consultancy services, advocacy and a source of supportive outreach activities in South Africa, in the Southern and Eastern regions of Africa, Africa more generally, and internationally.

The major objectives of the Centre are firstly, to conduct multidisciplinary research, teaching and service provision of high priority in Southern Africa. Integrating laboratory, clinical, epidemiological and policy skills. Another key objective is to explore and develop means of maintaining the health of workers and environmentally exposed communities. A third objective is to conduct policy research into issues ranging from toxic or injurious exposures through to health surveillance. Fostering inter-institutional research, teaching and service (including outreach) collaboration and capacity development constitutes another major objective. Finally, another aim is to foster local and global networks for occupational and environmental health promotion through collaboration with United Nations and other agencies.

Key research projects

Key research areas for the Centre currently include the identification of risk factors and evaluating preventive approaches for allergens and asthma in the workplace, health hazards of chemicals (such as pesticides and endocrine disruptors) and silicosis elimination in gold miners. Workforces that are of particular relevance for the Centre’s work include health care workers, with a specific focus on studying the determinants of TB infection and diagnostic approaches in order to prevent the spread of TB related to the HIV epidemic. Other vulnerable groups include agricultural workers (for whom injuries and pesticide-related asthma and neurotoxicity are a problem) and mine worker’s (at high risk of developing pneumoconioses and TB). Environmental risks for workers and communities exposed to metals, such as manganese and arsenic, and other chemicals in the working and residential environments are assessed and monitored. Climate change and its impact on occupational and general health has become a focus linked to the UCT African Climate and Development Initiative. These areas are supplemented by a broader focus on research to address occupational and environmental health systems and worker’s compensation, as well as developing programmes to build OHS capacity through research and training in the SADC region. Through the Fogarty International Centre International Training and Research in Environmental and Occupational Health (ITREOH) and the Millemium Promise Programme (MPP) for non communicable chronic diseases.

Major highlights for 2012 included the following

- Professor Aqiel Dalvie was appointed Director of Centre for the period 2013-2015.
- Professor Mohamed Jeenhay was elected as a fellow of the Collegium Ramazzini, an international academy of 180 fellows whose mission is to advance the study of occupational and environmental health issues. He was honoured by the Allergy Society of South Africa (ALLSA) on receiving the distinguished service award for his efforts over a decade in promoting allergy research in his capacity as head of the research portfolio on the ALLSA executive for the period 2003-2012.
- Professor Leslie London was appointed to an Advisory Committee for a Wellcome Trust-funded cluster randomised controlled trial to determine whether safe storage containers can reduce the incidence of intentional and unintentional pesticide poisoning in rural Sri Lanka, 2010-2015. He served as a member of a Technical workgroup providing technical support to the UN Special Rapporteur on the Right to Health for the report on Occupational Health as a Human Right. He convened an Africa Workgroup for the International Commission on Occupational Health (ICOH) contributing to a revision of the ICOH Ethical Guideline. Professor London's NRF rating was upgraded to B3.
- Dr. Hanna-Andrea Rother represented the COEHR at the third session of the International Conference on Chemicals Management (ICCM3) in Nairobi, Kenya. She was elected to UCT Senate by UCT's academic staff and appointed a member of the editorial board for the Journal of Public Health and Health Policy. Dr. Rother was awarded the Green Campus Initiative Backsberg Sustainability Award for her contribution to pesticide policy and management on UCT campuses. Finally, she was awarded a Visiting Scholars Fund Award to host Professor Thomas Arcury and Professor Sara Quandt from Wake Forest University School of Medicine, USA.
- Professor Rodney Ehrlich and Dr Jim te Water Naude joined the newly formed South Africa-Yale University Collaboration, a network of health science, social science and legal researchers and practitioners. The Collaboration is aimed at documenting the health burden among current
and former workers on South African mines, with an emphasis on silicosis, HIV and tuberculosis, and promoting an appropriate health systems response in Southern Africa.

Health Risk Management Programme

The Health Risk Management Programme conducts research, capacity building (teaching and networking), social responsiveness, policy analysis and develops interventions/risk communication materials in the area of environmental health, public health, pesticides and chemical, health and safety, and risk reduction. Research in 2012 focused on the silent public and environmental health problem of informal vendors selling agricultural pesticides for domestic use in low-socio economic communities of Cape Town; child poisonings from street pesticides; occupational herbicide exposures of community workers removing alien vegetation in the Working for Water programme. These research projects involve engagement with NGOs, community leaders/members, national, provincial and municipal government departments (health, agriculture and water affairs). Capacity building is through information sharing of research findings and policy information through UCT established electronic list servers, an on-line discussion forums with African Pesticide regulators, and a the Post Graduate Diploma in Pesticide Risk Management (DPRM). An innovative bi-monthly discussion forum is conducted as a virtual seminar through vula for students with global experts in the field of pesticides and health. The Post Graduate Diploma in Pesticide Risk Management (DPRM) is structured around the United Nations Code of Conduct on the Distribution and Use of Pesticides and has been developed in conjunction with the United Nations Food and Agricultural Organization (FAO), and the Swedish Chemical Agency (Kemi). In 2012 the first 15 DPRM students graduated, two with distinctions. There are currently 19 students registered in the programme.

A broad range of students have actively participated in research projects in the Health Risk Management Programme both MPH students and anthropology students (undergraduate, honours and master’s). Students have conducted household survey, case reviews and interviews, as well as developed risk communication tools, presented findings at conferences and to health professionals (e.g., Environmental Health Professionals and Community Health Promoters), and participated in training for workers.

The Health Risk Management programme also develops a range of risk communication materials and health interventions, algorithm, and policy briefs based on research findings. These mediums are used in order to disseminate and translate research findings for a broad range of stakeholders and continue to be widely distributed in printed form and as Creative Commons licensed electronic material posted on UCT’s Open UCT site. The programme also conducts policy analysis and inputs to national, regional and international policies on chemical risk management and environmental health.

Industrial Health Resource Group (IHRG)

Within the COEHR, the Industrial Health Resource Group (IHRG) operates as an action research and socially responsive development group, providing occupational health and safety research, curriculum development, training, advice, and resource development services for trade unions and their members. The work of IHRG is guided by a vision of building the capacity of trade unions and their members to independently monitor, enforce, defend and advance the workplace health and safety rights of workers.

IHRG does representation, investigative and advocacy work for workers and trade unions in relation to workplace health and safety incidents and cases of work-related injury and disease. During 2012 IHRG had a higher degree of engagement than previously with the Department of Labour’s (DoL) Compensation Commissioner and Health and Safety Inspectorate, with the Public Protector and with the National Prosecuting Authority (NPA) to address the issues arising from its experience of assisting workers with occupational injury and diseases.

IHRG assisted with 75 cases of occupational injury and disease involving more than 250 workers in 2012. Most of the cases were individual workers from breweries, retail, manufacturing, clothing, communications, engineering, motor, municipal, road freight transport, public health, printing, prisons, public transport, farming, furniture making and security sectors. There were also two large groups of organised unemployed workers – ex-Everite workers and ex-mine mine workers. Two of the cases involved groups of workers from single workplaces – the family members of the 13 workers killed in a fire at Paarl Print, and three labour broker workers who were injured in a fire at the Engen petrochemical plant in Cape Town.

In December 2012 IHRG convened a discussion with a group of trade unionists and occupational medicine specialists to discuss IHRG’s first draft of its forthcoming revised Pilot COIDA booklet. The group included representatives from COSATU, NUM, NUMSA, SAMWU and Solidarity, occupational medicine specialists from the University of Cape Town, as well as Dr. Sophia Kisting, former Director of the ILO HIV/AIDS Program. IHRG intends consulting with this Reference Group during 2013 on the further development of training material around case management and compensation.
IHRG also plays an advocacy role within a national, regional and global context of deregulation, outsourcing and casualisation of labour - trends which enable public and private sector employers to shed responsibility for workplace health and safety. In this regard, IHRG is collaborating with the Federatie Nederlandse Vakbeweging and its South African partners in a campaign for decent work that is directed particularly at vulnerable workers. Our work with vulnerable workers includes contract cleaning workers, community care workers, labour broker workers and farm workers. Our advocacy work included issues relating to the administration, enforcement and the amendment of the health and safety legislation.

In November 2012 IHRG convened an indaba for 43 community health care workers from four provinces. The group included home-based carers, HIV/AIDS counsellors and Patient Care Assistants. The objective of the gathering was to convene a networking forum where these workers could share their experiences of work, conditions of employment and health and safety concerns.

IHRG works in partnership with trade unions in a variety of programmes. During 2012 IHRG was involved with Naledi and Satawu in a project that looks at the working conditions, organisational rights and health and safety issues in the contract cleaning sector. Training workshops and participatory action research projects have been carried out with contract cleaning workers at OR Tambo airport. IHRG is also involved in a programme with Numsa and the German trade union confederation DGB, to build the capacity of Numsa shop stewards and organisers to engage with German multi-national companies in the negotiation of workplace level agreements.

IHRG collaborates locally, nationally, regionally and globally with other labour service organisations, non-governmental organisations, adult educationists, occupational health experts, various academic programmes, and health research institutions. During 2012, IHRG collaborated with - amongst others – Hesperian Foundation, Federatie Nederlandse Beweging, Deutscher Gewerkschaftsbund, Naledi, Ditsela, Workers World Media Productions, Legal Resources Centre, Labour and Enterprise Policy Research Group and the Department of Occupational and Environmental Health at UKZN. IHRG attended a health and safety conference convened by the Department of Labour in March 2012. IHRG attended the NUMSA National Congress in June and the COSATU Provincial Congress in the Western Cape in September 2012. IHRG also began networking with organisations and institutions conducting research into climate change and its impact on health.

Research activity of IHRG contributes towards the production and distribution of a variety of popular and accessible resources (including posters, newsletters, research reports, workshop materials, and handbooks) for trade unions and their members on issues of occupational health and safety. It also produced Edition 2 of Organising for Health and Safety – A guide for trade unions. In 2012 IHRG produced issue 8 of the Health and Safety Networker and drafts of two DVD’s. IHRG further developed its website www.ihrg.org.za (established in 2011) and contributed to labour shows on community radio and television.

Centre for Infectious Disease Epidemiology and Research (CIDER)

The Centre for Infectious Disease Epidemiology and Research (CIDER) is a multi-disciplinary research group with the following objectives:

- To conduct public health research integrating laboratory, clinical, epidemiological, social science and health systems research into infectious diseases that have high priority in southern Africa (in particular HIV, tuberculosis and sexually transmitted infections) in order to improve the prevention and management of these diseases.
- To be a service-led research entity, maintaining very strong links with health services at all levels, and to assist policy makers, programme and services managers with the implementation of the results of research.
- To be a centre of expertise in the surveillance and monitoring of infectious diseases and infectious disease programmes and services, and in the conduct of robust observational research based on routine data sources.
- To provide postgraduate teaching and supervision in epidemiology.

The Centre has a strong track record in researching strategies for HIV prevention. Historically the Centre ran field sites for two large multicentre HIV prevention trials, one for a candidate vaginal microbicide, and the other testing the efficacy of twice daily acyclovir suppressive therapy in preventing HIV transmission among heterosexual HIV-discordant couples in which the HIV-infected partner is Herpes Simplex Virus-2 seropositive. Furthering the focus on HIV prevention the Centre is developing tools and indicators for measuring and evaluating PMTCT programmes in resource limited settings, and is testing novel service strategies for further improving the effectiveness of PMTCT interventions.

A further focus of the work of the Centre is in the area of treatment and service delivery for HIV and tuberculosis. This encompasses an expanding portfolio of health systems research as well as the clinical epidemiology of treatment.
interventions in individual cohorts. Health system projects have focussed on the use of lay health workers and community-based care, and the integration of TB and HIV services in the Western Cape, Free State and Gauteng. A major strength of the Centre is cohort studies of patients receiving antiretroviral therapy. This includes work with individual cohorts in Khayelitsha and Gugulethu, through to running an NIH-funded data centre for collaborative cohort research combining data from 14 cohorts in South Africa.

The Centre has an excellent working relationship with the Provincial Department of Health, with staff supporting the conduct and analysis of the annual antenatal HIV sero-prevalence survey, the development and maintenance of information systems to monitor HIV programmes, and assistance with infectious disease surveillance and outbreak investigations. The work on context-appropriate information systems for HIV programmes has led to further collaborations nationally, regionally and with the World Health Organization.

The Centre has a strong multidisciplinary team of PhD scientists and continues to be a significant resource for epidemiology, biostatistics, infectious disease modelling and qualitative research support within the Faculty. There are active collaborations with a range of clinical and laboratory departments, including with the Departments of Psychiatry and Mental Health, Virology, Obstetrics and Gynaecology, Child and Adolescent Health, and Medicine.

The major highlights for 2012 include:

- Associate Professor Landon Myer received the British Association Medal (Silver). This medal is awarded to a scientist, under the age of 40 years, who has displayed “outstanding capability and achievements by way of publications, discoveries or special skills”.
- Morna Cornell and Anna Grimsrud received PhD Bursary awards from SACEMA
- Dr Leigh Johnson received 3 awards at the Actuarial Society Conference: best presentation on risk, best overall presentation and with together with Rob Dorrington, the award for the best actuarial paper published in a peer review journal. In addition he received the South African Black Actuarial Professionals award for contribution towards AIDS research in South Africa
- A number of staff were invited to participate in policy and scientific committees:
  - WHO Guidelines Committee for paediatric HIV treatment (Davies/Schomaker)
  - Review of EMOD, an infectious disease modelling tool funded by the Gates Foundation (Johnson)
  - South African National AIDS Council HIV Prevention Technical Task Team and the Costing, Budgeting and Health Financing Technical Task Team (Johnson/Boule)
  - WHO consultation on hormonal contraception (Myer)
  - PMTCT Technical Working Group & National Steering Committee, National Department of Health (Myer)
  - National PMTCT guidelines review committee, 2012-present (Myer)
  - Board of the Centre for Medical Ethics & Law at the University of Stellenbosch (Myer)
  - Organizing committee for the HIV Prevention and Epidemiology Track of the 2013 South African AIDS Conference (Johnson)
  - Chair of the 16th International Workshop on HIV Observational Databases in Athens (Boule)
  - Organising committee for the 1st SA HIV Clinicians Society Conference in Cape Town (Boule)
  - Working group on the Methodological Investigation of Cochrane reviews of Complex Interventions (MICCI) Project (Colvin)

**Health Economics Unit**

The Health Economics Unit (HEU) conducts research in health economics and health system issues. The HEU maintains a balance between conceptual and applied research as well as between topics of local and international relevance and focuses on three thematic areas of research, namely health systems and health equity research; health financing and the economic evaluation of disease-priority areas.

There are currently a number of projects relating to issues of health financing and the achievement of universal coverage. In addition to this research work, the HEU is active in knowledge translation through the provision of input into the Ministerial Advisory Committee on National Health Insurance and its various sub-committees in South Africa. Other key policy work includes participation in the Economics and Financing Group for the government’s new “National Strategic Plan for HIV and AIDS, STIs and TB” and the provision of scientific advice to the World Health Organisation to look at health economics issues related to vaccines in low- and middle-income countries.

A five-year research project (UNITAS – Universal coverage in Tanzania and South Africa: Monitoring and evaluating progress) entered its second year of operation in 2012. The UNITAS project will focus on monitoring and evaluating policy formulation and implementation processes aimed
at achieving universal health coverage in South Africa and Tanzania. The project will undertake monitoring mainly at the district level, with some monitoring and evaluation at the national level. It aims to support implementation processes and will establish an ‘early warning system’ of implementation difficulties. It is a collaborative, EU-funded project with 2 other South African institutions, a Tanzanian institution and 2 European institutions.

The Global Network for Health Equity (GHNE) continued in 2012 and will enable comparative and collaborative work across three continents to advance equitable universal health coverage. It draws on 3 existing networks: EQUITAP (Equity in Asia-Pacific Health systems, an Asia-Pacific Research Partnership); LANET (The Latin American and Caribbean Research Network on Financial Protection and Health Observatory); SHIELD (Strategies for Health Insurance for Equity in Less Developed Countries, an African network that the HEU co-ordinates). It is funded by the IDRC.

The HEU completed work undertaken in Kenya, Uganda and Zambia that critically evaluated patterns of health care financing and benefits from the use of health services, to provide an evidence base for promoting equitable health systems in these countries. The project was funded by the International Development Research Centre (IDRC) for Uganda and Zambia; and funding for Kenya came from the Wellcome Trust. The HEU worked with the following partners on this project: the Kenyan Medical Research Institute, HealthNet Consult in Uganda and the Department of Economics at the University of Zambia. The main role of the HEU was to provide research and technical support.

The DST/National Research Foundation South African Research Chairholder in Health and Wealth focuses on the inter-play of health and wealth in the South African context and the impact of a range of government policies on health. Researchers contextualised the social determinants of health within an African context to increase awareness about this issue and to take into account health equity issues to address the root causes of socioeconomic health inequalities. Another key area of research relates to providing a strong evidence base to contribute to current policy debates on health care financing reform.

The Researching Equity in Access to Health Care (REACH) project ended in 2012. It focused on how health systems could contribute more effectively to achieving development goals by actively promoting equitable access to health care. This was explored through the case of South Africa’s health system, focusing on three tracer health interventions of particular relevance to the Millennium Development Goals (MDGs) and which were crucial to addressing the burden of ill-health in South Africa. The tracers were maternal health services, tuberculosis and HIV care. The HEU collaborated with the Centre for Health Policy at the University of Witwatersrand, the Africa Centre at the University of KwaZulu-Natal and McMaster University in Canada.

The XTEND study evaluates the impact and cost-effectiveness of Xpert MTB/RIF in the investigation of TB and its impact on patient and programme outcomes and transmission at a population level, and thus informs policy on the scale up of Xpert MTB/RIF in low- and middle-income countries. The XPHACTOR project focuses on the Xpert MTB/RIF for people attending HIV clinics. It will identify an evidence-based algorithm, which is feasible to implement within HIV clinics, to guide the utilisation of TB investigations. The results will complement the XTEND study, and provide evidence to guide the rational use of Xpert MTB/RIF in national roll-out in South Africa and other settings where HIV and TB are both prevalent. The project runs until 2014 and the HEU is partnering with the London School of Hygiene and Tropical Medicine, the Aurum Institute, the World Health Organisation, and the National Health Laboratory Services. The Gates Foundation is funding this project.

The HEU also worked on four short-term research projects in 2012. First, a cost-effectiveness analysis of the MVA85A vaccine. This project focuses on estimating the potential cost-effectiveness of adding the MVA85A vaccine to the BCG vaccine in HIV negative children from the perspective of the South African government. It is funded by the Oxford-Emergent Tuberculosis Consortium (OETC). Second, a cost analysis of an integrated community-based approach for drug-resistant tuberculosis care. This study aims to estimate the cost of decentralized drug-resistant TB management model developed by the MSF in partnership with the City of Cape Town and the Provincial Government of the Western Cape. Costs will be estimated from both the health services perspective and a societal perspective. The study is funded by the MSF. Third, an implementing and scaling up a community health policy in Kenya project focuses on community health policy in Kenya; the HEU is working with Japanese Aid and the Kenyan Ministry of Health to analyse issues related to implementing a health promotion programme with Community Health Workers. The project will run until the end of January 2014. Finally, the retaining health professionals in Mozambique’s public health sector project. The HEU is working on a multi-partner project funded by the EU that is using Discrete Choice Experiment methodologies to elicit health professionals’ preferences for staying on in the public health sector of Mozambique. The project runs until the end of March 2013.
Resilient and Responsive Health Systems (RESYST) is a consortium that is undertaking health policy and systems research (with a focus on financing, health workers and governance) in a set of African and Asian settings, including India, Kenya, Nigeria, South Africa, Thailand, Tanzania and Vietnam. Funded by DfID, the consortium began in 2011 and will run until 2016.

Coordination work for EQUINET (Regional Network for Equity in Health in East and Southern Africa) continued in 2012 around equitable financing of health systems and equitable allocation of health care resources in a range of East and Southern African countries.

During this year, Dr Edina Sinanovic was appointed Director of the Unit. John Ataguba won the Young Investigators Best Publication Award 2011 for Public Health and Rehabilitation Sciences. Professor Di McIntyre attained an NRF B–rating and was elected as a foreign associate to the National Academy of Sciences’ Institute of Medicine (IOM) in Washington. Marsha Orgill and Judy Daire were selected to attend the Emerging Voices 2012 venture in Beijing.

Women’s Health Research Unit (WHRU)

The WHRU enjoys local, national and international research standing especially in the areas of sexual and reproductive health and gender issues. The Unit is involved in research, teaching, technical health service support, and advocacy in the area of women’s health. It is made up of a multidisciplinary team of researchers with expertise in public health, epidemiology, psychology, sociology and anthropology. Focus on women’s health and on gender and health is aligned with local and global challenges in addressing the health needs of women.

The Unit’s research focus can be summarised into three thematic areas: Socio-behavioural research; health services operational research and quantitative/epidemiological research.

The major highlights for 2012 include:

- The WHRU implemented its Mellon award to mentor staff towards completion of their PhDs in 2010 and has continued the mentorship process with another PhD mentorship continuing for 2012 and 2013. Deborah Constant was awarded a Harry Crossley bursary from the Health Sciences Faculty to enable her to progress with her PhD.

- A wide range of research collaborators and other visitors visited the Unit and included, Dr Grossman from Ibis Reproductive Health, USA, Dr My Huong Nguyen from the WHO Geneva, Dr Joanne Mantell, HIV Center, Columbia University, USA, Professor Kathleen Goggin, Director, HIV Research Unit, Department of Psychology, University of Missouri, USA and Mary Fjerstad Director of WomanHealth Global.

- The Unit also continued to host a study abroad programme from New York University in collaboration with Professor Sally Guttmacher, Professor of Public Health and Director of Master’s in Public Health Program in Community Health, New York University

- WHRU hosted Dr Rachelle Chadwick in the second year of a 2 year postdoctoral fellowship

- Unit members received numerous awards which included: a 2-month visiting fellowship at the Population Training and Study Centre at Brown University in the U.S.

- UCT PERC Africa Knowledge grant to set up a network of research collaborations with University of Namibia, University of Lesotho and Eduardo Mondlane University in Mozambique

- The Unit co-hosted and taught on Men Engage Africa Training course with Sonke Gender Justice and on the Stanford University Bing Overseas Study Program: Public and Community Health in Sub-Saharan Africa and a MACAIDS course run by the HSRC, UCLA and UKZN.

- Dr Jennifer Moodley was appointed as a member of the Ministerial Committee on the prevention and control of cancer.

- The Unit continues to disseminate our research at International Meetings including the FIGO conference in Rome, October 2012.

Health Policy and Systems Programme

The Health Policy and Systems Programme encompasses a range of activities aiming to build this area of work through research, teaching, and networking within and outside the SOPHFM. The particular focus of our work is health policy analysis and health systems research.

In 2012, work continued under the umbrella of the Consortium for Health Policy and Systems Analysis (CHEPSAA) an 11-partner consortium funded by the European Commission (see www.hpsa-africa.org). This
work built on the initial assets and needs assessment of health policy and systems research in UCT and South Africa – for example, by organizing a networking workshop on HPSR in South Africa at the Public Health Association Conference (PHASA), by developing teaching curriculae for relevant courses, and supporting skills development of staff. Dissemination of the initial needs assessment was also undertaken, including through writing a chapter for the annual Health Systems’ Trust Annual Health Review.

Continued implementation of work within the District Innovation, Action and Learning for Health Systems development (DIALHS) project. This project is being implemented in collaboration with the SOPH at UWC, and colleagues from the Western Cape health department and City of Cape Town, within the Mitchell’s Plain sub-district of the Metro District Health System. In 2012 a set of processes of action learning were implemented in collaboration with local officials focused on: following up a community profiling activity bringing together a range of local actors from local communities and different government sectors better to understand the locally available health assets and needs; better understanding the challenges and support needs of those working as primary health care facility managers; and better understanding the roles of sub-district managers. A series of presentations were made on this work at the South African Public Health Association Conference, and the second international Health Systems Symposium, Beijing. Funding is sourced from Atlantic Philanthropies.

The Collaboration for Health Systems Analysis and Innovation (CHESAI) was significantly strengthened during 2012. CHESAI is a collaborative of health policy and systems researchers based in the Western Cape, South Africa—with a focus on strengthening the health policy and systems research field through conceptual and methodological development, as well as interdisciplinary and multi-sectoral engagement. CHESAI aims to contribute to expanding and strengthening the health policy and systems research field through conceptual and methodological development. CHESAI has a particular focus on the governance agenda and will run until 2016. The Health Policy and Systems Division has a particular focus on the governance agenda within the RESYST programme of work. The UNITAS project focuses on monitoring and evaluating policy formulation and implementation processes aimed at achieving universal health coverage in South Africa and Tanzania. The project undertakes monitoring mainly at the district level, with some monitoring and evaluation at the national level. It aims to support implementation processes and will establish an ‘early warning system’ of implementation difficulties. The project runs from 2011 to 2015 and is funded by the European Union. It is a collaborative project with partners from the London School of Hygiene and Tropical Medicine, Ifakara Health Institute (in Tanzania), Institute of Tropical Medicine Antwerp (in Belgium), Centre for Health Policy, University of Witwatersrand and the Africa Centre in South Africa.

Health and Human Rights Programme

The Health and Human Rights Programme undertakes a range of teaching, research and advocacy aimed at helping to build a culture of human rights in South Africa. Its work extends into East and Southern Africa. Research areas include the role of civil society organisations (CSOs) in the realisation of the right to health, the rights of the Deaf in the health care system and how health care providers can be involved in the realisation of the right to health.

The Learning Network for Health & Human Rights (LN) with 6 Western Cape CSOs in partnership with Universities of Maastricht, Warwick and Western Cape continues to provide opportunities to identify best practice for realising health rights. This network draws on a multidisciplinary team of researchers in partnership with CSOs to develop...
best practice for realising the right to health. CSOs in the Learning Network have been utilising a toolkit for training on the Right to Health to raise awareness and to empower community members to claim their health rights.

A key part of the programme in 2012 focused on community participation as a strategy for the realisation of the right to health. This work followed the release of the results of a two year research project by the Learning Network in the Cape Town Metropole focusing on the challenges faced by health committees as the formal structures for community participation in health. The project secured two large grants for continued work with Health Committees to enhance community participation as a vehicle for the realization of the Right to Health. One grant was secured from the European Union as part of a call for projects that support primary health care and aims to look at health care users experiences as a focus for unlocking opportunities to access quality health services in the Eastern and Western Cape. An additional grant was secured from the International Development Research Centre in Canada to work with collaborators in Uganda on governance in the health system, specifically focusing on community participation as a key strategy for the realisation of the right to health.

Family Medicine Division

The mission of the Division of Family Medicine is to graduate doctors who are able to enter their internship and community service years with the appropriate level of confidence and competence when diagnosing and managing common primary care problems. They are able to function fully in the PHC team, and are able to take the lead in district-based health care, teaching and research in any community setting in South and Southern Africa.

Our postgraduate students enrolled for the M Fam Med, M Med (Fam Med), and M Phil (Pall Med) degrees are all required to complete a research dissertation.

Research highlights for 2012 included the following:

- The Division of Family Medicine partnered with Professor Leslie London in the Public Health Division and the Learning Network to successfully apply for an EU funded grant for the strengthening of primary health care services, to the value of around 1 million EURO. Family Medicine has 5 packages in this project to the approximate value of over R5 million over a period of 30 months, viz
  
  (a) 17: Extension of undergraduate student language learning into the 5th and 6th years of the MBChB curriculum
  
  (b) 18: Providing language instruction in isiXhosa and Afrikaans for service personnel at two sites
  
  (c) 19: PROMS (Patient Related Outcome Measures) being conducted by Palliative Medicine in association with King's College, London
  
  (d) 20: PCAT (Primary Care Assessment Tool)
  
  (e) 21: Chronic Disease Audit

- Professor Derek Hellenberg is the PI for packages 17 and 18 and Dr Liz Gwyther is the PI for package 19 of the EU project

- Dr Nayna Manga appointed as Research Project co-ordinator for the Family Medicine Packages for the EU Grant.

- Dr Liz Gwyther is the PI for the IMPAQFT study for the EU grant: Measuring and Improving Outcomes for Patients with Progressive Chronic Disease: a Palliative Care Audit in two Western Cape sites

- Dr Elma De Vries leads the annual audit of chronic diseases of lifestyle for the Western Cape Department of Health. This project has now added a new dimension to the audit tool (that of patient perceptions of the management they receive for chronic diseases at CHC's) which forms part of an EU Grant.

- Dr Graham Bresick is the PI for the PCAT study that started in 2011 and was completed in 2012. This study has been extended to include a rural and a few more urban sites and forms part of the EU Grant.

- Dr Abdul Isaacs is the PI for the Prescription costs study which started in 2012 and compared medicine costs for chronic diseases at a few CHC's in the Metro District. The first article from this study was accepted for publication in the SAFPJ in 2013.

- Professor D A Hellenberg is the PI of a survey initiated in 2009 of the first graduates of the new curriculum (2007) to assess the usefulness of language learning during the BaDr course in the work environment. Surveys and focus group interviews will be done annually until 2013 to record the effects of innovations in the course structure and content on the outcomes.

- Dr Tsepo Motsohi started a research project on staff absenteeism in the CHC's on the Metro West platform

- The database of 6th year family medicine student CHC-based projects is continuously updated on our database. The database serves as a useful guide for district management, the family physicians and family medicine registrars at the CHC's when deciding on research priorities and interventions to improve delivery of primary health care services

- Meetings with MDHS senior management and staff continued in 2012, to develop a common research agenda, prioritise key research questions and commission research. Date: 4th October 2012 which now involves the office of Dr Tracey Naledi assisted by Dr George Petros.
School Statistics

Permanent and long-term contract staff

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<th>Position</th>
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<td>Lecturers (including part-time)</td>
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<tr>
<td>Chief Research Officer</td>
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<td>Clinical Senior Research Officer</td>
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<td>Research Officer</td>
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<td>Research Assistant</td>
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<td>Research Project Management Staff</td>
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<td>Data Management staff</td>
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<td>Facilitators</td>
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<td>Admin and Clerical Staff</td>
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Honorary Staff

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Students

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Contact details

School of Public Health and Family Medicine, Faculty of Health Sciences, University of Cape Town, Observatory, 7925, South Africa
Telephone: +27 21 406 6300
Fax: +27 21 406 6459
Web: http://www.publichealth.uct.ac.za/

Research output

Edited books


Chapters in books


**Articles in peer-reviewed Journals**


Breuer, E., Stoloff, K., Myer, L., Seedat, S., Stein, D.J. and Joska, J. 2012. Reliability of the lay adherence counsellor administered substance abuse and mental illness symptoms screener (SAMISS) and the international HIV dementia scale (IHDS) in a primary care HIV clinic in Cape Town, South Africa. AIDS and Behavior, 16: 1464-1471.


Cleary, S., Birch, S., Moshabela, M. and Schneider, H. 2012. Unequal access to ART: exploratory results from rural and urban cases studies of ART use. Sexually Transmitted Infections, 88: 141-146.


Jeebhay, M.F. 2012. ALLSA-Supported Research - Some reflections two decades later Current Allergy & Clinical Immunology, 25(2): 97-98.


elvitegravir with an emphasis on resource-limited settings.


therapy in sub-Saharan Africa: systematic review and metaanalysis. Tropical Medicine & International Health, 17(12): 1509-1520.


Department Of Radiation Medicine

Division Of Medical Physics

HEAD OF DIVISION: MR JAN K HOUGH / MS H BURGER

Divisional profile

The Division of Medical Physics is responsible to Diagnostic Radiology, Nuclear Medicine and Radiation Oncology for the safe use of ionization radiation. This involves patient dosimetry and treatment, as well as the optimum use and functioning of radiation producing equipment. The Division is also directly involved in the selection and commissioning of new equipment.

Physics training and teaching of staff and postgraduate students in these divisions is undertaken. The UCT BSc (Hons) course in Medical Physics was revived in 2012 and eight students are expected to start in 2013.

The Division of Medical Physics is recognised by the HPCSA as a training centre for Medical Physicists and is currently training one intern. The Division is also involved in International Atomic Energy (IAEA) training programs.

We take part in quarterly Medical Physics Workshops for all the Medical Physicists in the Western Cape. This includes all the physicists in private practice as well as those at GSH, Tygerberg Hospital and iThemba LABS. Various papers of common interest are presented at these workshops.

Medical Physics research meetings take place every second week to create a space for open discussion and support for research projects within the Division. Several posters and papers were presented by staff at national and international level.
The Division of Medical Physics continues to provide Medical Physics services to Nuclear Medicine at Red Cross Hospital. This service has been expanded by our physicist in Nuclear Medicine to regular quality control checks.

Chris Trauericht will do Monte Carlo simulations of the dose distributions around I-125 seed ophthalmic applicators as part of his PhD thesis.

Research Fields and Staff

Head of Department

JAN HOUGH MPHIL (UCT) (RETIRED SEPTEMBER 2012)
Radiotherapy Treatment Planning

H. BURGER MSC (MED PHYS) (UP) (APPOINTED DECEMBER 2012)

Deputy Manager

H. BURGER MSC (MED PHYS) (UP)
Modern Radiotherapy and Radiosurgery Treatments and Treatment Planning

Assistant Managers (Medical Physics):

G MAREE PHD (UCT) (RETIRED OCTOBER 2012)
Brachytherapy and Radiation Dosimetry

H MACGREGOR BSC (HONS) (STARTED NOVEMBER 2012)
Radiotherapy and IMRT QA and Treatment Planning

T KOTZE PHD (US)
Diagnostic Radiology teaching and Radiation Protection

C TRAUERNICH MSc (MED) IN MEDICAL PHYSICS (UCT)
Nuclear Medicine and Brachytherapy

Technical Staff

CHIEF RADIOGRAPHER
K BOTHA NAT DIPL RADIOGRAPHY (THERAPY), DIPL COMPUTER SCIENCE

Mould Room

CHIEF RADIOGRAPHER
S TOVEY DIPL. RADIATION TECHNOLOGY, NAT DIPL RADIOGRAPHY (DIAGNOSTIC AND RADIOTHERAPY), BTECH (RADIOGRAPHY RADIOTHERAPY)

RADIOGRAPHER
G SIEBRITS NAT DIPL. RADIOGRAPHY (RADIOTHERAPY) (STARTED OCTOBER 2012)

INTERN RADIATION TECHNOLOGIST
M HENDRICKS NAT DIPL RADIOGRAPHY (DIAGNOSTIC)

Mechanical Workshop

CHIEF INDUSTRIAL TECHNICIAN
C THOMSON NTCII

ARTISAN
RE HISCOCK NIII

Secretarial

SENIOR ADMIN CLERK
O KWAYIBA

Contact Details

Division of Medical Physics, Groote Schuur Hospital/ University of Cape Town, Observatory, 7925 Cape Town
Telephone: +27 21 404-6240
Fax: +27 21 404-6269
Email: Hester.Burger@uct.ac.za

Department Of Radiation Medicine

Division Of Nuclear Medicine

HEAD OF DIVISION: DR TESSA KOTZE

Divisional Profile

Nuclear medicine currently provides a wide spectrum of diagnostic procedures, in-vivo studies and therapy; all pertaining to the use of unsealed sources of radioactivity. Procedures cover the central nervous system, respiratory, cardiac, gastrointestinal, genitourinary, endocrine, lymphatic and skeletal systems. There is access to both SPECT/CT and PET/CT. All procedures are integrated into service provision, training and research. In the department is also an osteodensitometer.
**Divisional Profile**

1. The Division of Radiation Oncology provides the following services:
   - Investigation, management and treatment of all forms of malignant disease. This is co-ordinated by 23 multidisciplinary clinics, which meet weekly.
   - Participation in clinical studies, both investigator initiated and as part of co-operative groups.

2. Teaching of undergraduate medical courses and provision of postgraduate specialists training courses. Pre and post-diplomate instruction to radiographers and post-diplomate courses to nurses. Full training in Radiobiology from under-graduate to honours, master’s and doctoral level.

3. Provision of a comprehensive clinical radiobiological research facility.
Contract Research Staff
Part-Time Clerical Research Assistants (Data Managers)
MRS GLYNIS CHILCOTT
MRS SUE GILES
MISS E NEL
MRS JEAN WILMOT
MRS RAE TAYLOR

Contact Details
Postal address: Division of Radiation Oncology, Groote Schuur Hospital & University of Cape Town, Observatory, 7925, South Africa
Telephone: +27 21 404 4263/5
Fax: +27 21 404 5259
E-mail: Raymond.abratt@uct.ac.za

Department Of Radiation Medicine
Division Of Radiology
HEAD OF DIVISION: PROFESSOR STEPHEN JAMES BENINGFIELD

Divisional Profile
The Division of Radiology works closely with clinical colleagues and their patients throughout the hospital, both in service and academic capacities. This collaboration involves all major medical, surgical, therapy and women’s health areas, including their subspecialties. Pending arrivals of a 256-slice CT and research 3T MRI promise interesting boosts to service and research. Red Cross is making good use of their new MRI and CT scanners. There is now improved exposure to PET-CT scanning at Tygerberg Hospital. Links to Somerset and GF Jooste Hospitals remain strong, with some teaching activity also at Victoria Hospital; However Jooste is being closed for reconstruction next year, with Mitchell’s Plain Hospital standing in The experience of our post-retirement sessional staff continues to benefit the Division. The positive impact of the full conversion to digital radiology over the last year is now evident, with the next phase of electronic radiology requests partially implemented

Medical Officers

DR CINDY SHEPHERD
Principal Medical Officer Radiation Oncology; Main interests - Lung cancer, Tumours of the thyroid, Male genito-urinary tract cancer.

Scientific Staff

DR ANDRE HENDRIKSE
Senior Medical Natural Scientist & Lecturer; Main interest - Research in Medical Natural Science Radiobiology (research on tumours with experimental animals)

DR ALISTAIR HUNTER
Medical Natural Scientist; Main interest - Research in Medical Natural Science Radiobiology (research on tumours with experimental animals)
Interest in supernumerary registrar posts from within and outside the country remains strong.

Research Fields and Staff

**PROFESSOR STEPHEN BENINGFIELD**
Hepatobiliary, vascular, interventional radiology, computer applications and digital radiology.

**DR NAZIR AHMED**
Cross-sectional imaging, colorectal imaging.

**DR HELEN BALL**
Ultrasound, mammography, computerised tomography and urological radiology.

**DR SALLY CANDY**
Neuroradiology and Magnetic Resonance Imaging.

**DR DILESH CHIBA**
Musculoskeletal radiology, cross-sectional imaging, interventional radiology.

**DR JACQUELINE KIECK**
High resolution computerized tomography and fine needle biopsies, interventional radiology.

**DR QONITA SAID-HARTLEY**
Chest radiology.

**DR PAUL SCHOLTZ**
Cross-sectional, abdominal imaging and Interventional radiology.

**DR GARY SUDWARTS**
Cross-sectional, abdominal imaging and Interventional radiology.

**DR TRACY KILBORN**
Paediatric radiology.

**DR ROBERT SEGGIE**
Ultrasound, computerised tomography and general radiology.

**DR NICOLE WIESELTHALER**
Paediatric radiology.

**DR E BANDERKER**
Paediatric Radiology

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**Divisional Statistics**

**Permanent and long-term contract staff**

**University staff**

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<th>Position</th>
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<tr>
<td>Administrative Staff</td>
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**JMS Staff**

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**Part-time JMS Staff**

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**Part-time UCT Staff**

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**Students**

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<td>Master’s [registrars]</td>
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**Teaching**

- **Postgraduate**
  This major activity continues, with new inputs from the University, Colleges and the HPCSA having significant roles. More structured teaching, regular assessments and revised examination structure plus obligatory theses are now reality. The division upgraded and complete refurbishment processes to convert into a fully digital radiology unit, with the advent of a formal Picture Archival and Communication Systems (PACS) and Radiology Information System (RIS) partially done. This is having a major beneficial effect on the manner and quality of postgraduate teaching and supervision, both in radiology and other specialties.

- **Undergraduate**
  Regular weekly structured teaching sessions continue, together with the case-based multidisciplinary meetings in various specialties allowing both undergraduate and postgraduate students to see the impact of imaging on clinical-decision making.
Research

There are a number of collaborative and self-initiated projects running, with the recent requirement for a thesis or dissertation leading to increased interest. The consequences of digital imaging and newer modalities remain strongly felt, with diversification of interests. These continue to be largely on the basis of combined collaboration and multidisciplinary applied clinical research, together with some basic research that is also being undertaken in MRI and digital mammography. There is a good prospect of a full body 3T MRI being installed soon.

Service

The increase in service load, particularly on the multislice CT’s, are placing an increased demand on reporting time. An attempt is being made to run three CT scanners during the day. The hope is that the PACS will allow more efficient distribution of the resulting reporting work. Close interaction with UCT PAH clinical service adds another aspect to the work undertaken.

Social responsiveness

There is ongoing collaboration with a number of the closer satellite hospitals, most notably GF Jooste, New Somerset and Victoria, but also II Military Hospital (with significant recent equipment upgrades), as well as with the newly-developed and refurbished regional hospitals such as George, Worcester and Paarl, Khayelitsha and Mitchells Plain, that are likewise converting to digital imaging and PACS.

Publications

These are largely on the basis of close clinical collaboration and applied research, although some more basic MRI and digital radiography research has been published.

General

The refashioning of the division into a purely digital system will have a major impact on the manner of our clinical interaction within and outside the division.

Contact Details

Postal Address: Division of Radiology, Room 16, C16, Groote Schuur Hospital and University of Cape Town, Private Bag, Observatory, 7935
Telephone: +27 21 404 4184 or 406 6426
Fax: +27 21 404 4185
E-mail: Steve.Beningfield@uct.ac.za

Department Of Radiation Medicine

Research output

Articles in peer-reviewed Journals


Department of Surgery
HEAD OF DEPARTMENT: PROFESSOR DEL KAHN

Departmental Profile

The Department of Surgery comprises the nine Divisions: General Surgery, Cardiothoracic Surgery, Emergency Medicine, Neurosurgery, Ophthalmology, Orthopaedics, Otorhinolaryngology, Plastic Surgery and Urology.

Each of the Divisions functions very independently with regard to administration, clinical service, undergraduate and postgraduate teaching, and research. The Special Clinical expertise, research interests, and outstanding achievements over the last year, are documented in the individual divisional profiles.

The Department of Surgery Research Day, organised by Dr David le Feuvre, was a most successful collaboration between the Divisions. Professor Richard Barnes delivered the John Terblanche Lecture.

Department Of Surgery
Division Of General Surgery

HEAD OF DIVISION: PROFESSOR DEL KAHN

Divisional Profile

The four surgical firms within the Division of General Surgery are responsible for Hepatobiliary Surgery, Surgical Oncology/Endocrine Surgery, Colorectal Surgery, and Vascular Surgery. The Surgical Intensive Care Unit, the Trauma Unit, and the Transplant Unit are also part of the Division.

The Division prides itself on maintaining high standards of clinical service, and teaching of both undergraduates and postgraduates. The Division continues to function as a true academic unit, with its members making significant contributions at both local and international meetings, while at the same time maintaining a high research output.

Professor Jake Krige has several research projects in Portal hypertension and diseases of the liver and bile ducts. Professor Lance Michell is involved in an audit of admissions to the Surgical ICU, as well as several multi centre pharmaceutical trials using anti microbes.

The Vascular Unit under Dr Nadraj Naidoo has established a vibrant endovascular service. Genetic aspects of colorectal cancer is the main research interests of Professor Paul Goldberg in the Colorectal unit. Professor Eugenio Panieri has a special interest in sentinel lymphnode biopsy in breast cancer as well as problems related to battery acid ingestion and thyroid cancer. Professors Andrew Nicol and Pradeep Navsaria are involved in major audits of various types of trauma, as well as various prospective randomised studies including penetrating cardiac injuries. Dr Elmi Muller has embarked on a study of transplanting kidneys from HIV positive donors into HIV positive recipients.

In addition there is an Emergency Surgery Firm which managers all the non-trauma surgical emergencies.

Contact Details

Division of General Surgery, University of Cape Town, Groote Schuur Hospital, J46, Old Main Building, Observatory 7925
Tel: +27 21 406 6475
Fax: +27 21 448 6461
UCT web: http://www.uct.ac.za
Health Sciences

Department Of Surgery
Division Of Ophthalmology
HEAD OF DIVISION: PROFESSOR C. COOK

Divisional Profile
The Division of Ophthalmology combines an academic hospital service with University teaching, clinical training and research.

Specialist tertiary care clinical services are provided to patients in the Western Cape and beyond.

Teaching is provided to fifth year medical students, and specialist training of both local graduates and graduates from other countries is provided.

A postgraduate diploma course in community eye health is provided for Vision 2020 programme managers working in sub Saharan Africa.

Permanent and Long Term Contract Staff

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<th>Professors</th>
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Students

| Master's | 10 |
| Postgraduate diploma | 8 |
| Undergraduate | 187 |
| Total | 205 |

Permanent Staff (Full-Time)

PROFESSOR C. COOK
Professor and Head, Division of Ophthalmology, UCT Faculty of Health Sciences, Groote Schuur Hospital and Red Cross Children's Hospital. Community eye health, glaucoma.

DR N. DU TOIT
Consultant Specialist, Groote Schuur Hospital. Anterior segment surgery, glaucoma, ocular trauma.

DR K. LECUONA
Consultant Specialist, Groote Schuur Hospital. Prevention of blindness in developing countries, lacrimal drainage disorders, inflammatory eye disease, ocular oncology.

DR T. POLLOCK
Consultant Specialist, Red Cross Children's Hospital. Paediatric ophthalmology.

DR J. RICE
Consultant Specialist, Groote Schuur Hospital. Vitreo-retinal disease.

DR J STEFFEN
Consultant Specialist, Groote Schuur Hospital. Vitreo-retinal disease.

DR C. TINLEY
Consultant Specialist, Red Cross Children's Hospital. Paediatric ophthalmology.

Permanent Staff (Part-Time)

DR E. ALBRECHT
Medical retina.

DR M. ATTENBOROUGH
Cornea.

DR J. DE VILLIERS
Strabismus.

DR R. GROTTE
Paediatric ophthalmology

DR D. HARRISON
Oculoplastics

DR F. KUPPER
General anterior segment

EMERITUS PROFESSOR A. MURRAY
Strabismus.

DR A. PERROTT
Glaucoma.

DR P. STEVEN
Neuro-Ophthalmology.

DR K SUTTLE
Surgical retina, oculoplastics.

DR H. VAN VELDEN
Surgical retina.

Honorary Staff

PROFESSOR P COURTRIGHT
Epidemiologist. Director of Kilimanjaro Centre for Community Ophthalmology.

PROFESSOR S LEWALLEN
Ophthalmologist. Director of Kilimanjaro Centre for Community Ophthalmology.

Contact Details
Division of Ophthalmology, University of Cape Town Medical School, Observatory 7925
Tel: +27 21 406 6216
Fax: +27 21 406 6218
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Department Of Surgery
Division Of Orthopaedic Surgery
HEAD OF DIVISION - PROFESSOR ROBERT DUNN

Divisional Profile
2012 was a year of re-organisation with the retirement of Professor Walters and appointment of Professor Robert Dunn to the Pieter Moll and Nuffield Chair. This necessitated a staff reshuffle with Dr Stephen Roche being promoted to HOCU: Adult reconstructive unit and Graham McCollum to run the foot and ankle service.

Professor Hoffman’s retirement as head of Paediatric Orthopaedic Surgery led to Stewart Dix Peek assuming this role supported by the newly appointed Stewart Dix Peek.

An additional post was established to strengthen General Orthopaedic management and Ian Koller appointed.

There is a renewed energy with this change. The undergraduate program has been overhauled with more student - consultant contact time, adoption of IT augmented teaching with the use of tablets and pre-loaded instruction videos filmed and edited by Nick Kruger. The exam format has been improved with collaboration with Rachel Weiss’ teaching unit and multi-station double track OSCE’s.

Research has been prioritised with 22 papers presented at the national Orthopaedic meeting in September. Robert Dunn was awarded the Best Orthopaedic publication by the SAOA for the paper “MRI findings of Spinal TB: Comparison of HIV positive and negative patients”. Dr Roche was awarded best paper at the British Elbow and Shoulder Society meeting. Dr Maree was awarded best Hand paper at the annual Hand meeting.

The department continued to run its annual spine cadaver and porcine based live tissue courses which attract national and regional delegates. In addition, postgraduate teaching has been strengthened with regular cadaver based surgical training under the direction of Dr Roche.

The department continues to have a national impact with Robert Dunn as president of the Spine Society, Orthopaedic College and SAOA EXCO, Stewart Dix Peek president of Paediatric Orthopaedic Surgery and Steve Roche secretary of Shoulder / Elbow Society.

Our clinical units continue to flourish despite the local challenges with well established Acute Spine Injury Unit, Hand Unit, Orthopaedic Trauma unit, Paediatric Orthopaedic Unit and Adult reconstructive unit which houses upper and lower limb arthroplasty, soft tissue reconstruction, elective spine surgery and Orthopaedic oncology.

Due to these well established units, we have increasing sub-specialist fellowship training. Currently we have a Upper limb, Lower limb arthroplasty and two spine long term fellowships. In addition there are frequent visits by overseas specialists to observe our work.

Our department has been recognised by the International Society of Orthopaedic Centres (ISOC) as a full member. This is an exclusive group of 18 global centres based in 4 continents. This allows interaction on all levels including organisational and academic.

Divisional Statistics
Permanent and Long-Term Contract Staff

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<th>Number</th>
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Students

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Department Of Surgery
Division Of Emergency Medicine

HEAD OF DIVISION: PROFESSOR LA WALLIS

Divisional Profile

Emergency Medicine is run as two academic Divisions (at UCT and SUN) but has a single, joint appointment, Head. The Division utilises various academic and satellite hospitals for the purposes of teaching and research; these include: Groote Schuur, Red Cross War Memorial Children's, Victoria, GF Jooste, Paarl, and New Somerset Hospital. The types of patients seen and emergencies treated vary among hospitals, allowing our MMed students to become fully competent Emergency Medicine specialists.

The Division places an emphasis on postgraduate programmes, with 15 PhD students, 5 MSc, and 20 MPhil. In 2012, the Division produced 30 publications in peer-reviewed journals and contributed to 10 book chapters. The Division’s research has been focused in the following areas: emergency care systems, emergency ultrasound, pre-hospital care and disaster medicine, and mHealth.

The Division has 1 Professor, 2 Senior Lecturers, 3 Lecturers, and 1 Research Coordinator between SU and UCT. There are 9 honorary lecturers at SU and an additional 10 honorary lecturers at UCT.

Head of Division (UCT, SU & PGWC)

Professor Lee A. Wallis MBChB MD DIMC Dip Sport Med FRCSed FCEM FCEM(SA) FIFEM

Head of Education

Heike I. Geduld MBChB FCEM(SA) MMed(EM)

MPhil Programme Coordinator

Tyson Welzel MBChB EMDM

Divisional Statistics

Permanent and Long-term Contract Staff

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Honorary staff

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Contact Details

Divisional Website: www.emergencymed.co.za
Telephone: +27 21 948 9908
Fax: +27 21 948 9909
Lee.wallis@uct.ac.za
Postal Address: Division of Emergency Medicine, University of Cape Town, Medical School, Groote Schuur Hospital, H53 Old Main Building, Observatory, 7925
Tel: +27 21 948 9908
Fax: +27 21 948 9909
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Department Of Surgery
Division Of Neurosurgery

HEAD OF DIVISION: PROFESSOR GRAHAM FIEGGEN

Divisional Profile

The Division of Neurosurgery is responsible for the neurosurgical management of patients at two internationally-renowned teaching hospitals, treating patients from across the Western Cape as well as elsewhere in South Africa and abroad. This clinical platform enables us to teach students, train specialists and pursue cutting-edge research into conditions relevant to our clinical practice.

The division has a tradition of close ties with colleagues in private practice, enabling us to contribute to the care...
of patients across our community and strive to contribute in all ways possible to the growth and leadership of our specialty nationally and internationally.

Neurosurgery demands the highest standards of practice, while remaining mindful of the needs and priorities of a developing country. Our training program encompasses all aspects of modern neurosurgery, exposing registrars to the full spectrum of subspecialties. During their training, registrars have numerous opportunities to pursue research and are equipped with skills for lifelong enquiry. In this way, we strive to produce neurosurgeons who have superb clinical and operative skills coupled with the intellectual rigour to cope with a career in the fast-paced and rapidly evolving field of clinical neuroscience.

**Divisional Statistics**

**Permanent and Long Term Contract Staff**

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**Honorary Staff**

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**Research Fields and Staff**

**Permanent Staff**

PROFESSOR GRAHAM FIEGGEN  
Head of Division; Paediatric and Functional Neurosurgery: spasticity in cerebral palsy, epilepsy surgery; congenital anomalies including dysraphism and the tethered spinal cord, hydrocephalus and neuroendoscopy; CNS infection; neurotrauma.

PROFESSOR ANTHONY FIGAJI  
Paediatric Neurosurgery, neurotrauma and neurocritical care: CNS injury and monitoring techniques including intraoperative neurophysiology; hydrocephalus and neuroendoscopy; CNS infection including TB; neurooncology.

ASSOCIATE PROFESSOR PATRICK SEMPLE  
Pituitary disease and neuroendoscopy; neurocritical care, neurotrauma, neuroHIV.

ASSOCIATE PROFESSOR ALLAN TAYLOR  
Neurovascular: diseases, interventions and surgery; Radiosurgery, stereotactic surgery and neuronavigation; skull base surgery.

DR DAVID LE FEUVRE, SENIOR LECTURER  
Neurovascular: diseases, interventions and surgery; HIV vasculopathy, skull base surgery.

DR DAVID WELSH, SENIOR LECTURER  
Neurospine: diseases and treatment, spinal trauma.

DR SALLY-JANE ROTHEMEYER, LECTURER  
Functional neurosurgery: pain, epilepsy and movement disorders; neuroHIV.

DR LLEWELLYN PADAYACHY, LECTURER  
Paediatric Neurosurgery: craniofacial surgery, paediatric neurovascular diseases, neurocritical care, monitoring and neuronavigation.

EMERITUS PROFESSOR JONATHAN PETER  
Paediatric Neurosurgery: intraoperative neurophysiology, spasticity.

**Contact Details**

Postal address:  H-53, Old Main Building, Groote Schuur Hospital, Observatory, 7925, South Africa  
Tel: +27 21 406 6213  
Fax: +27 21 406 6555  
UCT General enquiries: +27 21 650 9111  
UCT web: http://www.uct.ac.za

**Department Of Surgery**

**Division Of Urology**

**HEAD OF DIVISION – PROFESSOR R D BARNES**

**Divisional Profile**

The Division of Urology renders a urological service to Groote Schuur Hospital, Red Cross War Memorial Children’s...
Hospital and Somerset Hospital. An operating list is done once per week at Eerste river Hospital, operating on Groote Schuur Hospital patients.

Dr John Lazarus is head of Paediatric Urology at Red Cross Hospital and Professor R D Barnes attends Somerset Hospital for ward rounds and outpatients. The operating list at Eerste River Hospital is done by a Senior Registrar assisted by Professor Johan Naudé (ex head of Division of Urology).

Undergraduate teaching is provided to 6th year medical students, who do a two week block in Urology. Postgraduate training is provided to Urology Registrars and also to supernumerary registrars. The members of our division make significant contributions at both local and international meetings. A number of our members have attended instructional courses both locally and overseas. The Division has maintained its productivity despite staff shortages and the financial crisis.

The Division is involved with two combined clinics – Urological Oncology Clinic (with Radiation Oncologists) and Female Continence Clinic (with Gynaecologists). We run a number of other specialised clinics – Adolescent Spinal Defects Clinic, Haematuria Clinic, Stricture Clinic, Erectile Dysfunction Clinic, Reconstructive Urology Clinic and Metabolic Stone Clinic.

Divisional Statistics

Permanent and Long-term Contract Staff

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Research Fields and Staff

PROFESSOR R D BARNES
Metabolic aspects of Urolithiasis, Urological Oncology

PROFESSOR A R PONTIN
Renal infections in diabetics, Female Incontinence, Urological Oncology

DR J LAZARUS
All aspects of Paediatric Urology; Surgical Treatment of Renal Calculi

DR S SINHA
Widening indications for laparoscopic surgery in urology; double J stent insertion under local anaesthetic; radical cystectomy and extended pelvic lymphadenectomy

DR L KAESTNER
Prostate cancer; Renal Transplantation; Urogaecology

DR A VAN DEN HEEVER
Results of urethroplasty for urethral strictures

DR M KOLIA
Retrospective Review Prostatectomies done between 2005 and 2011 at Groote Schuur Hospital

DR F CASSIM
Retrospective Review of Bladder of Open versus Laparoscopic Radical Cystectomy for the Treatment of Bladder Cancer: Complications and Oncological Outcome

Divisional Contact Details

Postal Address: Division of Urology, Area E26, New Groote Schuur Hospital, Anzio Road, Observatory, 7925
Telephone: SA (021) 406 6529
Fax: SA (021) 406 6122
e-mail: lesley.burke@uct.ac.za

Department Of Surgery
Division Of Otolaryngology

HEAD OF DIVISION: PROFESSOR JOHAN FAGAN

Divisional Profile

The Division of Otolaryngology combines an academic hospital service with university teaching, training and research. It provides specialist clinical services to patients in the Western Cape and beyond. Its university responsibilities include in-hospital and community-based training of 5th year medical students, teaching of dental and paramedical students, and specialist training of both local graduates and graduates from other countries. An outreach programme supplements the training of students and primary health care workers in the fundamentals of ear care. We place a strong emphasis on clinical research.
**Divisional Statistics**

**Permanent and Long-term Contract Staff**

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<th>Role</th>
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<td>Audiologists</td>
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**Students**

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<tr>
<td>Karl Storz Fellow in Advanced Head and Neck Surgery</td>
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**Staff and Research Fields**

**J.J. FAGAN**  
Head and Neck Cancer; Developing World ENT

**D.E. LUBBE**  
Rhinology; Minimally invasive cranial base surgery.

**G.J. COPLEY**  
Paediatric ENT, ENT in primary care

**E. MEYER**  
Otology. Paediatrics; Head and Neck

**T. HARRIS**  
Otology; Head and Neck

**O. EDKINS**  
Sialendoscopy; General ENT

**Department Of Surgery**

**Chris Barnard Division Of**

**Cardiothoracic Surgery**

**HEAD OF DIVISION: PROFESSOR PETER ZILLA**

**Divisional Profile**

The Division offers the full range of adult and paediatric cardiac and thoracic surgery services, catering to all forms of congenital heart disease, myocardial revascularisation (on- and off-pump), cardiac valvular repair and replacement surgery as well as thoracic aortic surgery. The only exceptions are the use of long-term left ventricular assist devices or the use of the artificial heart, both of which are prohibitively expensive in a developing world scenario.

An envisaged ‘hybrid operating theatre’ has been approved in principal and nearing the end of its planning stage. While funding remains an issue, this facility will expand our repertoire to include the most recent development in heart valve replacement, namely transcatheter-delivered valve prostheses. This procedure will not only offer to reduce hospital stays but remove the costs of open heart surgery thereby bringing heart valve treatment closer to the third world where rheumatic disease remains highly prevalent. As this technology is prohibitively expensive, special training-arrangements were entered into with commercial valve providers to increase affordability under public hospital circumstances.

Moreover, the Cardiovascular Research Unit has been focusing on developing alternative transcatheter devices specifically aimed at the needs of a developing country including collaborative studies with the medical device industry and other international academic units to make newer and more cost-effective devices more readily available.

In this context, a UCT start-up company was formed around IP developed in the Cardiovascular Research Unit, receiving substantial funding – *inter alia* from the Department of Science and Technology’s ‘Technology Innovation Agency’ (TIA).

**Divisional Profile (Cardiovascular Research Unit)**

2012 represented a difficult year financially where decades of reliance on industry funding was largely replaced with a dependency on institutional academic grants.
The Western Cape Heart Research Grouping of the Medical Research Council, of which the Cardiovascular Research Unit is a member, continues to support essential basic research, the foundationstone for applied research.

The Unit has in 2012, amongst other grants, been awarded three separate NRF grants totalling approximately three million Rand.

A significant breakthrough in our synthetic vascular graft research was achieved in 2012 where spontaneous endothelialization of the luminal surface across an engineered porous graft wall was demonstrated in rats and shown to be independent of transanastomotic outgrowth. An endothelial lining in small diameter vascular grafts, commonly not achievable in humans, is essential for long-term patency.

International collaboration with Gothenburg and Clemson universities continued with respect to other vascular graft technologies.

Research focusing on the cell biology of the process of neovascularisation has spear-headed our regenerative medicine approach to facilitating the body’s own ability to remodel semi-synthetic prostheses. A model for assessment of the regenerative capacity of synthetic hydrogels in the treatment of myocardial infarction established in 2011 has led to published results and interest from overseas collaborators. The mechanism through which delayed delivery of hydrogel to an infarcted heart achieves greater therapeutic efficacy has been partially elucidated in 2012. The distribution of hydrogel was found to differ substantially dependent on the timing of hydrogel delivery. This is being further examined with micro computed tomography and promises to hold great significance in the field of biomaterial-based therapy for myocardial infarction.

Optimisation of treatment regimens to render animal tissue used in the construction of ‘bioprosthetic’ heart valves, especially transcatheter designs, more biocompatible and less immunogenic has in 2012 focused on porcine pericardium, including decellularisation and non-covalent ‘tanning’ thereof. Further assessment of both porcine and bovine pericardial candidates is currently in progress.

The Biomechanical Sciences group strengthened international networking through a 3-year collaboration grant from the UK Royal Society with Dr Georges Limbert from the University of Southampton, UK, on constitutive modelling of tissue-regenerative synthetic scaffolds.

Postgraduate training remained a priority in 2012. Interdigitation between our clinical staff and researchers also remains a key goal for which the Division continues to strive.

### Divisional Statistics

#### Permanent and Long Term Contract Staff

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### Research Fields and Staff

#### Permanent Staff

- **PROFESSOR PETER ZILLA**
  Head of Division

- **ASSOCIATE PROFESSOR JOHAN BRINK**
  Clinical Director

- **ASSOCIATE PROFESSOR JOHN HEWITSON**
  Section Head: Paediatric Surgery

- **ASSOCIATE PROFESSOR THOMAS FRANZ**
  Section Head: Biomechanics

- **DR PAUL HUMAN**
  Research Director, Section Head Pathobiology

- **DR LOVEN MOODLEY**
  Section Head: Thoracic Surgery

- **DR ANDRE BROOKS**
  Senior Consultant

- **DR DEON BEZUIDENHOUT**
  Senior Lecturer, Section Head Polymer Sciences

- **DR NEIL DAVIES**
  Senior Lecturer, Section Head Biology and Regeneration
Contact Details

Chris Barnard Division Of Cardiothoracic Surgery
D24, New Groote Schuur Hospital, Anzio Road,
OBSERVATORY 7925, Cape Town, South Africa
Tel: +27 21 406 6181
Fax: +27 21 448 1145
Web: http://www.health.uct.ac.za/departments/surgery/cardiothoracic/
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Cardiovascular Research Unit

Room 3.13, Chris Barnard Building, Faculty of Health Sciences, University of Cape Town, Anzio Road,
OBSERVATORY 7925, Cape Town, South Africa
Tel: +27 21 406 6476/6385
Fax: +27 21 448 5935

Department Of Surgery

Division Of Plastic Surgery

HEAD OF DIVISION: PROFESSOR DA HUDSON

Divisional Profile

The Division of Plastic Surgery combines an academic hospital service, with university teaching, clinical training and research. The division also functions at Red Cross Children’s Hospital and pressure sores are dealt with at Eerste River Hospital. Specialist tertiary services are provided to patients of the Western Cape and beyond.

The Department is actively involved in a number of multidisciplinary which include:
1. head and neck cancer clinic
2. skin cancer clinic
3. melanoma clinic
4. transsexual clinic
5. combined breast clinic

Multi-disciplinary clinics at Red Cross Children Hospital include:
1. Cleft lip and palate clinic
2. Inter sex clinic
3. Cranio facial clinic
4. Congenital ear clinic
5. Congenital hand clinic

Teaching is provided to fifth year medical students PAMS, and specialist training of postgraduates is undertaken – including supernumerary registrars from other countries.

The Department is actively involved in research in all aspects of Plastic Surgery, including paediatric Plastic Surgery.

The Department enjoys a strong partnership with colleagues in private practice. These part time surgeons provide valuable input to the Department both in teaching and in clinical services.

The Division continued to conduct research in breast reconstruction, complex wounds, paediatric plastic surgery, microsurgery and burns.

Permanent and Long Term Contract Staff

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Research Fields and Staff

PROFESSOR D.A. HUDSON
Breast Reconstruction; Wound Healing; Burns.

DR K. ADAMS
Management of complex wounds, Transsexual Surgery, Burns

DR S. ADAMS
Cleft Lip Palate; Lower leg Reconstruction, Burns

Contact Details

Postal address: Department of Plastic, Reconstrucrive & Maxillo-Facial Surgery, Room HS3/69, Old Main Building, Groote Schuur Hospital, Observatory, 7925, Republic of South Africa.
Tel: +27 21 406 6415
Fax: +27 21 406 6649
UCT General Enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za
Department of Surgery
Research output

Chapters in books


Articles in peer-reviewed journals


Deans Office: Health Sciences

Articles in peer-reviewed Journals


Despite a climate of decreasing research income from government for fundamental research, 2012 saw a number of research successes. The cost of research continues to grow and, despite the pressure on funding, particularly from government, staff were successful in raising some R108 million from government and non-governmental sources to support the research enterprise, with income from non-governmental sources comprising some R47.6 million of this total. Income from this external funding from industry, government, public entities, and statutory bodies was essential in providing bursaries to master’s and PhD students, postdoctoral fellowships, salaries of research and support staff, and project running expenses. The number of research contracts (145), and the income derived therefrom (R47.6 million), were significantly down on 2011 values (260 and R75.6 million respectively), which is a concern. Nevertheless, despite this funding pressure, the number of PhD and postdoctoral researchers continued to grow, with 124 postdoctoral fellows spread among the departments, and 376 PhD and 454 master’s students registered in the faculty. The number of doctoral degrees awarded in 2012 was 62, and that of master’s degrees was 137, approximately 20 percent of the latter with distinction; both PhD and master’s graduate numbers reflect increases over 2011. Two students who excelled in their postgraduate studies were Ms Andrea Muller, Department of Mathematics and Applied Mathematics, who received the S2A3 Bronze Medal for her MSc dissertation, titled Humpback whales, rock lobsters, and mathematics: Exploration of assessment models incorporating stock-structures, and Dr Ranga Jayakodi, Department of Chemistry, who received the Faculty PhD medal for his thesis, titled In silico investigation of the mechanism of ricin-catalysed depurination reaction and design of novel ricin inhibitors. Research publication output from staff and postgraduate students remained high, with some 900 peer-reviewed, accredited publications appearing in 2012.

One measure of our faculty achievements, in terms of recognition and international standing in the research arena, is through the increasing number of staff receiving high NRF ratings. In this regard, the faculty is proud of the latest additions to our current 14 NRF A-rated, 66 B-rated, 44 C-rated, and six P-rated researchers. The latter, in particular, reflect the growing research strength of our younger academic staff. Associate Professor Heribert Weigert of the Department of Physics received an NRF A rating in recognition of his research in Theoretical Physics, and two young researchers, Dr Åke Fagereng (Department of Geological Sciences) and Dr Andrew Hamilton (Department of Physics), received NRF P ratings in 2012; Dr Fagereng...
for his research work on earthquake dynamics and Dr Hamilton for his research related to the discovery of the Higgs Boson via the ATLAS consortium at the Large Hadron Collider. In total, 152 staff in the faculty are NRF-rated.

At the university level, associate professors Merle Sowman and Rachel Wynberg received the newly instituted Social Responsiveness Award for their leadership of, and research conducted through, the Environmental Evaluation Unit, aimed at uplifting poor communities in the Western Cape and further afield. Two of our younger scientists, Drs Will Horowitz (Department of Physics) and Åke Fagereng (Department of Geological Sciences), received prestigious UCT Fellows’ Young Researcher Awards, Dr Horowitz for his significant contributions to the determination of the properties of matter microseconds after the Big Bang, through demonstrating the importance of novel physics mechanisms in tomographic analyses, and Dr Fagereng for his studies on faults and fractures in the Earth’s crust, aimed at understanding how the Earth deforms and particularly the processes that lead to earthquakes.

The faculty was privileged to be awarded two DST/NRF SARChI Chairs in 2012, one in Environmental and Social Dimensions of the Bioeconomy, awarded to Associate Professor Rachel Wynberg (Department of Environmental and Geographical Sciences), the other in Stable Isotopes in Archaeology and Paleo-environmental Studies, awarded to Professor Judy Sealy (Department of Archaeology). These two additions now bring the number of DST/NRF SARChI Research Chairs in the faculty to 10.

Staff of the faculty continued to garner national and international awards for their research contributions. Professor Jill Farrant of the Department of Molecular and Cell Biology received the L’Oréal-UNESCO Women in Science Award in Life Sciences (region: Africa and Arab States), at a ceremony in Paris in April 2012 for her work on desiccation tolerance in plants. Other notable achievements by staff in the faculty were the receipt of the prestigious Humboldt Foundation Georg Foster Research Award by Professor Daya Reddy (Department of Mathematics and Applied Mathematics), and the Humboldt Foundation In Memory of Neville Alexander Research Award received by Emeritus Professor Césareo Dominguez of the Physics Department. National honours went to Professor Anusuya Chinsamy-Turan (Department of Zoology), who was awarded the NRF Special Category Award for Transformation of the Science Cohort in recognition of her excellent research performance and international standing as a palaeobiologist, and Professor Kelly Chibale (Department of Chemistry), who received the NRF’s Champion of Research and Capacity Development at Higher Educational Institutions in South Africa Award. Professor Ed Rybicki, Department of Molecular and Cell Biology, was successful in obtaining a prestigious Harry Oppenheimer Trust award for his work on Rift Valley fever virus and Crimean-Congo haemorrhagic fever virus proteins in plants, as reagents and potential vaccines.

The quality and research performance of the academic staff in the Science faculty is ably supported by many highly skilled and dedicated administrative and technical staff. They make an invaluable contribution to the research endeavour of the faculty and their skills are critical to the wide range of exciting research activities reported on in this 2012 Research Report.
DOCTORAL GRADUATIONS

M. BIRD (ZOOLOGY)
Effects of habitat transformation on temporary wetlands in the Southwestern Cape, South Africa
Supervised by Associate Professor J. Day

R. BLAMEY (OCEANOGRAPHY)
Mesoscale convective complexes over Southern Africa
Supervised by Professor C. Reason

T. BOOM (MOLECULAR AND CELL BIOLOGY)
A biological study of the cellular response to heat stress in the South African alga Gracilaria gracilis
Supervised by Associate Professor V. Coyne and Dr S. Rafudeen

N.A.K. BROWNE (ENVIRONMENTAL AND GEOGRAPHICAL SCIENCE)
Model evaluation for seasonal forecasting over Southern Africa
Supervised by Professor B. Hewitson and Dr B.J. Abiodun

L.A. CORKER (PHYSICS)
Probabilistic methods applied to fluctuating systems
Supervised by Professor D.T. Britton

V.B.G. COSTA (ZOOLOGY)
Using stable isotopes as a tool to understand the trophic relationships and movements of seabirds off Southern Africa
Supervised by Associate Professor P.G. Ryan and Dr R. Wanless (Birdlife South Africa)

K. DAVIES (CHEMISTRY)
Characterisation and topological analysis of novel metal-organic frameworks
Supervised by Professor S. Bourne

S.J. DU PLESSIS (MOLECULAR AND CELL BIOLOGY)
Molecular characterisation of selected gastrointestinal microbiota in South African HIV-positive patients during HAART
Supervised by Associate Professor V. Abratt and Associate Professor S.J. Reid

E. DU TOIT (MOLECULAR AND CELL BIOLOGY)
The development of probiotics for use in the ostrich farming industry in South Africa
Supervised by Associate Professor S.J. Reid

J.L. EWART-SMITH (ZOOLOGY)
The relationship between periphyton, flow and nutrients in foothill rivers of the south-western Cape, South Africa
Supervised by Associate Professor J. Day and Dr J.M. King

M.R. GAMIELDIEN (CHEMISTRY)
Parameterization of the Gay-Berne coarse-grained potential from atomistically detailed anisotropic free energy volumes
Supervised by Professor K.J. Naidoo
R. GAUJOUX (MOLECULAR AND CELL BIOLOGY)  
Non-negative matrix factorization: tools and application to gene expression deconvolution  
Supervised by Professor C. Seoighe and Professor N. Mulder

D.M. HAREBOTTLE (ZOOLOGY)  
Assessing the conservation value of wetlands and waterbirds with a focus on the winter rainfall region of South Africa  
Supervised by Emeritus Professor L. Underhill and Dr T. Williams (Cape Nature)

N.C.G. HART (OCEANOGRAPHY)  
Synoptic-scale rainfall patterns over Southern Africa: scale interactions with large-scale modes of variability  
Supervised by Professor C. Reason and Dr N. Fauchereau (CSIR)

S. HOFMEYR (ZOOLOGY)  
Impacts of environmental change on large terrestrial bird species in South Africa: insights from citizen science data  
Supervised by Emeritus Professor L. Underhill and Dr P. Barnard (South African National Biodiversity Institute)

S.M. HUDDY (MOLECULAR AND CELL BIOLOGY)  
Development of a transformation protocol and cell culture system for the commercially important species of red macroalga Gracilaria gracilis  
Supervised by Associate Professor V. Coyne

V.O. IKORO (PHYSICS)  
A study of postgraduate students in an Astrophysics bridging year: identifying contradictions in a complex system  
Supervised by Associate Professor S. Allie and Professor D. Demaree (Physics, Oregon State University, USA)

R. JAYAKODY (CHEMISTRY)  
In silico investigation of the mechanism of ricin-catalysed depurination reaction and design of ricin inhibitors  
Supervised by Professor K.J. Naidoo

G.S. JOSEPH (ZOOLOGY)  
Understanding pattern-process relationships in a heterogeneous landscape: effects of large termitaria on diversity and disturbance regimes in Miombo woodlands of northern Zimbabwe  
Supervised by Professor G. Cumming and Honorary Professor D.H.M. Cumming

H. KAMBAFWILE (CHEMISTRY)  
Synthesis of activity-based protein profiling probes for malaria and hypertension disease models and potential novel ACE Inhibitors with an attenuated zinc binding group  
Supervised by Professor K. Chibale

M.J. KOTZE (ZOOLOGY)  
Olfactory responses of Dasineura dielsi Rübsaamen (Diptera: Cecidomyiidae) females to host plant volatiles  
Supervised by Professor A. Chinsamy-Turan and Dr A. Jürgens (University of KwaZulu-Natal)

M.M. KOTZE (ASTRONOMY)  
Exploring the super-orbital periodic behaviour of X-ray binaries  
Supervised by Professor P. Charles and Professor B. Warner

L. LANGE (ZOOLOGY)  
Use of demersal bycatch data to determine the distribution of soft-bottom assemblages off the West and South Coasts of South Africa  
Supervised by Professor C. Griffiths

S.M. MARR (ZOOLOGY)  
Conservation of the native freshwater fishes of the Cape floristic region (South Africa): management of non-native species  
Supervised by Associate Professor J. Day

E.M. MASINDE (COMPUTER SCIENCE)  
ITIKI: bridge between African indigenous knowledge and modern science on drought prediction  
Supervised by Dr A. Bagula and Professor N. Muthama (University of Nairobi)

M. MASUBELELE (BOTANY)  
Understanding the past to conserve the future: long-term environmental and vegetation change in the Karoo Midlands, South Africa, over the 20th century  
Supervised by Professor T. Hoffman and Professor W. Bond

A.L. MONJANE (MOLECULAR AND CELL BIOLOGY)  
Analysis of recombination and evolution of maize streak virus  
Supervised by Professor E. Rybicki, Dr D. Martin, Dr D. Shepherd and Dr A. Varsani
H.B.H. MOHAMED (MATHEMATICS AND APPLIED MATHEMATICS)
Properties of solutions of the equations for generalized Oldroyd-B fluids
Supervised by Professor B.D. Reddy

C. MOODLEY (MOLECULAR AND CELL BIOLOGY)
Molecular characterization of ABC-type multidrug efflux systems in Bifidobacterium longum subsp. longum T JCM 1217
Supervised by Associate Professor V. Abratt

J.M.W. MWICIGI (ZOOLOGY)
The distribution, formation, origins and constituents of nepheloid layers on the Agulhas bank, South Africa, and their implications for Chokka (Loligo Reynaudi) Squid
Supervised by Associate Professor M. Lucas and Dr M.J. Roberts (Oceans and Coasts, Environmental Affairs: DEA)

R.K. NAIDOO (MOLECULAR AND CELL BIOLOGY)
Investigation of the Gracilaria gracilis proteome response to nitrogen limitation
Supervised by Associate Professor V.E. Coyne

M. NDLOVU (ZOOLOGY)
Environmental influences on moult and movement strategies in Southern African waterfowl
Supervised by Professor G. Cumming and Professor P.A.R. Hockey

F.P.J. NEHAMÁ (OCEANOGRAPHY)
Modelling the Zambezi river plume using the regional oceanic modelling system
Supervised by Professor C. Reason

S.A. NICHOLSON (MOLECULAR AND CELL BIOLOGY)
The molecular characterisation of the recA locus in the opportunistic pathogen Bacteroides fragilis
Supervised by Associate Professor V. Abratt

P.M. NJOGU (CHEMISTRY)
Molecular hybrids of N-benzoyl-(2R, 3S)-3-phenylisoserine with antimalarial scaffolds: design, synthesis and biological evaluation for antitumoural and antimalarial activity
Supervised by Professor K. Chibale, Associate Professor D.T. Hendricks and Dr A. Jardine

S. NSUMIWA (CHEMISTRY)
Synthesis and investigation of quinolone based b-haematin formation inhibitors as potential antimalarials
Supervised by Professor T.J. Egan

S.S. NTSHANGASE (PHYSICS)
Development of a recoil detector and the study of exotic asymmetric shapes in nuclei
Supervised by Dr R.A. Bark (external) and Dr R. Bark (Nuclear Physics, iThemba LABS)

P.M. OKOUNA (MATHEMATICS AND APPLIED MATHEMATICS)
Aspects of dark energy and cosmic curvature
Supervised by Professor B. Bassett

O. OLELA OTAFUDU (MATHEMATICS AND APPLIED MATHEMATICS)
Convexity in quasi-metric spaces
Supervised by Professor H.-P. Kunzi

P. PILLAY (CHEMISTRY)
Antiplasmodial neolignans from Trema orientalis: identification, synthesis and analogue generation
Supervised by Professor K. Chibale and Dr V. Maharaj (CSIR)

A. POTTS (BOTANY)
Tracking thicket through space and time: insights into the evolutionary history of the Albany Subtropical Thicket from comparative phylogeography and distribution modelling
Supervised by Professor T.A. Hedderson and Professor R. Cowling (Nelson Mandela Metropolitan University)

C. POWELL (PHYSICS)
J/ψ production in heavy ion collisions at the STAR detector at RHIC
Supervised by Professor A. Peshier, Emeritus Professor J. Cleymans and Dr G. Odyniec (Lawrence Berkeley National Laboratory, USA)

R. RADEMEYER (MATHEMATICS AND APPLIED MATHEMATICS)
The evolution of management procedures for the South African hake resource in the 2000s
Supervised by Professor D. Butterworth and Dr É. Plagányi (CSIRO, Australia)

R. RAMSOUT (CHEMISTRY)
Investigation of the in vitro and in vivo effects of some herbal preparations on risk factors for calcium oxalate kidney stone disease
Supervised by Professor A.L. Rodgers

N. RAZAK (GEOLOGICAL SCIENCES)
An investigation into the effectiveness of a controlled source electromagnetic survey in locating petroleum resources offshore Equatorial Guinea
Supervised by Mr G.C. Smith

A.F. REDDY (MOLECULAR AND CELL BIOLOGY)
Characterisation of the effect of stress on nitrogen metabolism in the commercially important agarophyte Gracilaria gracilis
Supervised by Associate Professor V.E. Coyne
H.A.B. SALATA (ZOOLOGY)
Environmental factors influencing the distribution of bats (Chiroptera) in South Africa
Supervised by Professor D. Jacobs

M. SMART (MOLECULAR AND CELL BIOLOGY)
Flowering in Protea: a molecular and physiological study
Supervised by Dr L. Roden and Associate Professor M. Cramer

S. STATHOPOULOS (MOLECULAR AND CELL BIOLOGY)
The tangled history of olfaction in African mole-rats, Bathyergidae: insights from olfactory receptor genes
Supervised by Dr C. O’Ryan and Dr J.M. Bishop

T. SUNYUY (BOTANY)
The role of cone volatiles and thermogenesis in the pollination of Encephalartos cycads with particular reference to E.villosus
Supervised by Professor J.J. Midgley, Honorary Professor J. Donaldson (Botany and SANBI) and Professor S. Johnson (University of KwaZulu-Natal)

R.S. THELINGWANI (CHEMISTRY)
Integration of in silico and in vitro ADMET properties in lead identification and optimization of compounds for the treatment of parasitic diseases
Supervised by Professor K. Chibale, Honorary Professor C. Masimirembwa and Professor P. Smith

M. TUKULULA (CHEMISTRY)
The application of the Multi-Component Reaction (MCR) strategy in the design and synthesis of new antiplasmodial and antimycobacterial agents
Supervised by Professor K. Chibale

C.J. UYS (ZOOLOGY)
The impact of pine plantations and alien invertebrates on native forest and fynbos invertebrate communities in Table Mountain National Park
Supervised by Professor M. Picker and Professor C. Griffiths

C.K. WAINMAN (OCEANOGRAPHY)
Estimating the upper ocean vertical temperature structure from surface temperature as applied to the southern Benguela
Supervised by Professor F. Shillington

N.D. WATERMEYER (CHEMISTRY)
Design and synthesis of potential inhibitors of enzymes involved in thebiosynthesis and utilisation of mycothiol
Supervised by Associate Professor D.W. Gammon and Associate Professor D. Steenkamp

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RESEARCH CONTRACTS 145
VALUE OF RESEARCH CONTRACTS R47.55 million
NRF-RATED RESEARCHERS 152
SARCHI RESEARCH CHAIRS 11
ACCREDITED RESEARCH GROUPINGS 13
DOCTORAL GRADUATIONS 62
DHET-ACCREDITED JOURNALS 327.20 units
PEER-REVIEWED PUBLICATIONS 920
FILED PATENTS 28
GRANTED PATENTS 6
POSTGRADUATE STUDENTS 1015
POSTGRADUATE FUNDING R48 million
POSTDOCTORAL RESEARCH FELLOWS 124
POSTDOCTORAL RESEARCH FUNDING R22.2 million
F.P. WEwers (Chemistry)
Transition metal complexes of bis(diphenylphosphino)methane, dithizone and dithiolenes: structural, spectroscopic, electrochemical and computational studies
Supervised by Associate Professor A.T. Hutton

M.R. Wilhelm (Zoology)
Growth and otolith band formation of Namibian hake merluccius capensis
Supervised by Associate Professor A. Jarre and Associate Professor C.L. Moloney

D.S. Worku (Physics)
Statistical models to describe nuclear matter at high temperatures and densities
Supervised by Professor J. Cleymans

F. Zheng (Chemistry)
Olefin oligomerization reactions: theoretical studies using cyclometallated palladium(II) catalysts and experimental studies on platinum(II) analogues
Supervised by Associate Professor A.T. Hutton, Professor S.F. Mapole (Stellenbosch University) and Dr C.G.C.E. van Sittert (North-West University)

PATENTS

FILED APPLICATIONS

ARENDZE-BAILEY, B.L., ELLICK, T.N., IYER, K., IYER, R., RAFUDEEN, M.S. AND THOMSON, J.A.
Plant stress-inducible promoter.
Provisional Patent Application South Africa 2012/06750

BRITTON, D.T. AND HÄRTING, M.
A Thin Film Semiconductor Device and Method of Manufacturing a Thin Film Semiconductor Device.
Divisional Patent Application Japan 2012-015646

BRITTON, D.T. AND HÄRTING, M.
Flexible temperature and strain sensors.
Provisional Patent Application South Africa 2012/00709

BRITTON, D.T. AND HÄRTING, M.
Thermal Imaging Sensors.
Provisional Patent Application South Africa 2012/00708

BRITTON, D.T., HÄRTING, M. AND WALTON, S.D.
Current switching transistor.
Provisional Patent Application South Africa 2012/07163

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Large area temperature sensor.
Provisional Patent Application South Africa 2012/00771

CAIRA, M.R., DE VILLIERS, M.M., LIEBENBERG, W. AND STIEGER, N.
Injectable Formulation of a Reverse Transcriptase Inhibitor for the Treatment of Cancer
National Phase Patent Application Canada 2796620

CAIRA, M.R., DE VILLIERS, M.M., LIEBENBERG, W. AND STIEGER, N.
Injectable Formulation of a Reverse Transcriptase Inhibitor for the Treatment of Cancer
National Phase Patent Application Europe 11730445.1

CAIRA, M.R., DE VILLIERS, M.M., LIEBENBERG, W. AND STIEGER, N.
Injectable Formulation of a Reverse Transcriptase Inhibitor for the Treatment of Cancer
National Phase Patent Application South Africa 2012/07797

CAIRA, M.R., DE VILLIERS, M.M., LIEBENBERG, W. AND STIEGER, N.
Injectable Formulation of a Reverse Transcriptase Inhibitor for the Treatment of Cancer
National Phase Patent Application United States 13/696,472
CAIRA, M.R., LIEBENBERG, W. AND STIEGER, N.
Method for Producing a Composition.
National Phase Patent Application South Africa 2012/04410

CAIRA, M.R., LIEBENBERG, W. AND STIEGER, N.
Method of Producing a Polymorph Form.
National Phase Patent Application Brazil 11 2012 014762

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Method of Producing a Polymorph Form.
National Phase Patent Application China 201080061226.2

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CHIBALE, K., WATERSON, D., WITTY, M.J. AND YOUNIS, Y.
New Anti-Malarial Agents.
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Expression of Proteins in Plants.
Divisional Patent Application China 201210488322.6

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HITZEROTH, I.I., PINEO, C.B. AND RYBICKI, E.P.
HPV Chimaeric Particle.
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JACOBS, M. AND JARDINE, M.A.
Tricyclic Derivatives.
Provisional Patent Application South Africa 2012/08875

JARDINE, M.A.
Modified Chitosan for Argentation Chromatography.
Provisional Patent Application South Africa 2012/08014

JARDINE, M.A., MAKHUBELA, B.C.E. AND SMITH, G.S.
A Polymer Support.
National Phase Patent Application China 201080040614.2

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A Polymer Support.
National Phase Patent Application Europe 10842020.9

JARDINE, M.A., MAKHUBELA, B.C.E. AND SMITH, G.S.
A Polymer Support.
National Phase Patent Application India 2724/DNLNP/2012

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A Polymer Support.
National Phase Patent Application South Africa 2012/02047

JARDINE, M.A., MAKHUBELA, B.C.E. AND SMITH, G.S.
A Polymer Support.
National Phase Patent Application United States 13/496,116

JAYAKODY, R.S. AND NAIDOO, K.J
Ricin transition state analogue inhibitors.
PCT Patent Application PCT/IB2012/054999

LE, H.
Medium Access Control in Wireless Sensor Networks.
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CHIBALE, K., NCHINDA, A.T. AND STURROCK, E.D.
Angiotensin I-Converting Enzyme (ACE) Inhibitors.
National Phase Patent Application Europe 06765437.6

EGAN, T.J., HUNTER, R. AND ZISHIRI, V.K.
Quinoline Antimalarial Containing a Chloroquine Resistance Reversing Dibemethin Group.
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Expression of Proteins in Plants.
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ILLING, N., STEIN, D.J. AND VAN HEERDEN, J.H.
A Method of Diagnosing a Mental State.
National Phase Patent Application South Africa 2011/06540

RYBICKI, E.P. AND VARSANI, A.D.
Chimaeric Human Papillomavirus 16 L1 Virus Like Particles and a Method for Preparing the Particles.
Divisional Patent Application United States 12/174,104
Department of Archaeology
HEAD OF DEPARTMENT: PROFESSOR JUDITH SEALY

Departmental Profile

The Department of Archaeology is characterised by a diversity of well-established research interests. The Western Cape has a rich archaeological heritage which includes evidence of hunter-gatherer settlement, pastoralist communities and colonial settlers - all the subject of ongoing research. Further afield, the Department also has a research focus on the archaeology of early Tswana and Sotho-speaking agropastoralists, particularly in North West and the Free State. In addition, the Department is home to archaeometric and materials research, focussing on palaeoanthropology, past environments, early human diets and materials analysis. The Department of Archaeology has developed an expertise in Cultural Resource Management, working with both government and private sectors to mitigate the effects of development and widen public awareness of the importance of the past.

Departmental Statistics

Permanent and Long Term Contract Staff

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<th>Position</th>
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<tr>
<td>Professor</td>
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<td>Associate Professor</td>
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Honorary staff

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Students

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<td>Undergraduates</td>
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<td>Total</td>
<td>648</td>
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</tbody>
</table>
Distinguished visitors

PROFESSOR JACK FISHER
Montana State University – faunal remains in archaeology

DR ALEX MACKAY
Australian National University – Pleistocene lithic technology

PROFESSOR SUSAN PFEIFFER
University of Toronto – biological anthropology

PROFESSOR PIERRE-JEAN TEXIER
CNRS-Valbonne France – prehistory

DR GUILLAUME PORRAZ
CNRS, University of Paris 10 – Stone artefact technology of the Middle Stone Age

Emeritus Professors

PROFESSOR NIKOLAAS J. VAN DER MERWE
Isotopes, palaeoecology, palaeoenvironments, archaeometallurgy

PROFESSOR JOHN PARKINGTON
Hunter-gatherers, palaeoenvironmental reconstruction and human ecology, prehistoric art, coastal archaeology

Emeritus Associate Professor

ASSOCIATE PROFESSOR A. SMITH
Prehistoric pastoralism, origins of food production, ethnohistory

Honorary Research Associates

DR GRAHAM. AVERY
Archaeozoology

DR KYLE BROWN
Stone artefact studies, landscape archaeology

DR PER DITLEF FREDRIKSEN
Ceramics, ethnoarchaeology, archaeology of farming communities

MR PIETER JOLLY
Contact period rock art, history of San-Nguni/Sotho interaction

PROFESSOR TIM MAGGS
Iron Age archaeology in southern Africa

DR WEBBER NDORO
Heritage Studies

PROFESSOR SUSAN PFEIFFER
Biological anthropology

PROFESSOR LARISSA SWEDDELL
Primate studies

Contact Details
Postal address: Department of Archaeology, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 2353
Fax: +27 21 650 2352
E-mail: lynn.cable@uct.ac.za
Web: http://www.uct.ac.za/depts/age/

Research output

Chapters in books

Articles in Peer-reviewed Journals


Master’s degrees (by research)


Smuts, K. 2012. An archaeology of the eighteenth and nineteenth century Cape wine economy from the perspective of Solms Delta and Babylonstoren. MSc. 265pp. Supervised by Hall, S.


Department of Astronomy

HEAD OF DEPARTMENT: PROFESSOR RENÉE C. KRAANKORTEWEG

Departmental Profile
The Astronomy department has a strong focus on multi-wavelength (X-ray, optical, infrared, radio) observational astronomy with strengths in extragalactic astronomy (large-scale structures of galaxies, cosmic flows, galaxy evolution and star formation, galaxy clusters, galaxy dynamics and dark matter), stellar astrophysics (Cataclysmic variables, X-ray binaries, accretion disks in compact binaries, supernova remnants, stellar pulsations and stellar evolution) and astronomical instrumentation (high-speed CCD detectors).

The Department hosts two SARChI chairs, one in Astrophysics and Space Science (DST/NRF) and one in Extragalactic Multi-wavelength Astronomy (SKA). Staff in the Astronomy department lead four of the ten MeerKAT Large (legacy) Survey Projects, focussing on the study of explosive radio transients in our Galaxy and the nearby Universe (ThunderKAT), to the study of the gas dynamics in nearby galaxies (Mhongoose) and the evolution of galaxies and their gas content over cosmic time scales (MIGHTEE and Laduma).

The Astronomy department is part of the Research Centre for Astrophysics, Cosmology and Gravitation (ACGC) at UCT (http://www.acgc.uct.ac.za), established in 2009, and is an active participant of the National Astrophysics and Space Science Programme – hosted at UCT – which offers Honours and Master’s degrees. Strong links have been established with the South African Astronomical Observatory (SAAO) and the SKA South Africa project through joint staffing positions and postgraduate student supervision. The Department also enjoys active research collaborations with a range of national and international groups.

In 2012 the Astronomy department has welcomed Professor Thomas Jarrett, a new DST/NRF SARChI Chair in Astrophysics and Space Science, whilst Professor Erwin de Blok, DST/NRF SARChI Chair from 2007-2012 left the department in January 2012 to join ASTRON in the Netherlands. He was appointed Honorary Professor to the Department from July 2012, and is still active in research and student supervision. Our postdoctoral cohort has continued to grow from eight in 2011 to twelve in 2012.

Departmental Statistics

Permanent and long-term contract staff

<table>
<thead>
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<th>Position</th>
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<tbody>
<tr>
<td>Professors</td>
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Honorary & Emeritus Staff

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Affiliated Researchers

Honorary Professors 2
Honorary Academic 1
Total 3
Postdoctoral Fellows 12
Total 12

Students

Doctoral 16
Master's (Research) 2
Master's (NASSP Dissertation) 16
Master's (NASSP Coursework) 19
Honours (NASSP) 20
Undergraduate 129
Total 202

Research Fields and Staff

Permanent Staff

PROFESSOR RENÉE C. KRAAN-KORTEWEG (HEAD OF DEPARTMENT), CO-DIRECTOR ACGC
Large-scale structures and streaming motions in the nearby Universe, the Zone of Avoidance, systematic HI-surveys, evolution and transformation of galaxies.

PROFESSOR CLAUDE CARIGNAN (SKA SARCHI CHAIR)
Galaxy dynamics and dark matter; astronomical instrumentation and techniques.

PROFESSOR THOMAS JARRETT (DST/NRF SARCHI CHAIR)
Galaxy evolution and star formation, large-scale structure and bulk-flow motions in the local Universe, astrophysical databases and large data sets.

PROFESSOR PATRICIA WHITELOCK (JOINT SAAO/UCT POSITION)
Galactic structure, stellar evolution, Local Group galaxies, long period variable and symbiotic stars.

EMERITUS DISTINGUISHED PROFESSOR BRIAN WARNER (SENIOR SCHOLAR)
Cataclysmic variable stars, white dwarf stars, history of astronomy.

ASSOCIATE PROFESSOR PATRICK A. WOUDT
Cataclysmic variable stars, ultra-compact binaries, high time domain astrophysics.

DR KURT VAN DER HEYDEN (SENIOR LECTURER)
Supernovae and Supernova remnants, systematic HI surveys, clusters of galaxies, X-ray spectroscopy.

DR SARAH BLYTH (LECTURER)
Large-scale structure, galaxy evolution and galaxy clusters, HI-surveys.

DR VANESSA McBRIDE (LECTURER, JOINT SAAO/UCT POSITION)
X-ray binaries, Magellanic Clouds.

PROFESSOR ROB FENDER (VISITING SKA PROFESSOR)
X-ray binaries, neutron stars, black holes, accretion disks, radio transient surveys.

Honorary Staff in the Department

HONORARY PROFESSOR MICHAEL W. FEAST & HONORARY RESEARCH ASSOCIATE
Stellar evolution, Galactic structure, long-period variable stars, distance scale.

Honorary Staff Associated with the Department

HONORARY PROFESSOR PHIL A. CHARLES (UNIVERSITY OF SOUTHAMPTON)
Cataclysmic variables, X-ray binaries, neutron stars, black holes, accretion disks.

HONORARY PROFESSOR ERWIN DE BLOK (ASTRON, NL)
Dark matter in disk galaxies, low-surface brightness galaxies, HI surveys, the interstellar medium in nearby galaxies, evolution of dark galaxies.

PROFESSOR PETER DUNSBY
Honorary Academic, Director NASSP, Co-director ACGC
Theoretical cosmology and gravity.

Postdoctoral Fellows

DR GARRY ANGUS
Cosmological simulations with modified Newtonian Dynamics.

DR RICHARD ARMSTRONG
Radio transients, radio interferometric techniques.

DR MACIEJ BILICKI
Cosmology, large-scale structure of the Universe, cosmic density and velocity fields, redshift and peculiar velocity surveys, cosmic flows.
Angus, G., Van Der Heyden, K. and Diaferio, A. 2012. The dynamics of the bulge dominated galaxy NGC 7814 in MOND. Astronomy & Astrophysics, 543: A76.


Contact Details
Postal Address:
Department of Astronomy
University of Cape Town
Private Bag X3
Rondebosch
7701

Telephone: +27 (21) 650 5830
Fax: 27 (21) 650 4547
E-mail: admin@ast.uct.ac.za
Webpage: http://www.ast.uct.ac.za

Research output
Articles in Peer-reviewed Journals


Peer-reviewed published conference proceedings


Department of Botany

(Including the Bolus Herbarium and the Plant Conservation Unit)

HEAD OF DEPARTMENT: PROFESSOR JEREMY J. MIDGLEY

Departmental Profile

Botany is a vibrant department, which strives towards the development of a centre of excellence for research and teaching of the ecology, evolution, physiological ecology and systematics of marine and terrestrial plants of southern Africa. The department includes two research units, the Bolus Herbarium and the Plant Conservation Unit, and is also home to the Department of Environmental Affairs & Tourism Chief Directorate: Marine & Coastal Management. Research thrusts include plant population, community and reproductive ecology, systematics, floristics, biogeography and evolutionary biology of the unique Cape Floral Kingdom and its response to different land use practices, ecology and economics of marine and freshwater algae, the ecophysiology of plant responses to pollution and global change, the physiology of plant nitrogen-fixing symbioses and dendrochronology and palaeoecology. The Plant Conservation Unit focuses on sustainable land use, restoration and palaeoecology/environmental history with an emphasis on the conservation of the vegetation of the winter rainfall region of South Africa, while the Bolus Herbarium is researching the taxonomy of and curating a specimen collection of over a third of a million southern African species. The staff are also active on Research Councils, policy-making forums and advisory committees.

Departmental Statistics

Permanent and long-term contract staff

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Honorary Staff

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Research Fields and Staff

Permanent staff

PROFESSOR JEREMY MIDGLEY
Head of Department; plant ecology; evolutionary biology; forest ecosystem dynamics.

PROFESSOR JOHN J. BOLTON
Phycology; marine and freshwater biology; mariculture.

PROFESSOR WILLIAM J. BOND
Plant ecology; evolutionary biology; conservation biology; fire and community dynamics.

DR SAMSON B. CHIMPHANGO
Physiology; nitrogen fixation.

ASSOCIATE PROFESSOR MICHAEL D. CRAMER
Physiology; ecophysiology; plant nutrition.

DR EDMUND FEBRUARY
Senior Lecturer; palaeoecology; ecophysiology.

DR LINDSEY GILLSON
Deputy Director of the Plant Conservation Unit: conservation ecology; palaeoecology; theoretical ecology; landscape history.

PROFESSOR TERRY HEDDERSO
Plant systematics; bryology; molecular systematics; life history traits.

PROFESSOR M. TIMM HOFFMAN
Director of the Plant Conservation Unit: plant ecology; conservation biology; community ecology; biodiversity.

DR A. MUTHAMA MUASYA
Senior Lecturer: plant systematics; molecular systematics; biogeography.

DR ANTHONY G. VERBOOM
Senior Lecturer: Plant systematics, ecophysiology, biogeography.

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Students

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Honorary Professors

PROFESSOR RICHARD COWLING
Plant ecology; conservation biology; community ecology; biodiversity.

PROFESSOR JOHN S. DONALDSON
Biodiversity.

PROFESSOR PETER LINDER
Systematics; taxonomy; evolutionary biology.

Honorary Associate Professors

ASSOCIATE PROFESSOR ROBERT J. ANDERSON
Phycology.

Honorary Research Associates

DR N. ALLSOFP
Ecophysiology

DR N. BERGH
Systematics

DR P. CARRICK
Restoration ecology

DR B HARDING
Phycology

DR S. HIGGINS
Ecosystems Ecology.

DR A.G. REBELO
Ecology.

DR R. ROHDE
Environmental Historian.

DR G. SCOTT
Systematics.

DR A. SEYDACK
Forest Ecology.

PROFESSOR C. STIRTON
Plant Systematics.

Research output

Chapters in books


Articles in Peer-reviewed Journals


Doctoral dissertations


Department of Chemistry

(Including the Centre for Supramolecular Chemistry Research, the MRC/UCT Drug Discovery & Development Research Centre and the Scientific Computing Research Unit)

HEAD OF DEPARTMENT: PROFESSOR SUSAN A. BOURNE

Departmental Profile

The research activities of the department reflect the wide range and scope of the traditional sub-disciplines of inorganic, organic and physical chemistry, sustained by analytical, spectroscopic and computational methodology. The four main research focus areas are synthetic and medicinal chemistry, supramolecular chemistry, transition metal chemistry as well as biophysical and structural chemistry. Programmes are devoted to fundamental and applied chemical research, and to interdisciplinary studies in which chemistry plays a key role. Synthetic studies are carried out in organic, organometallic and co-ordination chemistry, in order to develop and apply new methodology, and to prepare biologically active compounds, novel catalysts and components of new materials. These studies also provide tools for analytical and separation science, and models for advanced structural and conformational studies. Molecular structure determination with the aid of spectroscopic and X-ray diffraction techniques are two areas of specialisation in the department. Computational chemistry is a leading area of specialization supported by several state of the art LINUX clusters. Computer code development and modelling applications of biological and industrial problems play a key role in many of the Department’s research programmes. There is also an active research thrust in the area of chemistry education, with a particular focus on student learning in tertiary level chemistry courses.

The Department of Chemistry is home to three UCT-accredited research units

The Centre for Supramolecular Chemistry Research, CSCR (Dir. Prof. Mino Caira) studies the physical chemistry of supramolecular systems. Research projects include the synthesis and characterization of metal organic frameworks (MOFs) and large metal-containing supramolecular assemblies with the potential for guest uptake (gas storage, molecular sensing), the study of selectivity in organic host-guest systems, and the beneficiation of pharmaceutically relevant materials.
through the investigation of their polymorphs, solvates, cyclodextrin inclusion complexes and cocrystals. Solid phases are studied using powder and single crystal X-ray diffraction, thermal analysis (including TGA and DSC) and spectroscopy (FTIR and solid-state NMR techniques). The thermodynamics of inclusion and complexation processes in solution are investigated by high-resolution NMR spectroscopy and isothermal titration calorimetry.

The MRC/UCT Drug Discovery & Development Research Centre, H3D (Dir. Prof. Kelly Chibale) aims to bridge the gap between basic and clinical studies, training a new generation of African scientists with key skills required for drug discovery and development — integrating medicinal chemistry, biology, pharmacology as well as drug metabolism and pharmacokinetics (DMPK) studies as reflected in the processes of Absorption, Distribution, Metabolism and Excretion (ADME). H3-D also focuses on beneficiation of clinically used drugs, including generic medicines. Drug beneficiation, amongst other things, involves selection of the optimum form of a solid drug candidate for pharmaceutical development and (re)formulation.

The Scientific Computing Research Unit, SCRU (Dir. Prof. Kevin J. Naidoo) develop state-of-the-art high performance computing (HPC) software as well as providing a modelling and informatics platform for applications in chemistry and chemical biology. SCRU’s research activities include the development of software acceleration for life science applications. This aspect the unit’s research is supported by hardware giant Nvidia Corporation. SCRU’s specialised HPC facility houses the South Africa’s most sophisticated scientific compute servers and GPU clusters designed for chemical and chemical biology applications. The specific objectives of the unit are to trace gene-to-glycan biochemical schemes important in glycobiology as well as model enzyme catalysed chemical reactions and ionic liquids.

The research enterprise of the Department of Chemistry is significantly enhanced by the appointment of two of its permanent staff members to DST/NRF South African National Research Chairs - Professor Kevin Naidoo in Scientific Computing and Professor Kelly Chibale in Drug Discovery. These highly prestigious appointments have raised the Department’s international research profile significantly and contribute substantially to its research outputs.

Departmental Statistics

Permanent and long-term contract staff

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<th>Position</th>
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<td>Scientific Officers</td>
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Honorary Staff

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<td>Honorary Research Associates</td>
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Students

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Research Fields and Staff

Permanent and long-term contract staff

**PROFESSOR SUSAN A. BOURNE**
Inclusion chemistry; crystallography; thermal analysis.

**PROFESSOR MINO R. CAIRA**
Solid state chemistry; drug polymorphism; drug pseudopolymorphism; drug-cyclodextrin inclusion; drug complexation; co-crystallization; drug enantiomeric separation.

**PROFESSOR KELLY CHIBALE**
Organic synthesis; medicinal chemistry.

**ASSOCIATE PROFESSOR BETTE DAVIDOWITZ**
Chemical education; curriculum design; writing and communication within the discipline.
PROFESSOR TIMOTHY J. EGAN
Bioinorganic chemistry of the malaria parasite.

ASSOCIATE PROFESSOR DAVID W. GAMMON
Natural products chemistry; phytochemical studies on medicinal plants; carbohydrates; heterogeneous catalysis of organic reactions.

PROFESSOR ROGER HUNTER
Synthesis; indole alkaloids; calixarenes; p-block synthetic methodology.

ASSOCIATE PROFESSOR ALAN T. HUTTON
Organometallic chemistry; co-ordination chemistry; microwave chemistry; electrochemistry.

PROFESSOR GRAHAM E. JACKSON
Nuclear magnetic resonance; computer modelling; metal-ion equilibria; design of metal containing drugs; copper and rheumatoid arthritis.

DR ANWAR JARDINE
Senior Lecturer: medicinal chemistry; chemical biology; enzymology; natural product and organic synthesis; drug design and development.

PROFESSOR KEVIN J. NAIDOO
Computational chemistry; polymers; statistical physics; pharmaceutical drug design.

DR CLIVE OLIVER
Lecturer: self-assembly; large supramolecular assemblies; crystallography; inclusion chemistry.

ASSOCIATE PROFESSOR NEIL RAVENSCROFT
Physicochemical analysis of biologicals; carbohydrates; glycoconjugate and protein vaccines.

DR GREGORY S. SMITH
Senior Lecturer: organometallic chemistry; catalysis; metal-containing polymers and dendrimers; bio-organometallic chemistry.

DR GERHARD VENTER
Lecturer: computational chemistry; electronic structure calculations; free energy methods for properties of solutions; ionic liquids.

DR SARAH WILSON
Senior Lecturer.

Senior Scholars
PROFESSOR LUIGI R. NASSIMBENI
Physical chemistry; thermal analysis; kinetics; inclusion compounds.

PROFESSOR ALLEN L. RODGERS
Kidney stones; urine chemistry; calcium oxalate crystallization.

Honorary Research Associates
DR SHIRLEY C. CHURMS
Writing and communication within the discipline.

PROFESSOR RAYMOND J. HAINES
Organometallic chemistry.

DR ELIZABETH TIMME
Assessment of possible immuno-modulatory carbohydrates from local and indigenous plants and fungi.

Emeritus Professors
PROFESSOR JAMES R. BULL
Organic synthesis; steroidal hormones; 19-norsteroids; estrogens; bioactive steroids; predictive design; cycloaddition.

PROFESSOR PETER W. LINDER
Solution equilibria of cyclodextrin inclusion complexes.

PROFESSOR ALISTAIR M. STEPHEN
Carbohydrate chemistry.

Research Associate
DR GAËLLE RAMON
Supramolecular Chemistry; Inclusion Compounds; Metal Organic Frameworks; Crystal Engineering

Postdoctoral Fellows
DR YASSIR YOUNIS ADAM
Hit to Lead and Lead Optimization Medicinal Chemistry
Progression of Antimalarial Hits

DR ANDREW ANDAYI
New generation of combined drugs to fight tuberculosis

DR CHRIS BARNETT
Development of High Speed Informatics and Simulation Tools for Applications in Glycobiology

DR NYARADZO CHIGORIMBO-TSIKIWA
Biocatalytic modification of natural compounds for metabolite analysis.

DR DYANNE CRUICKSHANK
Beneficiation of Bioactive Compounds via Supramolecular Chemistry
**Registic Studies**

**DR FREDERIC DOUELLE**
Hit to lead and lead optimization medicinal chemistry progression of antimalarial hits.

**DR MARLENE ELIZABETH ESPINOZA MORAGA**
Hit to Lead and Lead Optimization Medicinal Chemistry Progression of Antimalarial Hits

**DR TZU-SHEAN FENG**
New generation of combined drugs to fight tuberculosis

**DR RIEADA GAMIELDIEN**
Hybrid algorithms, Hybrid Architecture on a distributed highly available Protein Server for Structure Prediction, Functional Exploration and Gene Signatures

**DR RICHARD KLAUS GESSNER**
New generation of combined drugs to fight tuberculosis

**DR DEREK DOUELLE**
New generation of combined drugs to fight tuberculosis

**DR EMMA HAGER**
The Synthesis of Water-Soluble Metallodendrimers for Use as Catalysts in Olefin Transformation Reactions

**DR ZE HAN**
Hit to lead and lead optimization medicinal chemistry progression of antimalarial hits.

**DR AHMAD HUSAIN**
Crystal engineering of large supramolecular assemblies and metal-organic frameworks

**DR CLAIRE LE MANACH**
Hit to lead and lead optimization medicinal chemistry progression of antimalarial hits.

**DR STEFAN LOUW**
Synthesis of novel artemisinin hybrid anti-malarial drugs.

**DR BANOTHILE CHARITY EVENTS MAKHUBELA**
Development of Water-Soluble Metallodendrimers for Biphasic Catalysis and as Novel Bioorganometallic Drugs

**DR JESTIN MANDUMPAL**
Development of coarse grain molecular dynamics software for protein folding

**DR MAIA MEURILLON**
New generation of combined drugs to fight Tuberculosis.

**DR GRACE MUGUMBA**
Application of in silico Tools to the discovery of novel anti-infective agents.

**DR DUBEKILE NYONI**
The Design and Development of Novel Ruthenium, Rhodium and Iridium Dendritic Multinuclear Complexes for Use in Medicinal Bio- and Nanotechnology

**PAQUET, TANYA**
Hit to Lead and Lead Optimization Medicinal Chemistry Progression of Antimalarial Hits

**DR MARIVEL SAMIPILLAI**
Selectivity in Host-guest Systems

**DR RAJNI SHARMA**
Synthesis of N domain selective ACE inhibitors.

**DR KAWALJIT SIGH**
Towards the synthesis of reversed anti-tuberculosis agents and hybrid bacterial efflux pump inhibitors

**DR CANDICE SOARES DE MELO**
New generation of combined drugs to fight tuberculosis

**Contact details**
Tel: +27 21 650 2446  
Fax: +27 21 650 5195  
e-mail: shanaaz.manie@uct.ac.za  
web: http://www.uct.ac.za/depts/cem

**Research output**

**Edited books**

**Chapters in books**


Articles in Peer-reviewed Journals


Thelingwani, R.S., Dhansay, K., Smith, P., Chibale, K. and Masimirembwa, C.M. 2012. Potent inhibition of CYP1A2 by frutinone A, an active ingredient of the broad spectrum antimicrobial herbal extract from Pfruticosa. Xenobiotica, 42(10): 989-1000.


Doctoral dissertations


Jayakody, R.S. 2012. In silico investigation of the mechanism of ricin-catalysed depurination reaction and design of novel ricin inhibitors. 210pp. Supervised by Naidoo, K.J.


Malatji, P. 2012. Studies towards degradable polymers: new zinc(II) and palladium(II) complexes as catalysts for lactide polymerization and carbon monoxide/styrene
copolymerization. 188pp. Supervised by Hutton, A.T. and Coville, N.J.


Pillay, P. 2012. Antiplasmodial neolignans from trema orientalis-identification, synthesis and analogue generation. 228pp. Supervised by Chibale, K. and Maharaj, V.


Thelingwani, R.S. 2012. Integration of in silico and in vitro ADMET properties in lead identification and optimization of compounds for the treatment of parasitic diseases. 204pp. Supervised by Chibale, K., Masimirembwa, C. and Smith, P.

Tukulula, M. 2012. The application of the multi-component reaction (MCR) strategy in the design and synthesis of new antiplasmodial and antimycobacterial agents. 239pp. Supervised by Chibale, K.


Master’s degrees (by research)


Nengwekhu, T.M. 2012. Computer simulations of a chromatographic column used in the separation of platinum group metal chlorinated complexes. MSc. 95pp. Supervised by Naidoo, K.J. and Venter, G.A.
preservation. The High Performance Computing Laboratory applies GPU programming and high throughput computing to areas such as scientific computing, visualisation and information retrieval, particularly in the domains of cultural heritage, radio astronomy and computational chemistry. The Intelligent Systems and Advanced Telecommunications Laboratory focuses on wireless sensor networks; and the Network and Information Security Laboratory on algorithms and systems for safe and secure information access.

ICT is an enabling technology, and thus highly cross-disciplinary. The UCT Centre in ICT for Development seeks to design, create and evaluate technologies that address the needs of the developing world, and to study the impacts of existing technology. This centre also includes staff from diverse UCT departments, such as Civil Engineering and Film and Media. It is closely associated with the Hasso-Plattner Research School in ICT for Development, through which the Hasso-Plattner Institute (Germany) funds African PhD students working in ICT for Development. The Samsung Mobile Innovation Lab is a joint Information Systems – Computer Science unit. The Telkom-Siemens Centre of Excellence in ATM and Broadband Networks and their Applications includes UCT’s Communications Group Laboratory in Electrical Engineering and the Departments of Computer Science at UCT and at Stellenbosch University.

### Departmental Statistics

#### Permanent Staff

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#### Adjunct & Honorary Staff

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#### Students

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<td><strong>Total</strong></td>
<td><strong>1155</strong></td>
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</tbody>
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---

### Research Fields and Staff

#### Permanent Academic Staff

**DR ANTOINE BAGULA**  
Traffic Engineering; Network Engineering; Network Security; Internet of Things

**ASSOCIATE PROFESSOR SONIA BERMAN**  
Head of Department; Data management

**PROFESSOR EDWIN BLAKE**  
ICT for Development; Human-Computer Interaction; User Experience in Games and Virtual Environments

**ASSOCIATE PROFESSOR JAMES GAIN**  
Computer Graphics; High Performance Computing; Visualisation

**DR ANNE KAYEM**  
Information Security

**ASSOCIATE PROFESSOR MICHELLE KUTTEL**  
Computational Science; Parallel Processing; Scientific Visualisation and Design

**DR HANH LE**  
Networks; Distributed Computing

**DR PATRICK MARAIS**  
Computer Graphics; Image Processing, GPU Computing

**PROFESSOR GARY MARSDEN**  
Mobile Interaction Design, ICT for Development

**DR AUDREY MBOGHO**  
Human Language Technologies; e-Health; Intelligent Systems and User Interfaces

**DR GEOFF NITSCHKE**  
Artificial Intelligence; Co-evolution; Robotics

**ASSOCIATE PROFESSOR HUSSEIN SULEMAN**  
Digital Libraries; Information Retrieval; Internet technology; High Performance Computing; Computer Science Education

#### Administrative and Support Staff

**MRS SALEGGA VALLEY**  
Administrative Officer

**MRS EVE GILL**  
Administrative Assistant
MRS THELMA JENNEKER
Senior Secretary

MS BERNIE SAM
Departmental Assistant

MR ADEMOLA ADEKAYODE
Computer Systems Administrator

MR CRAIG BALFOUR
Computer Systems Administrator

Postdoctoral Fellows

DR BRUCE MERRY
Computer Graphics

Adjunct and Honorary Professors

HONORARY PROFESSOR JUDITH BISHOP
Software Engineering; Programming Languages; Distributed Systems

ADJUNCT PROFESSOR ANDREW HUTCHISON
Information Security

Contact Details
Postal address: Department of Computer Science, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: SA (21) 650 2663
Fax: SA (21) 650 3551
Email: dept@cs.uct.ac.za
Web: http://www.cs.uct.ac.za/

Research Output
Chapters in books


Articles in Peer-reviewed Journals


Peer-reviewed published conference proceedings


**Doctoral dissertations**

Masinde, E.M.I. 2012. ITIKI: Bridge between African indigenous knowledge and modern science on drought prediction. Supervised by Bagula, A.B.

**Master’s degrees (by research)**

Allen, S.L. 2012. Analyzing the impact of mobile technology on mobile-centric youth in South Africa. Supervised by Marsden, G.


Erasmus, D.J. 2012. Video quality requirements for South African sign language communications over mobile phones. Supervised by Blake, E.

Fisher, M. 2012. Performance benchmarking physical and virtual linux environments. Supervised by MacGregor, K.J.


Isafiade, O.E. 2012. Drivable region detection for autonomous robots applied to South African underground mining. Supervised by Bagula, A.B.


Koletka, R. 2012. An architecture for secure searchable could storage. Supervised by Hutchison, A. M.


Mohamed Nour, M. 2012. An end-to-end solution for complex open educational resources. Supervised by Suleman, H.


Swanepoel, A.W. 2012. The design of a mobile user interface for an interest rate calculator. Supervised by Marsden, G.

Talbot, M.J. 2012. SHOP-Net: Moving from paper to mobile. Supervised by Marsden, G.


Department of Environmental and Geographical Science

(Including the Environmental Evaluation Unit)

HEAD OF DEPARTMENT: PROFESSOR MICHAEL E. MEADOWS

Departmental Profile

Major research themes covered by staff in the department reflect the interaction between humans and their environment and the variability of this environment, and the dynamic socio-economic and political conditions affecting society as a whole. Members of staff in the department draw empirical evidence from Africa to explore and engage these themes at various scales ranging from the global to the national, while also paying attention to specific challenges of reconstruction and development in South Africa. Much of the current research is focused on climate change, adaptation and modelling; ecology and society; environmental impact assessment; Quaternary palaeoenvironments, geomorphology and remote sensing; theories, policies and practices in natural resource governance and management; biodiversity conservation and benefit sharing; and urban theory, policy and planning.

The department has ongoing research initiatives and collaboration with dozens of institutions that are spread across six continents. It has strong working relationships with institutions in five countries in Africa (Botswana, Kenya, Liberia, Mozambique, and Tanzania); five countries in Asia (China, India, Indonesia, Japan and Sri Lanka); eight countries in Europe (France, Germany, Ireland, Italy, Netherlands, Spain, Sweden and United Kingdom); two countries in North America (Canada and the United States); and one country in South America (Brazil).

The Environmental Evaluation Unit was established as an independent professional consulting, research and training unit within the Department of Environmental and Geographical Science in 1985, based at the University of Cape Town. During the past 20 years, the EEU has completed over 150 consulting assignments and projects for private, institutional and government clients. The EEU has established itself as a centre of excellence in the field of environmental management, sustainable development, and natural resource management in Africa, particularly within the SADC region (projects have been completed in South Africa, Botswana, Namibia, Mozambique, Lesotho, Swaziland and the Seychelles).

Departmental Statistics

Permanent and Long-term Contract Staff

<table>
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<tr>
<th>Position</th>
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<tbody>
<tr>
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Emeritus & Honorary Staff

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<td>Honorary Professors</td>
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</table>
Research Fields and Staff

Permanent Academic Staff

DR BABATUNDE ABDUN
Lecturer; Atmospheric Science, Climatology

DR PIPPIN ANDERSON
Lecturer; Postgraduate co-ordinator

DR SHARI DAYA
Lecturer; Gender, Modernity

DR FRANK ECKARDT
Senior Lecturer; Geomorphology, Remote Sensing

PROFESSOR BRUCE HEWITSON
Chair in Climate Change
Atmospheric Science, Climatology

DR RICHARD HILL
Senior Lecturer; Environmental Assessment and Management

DR PETER JOHNSTON
Research Officer; Seasonal Forecasting Applications; Climate Change

PROFESSOR MIKE MEADOWS
Head of Department; Quaternary Environmental Change

ASSOCIATE PROFESSOR SOPHIE OLDFIELD
Political and Economic Geography

PROFESSOR SUE PARNELL
Urban Studies, Historical Geography

DR ZARINA PATEL
Senior Lecturer; Environmental governance and politics

ASSOCIATE PROFESSOR MAANO RAMUTSINDELA
Political Geography, Transnational Regionalism

ASSOCIATE PROFESSOR MERLE SOWMAN
Environmental Planning and Management, Coastal and Small-Scale Fisheries Management

DR KEVIN WINTER
Lecturer; Environmental Management, Water Resources, Monitoring and Evaluation

ASSOCIATE PROFESSOR RACHEL WYNBERG
SARChI Chair in Environmental and Social Dimensions of the Bio-economy Biodiversity and Social Justice, Commercial Use of Biodiversity, Access and Benefit Sharing; Genetic Resources for Food and Agriculture

DR GINA ZIERVOGEL
Senior Lecturer; Vulnerability and Adaptation

Long-term Contract Staff

DR MARIA HAUCK
Coastal and Small-Scale Fisheries Management

Contract Research Staff

MS LISA COOP
Research Assistant; Climate Data Analysis

MR CHIMANGO HARA
Intern; Environmental Law

MS PHILELE NONHLANHLA MBATHA
Junior Researcher; Coastal and Marine Management

DR BRADLEY RINK
Human Geography

MS KIRSTEN SCOTT
Research Assistant; EIA, Social Scoping Reports

MS ANNA STEYNOR
Research Associate; Stakeholder Engagement

MS JACKIE SUNDE
Research Assistant; Fisheries

MS KATE SUTHERLAND
Research Assistant; Climate Data Analysis

MS MATHILDA JACI VAN NIEKERK
Research Assistant; Biodiversity and Social Justice, Commercial Use of Biodiversity, Access and Benefit Sharing

MS RUWANI WALAWEGE
Research Assistant; Climate Data Analysis

DR PIOTR WOLSKI
Senior Researcher; Hydrology

Administrative and Support Staff

MRS SHARON ADAMS
Administrative Officer

MR ALDINO ARENDSE
Administrative and Financial Co-ordinator
Honorary Professors

PROFESSOR JOHN BOARDMAN
Soil Erosion, Land Degradation

PROFESSOR JONATHAN CRUSH
International Migration, Transnationalism

PROFESSOR DAVE THOMAS
Arid Zone Geomorphology, Quaternary Science

Research Associates

DR LAURENCE NATHAN
DR DAVID FIG

Emeritus Staff

PROFESSOR RON DAVIES
PROFESSOR RICHARD FUGGLE

Contact Details

Postal address: Department of Environmental and Geographical Science, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: SA (21) 650 2873/4
Fax: SA (21) 650 3456

Research output

Edited books


Chapters in books


Articles in Peer-reviewed Journals


Peer-reviewed published conference proceedings


Doctoral dissertations

Browne, N. 2012. Model evaluation for seasonal forecasting over southern Africa.110pp. Supervised by Hewitson, B.C.

Master’s degrees (by research)


Chasi, V. 2012. Tracing the progression of measles outbreak risk: an exploratory and descriptive study of the City of Cape Town, South Africa. MPhil Disaster Risk Science. 183pp. Supervised by Coetzee, D.J. and Holloway, A.
Cooke, K. 2012. Urban food access: a study of the lived experience of food access within a low-income community in Cape Town. MSoC. 170pp. Supervised by Battersby-Lennard, J.E.


Dhlembeu, R. 2012. Testing the use of the BASINS PLOAD model to simulate the quality of stormwater runoff from the Kuils River catchment, Cape Town. MSc. 118pp. Supervised by Winter, K.J.


Israel, A. 2012. The landscape pattern surrounding the Venda sacred site of Thathe forest. MPhil Environmental Management. 102pp. Supervised by Sowman, H.

Kinyanjui, R. 2012. Phytolith analysis as a palaeoecological tool for reconstructing mid-to late-pleistocene environments in the Olorgesailie basin, Kenya. MSc. 130pp. Supervised by Meadows, M.E.


Rumble, J. 2012. Collaborative environmental governance in agriculture: a case-study from the Breede Valley. MPhil Environmental Management. 120pp. Supervised by Hill, R.C.

Takalani, T.E. 2012. A spatial analysis of the alternative admissions research project at the University of Cape Town, 2000-2005. MSc. 113pp. Supervised by Meadows, M.E.


Department of Geological Sciences

HEAD OF DEPARTMENT: PROFESSOR STEPHEN RICHARDSON

Departmental Profile

Research in the Department of Geological Sciences covers a wide range of disciplines. The Department has strengths in geochemistry, structural geology and tectonics, igneous and metamorphic petrology, sedimentology, marine geology, economic geology and petroleum geophysics. General research interests include: global tectonics and geodynamics with emphasis on Gondwana geology; oceanic and continental igneous processes and the geochemical evolution of the underlying mantle; kimberlites and the genesis of diamonds; evolution of the Kaapvaal craton and gold genesis; paleoenvironments; marine geoscience and sedimentary geochemistry. Analytical facilities include X-ray fluorescence, X-ray diffraction, electron microprobe, fluid inclusion stage, stable isotope extraction lines and
access to a stable isotope mass spectrometer, quadrupole (single collector) and magnetic sector (multi-collector) inductively coupled plasma mass spectrometers (solution and laser analysis) and associated clean laboratories.

Departmental Statistics
Permanent and long-term contract staff

<table>
<thead>
<tr>
<th>Staff Category</th>
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<tr>
<td>Professors</td>
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<td>Associate Professors</td>
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<td>Senior Lecturers</td>
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<td>Lecturers</td>
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<td>Technical Support Staff</td>
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<td>Administrative &amp; Clerical Staff</td>
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Honorary staff

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<tr>
<td>Honorary Research Associates</td>
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<td>Emeritus Professors</td>
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Students

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<th>Student Category</th>
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<td>Master’s</td>
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Research Fields and Staff
Permanent staff

**PROFESSOR STEPHEN RICHARDSON**
Head of Department; Isotope geochemistry; geochronology; diamonds; continental mantle evolution.

**PROFESSOR ANTON LE ROEX**
Dean of Science; Igneous geochemistry; analytical geochemistry; mantle evolution.

**PROFESSOR CHRIS HARRIS**
Stable isotope geochemistry; igneous petrology.

**ASSOCIATE PROFESSOR JOHN COMPTON**
Low-temperature and sedimentary geochemistry; marine geology.

**ASSOCIATE PROFESSOR DAVID REID**
Precambrian crustal evolution and metallogeny; carbonatites; isotope geochemistry.

**MR GEORGE SMITH**
Senior Lecturer; petroleum geophysics.

**DR EMESE BORDY**
Senior Lecturer: Sedimentology

**DR PHIL JANNEY**
Senior Lecturer: Igneous petrology; analytical geochemistry

**DR JOHANN DIENER**
Lecturer; Metamorphic petrology.

**DR AKE FAGERENG**
Lecturer; Structural geology.

Honorary staff

**EMERITUS PROFESSOR JOHN GURNEY**
Upper mantle research; diamonds; diamond exploration and instrumental analysis of minerals

Honorary Research Associates

**PROFESSOR HARTWIG FRIMMEL**
Metamorphic petrology

**DR WENDY TAYLOR**
Palaeontology

Contact Details

Postal address: Department of Geological Sciences, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 2931
Fax: +27 21 650 3783
E-mail: sci-geology@uct.ac.za
E-mail: http://web.uct.ac.za/depts/geolsci/

Research output

Articles in Peer-reviewed Journals


Doctoral dissertations

Razak, N. 2012. An investigation into the effectiveness of a controlled source electromagnetic survey in locating petroleum resources offshore Equatorial Guinea. Supervised by Smith, G.C.

Master’s degrees (by research)

Backeberg, N. 2012. Petrogenesis of the False Bay Dyke Swarm, Cape Peninsula, South Africa. MSc. Supervised by Reid, D.

Bergh, E. 2012. A one-year, postfire record of element deposition and cycling in the Kogelberg sandstone fynbos mountain ecosystem of the Western Cape, South Africa. MSc. Supervised by Compton, J.

Faber, C. 2012. Insights into the processes of felsic melt migration through the mid-crust; an integrative approach from the central zone of the Damara belt, Namibia. MSc. Supervised by Diener, J.

Maake, L. 2012. Source of the suspended load, upper Orange river, South Africa. MSc. Supervised by Compton, J. and Rogers, J.

MacHutchon, M. 2012. The geological evolution and sedimentary dynamics of Hout Bay, South Africa. MSc. Supervised by Compton, J.

MacLennan, S. 2012. Structural, geophysical and geochemical characterisation of a Mesozoic paleosuture zone, Barberton Greenstone Belt, South Africa. MSc. Supervised by de Wit, M.
Ntholi, T. 2012. In situ purification of acid mine drainage using low enthalpy geothermal energy and sulphate reducing bacteria in the abandoned deep gold mines of South Africa. MSc. Supervised by de Wit, M.


Viglietti, P. 2012. Life after extinction: palaeoenvironments of the earliest Triassic lower Katberg formation, including the origin of Lystrosaurus bonebeds from the Karoo Basin, South Africa. MSc. Supervised by Compton, J. and Smith, R.

Department of Mathematics and Applied Mathematics

( Including the Cosmology and Gravity Group, the Laboratory of Foundational Aspects of Computer Science (FACS-Lab), the Marine Resource Assessment and Management Group (MARAM), Industrial Mathematics, and the Topology Research Group)

HEAD OF DEPARTMENT: ASSOCIATE PROFESSOR VASCO BRATTTKA (UP UNTIL 30 JUNE 2012)

(Acting Head of Department: Professor Hans-Peter Kunzi (as of 01 July 2012)

Departmental Profile

The Department of Mathematics and Applied Mathematics houses a number of research groups and individual activities which, in total, cover a large part of the mathematical spectrum. Examples are: cosmology and relativity, computational and applied mechanics, marine resource assessment and management, rangeland modelling, industrial mathematics, foundational aspects of computer science, topology, category theory, nonlinear mathematical physics, functional analysis, cryptography, string theory, financial mathematics and algebra. The Department has active research collaboration with other groups in the country and abroad. There is a strong postgraduate program, with M.Sc. and Ph.D. students in a variety of fields. A number of staff have NRF A-ratings and B-ratings. The Department has a good technical and administrative infrastructure, and regularly hosts visitors from abroad. More information can be found on the website www.mth.uct.ac.za.

Departmental Statistics

Permanent and long-term contract staff

<table>
<thead>
<tr>
<th>Position</th>
<th>Number</th>
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<td>Associate Professors</td>
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<tr>
<td>Senior Lecturers</td>
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<td>Lecturers (full-time)</td>
<td>14</td>
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<tr>
<td>Senior Scholar</td>
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<td>Research Staff</td>
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<td>Technical Support Staff</td>
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<td>Administrative and Clerical Staff</td>
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Honorary staff

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<td>Emeritus Professors</td>
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<td>Emeritus Associate Professor</td>
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<td>Visiting Professor and Principal research officer</td>
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<td>Research Associate</td>
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Students

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<td>Undergraduate</td>
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</table>

Research Fields and Staff

Permanent and long-term contract staff

PROFESSOR IGOR BARASHENKOV
Nonlinear waves and solitons; nonlinear dynamics; mathematical physics

PROFESSOR BRUCE BASSETT
Observational and theoretical cosmology; nonlinear optimization. Research astronomer at the South African Astronomy Observatory and senior researcher, African Institute of Mathematical Sciences

PROFESSOR DOUG BUTTERWORTH
Director, Marine Resource Assessment and Management Group (MARAM); particular focus on South African fisheries, northwest Atlantic fisheries, southern bluefin tuna, Antarctic whale and krill resources
PROFESSOR KATHY DRIVER
Special functions, orthogonal polynomials and approximation theory

PROFESSOR PETER DUNSBY
Director of the National Astrophysics and Space Science Programme; Co-Director of the Astrophysics, Cosmology and Gravitation Centre; cosmological perturbations; cosmic microwave background anisotropies; gravitational lensing; inflationary cosmology; cosmological magnetic fields; on-line mathematics education

PROFESSOR GEORGE JANELIDZE
Category theory, Algebra, Topology, Sets and Logic

PROFESSOR HANS-PETER KÜNZI
Topology, orders, categories, combinatorics and their applications in analysis and algebra; particular focus being the theory of asymmetric topology; leader of topology and category theory research group

PROFESSOR DAYA REDDY
South African Research Chair in Computational Mechanics Director, UCT Centre for Research in Computational and Applied Mechanics (CERECAM); mathematical and computational aspects of continuum mechanics; the finite element method

ASSOCIATE PROFESSOR VASCO BRATTKA
Computable Analysis, Effective descriptive set Theory, Algorithmic Randomness

ASSOCIATE PROFESSOR CHRISTOPHER GILMOUR
Pointfree topology and sigma-frames; categorical topology

ASSOCIATE PROFESSOR CHARLES HELLABY
General relativity; cosmology; gravity

ASSOCIATE PROFESSOR ALEXANDAR IANOFSKY
Dynamical systems – finite and infinite dimensions; differential geometric methods in the theory of dynamical systems

DR PETER BRUYNs
Senior Lecturer; group theory; permutation groups

DR CHRISTOPHER CLARKSON
Senior Lecturer; cosmology; gravitational waves; nonlinear perturbation theory; braneworlds -black holes; quasi-normal modes

DR JURIE CONRADIE
Senior Lecturer; functional analysis; vector lattices; von Neumann algebras; non-commutative function spaces; mathematics education

DR FRANCOISE EBOBISSE BILLE
Senior Lecturer, calculus of variations; PDE; mathematical and computational aspects of continuum mechanics; the finite element method

DR DAVID ERWIN
Senior Lecturer; classical, applied and algebraic graph theory

DR JOHN FRITH
Senior Lecturer; frame theory; topos theory; categorical topology; mathematical education

DR HENRI LAURIE
Senior Lecturer; mathematical biology, in particular ecology; industrial mathematics; mathematics education

DR JEFF MURUGAN
Senior Lecturer; string theory, quantum gravity, neurophysics

DR ANNELIESE SCHAUERTE
Senior Lecturer; frame and biframe theory; categorical topology; uniform and quasi-uniform structures

DR AMANDA WELTMAN
Senior Lecturer, string theory, cosmology, gravity

DR NORA ALEXEEVA
Lecturer; nonlinear dynamics and solitons; pattern formation in reaction-diffusion systems; synchronization of chaotic systems

DR MARGARET ARCHIBALD
Lecturer; analysis of algorithms and combinatorics

DR MARK BERMAN
Lecturer, group theory, universal algebra, set theory and model theory

DR TIRIVANHU CHINYOKA
Lecturer; computatıonal fluid dynamics

DR EBRAHIM FREDERICKS
Lecturer; lie symmetries analysis of stochastic differential equations; lie symmetries analysis of partial differential equations; lie symmetries analysis of ordinary differential equations; applying lie symmetries to fluid mechanics, applying lie symmetries to mathematics of finance

DR ROBERT MARTIN
Lecturer, functional analysis; operator theory

DR ANDRIY POTOTSKY
Lecturer; stochastic processes and equations. Applications in Biology and Physics
MR KENNETH RAFEL
Lecturer; mathematics education

DR JESSE RATZKIN
Lecturer, geometric analysis

DR NEILL ROBERTSON
Lecturer; functional analysis; locally convex spaces; descriptive set theory; infinite-dimensional holomorphy

DR DEON SOLOMONS
Lecturer; thermodynamics of spacetime; Interference and diffraction phenomena in gravitational lensing; structure formation in the universe; theories of higher order gravity

DR HOLGER SPAKOWSKI
Lecturer; theoretical computer science; computational complexity

DR CHRISTINE SWART
Lecturer, cryptography

DR VITALI VOUGALTER
Lecturer, nonlinear analysis, partial differential equations, mathematical biology

Senior Research Scholar
Emeritus Distinguished Professor George Ellis
Distinguished Professor of complex systems; cosmology and general relativity theory; emergence and functioning of complex systems, including the human brain; science policy; mathematics and science education and religion; social indicators

Research staff

DR ANABELA BRANDÃO
Senior Research Officer, MARAM; Southern Ocean toothfish assessment; SA west coast rock lobster surveys; minke whales, SA abalone assessment.

DR CARRYN DE MOOR
Senior Research Officer, MARAM; S.A. sardine and anchovy assessment and management

DR SUSAN HOLLOWAY
Senior Research Officer, MARAM; S.A. west and south coast rock lobster and horse mackerel assessment; whale management procedures

DR KENNETH HUGHES
Honorary Research Associate; number theory; algebra; algebraic geometry; topological quantum field theory; p-adic analysis, nil-theta functions

DR ÉVA PLAGÁNYI-LLOYD
Honorary Research Associate; multispecies modelling; Fisheries assessment and management ecological modeling, S.A. abalone assessment

Distinguished visitors

EMERITUS PROFESSOR BERNHARD BANASCHEWSKI
McMaster University, Hamilton, Ontario, Canada – pointfree topology; partially ordered algebraic systems; applied category theory

PROFESSOR ROY MAARTENS, Director of Institute of Cosmology and Gravitation, University of Portsmouth, UK – Relativity, Cosmology, Gravity

Honorary staff

EMERITUS PROFESSOR RONALD BECKER
Differential equations (bifurcations, abstract equations); theory of algorithms (graph partitioning, sorting networks) and Mathematical Finance

EMERITUS PROFESSOR GUILLAUME BRÜMMER
Topology and category theory group; categorical topology; asymmetric topology and uniformity

EMERITUS Distinguished Professor George Ellis
Distinguished Professor of complex systems; cosmology and general relativity theory; emergence and functioning of complex systems, including the human brain; science policy; mathematics and science education; metaphysics of cosmology and its connections to ethics and religion; social indicators

EMERITUS PROFESSOR KEITH HARDIE
Homotopy theory; algebraic topology; digital topology; categorical topology

EMERITUS ASSOCIATE PROFESSOR RONALD CROSS
Functional analysis; unbounded linear operators; linear relations

PROFESSOR PATRICIA WHITELOCK
Visiting Professor and Principal Research Officer; SAAO

DR DAVID RICHARDSON
Research Associate; Rangeland Modelling Group; modelling grazing animal production systems; relations between complex and simple models

PROFESSOR JOHN WEBB
Mathematical competitions and Olympiads; popularisation of mathematics
Postdoctoral Fellows

DR ALVARO DE LA CRUZ
Cosmology

DR RITUPARNO GOSWAMI
Cosmology

DR NIMA KHOSRAVI
Early universe cosmology including inflation and its generalisations

DR OLAWANLE PATRICK LAYENI
CERECAM: Moving boundary problems and variational inequalities

DR PATRICE OKOUMA
Constraints on dark energy from current and future cosmological observations including SKA

DR PRINA PATEL
Cosmology

DR ROBERT POLTIS
Works in particle physics and cosmology and in particular is studying the interface of the two looking at various tests of theoretical physics that can be done using observational cosmology

DR XAVIER ROY
Works on the averaging and backreaction problems in cosmology. This involves finding a self-consistent manner in which to smooth a spacetime, and make predictions for cosmology.

DR MARINA SEIKEL
Cosmology

DR PARAMJEET SINGH
Numerical analysis of conservation laws with fading memory in the research area of numerical analysis of partial differential equations

DR PER ERIC SUNDIN
String theory and Cosmology

DR ROCKHEE SUNG
Cosmology

Contact Details

Postal address: Department of Mathematics & Applied Mathematics, University of Cape Town, Private Bag, Rondebosch, 7701
Telephone: SA (21) 650 3191
Fax: SA (21) 650 2334
E-mail: mam-admin@uct.ac.za (Hayley.Leslie@uct.ac.za)
Web: http://www.mth.uct.ac.za

Research output

Authored books


Edited books


Chapters in books


## Articles in Peer-reviewed Journals


**Peer-reviewed published conference proceedings**


Doctoral dissertations


Master’s degrees (by research)


Richardson, N. J.N.2012. An investigation into aspects of rate-independent single crystal plasticity. MSc(Eng) Mechanical. Supervised by Reddy, B.D.

Walters, A. 2012. Constructing realistic Szekeres models from initial and final data. MSc Astrophysics & Space-Science. 160pp. Supervised by Hellaby, C.

Wilson, B. 2012. Robust Bayesian portfolio optimisation: Higher moments and the distorting effects of constraints. MSc. Supervised by Witten, G.

In addition to the research outputs listed further above, contributions ranging across book reviews to popular articles were made. The Marine Research Assessment and Management Group (MARAM) provided 105 technical papers to the scientific working groups of the Fisheries Branch of the Department of Agriculture, Forestry and Fisheries related to the management of South African marine resources, and to other United States and international fisheries management organisations.

**Department of Molecular And Cell Biology**

**HEAD OF DEPARTMENT: ASSOCIATE PROFESSOR VERNON COYNE**

**Departmental Profile**

The Department has interests and expertise in diverse areas of biology. The problem of desiccation in plants is being tackled by a combination of physiological and molecular approaches. “Biofarming” research involves the expression of pharmaceutically-important proteins in plants and insect cells, including vaccine candidates for human and animal diseases such as bluetongue, human papillomaviruses, human rotavirus and psittacine beak and feather disease. Plant biotechnology research for plant improvement is focused on developing virus-resistant and drought-tolerant crops and the molecular basis of nickel hyperaccumulation in plants. Plant defence responses are studied in both model and crop plants. Circadian rhythms and their role in plant development and responses, as well as sports performance in humans, are studied. Eukaryotic gene expression projects include the role of chromatin modifications in regulating the rhythms of gene expression and gene expression during neuronal differentiation and stress. Basic mechanisms underlying the regulation of gene expression are studied in human cells and in Plasmodium, with a view to pinpointing Plasmodium-specific mechanisms that can be exploited to develop novel anti-malarial drugs. Misfolding of DNA sequences is being investigated as a possible cause of inheritable mental diseases. In addition, the actions of mammalian hormones, synthetic contraceptives and steroid receptors are being investigated with a view to understanding mechanisms, integration of signalling pathways and role in HIV pathogenesis. Research on viral pathogenesis includes virus-host genomic and proteomic interaction studies for Maize streak virus, and protein structure-function studies of the envelope protein and its role in HIV transmission. Evolutionary biology projects focus on mechanisms that shape both genomic and population-level diversity, as well as evolution of limb development in bats. Molecular virology studies focus on the genetic diversity and molecular biology of single-stranded DNA viruses of plants and animals, of the marine virome, and of papillomaviruses of primates and humans. Structural studies are being carried out by electron microscopy and X-ray crystallography on a number of proteins, including glutamine synthetase and members of the nitrase superfamily, to obtain insights necessary for rational drug and industrial enzyme design. Research in marine biotechnology includes genetic and proteomic studies of the immune response of the abalone (Haliotis midae) and the stress and disease response systems of the commercially important seaweed Gracilaria gracilis. In addition, probiotics are being developed to improve the growth rate and disease resistance of farmed abalone. Research in microbiology includes molecular-genetic investigations of industrially and medically important anaerobic bacteria such as Corynebacterium, Bacteroides fragilis, Bifidobacterium and the fibre-degrading bacteria in the ostrich gut. The taxonomy of antibiotic-producing actinobacteria is being investigated. The Department also runs an analytical facility (amino acid analysis, DNA sequencing, DNA synthesis, DNA microarrays and protein identification). The instrumentation in the facility consists of HPLCs, a GC MS/MS and LC-ESI QTOF and MALDI instruments for mass spectrometry.

**Departmental Statistics**

**Permanent and Long-Term Contract Staff**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors</td>
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<td>Associate Professors</td>
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<td>Technical Support Staff</td>
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**Honorary Staff**

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Students

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</table>

Research fields and staff

Permanent Staff

ASSOCIATE PROFESSOR VERNON COYNE
Head of Department; Marine biotechnology

PROFESSOR JILL FARRANT
Desiccation tolerance; resurrection plants; seeds; plant physiology; molecular biology; systems biology

PROFESSOR JANET HAPGOOD
Molecular mechanisms of cell signalling and eukaryotic gene regulation via steroid receptors; role in HIV pathogenesis, immune and reproductive function

PROFESSOR NICOLA ILLING
Evolution of development; regulation of gene expression; limb development, comparative genomics

PROFESSOR EDWARD RYBICKI
Plant- and tissue culture-derived vaccines; oceanic viromics; Human papillomavirus (HPV); rotavirus; bluetongue virus; Beak and feather disease virus; geminivirus; Maize streak virus; molecular virology; molecular biotechnology

ASSOCIATE PROFESSOR VAL ABRATT
Bacteroides fragilis; nitrogen metabolism; virulence; metronidazole; DNA damage and repair; Bifidobacterium; Lactobacillus; probiotics

ASSOCIATE PROFESSOR SHARON REID
Gram-positive and anaerobic bacteria; Clostridium acetobutylicum; Bifidobacterium; Lactobacillus; gene regulation of nitrogen- and carbon-substrate utilisation; probiotics; molecular systematics; biofuels

DR ROBERT INGLE
Senior lecturer; interactions between plants and their environment (plant innate immunity, metal hyperaccumulating plants)

DR PAUL MEYERS
Senior lecturer; actinobacteria; family Streptosporangiaceae; Amycolatopsis; Kribbella; Streptomyces; bacterial taxonomy; bioprospecting; novel antitubercular antibiotics

DR COLLEEN O’RYAN
Senior lecturer; molecular and population genetics; genetics of neurodevelopmental disorders

DR LAURA RODEN
Senior Lecturer; flowering time and photoperiodism; plant and human circadian rhythms; regulation of plant gene expression; plant molecular biology; Arabidopsis genetics

DR THOMAS OELGESCHLAGER
Lecturer; molecular mechanisms of RNA polymerase II transcription regulation in eukaryotes; core promoter-selective transcription regulation mechanisms; transcription regulation in Plasmodium falciparum

DR SUHAILE RAFUDEEN
Lecturer; abiotic stress tolerance in plants; signalling and regulation of plant gene expression during stress; plant molecular biology; proteomics (protein expression profiling, protein mining); Xerophyta viscosa; maize; Tef

DR JERRY RODRIGUES
Lecturer; protein chemistry; drug discovery; plant desiccation tolerance; polyphenol research

DR ZENDA WOODMAN
Lecturer; HIV: structure-function and viral fitness; biochemical analysis of envelope’s role in HIV pathogenesis

Honorary Staff

EMERITUS PROFESSOR HORST KLUMP
Energy landscapes of dynamic ensembles of rolling triplet repeat bulge loops: implications for DNA expansion associated with mental-disease states

EMERITUS PROFESSOR JENNIFER THOMSON
Transgenic maize for resistance to the African Maize streak virus and tolerance to drought

Contract Research Staff

DR GARETH EVEREST
Postdoctoral fellow; antimycobacterial antibiotic drug discovery; actinobacterial characterisation; phylogeny of the family Pseudonocardiaceae; alternative taxonomic marker genes

DR BRUNA GALVÃO
Postdoctoral fellow; discovery and characterisation of novel putative virulence factors of the human opportunistic pathogen Bacteroides fragilis; membrane-associated adhesins; cell surface appendages; proteases
DR KERRY GORDON
Postdoctoral fellow; HIV-1 envelope structure and function; understanding the glycosylation requirements of HIV-1 envelope during transmission

DR INGA HITZEROTH
Senior Research Officer; plant-derived vaccines; Human Papillomaviruses (HPV), Beak and Feather disease virus (BFDV), Rotavirus and Influenza virus

DR SUZANNE HUDDY
Postdoctoral fellow; plant and algal biotechnology; plant-produced enzymes and pharmaceuticals; plant and algal tissue culture and transformation studies; Influenza

DR KERSHINI IYER
Postdoctoral fellow; plant biotechnology; promoter studies of stress-associated genes from Zea mays and Xerophyta viscosa

DR REVEL IYER
Chief Research Administrator; agricultural biotechnology; plant molecular biology; plant transgenics

DR BRIAN KULLIN
Postdoctoral fellow; Clostridium difficile (epidemiology, factors involved in host colonisation and mechanisms of antibiotic resistance); oxalate utilisation by probiotic gut bacteria (possible role in kidney stone prevention)

DR ANN MEYERS
Research Officer; plant-produced proteins, monoclonal antibodies and vaccines; bluetongue virus; Rift Valley fever virus; Crimean Congo haemorrhagic fever virus

DR SHANE MURRAY
Lecturer; crop genomics and transcriptomics; resistance in maize and grapevine to pathogens (fungi, viruses and phytoplasma)

DR CHRISTIANE M. NDAY
Postdoctoral fellow; identification of blood biomarkers for drug abusers with a history of psychosis using RNA sequencing technology

DR LYNTHIA PAUL
Research assistant; Bacteroides fragilis metronidazole resistance; mutational analysis; metronidazole uptake; flotillin; DNA recombination and repair genes

DR MAYA PFAFF
Postdoctoral fellow; marine virology; plankton ecology; metagenomics; microbial oceanography (understanding the role of viruses in the Southern Ocean carbon cycle and the formation, maintenance and termination of harmful algal blooms)

DR DIONNE SHEPHERD
Research Officer; virology and plant biotechnology; development of maize streak virusresistant maize; maize streak virus diversity; plant-virus interactions

DR MICHLE TOMASICCHIO
Postdoctoral fellow; glucocorticoid receptor (GR) transcriptional signalling; cross talk between HIV-1 Vpr and the GR in transcriptional regulation of host genes

Research Highlights

AWARDS
Professor Janet Hapgood was awarded a Grand Challenges Explorations grant by the Bill & Melinda Gates Foundation (www.uct.ac.za/mondaypaper/?id=9404).

SIGNIFICANT PUBLICATIONS
Emeritus Professor Horst Klump was a co-author on a paper in the Journal of the American Chemical Society (2011 impact factor: 9.907) that investigated the role of “bulge loops” in the generation of mutations that result in expanded stretches of repetitive DNA sequences (expansion mutations). Since expansion mutations are associated with a variety of human genetic disorders, such as Huntington’s disease, knowing more about bulge-loop behaviour may help researchers to understand expansion mutations (http://www.ncbi.nlm.nih.gov/pubmed/22397401).

Contact Details
Postal address: Department of Molecular and Cell Biology, University of Cape Town, Private Bag X3, Rondebosch, 7701, South Africa
Telephone: SA (21) 650-3269
Fax: SA (21) 689-7573
e-mail: ethne.liebenberg@uct.ac.za
Web: http://www.mcb.uct.ac.za

Research output

Chapters in books

**Articles in Peer-reviewed Journals**


Mulema, J. and Denby, K.J. 2012. Spatial and temporal transcriptomic analysis of the Arabidopsis thaliana-


**Doctoral dissertations**


Botha, S. 2012. Development of a transformation protocol and cell culture system for the commercially important species of red macroalga, Gracilaria gracilis. 272pp. Supervised by Coyne, V.E.


Master's degrees (by research)

Brito, D. 2012. Evolution of the ZRS and the regulation of SHH expression in the forelimbs of bats. MSc. 100pp. Supervised by Illing, N.


Department of Oceanography

(Including the Nansen-Tutu Centre for Marine Environmental Research and the Research Diving Unit)

HEAD OF DEPARTMENT: PROFESSOR CHRIS REASON

Departmental Profile

The Department of Oceanography is the only such Department in sub-Saharan Africa, and is the major focus for research in physical oceanography, atmospheric science, ocean circulation, and climate in South Africa and elsewhere in Africa. The Department has research groupings in sea-going observations, satellite marine remote sensing, coastal oceanography, ocean and atmospheric modelling, marine and coastal meteorology, severe weather, the science underpinning operational oceanography, and climate variability and change. Six scientists in the Department have been favourably evaluated in the review process of the National Research Foundation. Active international associations are maintained by collaborative projects with the Netherlands, France, Germany, Spain, the UK, Australia, USA and Canada. The Department maintains close contact with marine science activities in the governmental, private and academic sectors in South Africa and into Africa. The UCT Research Diving Unit (RDU) is housed within the Department and is fully equipped with a decompression chamber and compressor. Most scientific diving at UCT is carried out in conjunction with the RDU.

Departmental Statistics

Permanent and Long-term Contract Staff

<table>
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<th>Position</th>
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<tr>
<td>Professors</td>
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Honorary Staff

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Students

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</table>

Research Fields and Staff

Permanent Staff

PROFESSOR C.J.C. REASON
Head of Department, Southern Hemisphere climate variability and change, Coastal and mesoscale meteorology, regional oceanography, modelling

PROFESSOR F.A. SHILLINGTONG
Shelf oceanography, satellite marine remote sensing

DR I.J. ANSORGE
Senior Lecturer, Southern Ocean

DR H.N. WALDRON
Senior Lecturer, environmental oceanography

DR J. VEITCH
Lecturer, Benguela upwelling system, modelling
DR R. ROMAN  
Senior Scientific Officer; satellite marine remote sensing

MR P. TRUTER  
Diving Supervisor; ocean diving

ADMINISTRATIVE OFFICER  
Mrs C. Khai

RESOURCE CENTRE OFFICER  
Mrs N. Jabbar

Contract Research Staff

DR M. ROUault  
Ocean-atmosphere interaction

DR BJORN BACKEBERG  
Regional ocean modeling, data assimilation

Emeritus Professors

PROFESSOR G.B. BRUNDRIT  
Operational oceanography

PROFESSOR J.G. FIELD  
Marine Research Institute

Honorary Professors

PROFESSOR L.V. SHANNON  
Benguela ecosystem

Honorary Research Associates

DR S. BERNARD  
Optical oceanography

DR D. BYRNE  
Agulhas Current

DR C. DUNCOME RAE  
Coastal ocean dynamics

DR J. HERMES  
Regional ocean modelling

DR P. MONTEIRO  
Environmental oceanography

DR A. MAVUME  
Tropical cyclones

DR M.J. KRUG  
Agulhas current, remote sensing

DR K. BROWN  
Marine ecologist

DR N.C. FAUCHEREAU  
Climate Variability

DR K. HUTCHINGS  
Fisheries specialist

DR R.W. LESLIE  
Fisheries biologist

DR C. RUIZ-SEBASTIAN  
Marine ecologist

DR C.J. ROY  
Fisheries oceanography, upwelling systems

Postdoctoral Fellows

DR F. DUFOIS  
Coastal oceanography

Dr S. Swart  
Southern ocean Biogeochemistry

Dr A. Tagliabue  
Southern ocean Biogeochemistry

Dr A. Treasure  
Ecological modeling, Southern ocean

Contact Details

Postal Address: Department of Oceanography, University of Cape Town, Private Bag X3, Rondebosch, 7701  
Telephone: +27 21 650 3277  
Fax: +27 21 650 3979  
E-mail: claire.khai@uct.ac.za  
Web: http://www.sea.uct.ac.za  
UCT General Enquiries: +27 21 650 9111  
UCT web: http://www.uct.ac.za

Research output

Chapters in books


Articles in Peer-reviewed Journals

Backeberg, B., Penven, P. and Rouault, M. 2012. Impact of intensified Indian ocean winds on mesoscale


Dufois, F. and Rouault, M. 2012. Sea surface temperature in False Bay (South Africa): towards a better understanding of its seasonal and inter-annual variability. Continental Shelf Research, 43: 24-35


Le Moigne, F.A.C., Sanders, R.J., Villa-Alfageme, M., Martin, A.P., Pabortsava, K., Planquette, H., Morris, P.J. and...


Doctoral dissertations


Department of Physics

HEAD OF DEPARTMENT: ASSOCIATE PROFESSOR ANDY BUFFLER

Departmental Profile

The Department of Physics is accommodated in the R W James Building, which houses research laboratories equipped for nuclear physics, X-ray stress determination, computational physics and nanoelectronics production. Additional facilities available to the Department are provided within the building by the Electron Microscope Unit (Scanning Electron Microscope and Transmission Electron Microscope), and at iThemba LABS (200 MeV cyclotron, a 5 MeV Van de Graaff accelerator used for ion beam analysis, including a nuclear microprobe, high resolution X-ray diffraction, and PET scanners adapted for positron emission particle tracking).

Major areas of interest include:

1. Experimental nuclear physics at iThemba LABS (D G Aschman, A Buffler, R W Fearick, M R Nchodu): (a) Gamma ray spectroscopy with the AFRODITE array; (b) Giant resonance reactions with the magnetic spectrometer; (c) Fast neutron physics

2. Theoretical Physics (J W A Cleymans, C A Dominguez, W A Horowitz, A Peshier, S M Perez, H W G Weigert, S M Wheaton and R D Viollier): (a) Research within the Centre for Theoretical and Mathematical Physics; (b) Structure of elementary particles; (c) Weak interactions; (d) Quantum Electrodynamics and Chromodynamics in vacuum at extreme temperatures and densities; (e) Renormalization group equations (Color Glass Condensate); (f) Nonlinear effects in QCD at high densities; (g) Phenomenology of heavy ion reactions; (h) Quark gluon plasma; (i) Nuclear structure and models

3. Experimental high energy physics (J W A Cleymans, R W Fearick, A Hamilton): (a) Research within the UCT-CERN Research Centre; (b) Relativistic heavy ion collisions within the ALICE collaboration at CERN; (c) High energy proton-proton collisions within the ATLAS collaboration at CERN

4. Nanophysics and solid state physics (M D Blumenthal, D T Britton, C M Comrie and M Härting): (a) Research within the Nanosciences Innovation Centre; (b) Structural and electrical properties of thin films; (c) X-ray diffraction studies of strain fields and residual stress analysis; (d) Single electron transport and interactions

5. Applied Physics (A Buffler, I Govender, M R Nchodu, S W Peterson, S M Wheaton): (a) Positron Emission Particle Tracking at PEPT Cape Town, iThemba LABS; (b) Particulate flow and interaction characterization in engineering and biological systems by computational and mechanistic modelling; (c) Radiation transport modelling in industrial and medical systems; (d) Applied nuclear physics using neutrons; (e) Geo-neutrino detection (EARTH collaboration)

6. Tertiary physics education (M S Allie, A Buffler and D Taylor): (a) Curriculum design and evaluation; (b) Role of language; (c) Understanding of measurement and uncertainty; (d) Modelling and visualization

Departmental Statistics

Permanent and Long Term Contract Staff

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Technical Staff 4
Administrative Staff 4
Departmental & Lab Assistants 4
Total 30

Research Staff

Honorary Professor 1
Emeritus Professor 5
Emeritus Associate Professor 3
Honorary Research Associate 1
Total 10

Students

Doctoral 27
Master’s 15
Honours 2
Undergraduate 1540
Total 1584

Staff and Research Fields

Permanent Staff

ASSOCIATE PROFESSOR A BUFFLER, HEAD OF DEPARTMENT
Experimental Nuclear Physics, Physics Education

ASSOCIATE PROFESSOR M S ALLIE (CHED)
Physics Education

PROFESSOR D G ASCHMAN
Experimental Nuclear Physics

ASSOCIATE PROFESSOR M D BLUMENTHAL
Solid State Physics

PROFESSOR D T BRITTON
Solid State Physics

ASSOCIATE PROFESSOR R W FEARICK
Experimental Nuclear Physics

DR I GOVENDER
Senior Lecturer, Applied Physics

DR A HAMILTON
Lecturer, Experimental Particle Physics

ASSOCIATE PROFESSOR M HÄRTING
Solid State Physics

DR W A HOROWITZ
Lecturer, Theoretical Particle Physics

MR G LEIGH
Part-time Lecturer

DR M R NCHODU
Lecturer, Experimental Nuclear Physics

PROFESSOR A PESHIER
Theoretical Physics

DR S W PETERSON
Lecturer, Applied Nuclear Physics

MS D TAYLOR (CHED)
Lecturer, Physics Education

ASSOCIATE PROFESSOR H W G WEIGERT
Theoretical Physics

DR S M WHEATON
Senior Lecturer, Computational Physics

Research Staff

EMERITUS PROFESSOR F D BROOKS
Experimental Nuclear Physics

EMERITUS PROFESSOR J W A CLEYMANS
Senior Research Associate, Theoretical Physics

ASSOCIATE PROFESSOR C M COMRIE
Solid State Physics

EMERITUS PROFESSOR C A DOMINGUEZ
Theoretical Particle Physics

PROFESSOR F E LUBBEN, (HRA)
Physics Education

EMERITUS PROFESSOR S M PEREZ
Theoretical Nuclear Physics

EMERITUS ASSOCIATE PROFESSOR P SPARGO
History of Science

EMERITUS PROFESSOR R D VIOLLIER
Theoretical Particle Physics and Astrophysics

Honorary Research Associates

Dr Girma Gonfa, Haramaya University, Ethiopia
Dr Evariste Minani, Kigali Institute of Education, Rwanda
Professor Marcelo Loewe, University of Mainz, Germany
Professor Karl Schilcher, University of Mainz, Germany
Distinguished Visitors

Mr Stephan Gohl, Germany
Professor Herbert Spiesberger, University of Mainz, Germany
Professor Karl Schilcher, University of Mainz, Germany
Dr Shadrack Nsengiyumva, University of Johannesburg, SA
Dr Peter Egelhof, GSI, Germany
Dr Zvi Citron, Weizmann Institute, Israel
Dr Arnaud Ferrari, Uppsala University, Sweden
Professor Sergio Colafrancesco, Wits University, SA
Professor John Wood, Georgia Tech, USA
Dr Neven Bilic, Boskovic Institute, Croatia
Professor Daya Reddy, UCT & CERECAM
Dr Habarulema, Dr De Villiers, Dr Oyeyemi and Ms Tshisaphungo, The South African National Space Agency
Associate Professor Patrick Woudt, Astronomy Dept., UCT
Dr Jeff Murugan, UCT Applied Math
Professor Kristian Müller-Nedebock, University of Stellenbosch
Dr Danish Azmi, University of Cape Town
Dr Hugo Touchette, Queen Mary, University of London, UK
Professor Ronald Bieniek, Missouri University of Science and Technology, USA
Dr Gyorgy Wolf, KFKI Budapest, Hungary
A. Oga & F. Adam, Greenpeace Africa
Professor David Wolfe, University of New Mexico, US
Professor Ketevi Assamagan, Brookhaven Nat Lab, US
Professor Raju Venugopalan, Brookhaven Nat Lab, US
Mr Chris Powell, UCT & Lawrence Berkeley Nat Lab, US
Professor Gregory Beaucage, Director of NanoPower Africa and University of Cincinnati, USA
Dr Jan Ilavsky, Argonne National Laboratory, USA
Dr Greg Smith, Oak Ridge National Laboratory, USA
Dr Neven Bilic, Rudjer Boskovic Institute
Dr Raju Venugopalan, Brookhaven National Laboratory, USA
Dr Nirmal Weerasekara, JKMERC, University of Queensland, Australia

Contact Details

Postal address: Department of Physics, University of Cape Town, Private Bag X3, Rondebosch 7700
Physical location: RW James Building, 9 University Avenue
Telephone: +27 (21) 650-3326
Fax: +27 (21) 650-3324
Email: margaret.maich@uct.ac.za
Webpage: www.phy.uct.ac.za

Research output

Articles in Peer-reviewed Journals


Peer-reviewed published conference proceedings


Patents


Department of Statistical Sciences

HEAD OF DEPARTMENT: ASSOCIATE PROFESSOR CHRISTIEN THIART

Departmental Profile

Statistical sciences are defined to include the traditional concepts of statistics as well as allied areas such as operation management research and decision modeling. The department is located academically in both the Faculties of Science and Commerce. Research within the department covers econometrics and financial modeling, biodiversity modelling, mathematical and theoretical statistics, operational research, reliability and geostatistics.
Departmental Statistics

Permanent and long-term contract staff

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<td>Senior Lecturers</td>
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<td>Lecturers</td>
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<td>Administrative and Clerical Staff</td>
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Students

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</tbody>
</table>

Research Fields and Staff

Permanent staff

**PROFESSOR GRAHAM BARR**
Econometrics and economic forecasting; financial modeling; problem gambling analysis.

**PROFESSOR DAVE BRADFIELD**
Financial modelling.

**PROFESSOR TIM DUNNE**
Generalized linear models; statistical methods in education and psychology.

**EMERITUS PROFESSOR RENKUAN GUO**
Reliability and quality; imprecise spatial analysis.

**EMERITUS PROFESSOR LINDA HAINES**
Optimal experimental design; extreme value theory; modelling count data; time series.

**EMERITUS PROFESSOR THEODOR STEWART**
Multicriteria decision analysis and multiobjective optimization; resource allocation and management.

**ASSOCIATE PROFESSOR CHRISTIEN THIART**
Head of Department; GIS and spatial modeling; mixed linear models.

**ASSOCIATE PROFESSOR FRANCESCA LITTLE**
Statistical modeling; Biostatistic; longitudinal Data analysis; Analysis of Causality; Analysis of time to event.

**ASSOCIATE PROFESSOR SUGNET LUBBE**
Multivariate statistics; Graphical displays; Biplots.

**EMERITUS ASSOCIATE PROFESSOR JUNE JURITZ**
Biostatistics, hierarchical generalised mixed models.

**DR BIRGIT ERNI**
Senior Lecturer; environmetrics; biometrics; generalized linear models; spatial statistics.

**DR JUWA NYIRENDA**
Senior Lecturer; operations research; management studies; simulation and Heuristics.

**DR LEANNE SCOTT**
Senior Lecturer; decision analysis; statistical methods in the social sciences and local government; operations research in developing countries.

**MR KARL STIELAU**
Senior Lecturer; sampling, ecological statistics and probability models.

**DR IAN DURBACH**
Senior Lecturer; decision analysis; risk and uncertainty.

**DR FREEDOM GUMEDZE**
Senior Lecturer; biostatistics; mixed linear models; longitudinal data analysis; survival analysis.

**DR MELVIN VARUGHESE**
Senior Lecturer; ecological modelling, statistical analysis of cosmological data; diffusion processes.

**MR ALLAN CLARK**
Lecturer; Bayesian analysis; Extreme value theory; Econometric modelling

**MR GREG DISTILLER**
Lecturer; biostatistics; statistical ecology.

**DR MIGUEL LACERDA**
Lecturer; bioinformatics; stochastic processes.

**MS SHEETAL SILAL**
Lecturer; Mathematical modeling of infectious disease; public health.

**MR DOMINIQUE KATSHUNGA**
Lecturer; Professional teacher; multivariate analysis; financial modelling.
MS HANNAH KROON
Lecturer; Professional teacher.

Contact Details
Postal address: Department of Statistical Sciences, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 3219
Fax: +27 21 650 4773
Web: http://www.uct.ac.za/depts/stats/
UCT General enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Research output

Articles in Peer-reviewed Journals


Master’s degrees (by research)

Anyogu, A. 2012. The use of problem structuring methods to explore the functioning and management of a selected NGO. Master’s. Supervised by Scott, L.

Cecchini, L. 2012. Robben Island penguin pressure model: A decision support tool for an ecosystems approach to fisheries management. Master’s. Supervised by Scott, L.

Gavine, L. 2012. The use of environmental damage schedules and conjoint analysis in environmental valuation and decision making. Master’s. Supervised by Stewart, T.


**Department of Zoology**

*(Including the FitzPatrick Institute, DST/NRF Centre of Excellence, the Marine Research Institute and the Animal Demography Unit)*

**HEAD OF DEPARTMENT: PROFESSOR ANUSUYA CHINSAMY-TURAN**

**Department Profile**

The Zoology Department houses the Marine Biology Research Centre (MBRC), the Percy FitzPatrick Institute, DST/NRF Centre of Excellence (PFIAO); the Freshwater Research Unit (FRU) and the Animal Demography Unit (ADU). Other smaller cogent groups co-ordinate research on mammals, palaeobiology, entomology and physiology. The Department hosts South African Research Chairs in Evolution and Systematics and in Marine Ecology and Fisheries. The Department has a large postgraduate school of some 173 master’s and doctoral students and a significant portion of the research publications produced by UCT originate from Zoology.

Research interests of the MBRC include fisheries and coastal zone management, rocky shore ecology, seaweed and invertebrate biodiversity and systematics, the biology of the Benguela upwelling ecosystem, and biogeochemical cycles of the ocean, particularly of carbon and nitrogen, and how such cycles may be impacted by climate change. The PFIAO remains primarily involved in avian research, coupled with a strong emphasis on conservation biology. Research in the FRU focuses on the ecology of freshwater ecosystems, and on the conservation and management of rivers and wetlands. The Animal Demography Unit focuses on statistical ecology, with two strands of activities: a series of monitoring projects for birds, butterflies and reptiles, and a cohort of postgraduate students with statistics-rich research projects relating to various aspects of population dynamics. Other research in the department is centred around: the behaviour, ecology, physiology, systematics and evolutionary biology of a variety of small mammals (molerats, golden moles, rodents, bats), seals and primates; palaeobiology and osteohistology, including factors that affect bone depositional rates in modern birds and reptiles and the biological signals recorded in fossil bones of non-mammalian therapsids, mammals, dinosaurs and other archosaurs; the systematics and biogeography of insects and insect ecology in arid ecosystems; biological control, especially the use of herbivorous insects to curb the seeding capacity and invasiveness of problematic Australian acacia species; and physiological studies on...
how small peptide hormones produced in nerve cells regulate energy metabolism, growth, development and reproduction in insects and crustaceans and how astaxanthin and chitin can be used in an economically viable way to deal with so-called waste products of the rock lobster industry.

**Departmental Statistics**

**Permanent and Long-term Contract Staff**

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<th>Position</th>
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**Honorary Staff**

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<tr>
<td>Research Associates</td>
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**Contract staff**

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</table>

**Research Fields and Staff**

**Permanent Academic Staff**

**PROFESSOR ANUSUYA CHINSAMY-TURAN**  
Head of Department. Palaeobiologist. Undertakes comparative bone and teeth histology of extant and extinct vertebrates (such as dinosaurs, Mesozoic birds, pterosaurs, nonmammalian therapsids, as well as, more recent Pliocene vertebrates).

**ASSOCIATE PROFESSOR COLIN ATTWOOD**  
Marine protected areas; line fish population ecology.

**DR JACQUI BISHOP**  
Lecturer. Evolutionary biology and conservation genetics.

**DR GARY BRONNER**  
Senior Lecturer; systematics, ecology and conservation biology of African small mammals, with emphasis on endemic and threatened golden moles; Scientific Editor: African Zoology

**PROFESSOR CHARLES GRIFFITHS**  
Director of the Marine Biology Research Centre; aquatic invasive alien species; biodiversity and endemicity patterns of African marine fauna; coastal marine ecology; amphipod taxonomy

**ASSOCIATE PROFESSOR JOHN HOFFMANN**  
Integrating biological control into the management of alien invasive weeds in South Africa

**ASSOCIATE PROFESSOR DAVID JACOBS**  
DST & NRF Research Chair in Animal Evolution and Systematics. Evolutionary biology; behavioural ecology, systematics and evolutionary development; bats and other mammals

**ASSOCIATE PROFESSOR ASTRID JARRE**  
DST & NRF Research Chair in Marine Ecology & Fisheries. Ecosystem modeling: ecosystem approach to fisheries management; collaboration between social and natural scientists

**ASSOCIATE PROFESSOR MIKE LUCAS**  
Honorary Research Fellowship, National Oceanography Centre, Southampton, UK. UCT: biological oceanography; biogeochemical cycling; phytoplankton dynamics, carbon/nitrogen cycling and climate change. Research in the Benguela upwelling, North and South Atlantic and Southern Ocean ecosystems. South African Surface Ocean Lower Atmosphere Study (SOLAS) SSC

**DR HEATHER MARCO**  
Lecturer; Neuropeptide purification/biochemistry; crustacean neuroendocrinology & physiology; insect neuroendocrinology; Convenor of second year Form and function (Ecophysiology) course. Alexander von Humboldt Foundation Research Fellow

**ASSOCIATE PROFESSOR COLEEN MOLONEY**  
Plankton ecology; ecosystem dynamics; fisheries ecology; ecological modelling.
ASSOCIATE PROFESSOR JUSTIN O’RIAIN
Social mammals; behavioural ecology; vertebrate reproduction

ASSOCIATE PROFESSOR MIKE PICKER
Insect ecology; insect biodiversity

DR DEENA PILLAY
Lecturer; estuarine ecology; rocky-shore ecology; benthic ecology, biological interactions

DR CECILE C. REED
Lecturer; Aquatic Parasitology, freshwater ecology and conservation

PROFESSOR LES UNDERHILL
Director Animal Demography Unit. Interfaces statistics and biology, in applications of statistics in the biological sciences, particularly ornithology and ecology

PROFESSOR GRAEME CUMMING
Chair of Conservation Biology. Landscape ecology, conservation biology, community ecology, resilience and complex systems theory

PROFESSOR TIM CROWE
Evolution; systematics; gamebird management; sustainable utilization of wildlife

PROFESSOR PHIL HOCKEY
Director, Percy Fitzpatrick Institute of African Ornithology. Avian evolutionary biology; shorebirds; migration; community ecology; behaviour; ecology of rarity

ASSOCIATE PROFESSOR PETER RYAN
Seabird-fishery interactions; avian evolutionary biology; marine pollution; behavioural ecology; island conservation

DR ARJUN AMAR
Raptor research, Rarity & conservation of African birds

Liesl Phigeland – Senior Scientific Officer
Andrea Plos – Principal Technical Officer
Hilary Buchanan – Administrative Assistant
Anthea Links – Departmental Assistant
F A C Impson – Scientific Officer
C A Kleinjan – Scientific Officer
V C Moran – Scientific Officer
R A NAVARRO – SCIENTIFIC OFFICER
Chris Tobler – Principal Technical Officer

Contract Research Staff

MR DOUG HAREBOTTLE
SABAP2 Project Manager. Movement data for waterbirds in the African Eurasian flyway.

MS FIONA IMPSON
Development of insect agents for biological control of alien invasive plants.

MS CARIEN KLEINJAN
Evaluation of insect agents used for biological control of alien invasive plants.

DR HEATHER MALAN
Aquatic pollution; water quality; wetlands, sustainable urban drainage.

DR DIETER OSCHADLEUS
SAFRING Project Coordinator. African Weaver birds

MRS DONELLA YOUNG
CAR Project Coordinator. Coordinated Avifaunal Roadcounts; Long term monitoring of large terrestrial birds in agricultural landscapes

MRS GILLY SMITH
MBRC Research Officer

MR OSCAR FRANK NOELS

MR MICHAEL BROOKS

MRS MARJA THEA WREN-SARGENT

RENE ALDREDO NAVARRO

SUSAN KUYPER

MR JACOBUS JAN CLAASEN

MS SHAAMIELAH DAVIDS

MR EMLYN RHYS

Technical and Administrative Support Staff

George du Plessis – Chief Technical Officer
Granville Faulmann – Workshop/Departmental Assistant
Phelisa Hans – Niven Library Assistant
Tania Celest Jansen – PFIAO CoE Senior Secretary
Natalie Jordamus – SAP Administrator
Margaret Koopman – Niven Library Manager
Shanaaz Manie – Administrative Officer
Meg Ledeboer – Administrative Officer
Petra Muller – Chief Technical Officer
Jo-Wayne Palmer – Senior Secretary
Soraya Abrahams – Senior Secretary

ROB LITTLE
Manager, Centre of Excellence, Percy Fitzpatrick Institute of African Ornithology
Behavioural ecology, population genetics, management and utilization of gamebirds

MR DAVID NKOSI
PFIAO Research Assistant

MS KATE MEARES
PFIAO Ground-Hornbill project manager

Emeritus Professors

EMERITUS PROFESSOR GEORGE BRANCH
Rocky-shore ecology; estuarine and lagoonal ecology; invertebrate fisheries management; fisheries policy; subsistence fisheries; impacts of diamond-mining; coastal ecology

EMERITUS PROFESSOR GERD GÄDE
Invertebrates; isolation and characterization of neuropeptides; intermediary metabolism; anaerobic metabolism; insect flight and its control by hormones; mode of action of invertebrate neuropeptide hormones; phylogeny; confirmation of expression of genome predicted neuropeptides by mass spectrometric methods; spectrometric methods; cloning of neuropeptide precursors and their cognate receptors

EMERITUS PROFESSOR JOHN FIELD
Director Marine Research Institute

EMERITUS PROFESSOR W R SIEGFRIED
Former Director of the Percy FitzPatrick Institute

EMERITUS ASSOCIATE PROFESSOR BRYAN DAVIES
River ecology; ecosystem processes; ecological effects of dams and rivers; wetland ecology

EMERITUS ASSOCIATE PROFESSOR JENNY DAY
Director of the Freshwater Research Unit; freshwater ecology; bioassessment; crustaceans; wetlands, particularly temporary and saline waters; conservation and management of inland water ecosystems; water chemistry and water quality

EMERITUS ASSOCIATE PROFESSOR JENNIFER JARVIS
Small and subterranean mammal ecophysiology and ethology

Honorary Professors

PROFESSOR DAVID CUMMINGS
Influence of land use policy and practice on biodiversity and resilience in social-ecological systems

PROFESSOR LARRY HUTCHINGS
Marine fisheries

PROFESSOR R J M CRAWFORD
Animal Demography Unit

Honorary research associates

DR RES ALTWEGG
Statistical ecology

DR LARA ATKINSON

DR PAUL BARHAM
Penguin survival

DR R BARLOW

DR BARRY CLARK

DR ROB CRAWFORD
Ecosystem approach to fisheries (as it relates to seabirds) and the conservation and suitable utilization of South Africa’s seabirds

DR A COCKROFT

DR MARIENNE DE VILLIERS
SARCA Project Manager. Diversity and distribution of reptiles in South Africa, Lesotho and Swaziland.

DR DEON DURHOLTZ
Fish ageing, squid ageing, fisheries management

DR D Y GHEBREHWFET

DR DAVID GRÉMILLET
Visiting Research Associate. Functional ecology of marine birds. Ecophysiology of marine birds facing global change; functional and evolutionary ecology; avian energetic; biotelemetry; impact of marine fisheries; polar ecosystems; Benguela upwelling ecosystem.

DR H J HAWKINS

DR JENNY HUGGETT

DR ALAN KEMP
Natural history, behavioral ecology and systematics of birds, especially hornbills, and diurnal and nocturnal raptors
DR SVEN KERWATH
DR R W LESLIE
EMERITUS PROFESSOR CLIFF MORAN
DR B PATERSON
DR GRANT PITCHER
DR JEAN-PAUL ROUX
Benguela system
DR T SAMAIA
DR CARL VAN DER LINGEN
Pelagic fish, fish feeding ecology, pelagic fisheries management
DR H VERHEYE
DR ROSS WANLESS
Seabird conservation; island restoration; invasive alien species; mitigation measures for avoiding seabird bycatch in fisheries; population biology and demography for conservation; seabird and insular ecology, remote tracking of seabirds at sea, marine protected areas and marine Important Bird Areas; genetics, taxonomy and conservation of the Aldabra Rail; conservation and ecological applications of stable light isotopes
DR INGRID WIESEL
DR TONY WILLIAMS
Seabird biology and conservation; the status and distribution of seabirds in Latin America; synanthropic ecology
DR P BARNARD
Birds & Environmental Change Partnership Programme, South African National Biodiversity Institute
DR A R RIDLEY
Cooperative Breeding and Sociality in Birds (including the Pied Babbler Research Project)
DR R SIMMONS
Raptor Research, Life History Strategies, Seabird Research, Climate Change Vulnerability and Adaptation
DR R M WANLESS
Seabird Conservation

DR J P ROUX
DR I WIESEL
DR A J WILLIAMS

Postdoctoral Fellows

DR LAURA BLAMEY
Coastal and fisheries ecology
DR FLORENT BLED
Dynamic macroecology in conservation
DR RUTLEDGE BOYES
Rarity and Conservation of African parrots
DR T R COOK
Seabird Research
DR AURORÉ CANOVILLE
Palaeobiology of early tetrapods
DR SUSAN CUNNINGHAM
Sub-lethal Effects of Climate Change on Desert Birds
DR FITSUM GEbreSELASSIE
Integrated population modelling
DR KATRIN LUDYNIA
Namibian seabirds in the Benguela System
DR ROWAN MARTIN
Parrot biology and conservation
DR ANGELA MEAD
Marine biodiversity
DR HILKKA NDJAU LA
Modeling marine fisheries
DR GRAEME OATLEY
Phylogenetics and biogeography of the African white-eyes
DR LORIEN PICHEGRU
Marine Protected Areas for seabird foraging effort
DR TIMOTHY REID
Island Conservation & Seabird Research
DR RICHARD SHERLEY
Seabird biology
DR ANTJE STEINFURTH  
Factors influencing the ecology of the African Penguin

DR KIRSTEN WIMBERGER  
Animal behaviour

DR HENNING WINKER  
Assessment of Fish Stocks

DR YAHKAT BARSHEP

DR ANNA BASTIAN

DR FLORENT HERVE BLED

DR RUTLEDGE STEPHEN BOYES

DR TIMOTHEE ROMAULD COOK

DR SUSAN JANE CUNNINGHAM

DR ALETTA DE VOS  
Spatial resilience of protected areas

DR THOMAS PATRICK FLOWER  
Behavioural ecology

DR GARETH PETER HEMPSON

DR TALI SONIA HOFFMAN

DR SOPHIE ANNE KOHLER

DR ALAN TRISTAM LEE  
Birds & Environmental Change

DR KATRIN LUDYNA

DR KRISTINE MACIEJEWSKI

DR THABISO MICHAEL MOKOTJOMELA

DR RALF HUBERTUS MULLERS  
Conservation of the Shoebill

DR LORIEN CAROLINE PICHEGRU  
Seabird foraging ecology

DR RAGNA REDELFORST

DR TIMOTHY ADAM REID  
Island Conservation & Seabird Research

DR RICHARD BRIAN SHERLEY

RESEARCH AFFILIATES

DR GEORDIE RACTLIFFE  
River and wetland impact assessment, management plans, rehabilitation and biomonitoring; Western Cape river systems; role of disturbance in invertebrate community structure

DR HELEN DALLAS  
Water quality and bioassessment; development and validation of appropriate biomonitoring tools for river health monitoring, and aquatic biodiversity and conservation; development of the National River Health Program; development of national water quality guidelines for aquatic ecosystems; effects of temperature on aquatic ecosystems

MS NANCY JOB  
Wetlands (delineation, functional assessment and rating, mitigation, law and policy), land-use and zoning review, analysis of aerial photography, GIS and mapping. Assessment and classification of streams

MR DEAN OLLIS  
Testing, use and development of ‘tools’ for the assessment of freshwater ecosystems. Management of water resources, and the incorporation of ecological assessment in Environmental Impact Assessment (EIA)

DR E G DAY

DR J M KING

P PASHNEE

DR P BLOOMER  
Project Manager, DST/NRF at the Percy FitzPatrick Institute, University of Pretoria

DR R C K BOWIE  
Project Manager, DST/NRF at the Percy FitzPatrick Institute, University of California-Berkeley

DR R COVAS  
Cooperative Breeding & Sociality in Birds (Sociable Weaver Research Project)

DR A MCKECHNIE  
Project Manager, DST/NRF at the Percy FitzPatrick Institute, University of Pretoria
DR A MILEWSKI
Interactions between plants and megaherbivores

DR M PINEIRO DE MELO
Systematics and Biogeography

DR P PISTORIUS
Project Manager, DST/NRF at the Percy FitzPatrick Institute, NMMU

DR C O’RYAN

DR L ROXBURGH
Rarity and Conservation of African Birds

DR C SPOTTISWOODE

Contact details
Tel: +27 21 650 3603/4
Fax: +27 21 650 3301
E-mail: soraya.abrahams@uct.ac.za
Web: www.zoology.uct.ac.za
UCT General Enquiries: +27 21 650 9111
UCT web: http://www.uct.ac.za

Research output

Edited books

Chapters in books


Articles in Peer-reviewed Journals


Gade, G. and Marco, H. 2012. The adipokinetic hormone (AKH) of one of the most basal orders of Pterygota: structure and function of Ephemeroptera AKH. Journal of Insect Physiology, 58: 1390-1396.


McLeish, M.J. and van Noort, S. 2012. Codivergence and multiple host species use by fig wasp populations of the ficus pollination mutualism. BMC Evolutionary Biology, 12:1.


Peer-reviewed published conference proceedings


Doctoral dissertations

Barquete, V. 2012. Using stable isotopes as a tool to understand the trophic relationships and movements of seabirds off southern Africa. 184pp. Supervised by Ryan, P.G.


**Master’s degrees (by research)**

Brito, D. 2012. Evolution of the ZRS and the regulation of SHH expression in the forelimbs of bats. MSc.100pp. Supervised by Illing, N.

Faculty of COMMERCE

Research output from the Commerce faculty has been rising steadily for several years, but plateaued in 2011 by comparison with 2010. The 2012 results show this to have been a pause for breath. In 2012, the faculty produced a third more peer-reviewed, accredited journal articles than in any previous year, and our overall total of accredited units nearly doubled. By a number of measures, Commerce is the fastest growing hub of research at UCT, albeit from a comparatively low base, historically.

The faculty is undergoing rapid organisation into a structure of ‘wall to wall’ research units, each led by one or more senior scholars and including mid-career and junior academics, postgraduate students, and postdoctoral fellows. Three new units were accredited by the University Research Committee in 2012 for a provisional three-year period. First, the School of Economics added Policy Research in International Services and Manufacturing (PRISM) to its existing strong suite of units. Professor Mike Morris is PRISM’s founding director. Second, the Applied Management section of the School of Management Studies hosts the new UCT Tourism and Events Research Unit, directed by Dr Richard George. Third, the African Collaboration for Quantitative Finance and Risk Research (ACQuFRR) is jointly hosted by the Actuarial Science section and the Department of Finance and Tax. Associate Professor David Taylor serves as its founding director.

ACQuFRR merits special attention as the first piece of a larger enterprise that constitutes one of the faculty’s three strategic priorities. It will serve as the research wing of the larger planned African Institute for Financial Markets and Risk Management (AIFMRM), now in the final stages of planning. To be sponsored in its operations and governance by a consortium of South African financial institutions, AIFMRM will partner with the Risk Management Institute of Georgia State University to create capacity in quantitative finance and risk modelling on a level that has not previously been approached on the African continent.

AIFMRM will constitute the second major structural addition to postgraduate training in the Commerce Faculty. Ahead of it is the Graduate School for Development Policy and Practice (GSDPP), which will enjoy its first official year of operation in 2013, under the administration of founding director, Professor Alan Hirsch. Professor Hirsch re joins UCT after several years of service as the senior economic policy advisor in the Office of the Presidency. The GSDPP has already made its presence felt in the country and the continent through a series of highly successful workshops and short courses on policy implementation for senior civil servants and municipal administrators from across Africa. In 2014, it will receive its first cohort of executive master’s students, with a full-time master’s programme to follow thereafter.

The past year has been a milestone in the growth of the faculty’s corps of NRF-rated researchers. Before 2013, there had never been an A-rated commerce researcher in South Africa. Now the Commerce faculty hosts the first two. In addition, three Commerce researchers received new B ratings, two received new C ratings, and one
received a Y rating. The faculty’s overall number of A and B-rated researchers doubled in the last year.

A significant percentage of the research in the Commerce faculty is directly related to the economic development of South Africa and Africa. Government and international development agencies and foundations continue to be our overwhelmingly largest source of research support. Significantly stronger involvement is urgently needed from the main engine of economic growth and capacity development, the private sector. There is near unanimity among economists that an essential piece of the foundational institutional nexus for sustained ‘tiger’ – or ‘lion’ – rates of national growth are strong academic research hubs that work in close contact with innovative firms. UCT’s Commerce faculty is among the very few parts of South Africa’s tertiary education infrastructure that can realistically aspire to be the centre of such a hub in the short to medium term.

This requires persuading far more young South Africans to become involved in research beyond the level of the first degree than is currently happening. In particular, we need more such participation from members of formerly disadvantaged groups. Reduction of South Africa’s world-leading level of inequality absolutely depends on the success of this kind of transformation. UCT’s Commerce faculty has the capacity to make game-changing contributions to the country and the continent, but only if corporate leaders join us in setting and overseeing the research agenda. Businesses urgently need to foster an atmosphere of excitement around commercial research among young people. Our network of research partnerships with companies has been growing dramatically, from an almost non-existent base, but the scope for expansion in this area is effectively limitless.

The epicentre of research output in the Commerce faculty in 2012 remained our Africa-leading School of Economics (SoE). The Southern African Labour and Development Research Unit nurtures our two largest research enterprises, the National Income Dynamics Study and our activity as African host of the world-renowned Jameel Lateef Poverty Action Laboratory, based at the Massachusetts Institute of Technology. The SoE also hosts five other strong research units listed in this report. The Research Unit for Behavioural Economics and Neuroeconomics hosted its second annual workshop in experimental econometrics for researchers from across Africa, whose travel and accommodation was sponsored by UCT. The research of the Development Policy Research Unit (DPRU) into minimum wages yielded a series of publications in 2012, receiving significant public attention during the violent labour conflict that disrupted the country’s valuable deciduous fruit harvest in early 2013. The DPRU’s partnership with the Africa Growth Initiative at the Brookings Institution in Washington DC has also been highly successful.

The culture of world-class research is by no means confined to Economics, and now dominates all parts of the faculty. The highest per capita rate of publication is in the Marketing section of the School of Management Studies. This is a remarkable achievement, given that our Marketing academics also carry the faculty’s highest teaching loads. The UCT Unilever Institute of Strategic Marketing is the leading critical source of empirical research and marketing intelligence for South African companies. In the Department of Information Systems, the Centre for Information Technology and National Development in Africa (CITANDA), working especially closely with its new corporate partner, Samsung, leads development of customised mobile technology applications for businesses and households in the region.

Academics in the Department of Finance and Tax, which was launched at the beginning of 2012 are participating in two collaborative research projects, on international taxation with European institutions. Staff in the College of Accounting are involved in a number of research projects, including small business development and the SA Global Entrepreneurship Monitor project, and have collaborated with the South African Revenue Service and the National Energy Regulator of South Africa. Academics in the College worked with International Financial Reporting Standards (IFRS) subject experts from Ernst & Young’s EMEIA region (Europe, Middle East, India and Africa) to develop a dataset of questions designed to determine how IFRS is applied globally. In Actuarial Science, the Centre for Actuarial Research (CARE) led a multiyear project, funded by the United Nations Population Fund to update, and rewrite a major manual on demographic estimation from limited and defective data. Demographers at CARE also played a publicly prominent role in the evaluation,
analysis, and assessment of the 2011 South African census. The Organisational Psychology section’s Institute for Monitoring and Evaluation remains the preferred provider for public sector and non-governmental clients.

The research profile of the Graduate School of Business also continued to grow. Highlights included the 2012 international conference on the Business of Social and Environmental Innovation, which had as its theme, Informal Sector Entrepreneurship and Social Entrepreneurship. The conference was supported by the Bertha Centre for Social Innovation and Entrepreneurship and by TrustAfrica, which sponsored the travel and accommodation costs of a number of African delegates. The number of NRF-rated researchers in the school is currently eight, which represents a 300 percent increase over two years.

The research achievements of the Commerce faculty during 2012 have been notable, and the above represents only a fraction of these. The other achievements are, however, also both valued and recognised. The role of the faculty in producing business knowledge for Africa, integrated into the global context through an expanding range of international collaborations, is in a phase of exponential growth. We warmly encourage corporate partners and new postgraduate students to join this hub of excitement.
DOCTORAL GRADUATIONS

S.O. ADEWARA (ECONOMICS)
Provision of public goods and health outcomes during political transition in Nigeria
Supervised by Associate Professor M. Visser and Professor D. McIntyre

N. ASSAF (ACCOUNTING)
Longitudinal study of the relationship between board attributes and firms’ performance in South Africa
Supervised by Professor E. Uliana

J.E.O. ATAGUBA (ECONOMICS)
Distributional impact of health care finance in South Africa
Supervised by Associate Professor I. Woolard

F. BANKOLE (INFORMATION SYSTEMS)
The impacts of ICT infrastructure on national development: a multi-method investigation involving data mining and data envelopment analysis
Supervised by Professor I. Brown and Professor K. Osei-Bryson

F. BASARDIEN (GRADUATE SCHOOL OF BUSINESS)
The impact of action strategies on entrepreneurial success of emerging entrepreneurs in the Western Cape
Supervised by Dr H. Parker

W. BRAFU INSAIDOO (GRADUATE SCHOOL OF BUSINESS)
Determinants and macro-volatility impact of international capital flows in selected sub-Saharan Africa countries
Supervised by Professor N. Biekpe

Z. BRY (GRADUATE SCHOOL OF BUSINESS)
Towards building a theory of lean implementation in healthcare: Understanding the enablers and inhibitors of success
Supervised by Professor N.H.B. Faull

B.A. DELCARMÉ (INFORMATION SYSTEMS)
The development and institutionalisation of an integrated healthcare waste information system
Supervised by Professor I. Brown

T. ESEMU (GRADUATE SCHOOL OF BUSINESS)
Innovation and value creation in the fish and cut-flower export sectors in Uganda
Supervised by Associate Professor E. Wood

J. FESSEHAIE (ECONOMICS)
The dynamics of Zambia’s copper value chain
Supervised by Professor M. Morris

S.J. GOSSEL (GRADUATE SCHOOL OF BUSINESS)
A macroeconomic analysis of South Africa’s post-liberalisation capital inflow components
Supervised by Professor N. Biekpe

P.E. GREBE (ECONOMICS)
Civil society leadership in the struggle for AIDS treatment in South Africa and Uganda
Supervised by Professor N. Nattrass

S. HOVE (ECONOMICS)
Essays on monetary policy, institutions and terms of trade shocks in emerging market economies
Supervised by Dr A. Touna Mama

F.M. HOVE (ECONOMICS)
HIV prevalence estimates and their use in regression models: cautionary evidence from Zimbabwe and studies of the relationship between armed conflict and HIV
Supervised by Professor N. Nattrass

G.J.P. HUMAN (MANAGEMENT STUDIES)
Competencies, capabilities, and relational factors in buyer–supplier business-to-business networks
Supervised by Professor J. Simpson

J.-M. JAQUET (GRADUATE SCHOOL OF BUSINESS)
A non-linear approach to modelling motivation in the workplace using artificial neural networks
Supervised by Professor W. Baets

V. KATOMA (GRADUATE SCHOOL OF BUSINESS)
A framework for discretionary effort based on performance expectancies in an integrated work environment
Supervised by Professor K. April

G. MUTASA (ECONOMICS)
Disability grant and labour supply in South Africa
Supervised by Associate Professor I. Woolard

T. NGWARU (ECONOMICS)
Gender, poverty and intimate partner violence in Southern Africa
Supervised by Professor N. Nattrass

M.M. PHEKO (MANAGEMENT STUDIES)
Predictors of sensitivity toward being the target of upward comparison (STTUC): a study of female employees in Botswana
Supervised by Associate Professor A. Schlechter

C.D. REDDY (GRADUATE SCHOOL OF BUSINESS)
Enterprise, institutions, and economic development: a configurational approach
Supervised by Associate Professor R. Hamann and Professor B. Urban
The changing dynamics of the South African clothing value chain and the role for industrial policy: a case study of the China quotas
Supervised by Professor M. Morris

Poverty reduction with high inequality and growth: evidence from post-independence Namibia
Supervised by Professor M. Leibbrandt and Associate Professor I. Woolard

Towards coherent practice in capstone courses for IS majors
Supervised by Associate Professor K. Sewchurran

Cultivating recognition: a classic grounded theory of e-learning providers working in East Africa
Supervised by Professor I. Brown

An organisational framework for the use of web-based tools in “virtual” project teams
Supervised by Professor I. Brown

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RESEARCH CONTRACTS
136
VALUE OF RESEARCH CONTRACTS
R83.36 million
NRF-RATED RESEARCHERS
28
SARCHI RESEARCH CHAIRS
2
ACCREDITED RESEARCH GROUPINGS
10
DOCTORAL GRADUATIONS
26
DHET-ACCREDITED JOURNALS
56.56 units
PEER-REVIEWED PUBLICATIONS
278
POSTGRADUATE STUDENTS
724
POSTGRADUATE FUNDING
R9.5 million
POSTDOCTORAL RESEARCH FELLOWS
8
POSTDOCTORAL RESEARCH FUNDING
R1.8 million
College of Accounting

HEAD OF DEPARTMENT: ASSOCIATE PROFESSOR MARK GRAHAM

College Profile

Research in the College of Accounting is carried out in five broad areas, namely auditing, financial accounting, financial management, management accounting and taxation. The research effort is conducted on three general levels: applied research related directly to professional practice; applied research of a more general nature; and pure research on the broader frontiers of the discipline. In addition, research is carried out on the educational aspects of accountancy. The research is carried out by the staff members and postgraduate students.

College Statistics

Permanent Statistics

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Students

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</table>

Research Fields and Staff

Permanent Staff

ASSOCIATE PROFESSOR PETER BOURNE
Auditing; corporate governance; company law.

MS CAROL CAIRNEY
Activity based costing/management.

MR R. CARPENTER
South African income tax; capital gains tax; international tax; trust and estate duty.

PROFESSOR CARLOS CORREIA
Capital budgeting; cost of capital; valuations.

MR PETER CRAMER
Cost of capital and capital gains tax.

PROFESSOR GEOFF EVERINGHAM
Financial reporting; International Financial Reporting Standards (IFRS); corporate governance.

ASSOCIATE PROFESSOR MARK GRAHAM
International Financial Reporting Standards (IFRS); financial analysis; corporate reporting.

MRS SHELLY HERBERT
International Financial Reporting Standards (IFRS); financial analysis; corporate reporting.

MS JACQUI KEW
Accounting education; financial literacy and entrepreneurship.

MS I. LUBBE

MR DONALD MACDONALD
Accounting Education; Financial Literacy

MR PAUL MAUGHAN
Social Accounting; accounting education; financial analysis.

MRS TARYN MILLER

ASSOCIATE PROFESSOR TESSA MINTER
Information risk management and financial systems and controls and the teaching thereof; Corporate Governance and the education/teaching thereof.

MR GOOLAM MODACK

MR SHAUN PARSONS
South African income tax; capital gains tax; financial instruments, banking and the taxation thereof.

PROFESSOR ALEX WATSON

MS GIZELLE WILLOWS
International Financial Reporting Standards (IFRS); Financial Analysis; Behavioural Finance

MR JAMES WINFIELD
Accounting education; business and professional ethics; foundation of accounting.
**Contact Details**

Postal Address: College of Accounting, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 2269/2257
Fax: +27 21 689 7582
E-mail: mark.graham@uct.ac.za
Website: http://www.commerce.uct.ac.za/accounting

**Research output**

**Authored books**


**Articles in Peer-reviewed Journals**


**Peer-reviewed published conference proceedings**


School of Economics

DIRECTOR: ASSOCIATE PROFESSOR CORNE VAN WALBEEK

Departmental Profile
The School of Economics is located in two faculties, namely the Faculty of Commerce (which is also its administrative home) and the Faculty of Humanities. In March 2011, the School of Economics moved into a newly-constructed building on Middle Campus. The new infrastructure provides a good working environment for staff and helps the School in attracting good students and eminent academics from around the world. The School has 64 permanent and long-term contract staff. In 2013, Associate Professor Edwin Muchapondwa is set to direct the School of Economics.

The School has more than 3000 undergraduate students. In 2012, the School had 188 newly registered Honours students (67 in Economics and 121 in Financial Management and Portfolio Management), 56 registered master’s students, and 62 registered PhD students.

Since 2003, the School offers two PhD programmes. In addition to the traditional PhD by thesis programme, the School also has a coursework-and-thesis based PhD programme which is offered in collaboration with seven other universities on the African continent. The four-year collaborative PhD programme consists of 18-24 months of core and applied coursework, followed by a standard dissertation. Between 2003 and 2012 this programme has attracted 72 students, nearly all from African countries.

Since inception of the collaborative programme in 2003, a substantial number of PhD students in this programme have been funded by the African Economic Research Consortium (AERC). The AERC has typically funded about 11 students per year since 2011, up from 3-5 students per year before then. Furthermore, Carnegie Corporation provided one-year scholarships to another 12 PhD students in 2012. The scholarships from Carnegie Corporation are also tenable for students in the traditional PhD by thesis programme. The growth in the PhD enrolment means that the School can expect a sharp increase in PhD graduates in three or four years’ time. In 2012, the School graduated a total of 10 PhD students.

Current research activity, with an emphasis on policy related research, is spread across a number of fields, including development economics; international economics; international finance; financial theory; growth theory and empirics; labour economics; poverty and inequality; health economics; education; environmental and resource economics; and political economy.

The School of Economics hosts six research units which are led by its academic staff but also recruit other research staff. These are the Aids and Society Research Unit (ASRU), the Development Policy Research Unit (DPRU), the Environmental-Economics Policy Research Unit (EPRU), Policy Research on International Services and Manufacturing (PRISM), Research Unit in Behavioural Economics and Neuroeconomics (RUBEN) and the Southern Africa Labour and Development Research Unit (SALDRU).

Aids and Society Research Unit (ASRU)
ASRU is an inter-disciplinary unit that conducts quantitative and qualitative social science research on various aspects of AIDS policy and the socio-economic dimensions of living with HIV. Recent research by students and researchers in ASRU has focussed on the socio-economic determinants of HIV infection, medical male circumcision, AIDS conspiracy beliefs (and how they are contested), sexual behaviour, the international AIDS response (including millennium development goal 6), HIV and reproductive rights, HIV and gender, the modelling of HIV in Southern Africa, the effect of antiretroviral treatment on labour market behaviour and household composition. ASRU continues to engage with community organisations and NGOs outside of the university. ASRU is directed by Professor Nicoli Nattrass.

Environmental-Economics Policy Research Unit (EPRU)
The Environmental-Economics Policy Research Unit (EPRU) is a research group which seeks to enhance environmental policy-making in South Africa through rigorous policy research and extension in order to attain sustainable development and poverty reduction. EPRU is funded by the Swedish International Development Cooperation Agency (SIDA) through the Environment for Development (EfD) Initiative managed by the Environmental Economics Unit (EEU) at Goteborg University. The EfD consists of 6 environmental economics research centers in developing countries (Costa Rica, China, Ethiopia, Kenya, South Africa and Tanzania), the EEU and Resources for the Future in Washington DC, US. The EfD Initiative provides EPRU with a rich network of highly skilled academics trained in environmental economics to draw on.

The existing focus of EPRU’s research projects are in the following areas: biodiversity and ecosystems management; responses to climate risk; distributional consequences of climate policy; poverty, service delivery and local environmental quality; community based resource
management; fisheries; behavioural aspects of natural resource management including risk preferences and cooperative behavior.

In 2012, EPRU was coordinated by Mare Sarr (Director) and Jane Turpie (Research Convener). In addition, EPRU has four senior research fellows (Anthony Black, Martine Visser, Edwin Muchapondwa and Mare Sarr); seven junior research fellows (Kerri Brick, Reviva Hasson, Sunday Adewara, Byela Tibesigwa, Grant Smith, Sue Snyman and Coretha Komba); an administration officer (Libbi Downes) and four domestic research associates (Stephanie Giamporcaro, Precious Zikhalu, Harald Winkler and Andrew Marquard). A number of PhD and master’s students are also being funded and supervised by EPRU. In 2013, Anthony Leiman is set to direct EPRU.

EPRU’s research fellows are actively involved in teaching Environment and Natural Resource Economics, both within the School of Economics and in the broader university. Our research fellows have been particularly prolific with a publication record of 16 papers in reputable international and local journals, 4 discussion papers and a book chapter.

EPRU has collaborated with a number of local and national stakeholders on medium-size projects; these collaborators include South African National Parks in the wildlife sector, The Department of Water Affairs and Forestry in the water sector, The Department of Environmental Affairs and Tourism on marine and coastal management, The Department of Agriculture, Forestry and Fisheries, and the City of Cape Town on air quality management and energy savings. Increasingly the unit’s efforts are being channelled into research outputs accessible to policy makers.

**Southern Africa Labour and Development Research Unit (SALDRU)**

The Southern Africa Labour and Development Research Unit (SALDRU) carries out research in applied empirical microeconomics with an emphasis on labour markets, human capital, poverty, inequality and social policy. SALDRU is governed by an executive committee. It strives for academic excellence and policy relevance.

SALDRU was founded in 1975 and, in the apartheid years, conducted a number of surveys revealing the negative impacts of apartheid on the population. In the post-apartheid period, SALDRU has continued to gather data and conduct research directed at informing and assessing anti-poverty policy. Recent survey projects include the ongoing Cape Area Panel Study, the Financial Diaries Project, the Public Work Research Project and the Quality of Life Survey. In 2006 the Presidency awarded SALDRU the tender to set up and conduct the base wave of South Africa’s first national panel study of well-being, the National Income Dynamics Study. In 2009 and 2011, respectively, SALDRU won the tenders for the second and third waves of NIDS. Fieldwork for the third wave was conducted in 2012. In January 2011 J-PAL Africa was launched as a project within SALDRU. Linked to a global network of researchers, J-PAL Africa is building capacity within Africa to run randomized impact evaluations of anti-poverty programmes. In 2012 the National Treasury asked SALDRU to run a national project to stimulate and support research in three areas; employment, income distribution and inclusive growth. Three national research groups are being put in place to undertake this work.

Currently SALDRU’s research team includes a Director (Professor Murray Leibbrandt), a permanent Associate Professor, the Executive Director of J-PAL Africa, a Chief Research Officer, a Senior Research Officer, 3 Post-doctoral Fellows, 2 researchers, 19 research associates from within the School of Economics, 4 honorary research associates. There are 19 research affiliates, reflecting SALDRU’s active national and international research collaborators. The NIDS survey office is run by the survey manager and contains 7 dedicated staff and, during fieldwork, up to 30 temporary staff members. The J-PAL Africa office is run by the Executive Director, Kamilla Gumede, and has two research managers and four research assistants.

Aside from the National Income Dynamics Study and the work of J-PAL Africa, current research work falls into the following research themes:

- **Post-apartheid Poverty, Employment, Education, Health and Migration dynamics** In 2012 our key funders were the NRF Research Chair in Poverty and Inequality Research, the NRF Programme, Grand Challenges, Social Dynamics, European Union’s NoPoor Consortium, the National Institutes of Child Health and Development, the Presidency’s Programme to Support Pro-poor Policy Development, the National Treasury and the Centre of Higher Education Transformation.
- **Fertility and Intergenerational Transfers** (funded by the Hewlett Foundation and Population Reference Bureau).
- **Social Protection, Public Works and the Labour Force** (funded by the International Development Research Centre, the Ford Foundation and the British ESRC).
- **The Economics of Tobacco Control in Africa** (funded in 2011 by the American Cancer Society (ACS) and in 2012 by the ACS and the Bill and Melinda Gates Foundation).
Since 1999 SALDRU has run the annual UCT Summer Programme in Social Science Research Using Survey Data. Currently this programme trains over 100 Southern African researchers per year. It was funded by the Mellon Foundation for the first decade and, in 2011 was endowed by large grants from Kesge, Ford and Mellon Foundations and Statistics South Africa as well as smaller grants from 10 of South Africa’s universities. In addition, SALDRU runs Winter Workshops in the analysis of panel data and in programme evaluation.

Development Policy Research Unit (DPRU)

The Development Policy Research Unit (DPRU) has been actively engaged in policy-relevant research since 1990, establishing itself as one of South Africa’s premier research institutions in the fields of labour markets, poverty and inequality. The Unit’s research feeds into policy decisions and pronouncements at the highest level, including Cabinet memoranda, State of the Nation Addresses and legislation, while our research findings are regularly featured in the print and electronic media.

Much of the DPRU’s work derives from government departments at national and provincial level, while the DPRU also receives funding from international and multilateral agencies. In particular, the DPRU has completed numerous research projects at the national level for National Treasury, the Presidency, and the Departments of Labour, Social Development, Education and Trade and Industry, as well as for various departments in the Western Cape Provincial Government.

As part of our engagement in the policy arena, the DPRU has hosted highly successful conferences aimed at fostering greater interaction between researchers and policymakers. The DPRU publishes a Working Paper and a Policy Brief series, both of which are freely available on our website. DPRU staff members also undertake limited teaching and graduate supervision.

Apart from its research and capacity building activities, the DPRU is engaged in managing the Employment Promotion Programme (EPP), an initiative of the UK Government’s Department for International Development (DFID), aimed at providing an enabling policy environment in South Africa for employment creation and poverty reduction in South Africa. Bringing business, labour and government representatives together, the Programme has been able to commission a wide range of research that has had high level policy impact.

The DPRU is also the selected South African partner institution of the African Growth Initiative (AGI), in partnership with the Brookings Institute in the United States. This partnership ensures the DPRU’s research reach a broader international policymaking audience.

The DPRU’s Director, Professor Haroon Bhorat, holds the NRF Research Chair in Economic Growth, Poverty and Inequality. This has facilitated the awarding of postgraduate bursaries and fellowships broadly within the DPRU’s main areas of interest to Economics students at the University.

Current and recently completed projects undertaken by the DPRU include:
- Africa Growth Initiative (AGI) Programme
- Understanding enforcement of minimum wage laws
- Monitoring the impact of the economic downturn on the SA labour market
- Enhancing access to information: An analysis of collective bargaining and sectoral determination wage data
- Labour market dynamics in the Western Cape
- South African country case study on economic transformation
- Labour Market Intelligence Partnership Project
- The Pursuit of Inclusive Growth in South Africa

Policy Research on International Services and Manufacturing (PRISM)

Policy Research on International Services and Manufacturing (PRISM) is a research and policy unit located within the School of Economics. PRISM provides a lens to focus research and policy work broadly on issues of globalization, trade and industrialization. It is home to a number of related research activities, projects and programmes concerned with issues of globalization, global value chains, industrialization paths, international trade, foreign investment, the defence industry, policy governance, infrastructure development, the role of knowledge intensive services, innovation, and international competitiveness. Another feature of PRISM’s work has been its applied focus, responding to economic policy questions issues in South Africa, the rest of Africa and beyond. PRISM is managed by a Steering Committee consisting of Mike Morris (Head), David Kaplan and Anthony Black.

PRISM research and policy activities are focused around the following issues: Globalisation and industrialization development; International trade and foreign investment; Governance and economic policy; Commodities and resource based linkage industrialization; Innovation and upgrading in developing countries; Industrial policy and development; Employment intensive growth in South
Africa; International competitiveness of firms and sectors; Clusters and learning networks; China’s economic impact on Africa; Regulatory frameworks for trade, services and sectors; the distributional gains of industrial growth.

David Kaplan has been appointed to the Board of the Technology Innovation Agency (TIA) – the government agency responsible for bridging the chasm between new knowledge and commercial application.

Research Unit in Behavioural Economics and Neuroeconomics (RUBEN)

RUBEN’s interdisciplinary team of experimental economics researchers seek to understand the way in which people in developing economies assess risk and make decisions. They do this through quantitatively analyzed laboratory and field experiments with people earning real monetary rewards for performing experimental tasks. RUBEN researchers especially focus on trust - the essential basis of business relationships – and people’s attitudes to risk, uncertainty and time. This knowledge is crucial to innovative product design in insurance, banking and retail asset management. For certain studies, RUBEN researchers also have the technology and expertise to conduct brain imaging studies, of the kind needed for neuroeconomics and neuromarketing. In 2012, RUBEN was directed by Associate Professor Justine Burns, and includes researchers from other Departments at UCT and international associates. Members within the School of Economics are Andre Hofmeyr, Harold Kincaid, Don Ross, Mare Sarr, Martine Visser and Honorary Professor George Ainslie. In 2013, Professor Harold Kincaid is set to direct RUBEN.

Current RUBEN research projects underway include experimental and neuroimaging studies of addictive consumption and illegal gambling; a study of the risk and time preferences of Western Cape fruit farmers that can inform the design and pricing of new insurance products to support innovation for export promotion; a study of the prevalence and determinants of pathological gambling among Informal gamblers In a township; a study of a new initiative to deliver early childhood education in Cape Town townships; and a Portfolios of the Poor - Atlanta and Cape Town project about the financial lives and attitudes of the poor.

Departmental Statistics
Permanent and long term contract staff

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<th>Position</th>
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Students

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*Number of students enrolled for economics courses. Students can take a number of courses in one year.

Research Fields and Staff

Permanent teaching staff

PROFESSOR HAIM ABRAM
Finance; futures and derivatives; monetary economics in a general equilibrium context.

PROFESSOR HAROON BHORAT
Director of the DPRU; labour markets and labour market policy; poverty and income distribution.

PROFESSOR ANTHONY BLACK
Development economics, trade and industrial policy; automotive industry, garment industry, foreign direct investment, regional integration; global location of manufacturing and services; employment.

ASSOCIATE PROF JUSTINE BURNS
Head of RUBEN; Microeconomics; labour; poverty and income distribution; rural development; institutional economics.

DR BEATRICE CONRADIE
Farm labour markets; women in agriculture; wine industry mechanisation; irrigation farming; human animal conflicts.

MR REZA C DANIELS
Econometric analysis with missing data; analyses of surveys undertaken at UCT; applied development and labour microeconomics; public policy and benefit incidence analyses; geography and uneven development.
DR CLARA DELAVALLADE
Development economics; applied econometrics; corruption; health; education; evaluation of public policies.

PROFESSOR PAUL J DUNNE
Defence, conflict and peace economics; applied econometrics

ASSOCIATE PROFESSOR LAWRENCE EDWARDS
International trade and competitiveness; trade policy; trade and infrastructure; trade, employment and poverty.

MS KATHERINE EYAL
Labour; development; education; program evaluation; econometrics, behavioural economics

DR FARAYI GWENHAMO
International capital movements and institutions; construction of economic and political institutional indices; property rights and economic performance; macroeconomics; time series econometrics.

ASSOCIATE PROF LUKASZ GRZYBOWSKI
Industrial organisation; game theory; applied econometrics; network economics; telecommunications; competition and antitrust policy.

ASSOCIATE PROFESSOR SHAKILL HASSAN
Finance: fixed income, currency and commodity markets; arbitrage and asset pricing; applied financial econometrics. Economics: currency speculation and crises; monetary policy and asset prices; applicable economic theory.

MR ANDRE HOFMEYR
Game theory; behavioural economics; the economics of addiction; political economy.

PROFESSOR DAVID KAPLAN
Technology development; technology policy; industrial policy; telecommunications industry; migration of skilled persons. Work on the SA mining industry – technological change; innovation; mining based exports (capital equipment and services); local (Western Cape) economic development issues.

PROFESSOR HAROLD KINCAID
Philosophy and methodology of social science; causal modeling; addiction; experimental elicitation of risk and time preferences and other topics in behavioral economics

MS LEIGH LAKAY
Labour economics; environmental economics.

PROFESSOR MURRAY LEIBBRANDT
Director of SALDRU; income distribution and poverty; survey econometrics; labour; education.

ASSOCIATE PROFESSOR ANTHONY LEIMAN
Environmental and resource economics; cost-benefit analysis; informal sector.

MR CECIL MLATSHENI
Youth and the labour market; participation, search and unemployment; fertility and labour market participation; the brain drain and skills migration.

PROFESSOR MIKE MORRIS
Director of PRISM; Globalisation; impact of China on Africa; industrialization and the Africa commodities boom; clothing and textiles; automotive industry; clusters and industrial development; industrial policy.

ASSOCIATE PROF EDWIN MUCHAPONDWA
Community based natural resource management; nature-based tourism; valuation of non-market environmental amenities

PROFESSOR NICOLI NATTRASS
Director of ASRU; The socio-economic dimensions of living with HIV; the clothing industry; attitudes to employment; the political-economy of job creation; the moral economy of dealing with predators.

DR MIQUEL PELLICER GALLARDO
Economic inequality; political economy; education; redistribution; political clientelism; authoritarian regimes.

MS NERYYIA PILLAY
Risk measurement, financial markets.

DR PATRIZIO PIRAINO
Applied microeconometrics; labour economics; economics of education; immigration; development economics; experimental economics.

DR VIMAL RANJODH
Labour economics; economics of education; economic demography; poverty; inequality and development economics.

PROFESSOR DON ROSS
Game theory; philosophy of economics (methodology); neuroeconomics and experimental economics; infrastructure development; African trade and industry policy; philosophy of science.

DR MARE SARR
Director of EPRU; Institutions and development; political economy; natural resources.

DR ASHA SUNDARAM
International trade; development economics; applied econometrics.
DR ALBERT TOUNA MAMA
Macroeconomics (households’ consumption/investment behavior); international macroeconomics (current account imbalances, sovereign borrowing); dynamic stochastic equilibrium models; development economics (informal insurance arrangements, terms of trade shocks, structural changes).

ASSOCIATE PROFESSOR CORNE VAN WALBEK
The economics of tobacco control; evaluating economic forecasts; the quality of official data, economics education; economic history.

ASSOCIATE PROF MARTINE VISSE
Behavioural and experimental economics applications to natural resource utilization; environmental and natural resource economics; poverty, inequality and sustainability; social institutions and networks; applied game theory and microeconometrics; valuation techniques.

PROFESSOR MARTIN WITENBERG
Data Quality; Measurement of Poverty, Incomes and Economic Well-being; Labour economics; economics of the household; analysis of time-use data; microeconometrics.

ASSOCIATE PROFESSOR INGRID WOOLARD
Measurement of poverty; income inequality; labour economics; social assistance.

Adjunct staff

ADJUNCT PROFESSOR BRIAN LEVY
Governance and political economy; development policy and practice.

ADJUNCT ASSOCIATE PROFESSOR MARK ELLYNE
Monetary economics (monetary transmission, monetary policy, inflation targeting); exchange rates (policy, valuation, exchange regimes and controls); regional integration (SADC convergence, African integration); IMF and World Bank (structural adjustment programs); country macroeconomic studies.

DR NICK SAMOULIHAN

Internship teaching staff

MS CATHERINE KANNEMEYER
Labour economics; education; social transfers.

MR FRANCOIS STEENKAMP
Labour economics and trade.

MR SEAN MULLER
Applied microeconometrics; growth and development (particularly in Africa); choice theory; intergenerational mobility; methodological issues in economics and econometrics.

Honorary staff

HONORARY PROFESSOR GEORGE AINSLIE
Behavioral economics (picoeconomics); motivation; choice; self-control; higher mental functions; interface among economics; experimental psychology; philosophy (theory of mind).

Research Staff

ASRU
NATHAN GEFFEN (researcher, deputy director of ASRU, and co-ordinator of GroundUp)

DPRU
MR MORNÉ OOSTHUIZEN
Deputy Director: Labour markets; prices; poverty and inequality.

MS CARLENE VAN DER WESTHUIZEN
Senior Researcher: Labour economics; poverty and inequality.

MS TOUGHEDAH JACOBS
Labour markets; development; poverty, inequality.

MS NATASHA MAYET
Labour economics; minimum wage.

MS SUMAYYA GOGA
Labour markets; poverty and inequality.

MS ELNE JACOBS
Development economics; labour economics; institutional economics; micro economics; survey data analysis; economics of education.

MR DAVID (CHEN-WEI) TSENG
Labour economics; survival analysis; time series and forecasts.

MR BENJAMIN STANWIX
Labour markets; economic history.

MR NAN TIAN
Labour economics; conflict; economic growth.
ASSOCIATE PROFESSOR CALLY ARDINGTON
Intergenerational support; analysis of household surveys; orphanhood; family background, school quality and educational outcomes.

PROFESSOR SEAN ARCHER
Economics of human rights; economics of education training, and identities and ecology of arid zones.

PROFESSOR FRANCIS WILSON
Poverty and development; unemployment; household survey data collection; water policy.

MS KAMILLA GUMEDE
Executive Director of J-PAL Africa.

DR THOMAS BOSSUROY
Inequalities and social mobility; political economy; social structures and identities and evaluation of public policy.

DR MALCOLM KESWELL
Econometrics of Programme Evaluation, Behavioural Economics, Development Economics

DR BRENDAN MAUGHAN-BROWN
HIV-related stigma; socioeconomic and behavioural determinants of HIV.

DR EVA WEGNER
Political mechanisms of inequality persistence; clientelism; political parties; authoritarian regimes; Islamist movements.

DR NICOLA BRANSON
Quantitative research in education inequality and the intergenerational consequence of teenage childbearing in South Africa.

ARDEN FINN
Inequality, poverty and the analysis of panel data

CLARE HOFMEYR
Economics of education, training, communications and policy work.

LAURA COSTICA
J-PAL Africa Research Manager

BRYAN PLUMMER
J-PAL Africa Research Manager

MUTHONI NGATIA
Researcher J-PAL Africa

Distinguished visitors

PROFESSOR RAVI KANBUR
Cornell University

PROFESSOR FREDERICK FOURIE
University of the Free State

PROFESSOR ROBERT LAWRENCE
Kennedy School of Government, Harvard University

PROFESSOR RHYS JENKINS
University of East Anglia

PROFESSOR ANDREW ROSE
University of California, Berkeley

PROF GLENN W HARRISON
Georgia State University

PROF ELISABET RUTSTROM
Georgia State University

PROF WARREN BICKEL
Virginia Institute of Technology

Contact Details

SCHOOL OF ECONOMICS
Postal address: School of Economics, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 2723
Fax: +27 21 650 2854
Email: charlene.juries@uct.ac.za
Web: http://www.commerce.uct.ac.za/economics/

AIDS AND SOCIETY RESEARCH UNIT (ASRU)
Postal address: ASRU, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 4656
Email: kathy.forbes@uct.ac.za
Web: http://www.cssr.uct.ac.za/asru.html

DEVELOPMENT POLICY RESEARCH UNIT (DPRU)
Postal address: DPRU, University of Cape Town Private Bag X3 Rondebosch 7701
Telephone: +2721 6505705
Fax: +2721 6505711
Email: Waseema.Petersen@uct.ac.za
Web: www.dpru.uct.ac.za
Research Output

Authored books


Edited books


Chapters in books


**Articles in Peer-reviewed Journals**


Doctoral dissertations


Fessehaie, J. 2012. The dynamics of Zambia’s copper value chain. Supervised by Morris, M.L.


Hove, S. 2012. Essays on monetary policy, institutions and terms of trade shocks in emerging market economies. Supervised by Touna Mama, A.

Mutasa, G. 2012. Disability grant and labour supply in South Africa. Supervised by Woolard, I.D.


Master’s degrees (by research)

Bertscher, J. 2012. The complex determinants of childhood nutritional status and undernutrition in South Africa. MBusSc. Supervised by Wilson, F.


Etheredge, G. 2012. A procedure to test human behaviour under producer scrounger conditions. MSocSc. Supervised by Ross, D.A.


Smith, G. 2012. Social norms, social distance, social approval and household electricity consumption: a field experiment in Cape Town. MCom. Supervised by Visser, M.C.


Department of Finance and Tax

ACTING HEAD OF DEPARTMENT: ASSOCIATE PROFESSOR CRAIG WEST

Department Profile

The Department of Finance and Tax was formed with effect from 1 January 2012 and this represents the Department’s first research report. During January 2012, the Department moved into its allocated space. This represented some disruption for the members of staff, their teaching and research, but these issues were soon resolved.

The Department houses two disciplines, namely: finance at an undergraduate and postgraduate level and taxation at a postgraduate level only. The new Department is also home to a research unit, being the African Collaboration for Quantitative Finance & Risk Research (ACQuFRR).

As the Department becomes more established, it is anticipated that the research outputs of its staff will increase. Further postgraduate streams for taxation qualifications were developed during 2012 to come on-stream in 2013.

The tax section within the Department was invited to participate in a collaborative research project with 6 other institutions around the world. The Research Council of Norway funds this project. The staff of this section of the Department was further invited to participate in the Marie Curie International Staff Exchange Scheme (IRSES) for particular research topics in international tax. To this end, the Department hosted Dr Daniel Smit from Tilburg University in the Netherlands and will host further guests in 2013. Department staff will also participate in the exchanges in the coming years. The IRSES programme provides funding for the travel and accommodation of the visiting academic.

The department has one NRF-rated researcher, Professor Enrico Uliana (part-time).

An exceptional 42 master’s students graduated from the department in 2012. The master’s graduates are expected to increase as are PhD students.

African Collaboration for Quantitative Finance & Risk Research (ACQuFRR)

The African Collaboration for Quantitative Finance & Risk Research (Director: Associate Professor David Taylor) was established within the Department of Finance & Tax at the beginning of 2012. ACQuFRR’s purpose is to advance the
theory and application of modern quantitative, statistical and mathematical techniques to the modelling and risk management of financial products and markets. It will be primarily interested in the application of these techniques in African and South African contexts. Whilst doing this, it will simultaneously foster a culture of research excellence, provide research mentorship to staff and students, encourage entrepreneurial activity and develop research capacity.

Departmental Statistics

Permanent and Long-term Contract Staff (including both full and part-time staff)

<table>
<thead>
<tr>
<th>Category</th>
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<tr>
<td>Professors</td>
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Adjunct and Honorary Staff

Adjunct Associate Professors 1

Students

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</table>

Research Fields and Staff

Permanent Staff

MR ABDUL ABDULLA
Accounting education; financial ratio analysis. Islamic Finance.

DR EDWARD CHAMISA
International accounting standards in developing countries; corporate governance; corporate social responsibility.

MR PHILLIP DE JAGER
Fair value accounting; banks; capital markets.

ASSOCIATE PROFESSOR GLEN HOLMAN
Capital markets.

MR CHUN-SUNG HUANG
Financial risk management and modelling; Value-at-Risk estimates and Improvements; Utility-Indifference Pricing; Stochastic Modelling.

DR RYAN KRUGER
Predictive modelling of asset returns and the financial applications of machine learning.

MR AKIOS MAJONI
Liquidity in African financial markets; corporate restructuring and shareholder value.

MR LUCIAN PITT
General field of disclosure with emphasis on risk disclosure in AFS.

MR KANSHUKAN RAJARATNAM
Decision making in consumer credit finance; credit union models; optimisation.

ASSOCIATE PROFESSOR JENNIFER ROELEVELD
International tax (Capital and Income); Tax Information Exchange Agreements; South African income tax and Estate Duty

MR COLIN SMITH
Valuation models; working capital management; behavioural issues in Management Accounting; NGO accounting and financial management.

PROFESSOR PETER SURTEES
South African income tax.

DR FRANCOIS TOERIEN
Entrepreneurial and small business finance; alternative investments; equities.

PROFESSOR ENRICO ULIANA
Management accounting practices; strategic cost analysis; use of accounting in aligning performance with strategy; intellectual capital.

PROFESSOR PAUL VAN RENSBURG
Asset Pricing. Explaining the cross section of equity returns in local and international markets.

MR DAVID WARNEKE
Vat and income tax.

ASSOCIATE PROFESSOR CRAIG WEST
International Tax (Income and Capital); Tax Information Exchange Agreements and South African income tax.
MR DARRON WEST
Taxation of savings and investments; behavioural finance and investing.

Contact Details
Postal Address: Department of Finance and Tax, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 5337
Fax: +27 21 650 4487
E-mail: Waleda.Salie@uct.ac.za
Website: http://www.commerce.uct.ac.za/FinanceandTax/

Research output

Chapters in books


Articles in Peer-reviewed Journals


Master’s degrees in Finance


Master’s degrees in Financial Management

Attwood, M. 2012. An application of the Pitroski-F score to the SA market. MCom. Supervised by Paul van Rensburg.


Willows, G. 2012. She’s Built For It: Differential Investment Performance in South Africa Based on Gender. MCom. Supervised by Darron West.

**Master’s degrees in taxation**


Glendining, D. 2012. An investigation into the leakage factor, in respect of the accrual of employer’s and employee’s contributions to retirement savings, compounded, over an employee’s working career, in the private sector. MCom. Supervised by Jennifer Roeleveld.


Olivier, A. 2012. An exploration and critical analysis of the plastic bag levy, the fuel levy and the carbon tax on new vehicles, in order to understand the purpose and effects of their implementation. MCom. Supervised by Peter Cramer.


Van der Mescht, E. 2012. Limited interest in property: An overview of limited interests in property with particular reference to the taxation of usufructs and more specifically the capital gains tax effects on disposal for individuals and for Trusts. MCom. Supervised by Jennifer Roeleveld.

Van Wijk, A. 2012. Whether tax incentives to stimulate foreign direct investment for manufacturing in the SADC region is an indicator of harmful tax competition. MCom. Supervised by Craig West.

Department of Information Systems

HEAD OF DEPARTMENT: DR LISA SEYMOUR

Department Profile

Research continued to be high on the agenda of the IS department’s deliverables. Professor Ojelanki Ngwenyama joined the Department on a part-time basis and received his new NRF (B) rating. With the successful re-evaluation application of Professor Hart, the Department increased its NRF-rated researchers to eight. In terms of research publications, the department succeeded in its goal of increasing the quality of its outputs with a substantial increase in output in DHET-accredited journals.

We graduated 5 PhDs in December (a record for the Department) and 10 master’s students. One member of staff, Elsje Scott, was awarded her PhD in 2012 and 3 more academics intend submitting by June 2013. Our overall postgraduate profile is strong with 49 Postgraduate diploma and 49 Honours students graduating in 2012. The Department now runs four postgraduate diplomas in Information Systems, Computer Forensics, Enterprise Systems and BPM and Business and Systems Analysis (BASA) respectively. In addition to record numbers of postgraduate student graduations, the department maintains a strong and steadily increasing cohort of registered postgraduate students. In 2012, the department had 38 registered doctoral students and 42 registered master’s students. This is in addition to the 65 honours students who are also required to submit an individual research project.

The department also secured its first major multi-year research contract through the UCT-Samsung Mobile Innovation Laboratory (R1+ million in annual funding in terms of a three-year agreement), the Department’s Digital Forensics Unit hosted South Africa’s first Digital Forensics Conference and the CITANDA Community IT project in Vrygrond has precipitated some relevant ICT for development research studies.

Departmental Statistics

Permanent Staff

<table>
<thead>
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Honorary Staff

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Students

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</table>

Research Fields and Staff

PROFESSOR IRWIN BROWN
IS in developing countries; IS management; Grounded Theory in IS research.

ASSOCIATE PROFESSOR WALLACE CHIGONA
ICT for national development; community informatics; and mobile technology for development.

DR ERIC CLOETE
Computer architectures and software; information systems management; image processing; electronic commerce.

EMERITUS PROFESSOR MIKE HART
Strategic use of IS; key management issues in IS; business intelligence; data mining and analytics.

ASSOCIATE PROFESSOR KEVIN JOHNSTON
ICT strategy and alignment; use of ICT in business; ICT management issues; open source software.

ASSOCIATE PROFESSOR MICHAEL KYOBE
Strategic IT planning; IT alignment; computer security and utilisation of IT to leverage knowledge management; enterprise and IT governance.

DR ELSJE SCOTT
Object-orientated programming and methodologies; efficient teaching methods for programming concepts; IS project management, with the specific focus on student group projects using C# as programming language.
**MS SALAH KABANDA**  
IT adoption; M and E commerce; ICT4D.

**PROFESSOR OJELANKI NGWENYAMA**  
Developing and using critical social science methods for IS research. Empirical research focused on: software process innovation; IS implementation; IS management; the impact of ICT on social and economic development.

**DR JACQUES OPHOFF**  
Information and cyber security; privacy; design science research.

**MR MIKE POLLOCK**  
Effective IS teams, IS programming with students; technology acceptance; the digital divide in South Africa; digital forensics; virtual teams; m-innovation.

**MS SUMARIE ROODT**  
IS and Education: Technology-enhanced learning with a focus on using emerging technologies for the Net Generation, Digital Game-Based Learning (DGBL), Virtual Worlds, Educational Neuroscience & Technology-Enhanced Learning. IS and Business: Using emerging technologies for Competitive Advantage

**DR LISA SEYMOUR**  
Enterprise systems and business process management with a developing country focus.

**ASSOCIATE PROFESSOR KOSHEEK SEWCHURRAN**  
Project organising, systems thinking, innovation and creating a desirable tension between best-practices, research and professions.

**EMERITUS PROFESSOR DEREK SMITH**  
Project portfolio management; project teams; project manager competencies.

**MR ADRIE STANDER**  
Data communications; database design; human-computer interaction; culture and information systems.

**MS MAUREEN TANNER**  
Agile, Global Software development.

**PROFESSOR JEAN-PAUL VAN BELLE**  
Adoption of information technologies; ICT4D; e-commerce and m-commerce; e-government and m-government; open source software; enterprise IS architectures; e-readiness of SMEs and NGOs; Green IS/IT.

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**Contact Details**

Postal Address: Department of Information Systems, University of Cape Town, Private Bag X3, Rondebosch, 7701  
Telephone: +27 21 650 2261  
Fax: +27 21 650 2280  
E-mail: Linda.Magodla@uct.ac.za  
Website: http://www.commerce.uct.ac.za/InformationSystems/

**Research output**

**Authored books**


**Chapters in books**


**Articles in Peer-reviewed Journals**


Peer-reviewed published conference proceedings


Doctoral dissertations


Delcarme, B. 2012. The development and institutionalisation of an integrated health care waste information system. Supervised by Roode, J. and Brown, I.T.J.

Scott, E. 2012. Towards coherent practice in capstone courses for IS majors. Supervised by Sewchurran, K.


Weimann, P. 2012. An organisational framework for the use of web-based tools in ‘virtual’ project teams. Supervised by Brown, I.T.J.

School of Management Studies

HEAD OF SCHOOL: ASSOCIATE PROFESSOR ANTON F. SCHLECHTER

School Profile

The School of Management Studies provides undergraduate courses, postgraduate programmes and postgraduate diplomas in a range of management disciplines to students registered for Business Science, Commerce and Humanities degrees. Research is supervised at the Honours, Master’s and Doctoral levels. The School consists of five Sections (incl. Actuarial Science, Applied Management, Marketing, Organisational Psychology and the Professional Communication Unit), as well as four established research units (African Collaboration for Quantitative Finance & Risk Research (ACQuFRR); Centre for Actuarial Science Research (CARe); Institute of Monitoring and Evaluation (IME); and the Unilever Institute for Strategic Marketing). A further three research units have recently been established and are currently seeking University Research Committee (URC) approval (Development Unit for New Enterprise
The Section of Actuarial Science (Head of Section: Ms Shivani Ramjee) produces approximately 20% of all South African actuaries. More than half of our graduates go on to complete the professional examinations to qualify as actuaries, which is one of the highest qualification rates of any university in South Africa. In addition, a significant number of our graduates go on to complete other professional qualifications (for example as a CFA). In 2001 UCT became the second university in the world to have postgraduate courses recognised for exemption from the professional United Kingdom examinations. In 2010, the local actuarial qualification was introduced in South Africa and UCT plays a key role as a provider of education to the Actuarial Science profession. The Centre for Actuarial Research (CARe) (Director: Associate Professor Tom Moultrie) and African Collaboration for Quantitative Finance & Risk Research (ACQuFRR) (Director: Associate Professor David Taylor) are further aligned with the Section of Actuarial Science.

Centre for Actuarial Research (CARe), the only unit of its kind at an African university was established in 2001 focusses on building capacity, improving techniques and producing independent research in demography. The Centre is internationally recognised in the field of estimation of demographic parameters from limited and deficient data. The Centre’s other major field of work is in demographic and epidemiological modelling and population projections. In addition, the Centre hosts postgraduate training programmes in demography for both Master’s and PhD students. During 2012 academic staff at CARe were the principal investigators in a multi-year project funded by the UNFPA to update and rewrite a major manual on demographic estimation from limited and defective data. The results of this work are available electronically and a print version will appear in 2013. Demographers at CARe also played a significant role, some of which was played out in the popular media, in the evaluation, analysis and assessment of the data from the 2011 South Africa census. In addition, the unit’s peer-reviewed research output continued to be prolific, with staff publishing 11 papers in major international journals.

The Section of Organisational Psychology (Head of Section: Dr Suki Goodman) provides undergraduate and postgraduate courses in Industrial/Organisational Psychology. The Section presents a Master’s degree in Organisational Psychology that is accredited by the Health Professions Council of South Africa (HPCSA) for the professional training and registration of Industrial Psychologists. The Section further offers a second Master’s programme in Programme Evaluation, the only one of its kind in South Africa. The Section has PhD students working in the areas of talent retention, work-family studies, organisational health and safety and programme evaluation. During 2012 Professor Joha Louw-Potgieter edited a special edition of the South African Journal of Human Resource Management, to which a number of staff members contributed papers. In total, Section staff published 13 accredited articles in 2012 and contributed a total of seven oral/poster presentations at three international conferences (incl. International Congress of Psychology, World Congress of the International Federation of Scholarly Associations of Management, Annual Conference of the American Evaluation Association), and two oral presentations at the Southern Africa Institute for Management Scientists conference. One PhD, Dr Mpho Pheko and 19 Masters students graduated in 2012. Towards the end of 2012, Francois de Kock joined as a senior lecturer from the University of Stellenbosch. He is in the final stages of completing his PhD at Erasmus University of Rotterdam. Various international research collaborations were formed and further developed with visits during 2012: Dr Ines Meyer to the University of Connecticut; Prof Joha Louw-Potgieter and Adiliah Boodhoo to the Claremont Graduate University; and Chao Mulenga to the Organisational Health Psychology Institute in Oregon. The Organisational Psychology Section hosts two research units: Practice and Research of Occupational Health Psychology in Africa (PROPHA) (Director: Professor Jeffrey Bagraim); and the Institute for Monitoring and Evaluation (IME) (Director: Professor Joha Louw-Potgieter).

During 2012 the PROHPA reading group was accredited by the HPCSA and started providing Continuous Professional Development (CPD) points for various activities presented by the unit. The IME compiled a self-review report as part of the formal review of the School of Management Studies. The result of this exercise was a review of the Institute’s main goals. During 2012, the IME presented nine different public short courses in programme evaluation. Despite some competition in the market, the IME remains the preferred provider of short courses for public sector and non-governmental clients. The Institute also completed two contract evaluations for clients within the University; one for the ADAPT programme of the Transformation Services Office and one for the Project for the Study of Alternative Education in South Africa (PRAESA).

The Section of Marketing (Head of Section: Dr Gert Human) provides undergraduate courses in marketing management, which includes courses in consumer behaviour, industrial marketing, services marketing, international marketing, marketing research, E-marketing
and tourism marketing. At a postgraduate level research is encouraged at the Honours, Master’s and Doctoral levels. The Marketing Section continues to engage key questions in both the scholarly and applied domains of marketing. Justin Beneke, Elsamari Botha and Dr Mignon Reyneke published papers in accredited journals and presented papers at peer reviewed conferences. Research conducted in the Section covers a wide spectrum of issues: Justin focused on consumer brand value, loyalty, and digital media marketing. These include local publications in the South African Journal of Business Management, and Acta Commercii, as well as international publications in noteworthy outlets such as the Journal of Product and Brand Management. In a collection of journal articles and conference papers Elsamari and Mignon looked at both the online and traditional market spaces to asked questions about the effects of predictors such as online presence, emotion, purchase intention and their relationships with dependent variables such as trust formation, viral marketing, product types and high net worth markets. Gert obtained his PhD for a thesis that addresses the issues of network competence and network capability in business-to-business markets for the first time in South Africa. He goes on to confirm the mediation power of trust and commitment in the quality-loyalty-satisfaction causal chain within buyer-supplier dyads. The Marketing Section also saw an exponential growth in its post graduate research activity and noteworthy Masters’ topic includes models to consider complex time perspectives and spontaneous infection theory in social networks. The UCT Unilever Institute of Strategic Marketing (Director: Emeritus Professor John Simpson) is aligned with the Section of Applied Management.

The main purpose of the UCT Unilever Institute of Strategic Marketing is to develop marketing theory and information for the uniquely South African market place. This has become a critical source of marketing intelligence for South African marketers and is widely used by corporates, market research houses, advertising agencies and academics. 2012 was an exceptional year for the institute and their unique analysis of buying behaviour in emerging black consumer markets has spurred a new conceptualisation of the dynamic nature of these markets. Hence, major corporations across South Africa are keen to engage John Simpson, Martin Neethling and Paul Egan on these insights.

The Professional Communication Unit (Head of Unit: Dr Terri Grant) has the responsibility for teaching career-based communication practices across the faculty at both under- and postgraduate level. The PCU also offers its services to other faculties and institutions in both the public and private sector. Since 2010, when the local actuarial science qualification was introduced locally under the auspices of the Actuarial Society of South Africa (ASSA), the PCU has played a national role in examining the professional communication exemption examination and providing curriculum advice. Dr Terri Grant graduated with a PhD at the end of 2012. Her PhD entitled, Scenario Pedagogy: a negotiated, multimodal approach to developing professional communication practices in higher education, gave rise to two conference papers during 2012. The first, ‘Developing sustainable professional communication practices through Scenario Pedagogy, a multimodal and collaborative approach to teaching and learning in the commerce domain’, was presented at the Association of Business Communication conference in the Netherlands during May. The second, ‘Sustainable Business practices for Sustainable Futures: Professional Communication Pedagogy in HE’, a joint paper, was co-presented with colleague, Mr Gao Nodoba, at the annual HELTASA conference in November 2012 in Stellenbosch. Two journal articles based on PhD chapters have been submitted. One is under review; another, ‘Higher education drafting practices in professional communication and identity formation’, has been accepted for publication in the Journal of Modern Education Review, an international journal.

The Section of Applied Management (Head of Section: Ms Alison Meadows) is responsible for core management subjects on the Business Science degree, as well as presenting four postgraduate diplomas in Management (specialising in Tourism Management, Sport Management, Marketing and Entrepreneurship). The Section produces unique research within these fields of study. Dr David Priilaid’s research continues to focus on cue-conditioning where the key line of enquiry is how people consume cues like price and brand – and how through this style of consumption, given time and experience, people become increasingly conditioned by these cues. Dr Richard George wrote several journal articles on tourism crime-safety, specifically on tourists’ perceptions of Table Mountain National Park and the 2010 FIFA World Cup. The UCT Development Unit for New Enterprise (DUNE) is also aligned with the Section of Applied Management.

The UCT Development Unit for New Enterprise (DUNE) in collaboration with the Manufacturing, Engineering and Related Services SETA (MerSETA) is busy finalising the scoping and programme development of a Masters Programme in Technology-Based Entrepreneurship. To this end, DUNE and MerSETA have signed a Strategic Alliance Agreement which sees MerSETA committing R1.2 million, over 15 months, towards the costs of a detailed scoping, budgeting and programme development process which will determine the steps and resources needed to implement
the Masters programme. The programme development process includes the hosting of a colloquium of local and international experts in Entrepreneurial Education in Cape Town in August 2013.

**Research Fields and Staff**

**PROFESSOR JEFFREY BAGRAIM**
Theory and management of workplace attitudes; organisation commitment; commitment to change; work-family conflict; organisational culture.

**PROFESSOR ROB DORRINGTON (CARE)**
Demography; mortality; migration; HIV/AIDS modelling; population estimation and projection.

**PROFESSOR JOHA LOUW-POTGIETER**
Programme evaluation; human resource management.

**EMERITUS PROFESSOR JOHN SIMPSON**
Consumer behaviour; retailing; strategic marketing; management in sport; teaching methodology.

Adjunct Associate Professor Daniel Polakow
Financial derivatives; investment strategy; risk-budgeting; stochastic recurrence models; biostatistics.

**ASSOCIATE PROFESSOR IAIN MACDONALD**
Applied probability; new time series models (especially hidden Markov models); mathematical finance.

**ASSOCIATE PROFESSOR TOM MOULTRIE (CARE)**
Demography, especially the analysis of fertility patterns and trends; analysis of census and survey data; modelling of birth intervals; contraceptive use and adoption; HIV/AIDS.

**ASSOCIATE PROFESSOR ANTON SCHLECHTER**
Reward Management and talent retention; leadership; positive organisational behaviour.

**ASSOCIATE PROFESSOR DAVID TAYLOR**
Financial derivatives; mathematical finance; financial time series models (asset returns and volatility).

**DR RICHARD GEORGE**
Tourism marketing; responsible tourism; impact of mega-sport events; the association relationship between tourism and crime; township tourism.

**DR TERRI GRANT**
Business communications in the global economy; scenario learning and pedagogy; non-verbal communication and multimodality; graphics; commerce education and learning theories.

**DR SUKI GOODMAN**
Organisational and individual learning; training and programme evaluation; student ethics.

**DR GERT HUMAN**
Industrial marketing and inter-firm networks; strategic marketing; strategic management and international marketing.

**DR SHANNON KENDAL**
Measuring and managing retirement product risk; taxation of retirement funds; living annuities, defined benefit valuation bases.

**DR SURE MATARAMVURA**
Financial Mathematics; Stochastic Calculus; Game Theory.

**DR DAVID MARALACK**
Principles of sport management; sport policy and politics; sport and development; sport institution building; sport in transformation; sport strategic management.

**DR INES MEYER**
Intergroup relations in the workplace; transformation; workplace diversity.

**DR DAVID PRILLAID**
Wine pricing and brand valuations; extrinsic cues; placebo effects; the entrepreneurial mind-set.

**DR MIGNON REYNEKE**
Consumer Behaviour, Luxury Branding, Online marketing and branding and social media marketing.

**MR JUSTIN BENEKE**
Retailing management; electronic marketing; customer relationship management & higher education marketing.

**MS ADILAH BOODHOO**
Monitoring and programme evaluation; training evaluation; recruitment and selection.

**MS ELSAMARI BOTHA**
Marketing research and research methodology; social network analysis; online social networks; viral marketing; emotional contagion

**MR FRANCOIS DE KOCK**
Personnel selection; development and psychometric validation of psychological tests and personnel selection programmes; accuracy and bias in subjective ratings

**MS CARREN FIELD**
Monitoring and evaluation; training evaluation; employee relations.
MR STUART HENDRY
High-technology Entrepreneurship; social entrepreneurship and action-based learning.

MRS AMEETA JAGA
Work-family; organisational design; performance management.

MS CLAUDIA KAILIL
Applied language and literacy studies; scenario learning teaching practice; diversity, community and transformation.

MR GAONTEBALE NODOBA
Inter-cultural communication; second language acquisition; language policy and multilingualism.

MS CHAO NKHUNGULU MULENGA
Occupational Health and Safety, Recruitment and Selection; Monitoring and Evaluation.

MS SHIVANI RAMJEE
Health care insurance product design; health care financing; medical price indices; hospital efficiency models; private-sector engagement with health care reform.

MR JACQUES ROUSSEAU
Neuroeconomics of addiction; gambling behaviour and gambling policy; decision theory; epistemology; business ethics.

MR DAVE STRUGNELL
Asset pricing; behavioural finance.

School Statistics

Full-time staff

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<tr>
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Students

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Contact Details

Postal address: School of Management Studies, University of Cape Town, Private Bag X3, Rondebosch, 7701, South Africa
Telephone: +27 21 650 2466
Fax: +27 21 689 7570
E-mail: nonnie.falala@uct.ac.za
Website: http://www.commerce.uct.ac.za/Managementstudies/

Centre for Actuarial Research
Postal address: Actuarial Science, University of Cape Town, Private Bag X3, Rondebosch, 7701, South Africa
Telephone: +27 21 650 5475
Fax +27 21 650 5937
E-mail: care@commerce.uct.ac.za
Website: http://www.commerce.uct.ac.za/Demography/, http://www.commerce.uct.ac.za/care

Research Output

Authored books


Chapters in books


Articles in Peer-reviewed Journals


Kerber, K.K., Tuaone-Nkhasi, M.T.N., Dorrington, R.E., Nannan, N., Bradshaw, D., Jackson, D. and Lawn, J.E.L.


Peer-reviewed published conference proceedings


Doctoral graduations


Master’s degrees (by research)

Ayalew, K. 2012. Assessment of the IGME methods of estimating infant mortality rate and neonatal mortality rate from under-five mortality rate in countries affected by HIV/AIDS. MPhil Demography. Supervised by Moultrie, T.


Hako, P. 2012. An investigation into factors that influence employees to support diversity in the South African workplace. MA Organisational Psychology. Supervised by Meyer, I.M.


Kuhn, C. 2012. The effect of rational choice and anti-intellectualism on students intention to cheat. MSocSc Organisational Psychology. Supervised by Bagraim, J.

Magadzire, A. 2012. Test the orphanhood method against benchmark rates in South Africa since 1996. MPhil Demography. Supervised by Dorrington, R.

Marais, I. 2012. Attitudes towards multiple role planning amongst engineering students. MCom Organisational Psychology. Supervised by Bagraim, J. and Jaga, A.


Muzigaba, M. 2012. An outcome evaluation of the SHAWCO Saturday school programme. MPhil Programme Evaluation. Supervised by Louw-Potgieter, J.


Tagwira, R. 2012. An investigation into the effect of information on decision-making for members of defined contribution pension funds. MBusSc Actuarial Science. 61pp. Supervised by Strugnell, D. M.


Wilson, B. 2012. Robust Bayesian portfolio optimisation: higher moments and the distorting effects of constraints. Master’s. Supervised by Witten, G.

Graduate School of Business
DIRECTOR: PROFESSOR WALTER BAETS

School Profile

The UCT Graduate School of Business’ goal is to be a leading emerging market business school that is relevant both internationally and to its local context. Its mission is to build and strengthen three pillars of excellence to ensure that we produce responsible leaders with a keen grasp of complex organisational and social challenges and opportunities:

Academic Excellence and Thought Leadership: The GSB is one of South Africa’s leading business schools in terms of research. We strive to make good use of our position at the tip of Africa, a continent in which the role of business in contributing to sustainable development is especially pertinent. GSB research is published in scholarly journals, as well as the popular media, taking a stand on issues of public concern. There is no uniform position within the GSB on key questions within management disciplines or surrounding the role of business in society; rather, we seek to cultivate a culture of debate within the school and beyond, which also enriches students’ experience.

Societal Relevance: The GSB has unique opportunities to contribute to the university’s strategic goal of addressing key developmental challenges facing South Africa and the continent. This includes the all-important teaching and research activities at the GSB, but it also relates to the manner in which we seek to create mutually beneficial relationships with diverse stakeholders. Much of our research has important pertinence for public policy or business strategy, and we strive to enhance such links through, for instance, workshops and conferences for officials or managers. Teaching and training programmes have been developed to proactively target disadvantaged youngsters, as in the Raymond Ackerman Academy of Entrepreneurial Development. Students in the MBA and other programmes are commonly linked to real-life development initiatives as part of their learning experience, especially in their group work.

Pedagogical Excellence: The GSB has sought to augment traditional lecture style teaching and case study discussions with alternative approaches that emphasise experiential
learning and personal development. A dedicated methodology called SYSTAL (Systems Thinking Action Learning) has been developed and implemented particularly in the Executive MBA, linking systems thinking to on-the-job action learning projects. Such approaches are also implemented in the executive education and customized academic programmes, as well as the MBA. The emphasis on systems thinking allows for the holistic integration of complex social, environmental and organizational issues in the exercises, discussions and projects in the classroom and beyond. A key underlying premise is the need for personal reflection and the development of mindfulness in becoming a responsible leader.

Continued efforts were put into developing GSB researchers’ capabilities and networks. These included in particular the “Research design and methodology workshop”, which we hosted 23-25 May. Through this workshop, we wanted to support African organisational and management researchers in making profound impacts on both practice and theory. Targeted at PhD students and faculty members, the workshop was an intensive ‘boot camp’ focusing on how to identify a compelling research question, to situate research in the literature, and to develop a coherent research design. Attention was also given to key qualitative and quantitative data generation and analysis methods, including quasi-experimental research designs. Participants had an opportunity to present and discuss their research, and they were expected to come carefully prepared with regard to a comprehensive reading list. The workshop was facilitated by Ted Baker (Associate Professor at North Carolina State University and associate editor of Strategic Entrepreneurship Journal) and Tim Pollock (Professor at The Pennsylvania State University and associate editor for the Academy of Management Journal).

In November, we hosted for the second time our annual, international conference on “The Business of Social and Environmental Innovation”. The 2012 conference theme was “Informal Sector Entrepreneurship and Social Entrepreneurship,” and the event included 36 paper presentations and two keynotes. The conference was supported by TrustAfrica, which provided for travel and accommodation for a number of African delegates to attend. It was also supported by the Bertha Centre for Social Innovation and Entrepreneurship. A selection of papers presented in last year’s conference is currently being compiled in a book, with preliminary agreement to publish from two publishers.

With regard to publications, 2012 publications include two authored books, one book chapter, four conference papers, and 13 accredited, peer-reviewed journal articles.

School Statistics

Permanent and long-term contract staff

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Students

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Research Staff and Fields

PROFESSOR WALTER BAETS
Innovation; knowledge management; management learning; non-linear dynamic (complex) behaviour in management; pedagogical approaches; workplace learning; personal development

PROFESSOR GEOFF BICK
Marketing; particularly marketing metrics

PROFESSOR NICHOLAS BIEKPE
Development finance; econometrics; statistics and financial economics.

PROFESSOR KURT APRIL
Human dynamics; organisational leadership; organisational psychology; personal psychology; diversity; inclusive workplaces and cross-cultural dynamics.

PROFESSOR ANTON EBERHARD
Strategic management; restructuring and regulation of infrastructure industries, including the electricity, gas, telecommunication and water sectors.

PROFESSOR THOMAS KOELBLE
Globalisation; European politics; business, governance and society; electoral laws; South African democracy.

PROFESSOR JOHN LUIZ
International business; business in Africa; business, society, and government economics of emerging markets.

PROFESSOR ERIC WOOD
Entrepreneurial thinking and mindsets-both individual and systemic; entrepreneurs as role models; high-tech ventures; entrepreneurship education; internationalisation strategies for high-profile businesses in the third world.

PROFESSOR (EMERITUS) NORMAN FAULL
Operations management; strategy and implementation; lean thinking in operations; supply chain management; world-class manufacturing.

PROFESSOR (EMERITUS) COLIN FIRER
Financial planning; corporate finance; history of South Africa’s capital markets.

PROFESSOR (EMERITUS) PAUL SULCAS
Information systems and technology; business strategy; applied business strategy; change management.

ASSOCIATE PROFESSOR RICHARD CHIVAKA
Strategic cost management; supply chain management; business strategy; business process improvement.

ASSOCIATE PROFESSOR RALPH HAMANN
Sustainable enterprise; corporate citizenship and social responsibility; organizational strategy; cross-sector collaboration.

ASSOCIATE PROFESSOR TOM RYAN
Systems thinking and organisational development; management development and learning; management research methodology.

ASSOCIATE PROFESSOR KOSHEEK SEWCHURRAN
Innovation management; information systems; systems thinking and project organising.

ASSOCIATE PROFESSOR MILLS SOKO
International trade, international business; emerging markets; globalization; foreign direct investment; commercial diplomacy; regional economic integration, with a specific focus on southern Africa; public-private partnerships; economic competitiveness and innovation; government-business relations in South Africa.

DR FRANCOIS BONNICI
Social innovation, social entrepreneurship, health

DR PREEYA DAYA
Human resources management; diversity, inclusion and performance; performance management; leadership / team performance; high performance culture / organisation culture; employee engagement

MS JANINE EVERSON
Executive coaching; leadership and team development; large group facilitation; organisational development; productive dialogue skills; virtual teams; cross-cultural and global teams; implementation of small and large-scale coaching interventions.

DR STEPHANIE GIAMPORCARO
Responsible and sustainable investment; developmental finance; carbon finance and impact investment; social studies of finance; anthropology of markets and consumption; economic sociology; sustainability (green building, fair trade).

DR SEAN GOSSEL
Applied financial econometrics; applied macro econometrics; development finance; capital flows; corporate finance.

MS FATIMA HAMDULAY
Operations management; change leadership.

DR MLENGA JERE
Advertising; consumer behaviour; social marketing.
DR SHADRICK MAZAZA
Health management; personal transformation; leadership; continuous quality improvement; healthcare quality and accreditation.

DR CHIPO MLAMBO
Investments; finance; financial markets.

DR WARREN NILSSON
Relationship between positive organizational dynamics (e.g., engagement, creativity, compassion) and broader patterns of deep, intentional, institutional change.

DR ELIADA W GRIFFIN-EL
Social entrepreneurship; entrepreneurial development in African emerging markets; social capital/networks and economic development; international development; global political economics; grounded theory

DR HAMIEDA PARKER
Manufacturing and operations; supply chain management; entrepreneurship; innovation and new product development.

MR MARK PETERS
Strategy, marketing and governance.

DR LINDA RONNIE
Managing people in organisations; organisational change; adult learning; sociology of education; research methodology; HR good practice and management; organisational behaviour.

MS ELANCA SHELLEY
Executive development; systems thinking; organizational diagnostics and design.

MS BEVERLY SHRAND
Marketing; database marketing; business administration.

MR BARRY STANDISH
Macro-economic performance and trends; economic modelling; economic impact assessment; market size studies.

MR LANCE STRINGER
Technology strategy and management; IT management.

DR NOSAKHERE GRIFFIN-EL
Freirean thought, love as a theoretical framework, qualitative methods, autobiography as methodology, and educational and societal issues of peoples from oppressed backgrounds.

Contact Details
Postal address: Graduate School of Business, University of Cape Town, Breakwater Campus, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 406 1503
Fax: +27 21 406 1412
E-mail (research director): ralph.hamann@gsb.uct.ac.za
Website: http://www.gsb.uct.ac.za

Research Output

Authored books


Chapters in books

Articles in Peer-reviewed Journals


**Peer-reviewed published conference proceedings**


Faculty of LAW

I am pleased to report that the faculty’s three departments and their associated research units maintained their record of diverse research in 2012, by working together to steward and administer our thriving research enterprise. The research capacity of the faculty was also significantly strengthened during the past year, when six academics were successfully re-rated by the National Research Foundation. The faculty now has a total of nineteen NRF-rated researchers.

The faculty is home to the DST/NRF SARChI Chair in Customary Law (Professor Chuma Himonga) and the now well-established DST/NRF SARChI Chair in Security and Justice (Professor Clifford Shearing), as well as the Chair of Comparative Law in Africa (Professor Salvatore Mancuso) – an initiative supported by the Vice-Chancellor’s Strategic Fund – and the Chair in Intellectual Property Law and Policy (Professor Julian Kinderlerer), funded by the national Department of Trade and Industry. The Chairs all remained active in the generation and dissemination of research. The Chair in Customary Law, Professor Chuma Himonga, hosted a well-attended seminar on Children: Rights and Ethics on 16 October 2012. The seminar was presented by Professor Michael Freeman, a renowned scholar on children’s rights, and Associate Professor Anne Pope, an expert on research ethics. The Chair of Comparative Law in Africa and the members of the Centre for Comparative Law in Africa, which was established in 2011 to promote the study of comparative law and draw on the strengths of comparative methodology to conduct research into the multifaceted field of law in Africa, held its first Comparative Law methodology workshop, titled Building African Scholarship in Comparative Law: Teaching and Research Methodology. The workshop, held from 22 to 24 October 2012, hosted participants from various African law faculties, as well as from Europe and the United States. As part of the Vice-Chancellor’s Open Lecture series, the Centre for Criminology together with the Institute for Security Studies, hosted leading criminologist Professor John Braithwaite on 26 July 2012, who offered important ideas on how South Africa could address crime in his talk, titled Restorative Justice: Republican Vision and Justice as a Better Future.

Further highlights from our research units include an Expert Roundtable for the United Nations High Commissioner for Refugees hosted by the Refugee Rights Research Unit on 13 and 14 September 2012. A seminar by Willie Hofmeyr, who is currently the Deputy National Director of Public Prosecutions and Head of the Asset Forfeiture Unit, was jointly hosted by the Centre of Criminology and the Democratic Governance and Rights Unit (DGRU) and titled Using Asset Forfeiture to fight Crime and Corruption.

The faculty welcomed a number of special guests and visitors during the year. These include former Vice-Chancellor Dr Mamphela Ramphele and the Chair of the...
Congress of Traditional Leaders, Patekile Holomisa, who formed part of the annual Constitution Week project organised by the DGRU. Clive Thompson, the founding director in 1987 of the Labour Law Unit at UCT known today as the Institute for Development and Labour Law, presented a lunchtime seminar for the faculty as part of the annual Rabinowitz lecture, titled The Paradox of the Great Workplace.

We had one inaugural lecture in 2012. On 31 July 2012, professor Wouter de Vos from the Department of Public Law gave a lecture on Is a Class Action a ‘Classy Act’ to implement outside the Ambit of the Constitution?

I am also very pleased to report that we have four authored books, written respectively by professors Hanri Mostert and Clifford Shearing, Ms Emma Witbooi, and Justice Laurie Ackermann, who is an Honorary Professor in the Faculty. These are listed below, together with books edited by our staff: Fisheries and Sustainability. A Legal Analysis of EU and West African Agreements (Emma Witbooi), Human Dignity: Lodestar for Equality in South Africa (Laurie Ackermann), Mineral Law: Principles and Policies in Perspective (Hanri Mostert), The New Environmental Governance (Clifford Shearing, co-author), Accountable Government in Africa: Perspectives from Public Law and Political Studies (Danwood Chirwa); African Perspectives on Tradition and Justice (Tom Bennett), Labour Law in Context (Rochelle Le Roux, co-author), Permanent Court of Arbitration Award Series: The Guyana/Suriname Arbitration Award of 2007 (Lise Bosman), and The Law of Contract in South Africa 2nd Edition (Dale Hutchison).

The Faculty has also maintained its tradition of being engaged in socially responsive research. As such, the Faculty Research and Social Responsiveness Committee considered and approved an initiative titled the UCT Law Advice Programme, co-ordinated by Dr Alistair Price, senior lecturer in the Department of Private Law. The initiative will link members of the faculty with the Legal Resources Centre (LRC) and faculty members will provide legal advice in a number of areas of law, as and when needed by the LRC. In December 2011, the Traditional Courts Bill was published in the Government Gazette and received a critical response from a broad spectrum of civil society. In response, the Centre for Law and Society (previously known as the Law, Race and Gender Unit) co-hosted a national conference for rural community-based organisations and NGOs on the bill, resulting in the establishment of a national co-ordinating committee.

The Kramer Law Library has established a Postgraduate Research Commons, allowing doctoral students and postdoctoral fellows to utilise the quiet and adapted area for writing up their research.

The faculty is also proud to share a number of awards and distinguished appointments received by members of staff. Dr Sindiso Mnisi-Weeks received the Department of Science and Technology’s Emerging Researchers Women in Science Award for her work on the development of rural women. The previous Director of Research, Professor Hanri Mostert, was runner-up in the Distinguished Young Woman Scientist in the Social Sciences and Humanities category. Our faculty presents an annual Research Prize for the most outstanding article published in the preceding two years by any member of staff of the rank of senior lecturer or lecturer. The winner for 2012 was Dr Waheeda Amien and the runner-up was Dr Andrew Hutchison. DGRU director, Professor Richard Calland, has recently been appointed to the World Bank’s Independent Access to Information Appeals Board.

Finally, the faculty welcomed Sufia Singlee, Salona Lutchman, and Thabi Chanetsa as academic staff. It is with sadness, however, that I mention the passing of a wonderful teacher, researcher, friend, and colleague, Professor John Gibson, Director of the Institute of Marine and Environmental Law. He will be missed by all at the Faculty of Law.

Given the relatively high staff/student ratio in the Faculty of Law, the role of Director of Research has been crucial in promoting research in the faculty. Professor Loretta Feris, who took on the directorship officially at the beginning of 2012, continues to encourage and support research. The research featured in this year’s report reflects the broad scope and intellectual vigour of our faculty community. I have pleasure in sharing it with you.
RESEARCH CONTRACTS
44
VALUE OF RESEARCH CONTRACTS
R5.66 million
NRF-RATED RESEARCHERS
19
SARCHI RESEARCH CHAIRS
2
ACCREDITED RESEARCH GROUPINGS
3
DOCTORAL GRADUATIONS
7
DHET-ACCREDITED JOURNALS
49.58 units
PEER-REVIEWED PUBLICATIONS
219
POSTGRADUATE STUDENTS
370
POSTGRADUATE FUNDING
R3.9 million
POSTDOCTORAL RESEARCH FELLOWS
4
POSTDOCTORAL RESEARCH FUNDING
R919 291

DOCTORAL GRADUATIONS

A.M. BARDOPoulos (COMMERCIAL LAW)
The impact of technology on taxation and is VAT the eTax solution?
Supervised by Professor D. Davis

S. BAVIKATTE (PUBLIC LAW)
Stewarding the earth: rethinking property and the emergence of biocultural rights
Supervised by Professor T. Bennett

D. JORDAAN (PRIVATE LAW)
Medical biotechnology law in South Africa: a human rights analysis of selected topics
Supervised by Professor J. Kinderlerer

J. MASABO (PUBLIC LAW)
The protection of the rights of migrant workers in Tanzania
Supervised by Professor E.R. Kalula and Associate Professor B. Rutinwa (University of Dar es Salaam)

C.O. MOITUI (PUBLIC LAW)
Implementation of the precautionary approach in the regulation of genetically modified organisms: An African context
Supervised by Professor J. Kinderlerer

A.E. TSHIVHASE (PUBLIC LAW)
Military courts in a democratic South Africa: in search of their judicial independence
Supervised by Professor H.M. Corder

S. WAGENER (PRIVATE LAW)
An assessment of the normative bases for the doctrine of vicarious liability in South African law, and the implications for its application
Supervised by Professor A. Fagan
Department of Commercial Law

(包括发展与劳动法研究所，比较法律中心在非洲，航运法单位和知识产权法和政策研究单位）

HEAD OF DEPARTMENT: PROFESSOR ALAN RYCROFT

Departmental Profile

The Department of Commercial Law is the biggest department in the Law Faculty. It is staffed by many new academic staff working on PhD degrees. Longer-serving academic staff members are working on new books or on new editions of established works. The Department now has three NRF rated researchers.

The Department has an increasing number of PhD and LLM by dissertation students and teaches most of the students who are taking the LLM by coursework and the Postgraduate Diplomas in Law.

In the LLB programme the Department teaches compulsory courses in Corporation Law and Commercial Transactions and offers optional courses to final year students. The Department also offers specialised commercial law courses to nearly 2600 students from other faculties.

There are four research and teaching units which form part of the Department: the Institute of Development and Labour Law, the Centre for Comparative Law in Africa, the Shipping Law unit and the Intellectual Property and Policy Research Unit.

Departmental Statistics

Permanent and long-term contract staff

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Students

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</table>

* These figures reflect actual registrations for Commercial Law courses and LLB courses. Where a student registers for two Commercial Law /LLB courses he/she was counted twice.

Research Fields and Staff

PROFESSOR AND HEAD OF DEPARTMENT

PROFESSOR A. RYCROFT
Labour Law, Dispute Resolution

Honorary Professors

PROFESSOR/JUDGE D.M. DAVIS
Capital Transfer and International Tax Law; Competition Law

JUDGE I. FARLAM

Professors

PROFESSOR P.S. BENJAMIN (Part-time)
Labour Law

PROFESSOR J.E. HARE
Admiralty Jurisdiction and Practice; Maritime Law and Marine Insurance; Carriage of Goods by Sea

PROFESSOR R.D. JOOSTE
Revenue Law; Company Law

PROFESSOR E.R. KALULA
International Comparative Labour Law; Labour Market Regulation; Social Security

PROFESSOR J. KINDERLERER
Biotechnology and IPL

PROFESSOR R. LE ROUX
Labour Law, Sport Law

PROFESSOR S. MANCUSO
Comparative Law
PROFESSOR R.C. WILLIAMS (Part-time)  
Revenue Law; Company Law

**Associate Professors**

ASSOCIATE PROFESSOR G. BRADFIELD  
Shipping Law; International Trade

ASSOCIATE PROFESSOR D. COLLIER  
Labour Law; Electronic Law; Intellectual Property Law

ASSOCIATE PROFESSOR T.S. EMSLIE SC (Part-time)  
Revenue Law

ASSOCIATE PROFESSOR T. MONGALO (On extended leave)  
Company Law

**Emeritus Associate Professor**

EMERITUS ASSOCIATE PROFESSOR J. HOFMAN

**Honorary Research Associate**

DR T. KRUGER  
International Trade Law

**Adjunct Professors**

MS A. BOSMAN  
MR N. JERAM  
DR T. MADIMA  
MR W. SCHOLTZ  
MR E. SWANEPoEL  
PROF C.R. THOMPSON

**Senior Lecturers**

DR W. AMIEN  
Business Law, Muslim Law

MS T.L. GUTUZA  
Revenue Law; Capital Transfer and International Tax Law

DR A. HUTCHISON  
Business Law

MS K. IDENSOHN  
Company Law

MS K. LEHMANN  
Business Law; Global Economic Law; International Economic Law

**Lecturers**

MR C. CHOKUDA  
Business Law; Company Law

MS J. YEATS  
Business Law; Company Law

**Administrators**

MR C. ELISSAC  
Administrative Officer  
LLB and Postgraduate Courses

MR M. MBEBE  
Administrative Assistant  
All Commerce Courses

MS F. KHAN  
Administrative Assistant  
Labour and Development Law

**Contact details**

Postal address: Department of Commercial Law  
Faculty of Law  
Private Bag, Rondebosch, 7701  
Telephone: + 27 21 650 3068 / 65  
Fax: +27 21 650 5631  
Web page: http://www.comlaw.uct.ac.za
Institute of Development and Labour Law

DIRECTOR: PROFESSOR R. LE ROUX

Institute Profile
The Institute of Development and Labour Law was established in 1996 through the merger of the Labour Law Unit and the Institute of Development Law. The Institute plays a leading role in development and labour law teaching and research. It is involved with training courses in South Africa and other countries in Southern Africa. It also regularly contributes to training programmes in other organisations and collaborates closely with other leading university centres and NGOs.

Research Fields and Staff

Professors

PROFESSOR E.R. KALULA
International and Comparative Labour Law; Labour Market Regulation; Social Security; Law and Regional Integration

PROFESSOR R. LE ROUX
Labour Law

PROFESSOR P. BENJAMIN
Collective Bargaining and Strike Law; Health and Safety; Minimum Labour Standards; Regulatory Framework

ASSOCIATE PROFESSOR D. COLLIER
Labour Market Regulation, Inequality, Intellectual Property and Development

Adjunct Professors

PROFESSOR C. THOMPSON
Collective Bargaining; International Labour Law

DR T. MADIMA
Collective Bargaining

MR C. NUPEN
Dispute Resolution; Social Dialogue

MS T. ORLEYN
Dispute Resolution

MR N. JERAM
Social Security

Administrative Staff

MS F. KHAN

Researchers

MR S. GODFREY
Senior Researcher, Labour and Enterprise Project
Bargaining Councils; Industrial Sociology

MR J. THERON
Co-ordinator of the Labour and Enterprise Policy Research Group (LEP)
Labour Rights; Small and Medium Enterprise

MS M. VISSER
Researcher

Honorary Research Associate

PROFESSOR N. RUBIN
International Labour Standards; Law and Development

Contact Details
Postal address: Institute of Development and Labour Law, 6.23, 6th Level, Wilfred & Jules Kramer Law Building, Middle Campus, University of Cape Town, Rondebosch, 7700
Tel: +27 21 650 5634
Fax: +27 21 650 5660
Web: www.idll.uct.ac.za

Centre for Comparative Law in Africa

DIRECTOR: DR A. ORDOR

The Centre for Comparative Law in Africa (CCLA) was established in 2011 to promote the study of comparative law and draw on the strengths of comparative methodology to research into the multifaceted field of law in Africa. The Centre presents an opportunity to develop a discipline that lends itself to optimal application in the pluralistic legal frameworks within which life is lived in Africa. In its mission to contribute to the development of comparative law in Africa, the strategy of the CCLA is to establish the field at UCT, build capacity in it across the continent through academic programmes, apply comparative law expertise in consultancies and disseminate new knowledge in comparative law in Africa through conferences, publications and professional networks. Its location within the Department of Commercial Law recognises
the centrality of comparative law to on-going efforts at economic integration on the African continent. The CCLA offers an LLM and a postgraduate diploma in Comparative Law and conducts research on a variety of themes that apply comparative methodology. Currently the Centre is involved in a collaborative research project on mineral law and policy in three southern African countries (South Africa, Namibia and Zambia) under the UCT PERC Africa Knowledge Project as well as customary law development in Somaliland. The CCLA offers support for Africa-focused doctoral research and also undertakes consultancies from institutions in the public and private sectors.

Professor and Chair
Professor S. Mancuso, LLB Palermo PhD Trieste

Administrator
Ms S. van der Brock

Contact details
Postal address: Room 4.41, 4th Floor, Kramer Law Building, Faculty of Law, Middle Campus
Tel: +27 21 650 5268
Fax: +27 21 650 3671
Email: info-ccla@uct.ac.za

Shipping Law Unit

PROFESSOR AND HEAD: PROFESSOR J.E. HARE

The Shipping Law Unit has been in operation since the beginning of 1993. The Unit was set up within the Department of Commercial Law to accommodate part-time and full-time studies in Shipping Law at higher postgraduate level, and to support the Maritime Law option offered to Final Level LLB students. The Shipping Law Unit provides postgraduate tuition and research in Admiralty law and practice and in all private law aspects of the law relating to the sea and ships. It serves as an information and advice centre to the shipping industry, and monitors developments in maritime law and policy in South Africa and abroad. The Unit co-operates closely with the Institute of Marine and Environmental Law which handles the public law elements of the Law of the Sea and related subjects.

Visiting Teacher
R. Knutzen, LLB Cape Town BCL Oxon

Contact details
Postal address: Room 501, 5th level, Wilfred & Jules Kramer Law Building, Faculty of Law, Middle Campus
Tel: +27 21 650 2676
Fax: +27 21 650 5662
Email: John.Hare@uct.ac.za

Department of Commercial Law

Research Output

Edited books


Chapters in books


Articles in Peer-reviewed Journals


Department of Private Law

HEAD OF DEPARTMENT: PROFESSOR TJAKIE NAUDÉ

Departmental Profile

The Department of Private Law has seven NRF-rated researchers. The Department continued to maintain its strong research record during the period of review. Members of the department maintained a high rate of publication, which included a number of international publications.

The Department welcomed Mr Alistair Price who has since obtained his PhD from the University of Cambridge in 2013.

Professor Hanri Mostert and Associate Professor Anne Pope convened the annual Southern African Property Law Teachers Colloquium and Associate Professor Mohamed Paleker convened a conference on the Law of Succession and Trusts. Several members of the Department presented papers at local and international conferences: Dr Lesley Greenbaum (UCT’s Teaching and Learning Conference and the Higher Education Teaching and Learning Association of South Africa Conference); Professor Tjakie Naude (International Consumer Law Conference, Utrecht, Netherlands); and Professor Hanri Mostert (World Bank Conference on Land and Poverty, Washington DC; Progressive Property Seminar, Harvard University).

Professor Jaco Barnard-Naudé was invited to teach at the University of Pretoria, Associate Professor Paleker at the University of Florida, Professor Mostert in the Topclass Programme of the Universities of Radboud Nijmegen and Groningen, and Associate Professor Scott at the University of Oxford. Prof Barnard-Naudé was also appointed as Honorary Research Fellow in the Birkbeck Institute for Humanities, University of London.

Departmental Statistics

Permanent and long-term contract staff

<table>
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<tr>
<th>Position</th>
<th>Number</th>
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<tbody>
<tr>
<td>Emeritus Professor</td>
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<td>Professors</td>
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<tr>
<td>Associate Professors</td>
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<tr>
<td>Senior Lecturers</td>
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<tr>
<td>Admin and Clerical Staff</td>
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<td>Total</td>
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Students

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<td>PhD</td>
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<td>Total</td>
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</table>

* These numbers generated from Peoplesoft course numbers for 2012.

RESEARCH FIELDS AND STAFF

Professor and Head of Department

PROFESSOR T. NAUDÉ

Law of Contract; Consumer Protection

Professors

PROFESSOR A.J. BARNARD-NAUDÉ

Jurisprudence; Legal Theory

PROFESSOR A.G. FAGAN

Law of Delict; Jurisprudence; Constitutional Theory

PROFESSOR C. HIMONGA

African Customary Law

PROFESSOR D.B. HUTCHISON

Law of Contract; Law of Delict

Emeritus Professors

EMERITUS PROFESSOR W. DE VOS SC

Unjustified Enrichment; Legal History

EMERITUS PROFESSOR I. LEEMAN

Copyright Law

Honorary Research Associate

ASSOCIATE PROFESSOR M.L. HEWETT

South African and European Legal History

Distinguished visitors

PROFESSOR R. EVANS-JONES

University of Aberdeen, Scotland

Senior Lecturers

DR A. BARRATT

Law of Persons and Marriage; Legal History; Intellectual Property Law
DR L. GREENBAUM
Legal Education; Legal Writing.

DR SINDISO Mnisi-Weeks
African Customary Law

DR ALISTAIR PRICE
Law of Delict; Jurisprudence

Lecturers
MS SALONA LUTCHMAN
Law of Succession

PROFESSOR H. MOSTERT
Law of Property; Land Law; Mineral and Petroleum Law

ASSOCIATE PROFESSOR M. PALEKER
Law of Succession; Civil Procedure

ASSOCIATE PROFESSOR A. POPE
Law of Property; Bio-ethics; Customary Law; Family Law

ASSOCIATE PROFESSOR H. SCOTT
Unjustified Enrichment; Law of Delict; Legal History

Administrators
MRS. N. CAMPBELL
Administrative Officer
LLB Intermediate/Final Year

MRS. F. MOHAMED
Senior Secretary
LLB Preliminary Undergraduate/Postgraduate/LLM Courses

Contact Details
Postal Address: Department of Private Law, Faculty of Law, University of Cape Town, Private Bag, Rondebosch, 7701
Telephone: +27 (21) 650-3447/5609
Fax: +27 (21) 650-5770
E-mail: faiza.mohamed@uct.ac.za; nikki.campbell@uct.ac.za

Research Output

Authored books

Edited books


Chapters in books


Articles in Peer-reviewed Journals


Department of Public Law
(Including the Centre of Criminology; Institute of Marine and Environmental Law; Democratic Governance and Rights Unit; Law, Race and Gender Unit; and Refugee Rights Unit)

HEAD OF DEPARTMENT: PROFESSOR D.M. CHIRWA

Departmental Profile

The Department of Public Law now has 9 NRF rated researchers on staff and continues to produce high level research in various areas, including constitutional law and human rights, environmental law, criminal law (both national and international), criminal procedure, evidence, policing, land rights and labour law. 2012 was another highly productive year for this Department. Members of the Department were involved in the production of at least four books and two edited books. A large amount of book chapters and journal articles were produced.

The Department's research units – the Centre of Criminology, the Institute of Marine and Environmental Law, the Democratic Governance and Rights Unit, and the Law, Race and Gender Research Unit – apart from producing accredited research outputs, were involved in a wide range of socially responsive activities, which bolstered the Department's contribution to society.

Departmental Statistics

Permanent and long-term contract staff

<table>
<thead>
<tr>
<th>Position</th>
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<tbody>
<tr>
<td>Professors</td>
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<td>Associate Professors</td>
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<td>Senior lecturers</td>
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<td>Lecturers</td>
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<td>Teaching and Research Assistants</td>
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<td>Total</td>
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Honorary staff

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<td>Research Associates</td>
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<td>Emeritus Professors</td>
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Students

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<td>Masters – Coursework and Research/MPhil</td>
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*These figures reflect actual registrations for Public Law courses and LLB courses. Where a student registers for two Public Law/LLB courses he/she was counted twice.

Research Fields and Staff

Professor and Head of Department

PROFESSOR D.M. CHIRWA
International Human Rights; the Rights of the Child; Domestic implementation of Human Rights; Administrative Law; Social and Economic Rights

Professors

PROFESSOR T.W. BENNETT
African customary law; land rights; public and private international law
PROFESSOR J. BURCHELL
Criminal Law; Personality Rights

PROFESSOR H. CHEADLE
Labour Law; Human Rights; Constitutional Litigation; Legal Drafting

PROFESSOR H.M. CORDER
Administrative Law; the Judicial Process

PROFESSOR P. DE VOS, CLAUDE LEON FOUNDATION CHAIR IN CONSTITUTIONAL GOVERNANCE
Constitutional Law; Current issues in Constitutional Law; Governing under Constitution

PROFESSOR W. DE VOS
Criminal Procedure; Law of Evidence; Constitutional aspects of Procedure; Class Actions

PROFESSOR L.A. FERIS
Environmental law; Human rights, Liability; Biodiversity; Climate Change; Trade and Environment

PROFESSOR J.N.K. GIBSON
Law of the Sea; Coastal Zone Law; Environmental Law

PROFESSOR J.I. GLAZEWSKI
Environmental Law; Energy Law, Antarctic, Marine Pollution Law

PROFESSOR C.M. MURRAY

PROFESSOR P.J. SCHWIKKARD
Evidence, Criminal Procedure

PROFESSOR C. SHEARING
Governance of Security; Environmental Security

Associate Professors

ASSOCIATE PROFESSOR R. CALLAND
Accountable Government; Access to Information; Whistle Blowing Legislation; Constitutional Law; Public Ethics

ASSOCIATE PROFESSOR A.R. PATERSON
Environmental Law; Biodiversity; Protected Areas; Environmental Fiscal Reform

ASSOCIATE PROFESSOR D. SMYTHE
Law and Society (particularly the use of interdisciplinary research methods); Criminal Justice Policy; Human Rights; Violence against Women

ASSOCIATE PROFESSOR E. VAN DER SPUY
Policing (public); International Assistance to Policing in Transition; Security Sector Reform; Police Reform; Peacekeeping

Emeritus Professors

PROFESSOR D.J. DEVINE
International Law of the Sea; General Principles of International Law; Regional Integration

PROFESSOR D. VAN ZYL SMIT
Criminal Law

Honorary Professors

PROFESSOR J. DUGARD

ADVOCATE W. TRENGOVE
Honorary Research Associates

JUSTICE L.W.H. ACKERMANN
Emeritus Justice of the Constitutional Court

Senior Lecturers

MS C.H. POWELL
Constitutional Law; International Law; International Criminal law

Lecturers

MS M.C. DU PLESSIS
Social Security Law and Governance; Workers’ Compensation

MS P.K. GUMEDE
Environmental Law; Alien Invasive Species, Environmental Management Agreements; African Customary Law; Marine Pollution Law

MS K. PHELPS
Constitutional Criminal Adjudication; Punishment; the Principle of Legality and Sexual Offences

MR A. TSHIVHASE
Military Justice; Criminal Procedure; Law and Regional Integration in Africa; Human Rights; Constitutional Law
Contract Staff

ASSOCIATE PROFESSOR R. MANJOO
Women’s Human Rights; Violence against Women; Culture, Religion, Tradition and Human Rights

DR H. WOOLAVER
International Law, International Criminal Law

MS M. VON BROEMBSSEN
Law and Poverty; Human Rights and Legal Empowerment of the Poor; the Interrelationship between the Informal Economy; Alleviation of Poverty and Law

Administrative Staff

MS D. MWAMBALA
Administrative Officer

MS R. FRANCKE
Senior Secretary

Contact Details

Postal address: Department of Public Law, Faculty of Law, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 3072
Fax: +27 21 650 5673
Website: http://www.publiclaw.uct.ac.za

Centre of Criminology

DIRECTOR: PROFESSOR C. SHEARING

Centre profile

The Centre is a niche research unit within the Faculty of Law at the University of Cape Town. Our research and analysis in 2012 was organised around three principal foci, namely, developments in policing; developments in penal policy and the emergence of new environmental risks and responses to them. A unifying theme is the concern to ensure that the programmes contribute to both theory development and to policy development and implementation.

The Centre’s research programme builds on established arenas within Criminology and established strengths within the Centre of Criminology and is stretching the boundaries of Criminology in ways that will enable it to recognise and respond to the changing international and local risk landscapes.

Research on policing at the Centre of Criminology is concerned both with public police and private policing developments in South Africa and in transitional contexts, particularly in Africa.

Centre Statistics

Permanent and long-term contract staff

<table>
<thead>
<tr>
<th>Position</th>
<th>Number</th>
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<tbody>
<tr>
<td>Professors</td>
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<tr>
<td>Associate Professors</td>
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<tr>
<td>Senior Lecturer</td>
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<tr>
<td>Administrative Staff</td>
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<tr>
<td>Research Staff</td>
<td>4</td>
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<tr>
<td>Honorary Research Associates</td>
<td>3</td>
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<tr>
<td>Total</td>
<td>12</td>
</tr>
</tbody>
</table>

Research Fields and Staff

Permanent Staff

PROFESSOR C. SHEARING
Governance of Physical and Environmental Security

ASSOCIATE PROFESSOR E. VAN DER SPUY
Policing (public); International Assistance to Policing in Transition; Security Sector Reform; Police Reform; Peacekeeping

MS. J. BERG, SENIOR LECTURER,
Governance of Security; Plural Policing; Policing Accountability

Honorary Research Associates

DR L. LAZARUS
Lecturer at St Anne’s College, University of Oxford

C. CULLINAN
Director, EnAct International, Practising Environmental Attorney

ASSOCIATE PROFESSOR J. FROESTAD
Institute of Administration and Organization Theory, University of Bergen

Research Staff

MS E. ATKINS (Information Manager)
Multi-media Electronic Resource Library

MR T. HERBSTEIN
Environmental Security Programme
Institute of Marine and Environmental Law

DIRECTOR: ASSOCIATE PROFESSOR A.R. PATERSON

Institute Profile

The Institute of Marine and Environmental Law undertakes research, teaching and consultancy in the fields of marine and environmental law both at the international level and in the context of Southern Africa. It also participates in multi-disciplinary projects in collaboration with other specialists in marine and environmental subjects. 2012 was a year of transition for the Institute with the sudden sad death of its director, Professor John Gibson. Prof Gibson will always be remembered for his significant international and domestic contribution to teaching and research in the areas of international law of the sea, coastal zone law, marine resources law and marine pollution law. In 2012, Professor Loretta Feris initiated a research project examining the right to sanitation in both international law and domestic law. To this end she delivered papers at both international and domestic conferences which will shortly be published. She also published an article on acid mine drainage and investigated the intersection between customary law and the traditional rights to fishing, which resulted in the drafting of an advisory opinion for the Eastern Cape Parks and Tourism Authority. Professor Jan Glazewski’s research focussed on the areas of climate change law and marine law. In collaboration with the Centre for Law and Environment at UCL, he convened a series of workshops and co-authored a report titled Carbon Capture and Storage – Towards a Regulatory and Legal Regime for South Africa. He was also involved in collaborative projects with the ACDI (on climate change in the Berg River Region) and MA-Re (on ocean governance). Associate Professor Alexander Paterson continued with his research in the area of protected areas governance. He published several journal papers and book chapters on co-management, indigenous peoples’ rights in protected areas, and legal models for promoting inclusive, participatory and human-centred legal approaches to conservation. He also continued his work with the IUCN Environmental Law Centre relating to the development of a Concept Paper on the Legal Aspects of Connectivity Conservation. Miss Peggy Gumede progressed with her research in the areas of integrated coastal management and alien invasive species regulation.

Institute Statistics

Permanent and Long-term Contract Staff

<table>
<thead>
<tr>
<th>Role</th>
<th>Number</th>
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<tbody>
<tr>
<td>Professors</td>
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<tr>
<td>Associate Professors</td>
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<td>Emeritus Professor</td>
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<td>Lecturers</td>
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<tr>
<td>Honorary Research Associate</td>
<td>2</td>
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<tr>
<td>Administrative and Clerical Staff</td>
<td>1</td>
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<tr>
<td><strong>Total</strong></td>
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Students

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<td>Doctoral</td>
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<td>Masters</td>
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<td>LLB – Final Year</td>
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Research Fields and Staff

Permanent Staff

PROFESSOR J.N.K. GIBSON
Law of the sea; coastal zone law; environmental law

PROFESSOR J.I. GLAZEWSKI
Environmental law; energy law; Antarctic; marine pollution law
The vision for the future is that in ten years’ time, the DGRU will have a strong international reputation as a place where bold new ideas are born and then turned into working practice, providing a stimulating environment for policy-makers, academic thinkers and students alike, and an intellectual bridge between Europe and Africa on some of the most significant public law issues that face modern societies everywhere.

Unit Statistics

<table>
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<th>Position</th>
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<td>Associate Professors</td>
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<td>Administrator</td>
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<td><strong>Total</strong></td>
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Research Fields and Staff

Permanent and Contract Staff

ASSOCIATE PROFESSOR R. CALLAND
Transparency Law & Policy, the Right of Access to Information, Whistle Blowing, Public Ethics, Political and Economic Governance, Constitutional Law, Multi-stakeholder Processes

MS T. MASENGU
Refugee Law, Women’s Rights and the impact of the Protocol to the African Charter on the Rights of Women in Africa on Democracy and Governance

MR C. OXTOBY
Judicial Appointments, Judicial Ethics, Human Rights, Anti-terrorism Law and Practice in Southern and Eastern Africa and the 2010 World Cup

Administrative Staff

MS V. KARTH
Programme and Financial Management; Website Management, Marketing & PR

Contact details

Postal Address: The Democratic Governance and Rights Unit, Kramer Law School Building, Middle Campus, University of Cape Town, Rondebosch, 7700
Tel: +27 21 650 2011
Fax: +27 21 650 5607
Web: www.dgru.uct.ac.za

Democratic Governance & Rights Unit

DIRECTOR: ASSOCIATE PROFESSOR R. CALLAND

Unit Profile

Based in the Department of Public Law at the University of Cape Town, the DGRU’s mission is to advance the principles and practice of constitutional democracy in Africa. Recognising the gap between the promise of constitutionalism and the reality of daily life for the majority of Africans, the DGRU aims to stimulate fresh thinking on the intersection between rights and transformative governance. In collaboration with others, the DGRU supports the process of law and policy reform, and informs public debate, through inter-disciplinary research and advocacy.
Law, Race and Gender Research Unit

DIRECTOR: ASSOCIATE PROFESSOR D. SMYTHE

Unit profile

The Law, Race and Gender Unit (LRG) has worked, since its inception in 1993, to provide legal decision-makers with an understanding of the ways in which the history and social context of our country informs the creation, application and interpretation of our laws. The Unit focuses on producing excellent empirical studies of law in context, based on participatory methodologies and collaborative partnerships. It publishes a work in progress series, called Issues in Law, Race & Gender and convene a very successful seminar series under the auspices of our Rural Women’s Action Research Project.

Over the years LRG has done research, developed a range of training materials, and conducted regular participatory workshops through which actors within the justice system are able to explore issues such as gender-based violence, racial discrimination and inequality, sexuality, ethics and various associated legal problems. Current work focuses on laws and practices affecting women living under customary law, including the Traditional Courts Bill and Communal Land Rights Act, and related governance issues. Its work reflects a continued commitment to sound research underpinning evidence-based advocacy on critical legal and social issues.

LRG hosted an externship project with Stanford University’s Stanford International Human Rights Clinic, receiving 3 final-year Stanford law students. They also convene the final year LLB research focus group on “Women and the Legal System” and an LLM course on “Sexual Offences”.

LRG works on a collaborative basis with a range of external partners, including rural community based organisations (e.g. Masifunde, Masimanyane, LAMOSA, Border Rural Committee, and the Rural Women’s Movement) and other academic institutions (especially UWC, Stellenbosch and Stanford University). They work particularly closely with lawyers from the Legal Resources Centre. They draw on a range of internationally recognised researchers to supplement their own research capacity where necessary.

Permanent and Contract Staff

<table>
<thead>
<tr>
<th>Role</th>
<th>Number</th>
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<tbody>
<tr>
<td>Associate Professors</td>
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<td>Senior Researchers</td>
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<tr>
<td>Research Support Staff</td>
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<tr>
<td>Contract researchers</td>
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<tr>
<td>Administrator</td>
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<tr>
<td>Total</td>
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</tr>
</tbody>
</table>

Research Fields and Staff

Permanent Staff

ASSOCIATE PROFESSOR D. SMYTHE
Law and Society (particularly the use of Interdisciplinary Research Methods), Participatory Governance, Criminal Justice Policy, Violence against Women

DR A. CLAASSENS
Culture and Human Rights; Land Rights; Women’s Rights; Participatory Action Research, Traditional Leadership and Governance

DR S. MNISI
Interface between Living Customary Law and State Law, Culture and Human Rights; Institutionalisation of Traditional Authorities, particularly Traditional Courts; Succession

MS M. DE SOUZA
Researcher

MS D. JEFTHAS
Researcher

MS S. TAHERZADEH
Researcher

MR M. JARA
Accountable Government; Traditional Leadership and Governance; Land Rights; Agricultural Production

Research Support Staff

MR C. KAVURO
Resource Administrator

Administrator

MS S. WRIGHT
Refugee Rights Unit

Unit Profile

The Refugee Rights Unit was founded in 1998 as a Project within the UCT Law Clinic, aimed at providing legal support services to the growing number of refugees and asylum seekers in South Africa. It has since evolved into a fully independent Unit, with four main components: the Unit’s Refugee Law Clinic provides direct legal services to thousands of refugees and asylum seekers in the Western Cape each year; the Unit conducts applied research in refugee law and related topics; it teaches refugee law to undergraduate law and masters’ students within the Department of Public Law; and, it undertakes a significant amount of targeted advocacy and training of government officials, the judiciary, civil society partners and refugee communities.

The close relationship between the Refugee Law Clinic’s practice, the Unit’s teaching of Refugee and Immigration Law courses to LLB and LLM students, and the Unit’s research is a unique aspect of the Unit’s work. The Refugee Law Clinic provides the Unit with a close link to the practical application of refugee law in South Africa and therefore directly informs and supports the Unit’s teaching activities and research outputs. Students often engage with the most current issues facing refugees and asylum seekers in South Africa, including those involved in the strategic litigations undertaken by the Refugee Law Clinic. Students are also encouraged to volunteer at the Refugee Law Clinic in order to gain practical experience and fulfil community service requirements. The Unit’s teaching component includes the direct supervision of undergraduate and graduate level research work in the field of refugee and immigration law.

The Working Paper Series, (http://www.refugeerights.uct.ac.za/research/working_papers/) publishes the research reports of the Refugee Rights Unit, occasional papers of the Unit members and versions of some of the papers presented by the Refugee Rights Unit members. A key focus of the Working Papers is the promotion of the rights of refugees in South Africa and the global South.

The Refugee Rights Unit remains not only committed to directly assisting refugees and asylum seekers but also in teaching and engaging in research which can be used to promote and further the law in this area and as an advocacy tool in the future.

Unit Staff

Ms F. Khan Rights of refugees and their integration into the host country

Ms T. Schreier (Senior Attorney and Research Manager) International and human rights law, South African refugee law and analyzing refugee legislation in SADC

Unit Attorneys and Researchers

MR J. CHAPMAN
MR J. DE JAGE
MS M. SCHOEMAN

Unit Candidate Attorneys

MS N MAGAZI

Contact Details

Postal address: Refugee Rights Unit
Department of Public Law, Faculty of Law, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 5632
Fax: +27 21 650 4107
Web: http://www.refugeerights.uct.ac.za

Department of Public Law

Research output

Authored books


Edited books


Chapters in books


Mnisi, S. and Claassens, A. 2012. Tensions between vernacular values that prioritise basic needs and state versions of customary law that contradict them: "we love these fields that feed us, but not at the expense of a person". In S. Liebenberg and G. Quinot (eds), Law and Poverty. Perspectives from South Africa and Beyond, pp. 381-402. Claremont, South Africa: Juta. ISBN 9780702194450.


**Articles in Peer-reviewed Journals**


Corder, H.M. 2012. ‘Building a nation’: the judicial role in South Africa. Law in Context, 28(8): 60-75.


**Peer-reviewed published conference proceedings**

The Faculty of Engineering & the Built Environment continues to strive towards research excellence, and to strengthen its international profile.

Dean’s Report

During 2012, the faculty has seen an increase in the number of NRF-rated researchers to 46. There has also been a marked increase in publications in peer-reviewed, accredited journals, and the publication count is up from 71.36 units in 2005 to 94.67 units in 2011. With this reputation, the faculty has become the faculty of choice for a growing number of prospective postgraduate students. The number of postgraduate students registered in the faculty in 2012 totaled 1,040. Contracts from industry have steadily increased in number over the past years. In 2011, the faculty signed 299 contracts to the value of R94.2 million and in 2012 a total of 296 contracts, valued at R136.6 million, were awarded to the faculty.

In 2012, the South African National Roads Agency Limited funded a chair in Transport Studies in the Department of Civil Engineering. Eskom established two chairs, the first in the field of Energy Efficiency, housed in the Department of Mechanical Engineering, and the second in Materials Science, hosted by the Centre of Materials Engineering. In addition, the faculty has two new DST/NRF SARChI Chairs – the first in Reaction Engineering, in the Department of Chemical Engineering, and the other in Industrial Computational Fluid Dynamics, in the Department of Mechanical Engineering.

The faculty has appointed three senior research scholars to assist in the mentoring of younger staff, and also to contribute to the research agenda of the faculty. As part of the AW Mellon Foundation’s Visiting and Retired Scholars Mentorship project, the African Centre for Cities hosted Professor Margo Huxley, a retiree from the University of Sheffield, in the UK. The faculty continues to create a supportive and enabling environment for research and innovation, and it is particularly encouraging to note that nine new staff members joined the Emerging Researcher Programme during 2012. The programme ensures the transfer of essential research skills from experienced researchers to those academics who are establishing a research career.

The faculty had 21 registered postdoctoral research fellows in 2012. Four postdoctoral fellowships are available annually through faculty funds, to increase the number of postdoctoral fellows in the faculty. We believe that the role of postdoctoral fellows is critical to the development of the next generation of research scholars.
Highlights from 2012

- The Centre for Materials Engineering had a Geeble 3800 installed thanks to an NRF special equipment award. Valued at more than R10 million, the Geeble 3800 will place the centre at the forefront of research into the performance of materials during manufacture, allowing researchers to investigate novel materials processing.

- Aurecon has committed R2 million over the next five years to support postgraduate students in the Department of Civil Engineering.

- Professor Mark Alexander, Dr Hans Beushausen, and Mike Otieno (PhD student) from the Department of Civil Engineering were awarded the Wason Medal for Materials Research from the American Concrete Institute.

- Associate Professor Harro Von Blottnitz’s Environmental and Process Systems Research Group, in the Department of Chemical Engineering, was awarded a R2.5 million grant by the NRF to support research into the emerging biogas innovation sector in South Africa.

- Professor Alison Lewis from the Department of Chemical Engineering was named Distinguished Woman Scientist: Physical and Engineering Sciences at the Department of Science and Technology Distinguished Women in Science Awards.

- Joyce Mwangama, Gladwell Nganga, and Lombe Mutale received fellowships from the Department of Science and Technology for their doctoral and master’s studies.


- C*Change, the DST/NRF Centre of Excellence in Catalysis, hosted the Syngas Convention in association with Sasol and PetroSA. This was a first-of-its-kind convention, dedicated to synthesis gas conversion and brought together some of the world’s top scientists and industry experts to build valuable international collaborations.

- Neehal Mooruth and Dr Rob van Hille, from the Department of Chemical Engineering, received the Water Institute of South Africa’s award for the most outstanding contribution to industrial water technology.

The years ahead will remain exciting and demanding ones for the faculty, progressing on a journey of providing quality research output that can make an impact internationally.
DOCTORAL GRADUATIONS

M.S. AHMAD (MECHANICAL ENGINEERING)
Study of dynamic behaviour of multilayered structures subjected to blast loading
Supervised by Professor G. Nurick

O.S. AZEEZ (CHEMICAL ENGINEERING)
Supply and target-based superstructure synthesis of heat and mass exchange networks
Supervised by Associate Professor D. Fraser

L.E.K. CHALEMBA (ELECTRICAL ENGINEERING)
Topology-aware multicasting in phased mobile ad hoc networks for e-learning
Supervised by Dr A. Murgu and Professor M.E. Dlodlo

G. EVEZARD (MECHANICAL ENGINEERING)
An innovative rapid compression machine in theory and practice
Supervised by Professor A. Yates and Mr T. Cloete (International Labour Resource and Information Group)

C. GERETTO (MECHANICAL ENGINEERING)
The effects of different degrees of confinement on the deformation of square plates subjected to blast loading
Supervised by Professor G. Nurick and Dr S.C. Kim Yuen

Y. GHRORANI (CHEMICAL ENGINEERING)
On the progression of leaching from large particles in heaps
Supervised by Associate Professor J. Petersen, Dr M. Becker, Dr A. Mainza and Professor J.-P. Franzidis

M. JOHNSTONE-ROBERTSON (CHEMICAL ENGINEERING)
Influence of enzyme location and culture rheology on the optimisation of glucose oxidase production by Aspergillus niger NRRL-3 and Penicillium sp. CBS120262
Supervised by Professor S.T.L. Harrison and Professor K.G. Clarke (Stellenbosch University)

A. KOTSIOPOULOS (CHEMICAL ENGINEERING)
Development of an unsteady state model for the tank bioreaching of sulphide mineral concentrates in flow reactor systems
Supervised by Dr R. Rawatlal and Emeritus Professor G. Hansford (deceased)

C.V. MADELL (ARCHITECTURE AND PLANNING)
Local economic development, business stimulation and poverty reduction in poor urban areas: the disjunction between state policies and household survival strategies in the case of Heideveld, Cape Town
Supervised by Professor V. Watson

J.T. MARKS (MECHANICAL ENGINEERING)
Kolb interrupted: an investigation into students’ experience of an experiential learning approach to entrepreneurship education
Supervised by Associate Professor B. Collier-Reed and Professor J. Case

R.P. MOGOROSI (CHEMICAL ENGINEERING)
Metal support interactions on Fe-based Fischer-Tropsch catalysts
Supervised by Professor E. van Steen

M.M.Z.E. MOHAMMED (ELECTRICAL ENGINEERING)
Automated signature generation for zero-day polymorphic worms using a double-honeynet
Supervised by Professor H.A. Chan

M.M.A. MUSLAM (ELECTRICAL ENGINEERING)
Host mobility management with identifier-locator split protocols in hierarchical and flat networks
Supervised by Professor H.A. Chan

M.J. RAPSON (ELECTRICAL ENGINEERING)
An extensible computational cochlear modelling framework
Supervised by Professor J.C. Tapson and Ms R.A. Verrinder

C. SHAW (MECHANICAL ENGINEERING)
Learning systemic management practice
Supervised by Associate Professor T. Ryan

L.C. SMITH (CHEMICAL ENGINEERING)
The effect of selected academic development programmes on the academic performance of academic development students at a South African university: An empirical analysis
Supervised by Associate Professor J. Case, Professor D.M. Fraser, Associate Professor C. van Walbeek, and Dr V. Ranchhod

A.F. UDEMANS (MECHANICAL ENGINEERING)
Business Architecture Tool (BAT): Development and assessment of a systems framework to guide organisations from concept to delivery, in terms of creating deeper and meaningful integration across processes and functions
Supervised by Associate Professor T. Ryan

A.A. VAN DER BYL (ELECTRICAL ENGINEERING)
A parallel processing framework for spectral based computations
Supervised by Professor M. Inggs and Professor R. Wilkinson (Department of Electrical Engineering, Cape Peninsula University of Technology)
PATENTS

FILED APPLICATIONS

BACON, T. AND MCNAUGHT, A.M.
Prosthesis with Underactuated Prosthetic Fingers.
PCT Patent Application PCT PCT/IB2012/056637

TOMA, V.N.
Stabilised and Activated Metal Cluster Complex Based Catalysts and their Preparation.
PCT Patent Application PCT/IB2012/056681

BOONZAIER, J.A., HENDRICKS, M.R. AND VICATOS, G.
Transport Distraction Apparatus.
PCT Patent Application PCT/IB2012/056664

BRUJAL, Y., JOHN, L.R. AND SIVARASU, S.
Hand Exoskeleton.
Provisional Patent Application South Africa 2012/08238

BURTON, S.G., DAVIDS, L.M. AND ZWANE, E.N.

BURTON, S.G., DAVIDS, L.M. AND ZWANE, E.N.

BURTON, S.G., DAVIDS, L.M. AND ZWANE, E.N.

CLAEYS, M.C.M.
Compression Seal Fitting for Tubes and Other Elongate Elements. Provisional Patent Application South Africa 2012/04359

CLAEYS, M.C.M. AND FISCHER, N.F.

CLAEYS, M.C.M. AND FISCHER, N.F.
Sample Presentation Device for Radiation-Based Analytical Equipment. PCT Patent Application PCT PCT/IB2012/053438

GINSBERG, S.I.
Adjustable Picture Hanger.
Provisional Patent Application South Africa 2012/05031
GINSBERG, S.I., PARSONS, A.T. AND VICATOS, G.
An Endoprosthesis. PCT Patent Application PCT/IB2012/053247

GOLOVINS, E.

GOLOVINS, E.

GOLOVINS, E.

LUSILAO-ZODI, G-A. AND MORRISON, N.
National Phase Patent Application Britain GBxPCTIB2011/000393

LUSILAO-ZODI, G-A. AND MORRISON, N.

LUSILAO-ZODI, G-A. AND MORRISON, N.
National Phase Patent Application South Africa 2012/05903

LUSILAO-ZODI, G-A. AND MORRISON, N.
National Phase Patent Application United States 13/579,253

VICATOS, G.
Rotating Hinge Knee Prosthesis.
Provisional Patent Application South Africa 2012/01641

GRANTED APPLICATIONS

BRADSHAW, D.J. AND NEWELL, A.J.H.
National Phase Patent Application China 200780042453.9

BURTON, S.G., DAVIDS, L.M. AND ZWANE, E.N.
A Hydroxytyrosol Compound.
National Phase Patent Application South Africa 2012/02288

RESEARCH CONTRACTS
296
VALUE OF RESEARCH CONTRACTS
R136.62 million
NRF-RATED RESEARCHERS
46
SARCHI RESEARCH CHAIRS
6
ACCREDITED RESEARCH GROUPINGS
13
DOCTORAL GRADUATIONS
18
DHET-ACCREDITED JOURNALS
94.67 units
PEER-REVIEWED PUBLICATIONS
389
FILED PATENTS
22
GRANTED PATENTS
2
POSTGRADUATE STUDENTS
1090
POSTGRADUATE FUNDING
R29 million
POSTDOCTORAL RESEARCH FELLOWS
21
POSTDOCTORAL RESEARCH FUNDING
R3.3 million
School of Architecture, Planning & Geomatics
(INCLUDING THE AFRICAN CENTRE FOR CITIES)
DIRECTOR: ASSOCIATE PROFESSOR ALTA STEENKAMP

School Profile
Within the School of Architecture, Planning and Geomatics, research work includes conventional research and applied research as well as creative work. This takes place within the actively teaching divisions within the School, as well as within dedicated research units. In the Architecture and Planning programmes these research endeavours include areas of enquiry such as urban design, architectural design, architectural education, digital technology, contemporary architectural theory and practice, planning theory, urban conservation, urban transport policy and urban informality.

The ethos of this School is also strongly influenced by our context: the physical context, the city, and the broader social/cultural/economic context of the region and the country. We are committed to engage with these contexts in both a meaningful and critical way, not as abstract sites for investigation but rather as peopled places to which we can respond.

The Geomatics Division within the School undertakes research in a variety of areas. These include documentation, modelling and visualization of African heritage sites, close-range photogrammetry, laser scanning of architectural structures and remote sensing of the environment; issues relating to land surveying, ownership, registration and tenure; modeling of the shape of the Earth (geoid) using gravity and satellite data; applications of GPS and modeling of datum transformations in Africa; applications of remote sensing and geographic information systems (GIS) to urban, agricultural and environmental monitoring. Spatial data infrastructure (SDI) development for integrated development planning (IDP) in sub-Saharan African cities.

African Centre for Cities
Known colloquially by the acronym ‘ACC’, the Centre has established an impressive international profile and reputation as a dynamic home for analysis of urban problems and policies. Its interdisciplinary brand gives the ACC huge potential to facilitate urban conversations and inquiry throughout UCT.

‘CityLabs’, a new model of engaged and applied research, were created to address pressing concerns in Cape Town, including flooding, urban health, densification, ecology, and climate change. New Labs on violence, culture and human settlements have been launched. The ACC partners with international research units studying food security, and women’s informal employment. Honours for ACC include its (renewed) status as a UCT ‘Signature Theme’ and a Rockefeller Innovation Award.

School Statistics

Permanent and Long-term Contract Staff

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<th>Position</th>
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Students

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</table>

Research Fields and Staff

DR MAHMOUD ABDEL-GELIL
Senior Lecturer: Geomatics. Gravity data analysis, GPS, Geodesy and geophysics.

FRANCIS CARTER
Senior Lecturer: Architecture. Curriculum theory in relation to undergraduate built environment design programmes; theories of making, with reference to contemporary South African architecture; programming for new knowledge space.

ASSOCIATE PROFESSOR NICHOLAS COETZER
Architecture. Architectural design; contemporary architectural history and theory; digital technology.

ALBERTRUM CROWDER
Lecturer: Architecture. Specializes in the area of cultural heritage conservation. His research focuses on the inherent values that people associate with their environment and the possibility for this to help promote sustainable cultural heritage conservation and development.
KEVIN FELLINGHAM
Senior Lecturer: Architecture. Interdisciplinary research, practice and design.

CLINTON HINDES

SIMON HULL
Lecturer: Geomatics. Digital photogrammetry for heritage documentation, fields of land tenure reform, disaster management using remote sensing and GIS, heritage documentation, and improving education.

FADLY ISAACS
Lecturer: Architecture. (Measuring) urban settlement quality, integrating strategic urban infrastructure investment.

TANIA KATZSCHNER
Lecturer: Planning. Education for sustainable development, sustainable urban systems, creating and nurturing educational systems that serve human needs while also protecting our resources for future generations, trans-disciplinarity and systems thinking.

SIMONE LE GRANGE
Lecturer: Architecture. Architectural design, Academic Development Lecturer.

MIKE LOUW
Lecturer: Architecture. Sustainable architecture and urbanism, architectural history and materiality.

PROFESSOR IAIN LOW
Architecture. Space and transformation; critical thinking / practice and the ‘re-writing’ of architectural type; post apartheid South African condition: urbanism, the ‘new’ public realm, contemporary dwelling and architectural pedagogy.

LIANA MULLER
Lecturer: Landscape Architecture. Heritage and management of cultural landscapes, heritage landscapes and representation, specifically focussing on people’s connection with the environment and landscape as an anchoring point for memory and meaning.

PROFESSOR JO NOERO
ARCHITECTURE.

DR NANCY ODENDAAL
Senior Lecturer: Planning. Relationship between Information and Communication Technology and urban transformation, metropolitan planning, planning theory and infrastructural transitions in cities of the Global South. Commissioned research on planning and transformation, land use management and planning standards.

STELLA PAPANICOLAOU
Lecturer: Design, the tension between meaning and the production of space in architectural practice and education; developing tools for critical thinking to enhance the creative process in architectural education.

PROFESSOR EDGAR PIETERSE
Director: African Centre for Cities, and holder of a DST/NRF SARChI Research Chair. Promoting new approaches to urban development in South Africa and Africa, in collaboration with partners from the global South.

PROFESSOR GORDON PIRE
Deputy Director: African Centre for Cities. Geographer, principal research field of transportation and travel.

DR TOM SANYA
Senior Lecturer: Architecture. Sustainable Habitat Innovations (SusHi), systems theory in sustainable architecture evaluation with particular focus on Africa. Sustainability evaluation tool (emerging from PhD). Design and making Epistemology – in Search of an Afro-centric perspective via the African Informal Settlement.

DR GEORGE SITHOLE
Senior Lecturer: Laser altimetry, photogrammetry, 3D object reconstruction.

ASSOCIATE PROFESSOR JULIAN SMIT
Geomatics. Application of remote sensing, photogrammetry and geographic information systems for land and environmental management.

ASSOCIATE PROFESSOR ALTA STEENKAMP
Director: School of Architecture, Planning & Geomatics. History and theory of Southern African architecture and its relation to the global environment.

PROFESSOR VANESSA WATSON
Planning, Planning theory; governance; housing; urbanization; large city planning.

ASSOCIATE PROFESSOR JENNY WHITTAL
Geomatics. Land tenure and cadastral systems, specialising in land for the urban poor and fiscal cadastral systems and reform.
DR TANJA WINKLER
Senior Lecturer: Planning. Current research interests include critically assessing “the voice of the poor” in urban governance and public decision making processes. Ongoing research on civil society, poverty, and inner city regeneration.

Research Associates

EMERITUS PROFESSOR JULIAN COOKE
Contemporary South African architecture.

EMERITUS PROFESSOR DAVID DEWAR
Former Deputy Dean of the Faculty of Engineering and the Built Environment; BP Chair of Planning; urban structure and form; place making; informal housing; housing policy; informal economic development; public space; regional planning and development.

EMERITUS PROFESSOR LUCIEN LE GRANGE

EMERITUS PROFESSOR FABIO TODESCHINI
Architect, city planner, urban designer, heritage practitioner.

EMERITUS PROFESSOR HEINZ RÜTER
Digital close range and aerial photogrammetry; precise engineering surveying; geographic information systems; visualisation and 3D modeling.

EMERITUS ASSOCIATE PROFESSOR CHARLES MERRY
Earth’s gravity field; global positioning system; co-ordinate transformations.

MR BARRIE GASSON
Ecologically sustainable cities; regional planning and development.

Contact Details
School of Architecture, Planning and Geomatics, University of Cape Town, Private Bag X3, Rondebosch, 7701, Republic of South Africa
Telephone and Fax:
Architecture: Tel: SA (21) 650-2374 and Fax: SA (21) 650-2383
Planning: Tel: SA (21) 650-2359 and Fax: SA (21) 689-9466
Geomatics: Tel: SA (21) 650-3577 and Fax: SA (21) 650-3572
Webpage: http://www.apg.uct.ac.za

Research output

Edited books


 Chapters in books


Articles in Peer-reviewed Journals


---

Peer-reviewed published conference proceedings


**Artistic works**


**Master’s degrees (by research)**


**Department of Chemical Engineering**

(Including the Centre for Bioprocessing, Catalysis, Crystallization & Precipitation, Engineering Education and Minerals Processing. The department also has strong research interests in Environmental Process Engineering and Process Modelling. The Chemical Engineering Department also hosts the DST-NRF Centre of Excellence in Catalysis, the DST Hydrogen Catalysis Centre of Competence, the South African Minerals to Metals Research Institute (SAMRI), four DST/NRF SARChI chairs: Minerals Beneficiation, Bioprocess Engineering, Nano-Materials for Catalysis and Reaction Engineering, as well as the Anglo American Platinum Chair in Minerals Processing.

**Noteworthy research-related achievements in 2012**

Dr Dyllon Randall, from the Crystallization and Precipitation Research Unit in the Department of Chemical Engineering, was one of three South African scientists to receive the renowned “Green Talents” sustainability prize in a competition organised by the German Federal Ministry of Education and Research in Berlin.

A first-of-its-kind convention dedicated to synthesis gas conversion - one of the key industrial technologies underpinning the South African economy - took place in Cape Town in April. The event was hosted by c*change, the Department of Science and Technology and the National Research Foundation’s Centre of Excellence in Catalysis at UCT, in association with Sasol, PetroSA and other sponsors.

Professor Alison Lewis was awarded the Department of Science and Technology’s Distinguished Women Scientist Award in the 2012 South African Women in Science Awards.

Dr Adeniyi Isafiade received NRF Y2 rating.

Chemical Engineering had its highest-ever number of graduating students in 2012 – 99, 25 more than in 2011, and 43 more than in 2010.

**Departmental Statistics**

<table>
<thead>
<tr>
<th>Role</th>
<th>Number</th>
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<td>Professors</td>
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<tr>
<td>Professor (contract)</td>
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<td>Research Staff (permanent)</td>
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<td>Research Staff (contract)</td>
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<tr>
<td>Technical &amp; Scientific Staff (permanent &amp; Long-term Contract)</td>
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</tbody>
</table>
Technical & Support Staff (contract) 15
Administrative and Clerical Staff (permanent) 20
Administrative and Clerical Staff (contract) 7
Total 104

Honorary Staff
Honorary Professor 1
Honorary Adjunct Professors 2
Total 3

Students
Doctoral 54
Master’s 111
BSc(Eng) 508
Total 673

Research Fields and Staff
Permanent Academic Staff

MR PAUL BEPSWA
Centre for Minerals Research - Heuristic-based methods for precision accounting of material flows in mineral processing systems.

DR MEGAN BECKER
Centre for Minerals Research, Process Mineralogy: using mineralogy to understand and predict the effect of mineralogy on minerals beneficiation (liberation, separation and disposal of valuable minerals from gangue).

MR WALTER BÖHRINGER
Centre for Catalysis Research - Acid catalysis.

DR ROALD BROSIUS
Centre for Catalysis Research - Diesel selective and gasoline/ kerosene selective catalytic synthetic fuel processes; noble metal promoted zeolite catalysts for Fischer-Tropsch compatible hydrocracking catalysts; hierarchically and/or nano-structured zeolite catalysts for combined FT synthesis and fuels upgrading in micro-channel and continuously stirred tank reactors.

PROFESSOR JENNI CASE
Centre for Research in Engineering Education – Student experience of learning in science and engineering, gold catalysis.

PROFESSOR MICHAEL CLAEYS
Centre for Catalysis Research – Director DST/NRF Centre of Excellence in Catalysis (c*change), Fischer Tropsch synthesis, in-situ catalyst characterization, nano-materials.

DR KIRSTEN CORIN
Centre for Minerals Research - Mineral Processing, Flotation Chemistry: chemical interactions between reagents and minerals.

PROFESSOR DAVE DEGLON
Centre for Minerals Research and Anglo Chair - modelling of mechanical mineral flotation cells, computational fluid dynamics, hydrodynamics, gas dispersion, solids suspension.

HONORARY PROFESSOR MARK DRY
Centre for Catalysis Research - Fischer Tropsch (FT) catalytic processes, production of synthesis gas.

DR CARYN FENNER
Centre for Bioprocess Engineering Research - Production of fine chemicals and commodity bioproducts through combining research into process kinetics, product optimisation and induction. Production of affordable, modern biopharmaceuticals and chemicals; production of industrial enzymes with commercial applications; and the development and optimisation of bio-analytical procedures.

DR BELINDA MCAFADZEAN
Centre for Minerals Research - Mineral processing: Flotation reagents such as collectors, frothers and depressants.

PROFESSOR JACK FLETCHER
Director of the Centre for Catalysis Research – Contract Director National Hydrogen Catalysis Competence Centre (HySA/catalysis) - catalysis by noble metals, zeolite catalysed conversion of phenol and derivatives, wax hydrocracking, shape selectivity in zeolites and molecular sieves, hydrogen processors and fuel cells.

PROFESSOR JEAN-PAUL FRANZIDIS
SA Research Chair in Minerals Beneficiation, Director: Minerals to Metals Signature Theme - Integrating and expanding capacity in minerals beneficiation research.

MR MARTIN HARRIS
Centre for Minerals Research – flotation, modelling, simulation.

PROFESSOR SUE HARRISON
SA Research Chair in Bioprocess Engineering, Deputy Dean Research EBE, Director of the Centre for Bioprocess Engineering Research – Interaction of micro-organisms with the biochemical, thermal and hydrodynamic environment. Microbial community dynamics in planktonic and sessile environments. Biokinetics and metabolic modelling of the biomass and bioproduct components, applied to alkane biotechnology, human
health products, mineral bioleaching through heap and tank processes, AMD prevention and remediation, algal bioprocesses for bioenergy and fine chemicals. Bioprocesses for sustainable process engineering.

MR HILTON HEYDENRYCH

MR NABEEL HUSSAIN
Centre for Catalysis Research - Design and development of catalytic components and devices for low temperature fuel cells

DR ADENIYI ISAFADE
Environmental and Process Systems Engineering – Process design and optimization.

DR PIETER LEVEQUE
Centre for Catalysis Research - Electrocatalysts for fuel cells and high throughput catalyst preparation

PROFESSOR ALISON LEWIS
Director of the Crystallization & Precipitation Research Unit – Industrial precipitation and crystallization, product and particle analysis, process control for optimised product quality; crystallization process development; aqueous chemistry modelling of speciation, thermodynamic equilibria, hydrodynamic and population balance modelling of precipitation systems; water treatment through crystallization, eutectic freeze crystallization.

MR NIELS LÜCHTERS
Centre for Catalysis Research - high throughput experimentation, parallel preparation of heterogeneous catalysts, high throughput methodology for fuel processing research.

DR AUBREY MAINZA
Centre for Minerals Research – Comminution and classification, positron emission particle tracking, discrete element method, computational fluid dynamics.

MS RETHABILE MELAMU

PROFESSOR KLAUS MÖLLER

PROFESSOR CYRIL O’CONNOR
Director of the Centre for Minerals Research Flotation, reagent evaluation, cell design.

DR JOCHEN PETERSEN
Centre for Bioprocess Engineering Research – Hydrometallurgy, especially heap (bio) leaching of low grade minerals, heap reactor characterisation and modelling, bio-leaching processes.

DR DYLLON RANDALL
Crystallization and Precipitation Research Unit

DR RANDHIR RAWATLAL
Reactor Engineering with focus on modelling and simulation, mass transfer modelling in the activation of alkanes, multiphase flow, population balances and applications of segregation and compartment models in flow reactors for minerals bio-leaching and polymerization

DR MARCOS RODRIGUEZ PASCUAL
Crystallization and Precipitation Research Unit - Design and implementation of reactors for crystallization and precipitation processes applying thermo-fluid dynamics and non-intrusive optical techniques

MRS JEANNETTE SWEET
Centre for Minerals Research - Comminution and flotation

MRS RENE TOERIEN
Engineering Education - Chemical Engineering Schools Project: Resource material development for secondary school science teachers; science education research; schools liaison.

PROFESSOR ERIC VAN STEEN
Centre for Catalysis Research/DST-NRF Centre of Excellence in Catalysis C*Change - Fischer-Tropsch synthesis, nanomaterials, molecular modelling of heterogeneous catalytic systems, reaction kinetics.

MR JACOBUS VAN DER MERWE
Engineering Education

MR ANDRIES VAN DER WESTHUIZEN
Centre for Minerals Research - Comminution as used on mineral processing operations for the liberation of valuables. Applied process optimisation through plant
campaigns, mass balancing, model fitting, and simulations. Fine grinding through stirred milling.

**DR ROB VAN HILLE**  
Centre for Bioprocess Engineering Research – Mineral biotechnology, algal biotechnology, microbial ecology, carbon cycling, sulphide chemistry and bioremediation.

**ASSOCIATE PROFESSOR HARRO VON BLOTTNITZ**  
Environmental and Process Systems Engineering – Industrial ecology especially Life Cycle Assessment, waste management and bioenergy, for sustainable development.

**DR MARK WILLIAMSON**  

**MRS JENNIFER WIESE**  
Centre for Minerals Research - Flotation chemistry

### Honorary Staff

**HONORARY PROFESSOR DEE BRADSHAW**  
Centre for Minerals Research – Process mineralogy, froth flotation including machine vision systems and chemical interactions.

**HONORARY ADJUNCT PROFESSOR ALEXANDER STEWART LAMBERT**

**HONORARY ADJUNCT PROFESSOR DAVID WILLIAM WRIGHT**

### Postdoctoral Fellows

**DR ABOYADE AKINWALE**  
LCA of syngas from co-gasification

**DR MAYELI ALVAREZ-SILVA**  
An investigation into the role of the froth phase in the flotation of UG2 ore using a laboratory column flotation cell

**DR OLUWATOSIN AZEEZ**  
Synthesis of heat exchanger networks involving multiple utilities

**DR THERESA HELTES**  
Preparation and characterization of nano-materials for Fischer-Tropsch synthesis

**DR MELINDA GRIFFITHS**  
Large scale production of spirulina

**DR ROBERT HENKEL**  
Two-dimensional gas chromatography GCxGC-TOF, Magnometer

**DR RENE LARYEA-GOLDSMITH**  
Thermal conversion of biomass

**DR PETER MALATJI**  
Development of bimetallic precious metal catalysts for steam reforming of methane

**DR RAMOSHIBIDU MOGOROSI**  
Metal solutions indicators

**DR RUSHANAH MOHAMED**  
Membrane electrode assembly development for PEM fuel cell application

**DR QILING NAIDOO**  
Synthesis core-shell platinum group metal electrocatalysts by different approaches

**DR SUZANA ANNA SAWVI**  
Biological oxidation of alkanes for maximising use of this resource

**DR ANGELA STOTT**  
Developing interactive quizzes for improving conceptual learning in science education.

### International Visitors

**Centre for Catalysis Research**

- Professor Hans Niemantsverdriet - Eindhoven University of Technology, Netherlands
- Professor Guenther G. Scherer - Paul Scherrer Institut, Switzerland
- Professor Calvin H Bartholomew - Brigham Young University, USA
- Dr Hanene Zazoua - Technical and Scientific Research Centre of Physico-Chemical Analysis, Algeria
- Dr Lerari Djahida - Technical and Scientific Research Centre of Physico-Chemical Analysis, Algeria
- Dr Sanjiv Malhotra (CEO) - Oorja Protonics, USA
- Professor Thomas Schmidt - ETH Zurich and Paul Scherrer Institut, Switzerland
- Professor Hubert Gasteiger - Technical University Munich, Germany
- Professor Graham Hutchings - Cardiff University, United Kingdom
- Dr Andrew York - Cambridge University, United Kingdom
- Gessie Brisard - Sherbrooke University, Canada
- Professor Hubert A. Gasteiger - Technische Universität, Germany
Dr Amira Abou-Hamdan - Chemspeed Technologies AG, Switzerland
Mr Bill Massengill - Micromeritics, USA
Dr Sebastian Storck - Germany
Cordelia Gloor - Paul Scherrer Institut, Switzerland
Dr Bachari Khaldoun - Research Centre in Analytical Chemistry and Physics, Algeria

Centre for Bioprocess Engineering Research
Professor Jill Banfield - University of California, USA
Professor Chris Howe - Cambridge University, UK
Professor John Villadsen - Danish University of Technology, Denmark
Dr Chris Bryan - University of Exeter, UK
Dr Peter Neubauer - Technical University of Berlin, Germany
Dr Dave Dew - Billiton, UK

Crystallization and Precipitation Research Unit
Professor Patrice Nortier - Grenoble INP, France
Mr Jim Wrubel - Newco, USA
Rudy Maliepaard - Mettler Toledo, Switzerland
Juan-Carlos Mani, Process Systems Enterprise Limited, UK

Engineering Education
Professor Vidar Gynnild - Norwegian University of Science and Technology, Norway
Anna Danielson – Cambridge University, UK

Minerals to Metals Initiative (MtM)
Professor Don McKee – Retired, University of Queensland, Australia
Professor MJ Nicol – Murdoch University, Australia
Professor JD Miller – University of Utah, USA

Resignation
Dr Sanet Minnaar, Senior Lecturer 31st October 2012

Retirement
Mr Bill Randall, Principal Scientific Officer 31st December 2012

Appointments
Mr Hilton Heydenrych, Senior Lecturer 1st January 2012
Dr Mark Williamson, Senior Lecturer 1st January 2012
Mrs Zulfa Le Riche, Senior Scientific Officer 1st September 2012

Contact Details
Postal Address: Department of Chemical Engineering, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 2509
Web: http://www.chemeng.uct.ac.za/

UCT main phone number: +27 21 650 9111
UCT web site: http://www.uct.ac.za
Research Output

Chapters in books


Articles in Peer-reviewed Journals


Gudiminchi, R.K., Randall, C., Opperman, D.J., Olaofe, O., Harrison, S.T.L., Albertyn, J. and Smit, M. 2012. Whole-
cell hydroxylation of n-octane by Escherichia coli strains expressing the CYP153A6 operon. Applied Microbiology and Biotechnology, 96: 1507-1516.


Peer-reviewed published conference proceedings


Department of Civil Engineering

HEAD OF DEPARTMENT: ASSOCIATE PROFESSOR NEIL ARMITAGE

Departmental Profile

The Department of Civil Engineering currently has an establishment of 15 permanent full-time academic positions and 3 Research Officers, supported by a dedicated complement of 13 technical and administrative staff. It offers a four-year BSc (Civil Engineering) degree programme and several taught postgraduate programmes, as well as supervised research studies leading to Master's and Doctoral degrees. The current enrolment is about 425 undergraduate students and 210 postgraduates – giving a total of 635 students.

Postgraduate teaching and research is conducted within the framework of well-established research groups in the areas of Structural Engineering and Mechanics, Geotechnical Engineering, Concrete Materials and Technology, Hydraulic Engineering, Water Quality Engineering, Urban Water Management, Urban Engineering and Management, Transport Studies and GIS. Members of staff also interact with research groups in other departments, such as the Centre for Research in Computational and Applied Mechanics (CERECAM) and the Africa Centre for Cities (ACC). The Department has fruitful collaborative links with several local and overseas universities, and with local industry. Much of the work done by members of staff finds application in industry.

The high quality of the research undertaken by the Department is evidenced by the considerable number of peer-reviewed publications in ISI-accredited international journals produced by members of staff annually, and the international recognition that members of staff enjoy in their areas of research. Members actively participate on the committees of local professional bodies, provide expert advice to industry, and serve on the editorial and advisory boards of various international journals and conferences.
Departmental Statistics

Permanent and Long-Term Contract Staff

<table>
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<th>Position</th>
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<td>Professors</td>
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<td>Research Officers</td>
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Emeritus and Honorary Staff

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<td>Honorary Research Associates</td>
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Students

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<td>Doctoral</td>
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<td><strong>TOTAL</strong></td>
<td><strong>635</strong></td>
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</table>

Research Fields and Staff

Permanent and Long-Term Contract Staff

**PROFESSOR MARK ALEXANDER**
Concrete durability and deterioration; concrete materials; concrete service life; sustainability of concrete construction; applications to structural design and construction.

**ASSOCIATE PROFESSOR NEIL ARMITAGE**
Urban water management including: Water Sensitive Urban Design (WSUD), Sustainable Drainage Systems (SuDS) and the provision of water services to informal settlements.

**ASSOCIATE PROFESSOR ROGER BEHRENS**
Activity-based travel analysis; local movement network configuration and management; non-motorised transportation; policy analysis in the fields of urban passenger transport; land use-transport interaction.

**ASSOCIATE PROFESSOR HANS BEUSHAUSEN**
Concrete materials; structural engineering; repair of concrete structures.

**DR KIRSTY CARDEN**
Urban water management; sustainability assessment; integrated approaches geared towards sustainable urban development and water sensitive cities.

**MR MICHAEL CHAMPANIS**
iCOMMS: Information for Community Oriented Municipal Services. Role of ICTs in water service delivery and management.

**MS FARIDAH CHEBET**
Geotechnical engineering

**PROFESSOR GEORGE EKAMA**
Chemical and biological wastewater treatment; physical and biological process modelling.

**DR DENIS KALUMBA**
Geotechnical engineering: Ground Improvement, Waste Minimisation, Foundations/Soils Interaction, Electrokinetics, Geosynthetics, and Soil Remediation

**PROFESSOR PILATE MOYO**
Structural health monitoring and testing.

**ASSOCIATE PROFESSOR ULRIKE RIVETT**
iCOMMS: Information for Community Oriented Municipal Services. Role of ICTs in water service delivery and management.

**MR HERRIE SCHALEKAMP**
Road-based public transport policy and regulation; institutional and operational reform processes in passenger transport systems; qualitative methods of investigation in the transport arena

**DR SEBASTIAN SKATULLA**
Multiscale Methods; Biomechanics; Electromechanics; Meshfree Methods; High-Performance Computing.

**ASSOCIATE PROFESSOR MARIANNE VANDERSCHUREN**
Assessment of urban transport systems; urban transport decision-making; transport policy.

**ASSOCIATE PROFESSOR MARK VAN RYNEVELD**
Urban Engineering

**ASSOCIATE PROFESSOR KOBUS VAN ZYL**
Hydraulics; urban water management; water demand analysis; distribution networks.

**MS NICKY WOLMARANS**
Academic development; teaching and learning; mechanics of solids.

**PROFESSOR ALPHOSE ZINGONI**
Shell structures; space structures; structural mechanics; applications of group theory; finite element modelling; vibration and structural dynamics; structural analysis and design.
Honorary Research Associates

MS LISA KANE
Transportation engineering and planning.

PROFESSOR MANU SANTHANAM
Concrete materials and technology; concrete diagnosis, service life design

MR VERNON COLLIS
Integrated structural design; sustainability solutions; concrete repair and rehabilitation

Contact details
Postal Address:
Department of Civil Engineering, University of Cape Town,
Private Bag X3, Rondebosch, 7701
Tel: +27 21 650 2584
Fax: +27 21 689 7471
E-mail: civil@ebe.uct.ac.za
Web: http://www.civil.uct.ac.za/
UCT general phone number: +27 21 650 9111
UCT web site: http://www.uct.ac.za

Research output
Chapters in books

Articles in Peer-reviewed Journals


Peer-reviewed published conference proceedings


Department of Construction Economics and Management

HEAD OF DEPARTMENT: PROFESSOR KEITH CATTEL

Departmental Profile

Research and allied scholarly work in the Department falls under two broad themes of property and construction. Five research groups examine issues related to infrastructure delivery, construction industry development, wellness in construction, emerging property markets, and facilities management. A number of cross cutting themes provide diversity and smaller research interest groups; these themes include sustainability, project management, human development, procurement, entrepreneurship, and teaching and learning.

Strong research links exist with academic institutions in the United Kingdom, Australia, United States of America, Central and East Africa, and India, as well as with institutions within South Africa.

During 2012, papers were presented at key international conferences in Durban, Port Elizabeth, Cape Town, Abuja, Edinburgh, Sydney, Elmina, and Montreal. In addition, a number of papers were published in peer-reviewed local and international journals, frequently with international co-authorship, underlining the Department’s international profile and collaborative research philosophy.

Nationally, the Department continues its engagement with local and international organisations. These include:
- The Association of South African Quantity Surveyors on the Standard System and Chapter Committees,
- The South African Council for the Quantity Surveying Profession as Council Members and on the Education Standards and Research Sub-Committee,
- The Royal Institution of Chartered Surveyors on the World Regional Board, the Education Standards Board and on the EMEA Region Education Standards Board,
- The South African Facilities Management Association,
- The South African Property Owners Association, and,
- The Construction Industry Development Board.

Research endeavours by individual staff have been good in terms of higher degree graduates, attracting research funding, and producing research outputs. The staff received research funding from a variety of sources in 2012, namely: the University Research Committee, the National Research Foundation (NRF), and the Construction Industry Development Board. In addition, the department boasts a “B2” NRF-rated researcher.
Departmental Statistics

Permanent and Long-term Contract Staff

<table>
<thead>
<tr>
<th>Professors</th>
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<tbody>
<tr>
<td>Associate Professors</td>
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<tr>
<td>Senior Lecturers</td>
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<td>Administrative and Clerical Staff</td>
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<td>Departmental Assistant</td>
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Students

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<td>Master’s</td>
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<td>Undergraduate</td>
<td>425</td>
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<td><strong>TOTAL</strong></td>
<td><strong>606</strong></td>
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</tbody>
</table>

Research Fields and Staff

Permanent Staff

**PROFESSOR K.S. CATTELL**
Head of Department: Value management; workplace facilities management; learning spaces; the impact of HIV/AIDS on the South African construction industry; corruption in the construction industry; and stress management for built environment professionals.

**PROFESSOR P.A. BOWEN**
Value management; project procurement; project briefing as an interpersonal communication process; the sustainability assessment of buildings; the impact of HIV/AIDS on the South African construction industry; corruption in the construction industry; and stress management for built environment professionals.

**ASSOCIATE PROFESSOR K.A. MICHELL**
Facilities management as a social and community enterprise in low-income areas of cities; urban facilities management; work space planning and management in buildings; learning spaces.

**ASSOCIATE PROFESSOR F. VIRULY**
Urban economics; property development; property feasibility studies; property and building cycles; property and the macro economy; econometric forecasting of the commercial and residential property markets; institutions and the structure of property markets.

**MRS E. EDWARDES**
Senior Lecturer: Education in construction studies; enhancement of skills required for construction studies.

**MRS K. EVANS**
Senior Lecturer: Work with the African Centre for Cities Research Laboratory; innovative financing of medium to low-income housing from the perspective of end-users; working capital, bridging finance and wholesale finance.

**MR I. JAY**
Senior Lecturer: Project Management – particularly in the area of project strategy and project portfolio (Programme) management. Application of value models to portfolio balancing, and enterprise wide project management structures and systems. Value Management – particular focus on client values, determination of project measures of success (success criteria) and modelling of client values.

**MRS K. LE JEUNE**
Senior Lecturer: Gender related issues within the Built Environment professions; green buildings; service learning and application in construction education; social responsibility and construction education.

**MR J. MARKS**
Senior Lecturer: Entrepreneurial thinking; skills migration, learning spaces; experiential learning; integrated learning.

**MR M. MASSYN**
Senior Lecturer: Skills and competencies of SME’s within the construction industry; procurement systems using in housing delivery with particular emphasis on the PHP delivery system.

**MR R. MCGAFFIN**
Senior Lecturer: The relationship between land economics and planning; property markets and value-capture; Housing and affordable housing markets.

**DR M. MOOYA**
Senior Lecturer: Informal/Low income property markets; property market process; property valuation theory and practice; epistemology and methodology in property market research.

**DR A. WINDAPO**
Senior Lecturer: Contractor performance and development studies; housing procurement and development studies; risk and quality management processes on construction projects and health, safety and environmental issues.
DR E. HURST
Academic Development Lecturer: Academic literacies; student-centred learning and assessment; identity and agency; the sociolinguistic study of the links between language, style and identity.

Contact Details
Postal address: Department of Construction Economics & Management, University of Cape Town, Private Bag X3, Rondebosch, 7701, South Africa
Telephone: +27 21 650 3443
Fax: +27 21 689 7564
E-mail: Mareldia.Fagodien@uct.ac.za
Web: http://www.cons.uct.ac.za

Research output

Chapters in books

Articles in Peer-reviewed Journals


Peer-reviewed published conference proceedings


Faculty of Engineering & the Built Environment


Department of Electrical Engineering

HEAD OF DEPARTMENT: EMERITUS PROFESSOR B.J. DOWNING

Departmental Profile

The Department of Electrical Engineering has 24 permanent academic staff, 131 MSc students and 53 PhD students. The research activities and projects are largely industrially based. The main funding sources are Eskom, Sasol, Telkom, Siemens, De Beers, Mintek, Water Research Commission, Anglo Platinum, Department of Trade and Industry, South African National Defence Force, SunSpace, IQS and the NRF.

The Department has seen a growth in the number of undergraduate students over the past 10 years, which is expected to result in higher postgraduate numbers. There are seven large research groups in the Department, which attract 80% of the postgraduate students. These are:

1. Broadband, Wireless, Communication, and Networks
2. Electrical Machines and Power Electronics
3. Image Processing and Vision Systems
4. Control and Instrumentation
5. Power Engineering
6. Remote Sensing and Radar
7. Robotics and Mechatronics

Departmental Statistics

Permanent and Long-term Contract Staff

| Professors | 6 |
| Associate Professors | 6 |
| Senior Lecturers | 9 |
| Lecturers | 6 |
| Research Staff | 3 |
| Technical Support Staff | 6 |
| Administrative and Clerical Staff | 6 |
| Departmental Assistants | 1 |
| Total | 43 |

Students

| Doctoral | 53 |
| Master’s | 131 |
| Undergraduates | 710 |
| Total | 894 |

Research Fields and Staff

Permanent Staff

PROFESSOR M. BAADE
Multivariable control; mineral extraction control applications; computer-based education

PROFESSOR A. BAGHAI-WADJI
Electronics and Computational Engineering

PROFESSOR C.T. GAUNT
Electricity delivery networks

PROFESSOR M.R. INGGS
Radar remote sensing; synthetic aperture radar; software defined radio; parallel computing

PROFESSOR J. TAPSON
Instrumentation and measurements; ultrasonics; microactuators; probe microscopy

PROFESSOR P. PILLAY
Electrical machines and drives

ASSOCIATE PROFESSOR S.P. CHOWDHURY

ASSOCIATE PROFESSOR M.E. DLODLO
3G mobile and future communication systems

ASSOCIATE PROFESSOR K. FOLLY
Power system stability, control, grid integration of Renewable Energy, Intelligent grid, applied Computational Intelligence and HVDC Transmissions Systems

ASSOCIATE PROFESSOR M.A. KHAN
Electrical machines and drives

ASSOCIATE PROFESSOR A.J. WILKINSON
Signals and image processing, radar; SAR interferometry; tomography, Bayesian interference; inverse problems; RF power amplifiers
Research Staff

DR R. HERMAN
Senior Research Officer, Statistical Techniques in Power Systems

DR A VAN DER BYL
Research Officer, Reconfigurable computing for signal processing applied to SDR

MR M.J.E. VENTURA
Senior Research Officer, Broadband communications & applications; digital systems

Honorary/Emeritus Professors

EMERITUS PROFESSOR B.J. DOWNING
Microwave Systems and Circuits

EMERITUS PROFESSOR G. DE JAGER
Image processing; machine vision and image compression

EMERITUS PROFESSOR A. PETROIANU
Power system analysis; operation and control

EMERITUS PROFESSOR K.M. REINECK
Antennas

EMERITUS ASSOCIATE PROFESSOR J.R. GREENE
Computational Intelligence

Contact Details
Postal address: Department of Electrical Engineering, University of Cape Town, Private Bag X3, Rondebosch, 7701
Telephone: +27 21 650 2811
Fax: +27 21 650 3465
E-mail: ElecEng@uct.ac.za
Web: http://www.ee.uct.ac.za

Research output

Chapters in books

Articles in Peer-reviewed Journals


Peer-reviewed published conference proceedings


Soubachov, B. and Ventura, N.M. 2012. NC-OFDM cognitive radio optimal pilot placement for the LS estimator.


Doctoral dissertations


Van Der Byl, A. 2012. A parallel framework for spectral based computations. 128pp. Supervised by Inggs, M.

Master’s degrees (by research)

Bruintjies, M. 2012. PD trending and TVA test readings are good indicators of the condition of aged Stator Bar insulation. MSc (Eng). 104pp. Supervised by Gaunt, C.


Khwambala, P. 2012. The importance of selecting the optimal number of principal components for fault detection using principal component analysis. MSc(Eng). 85pp. Supervised by Braae, M.


P. Omar, S. 2012. Target tracking using multisensor data fusion for an unmanned aerial vehicle sense and avoid system. MSc(Eng). 88pp. Supervised by Winberg, S.

Oyedokun, T. 2012. Sea clutter simulation. MSc (Eng). 90pp. Supervised by Inggs, M.

Paverd, A.J. 2012. Enhanced mobile computing using cloud resources. MSc(Eng). 98. Supervised by Inggs, M.


**Patents**


**Department of Mechanical Engineering**

(Including the Blast Impact and Survivability Research Unit (BISRU), the Centre for Materials Engineering (CME), the Centre for Research in Computational and Applied Mechanics (CERECAM), the Energy Research Centre (ERC), and the SASOL Advanced Fuels Laboratory (SAFL)).

**HEAD OF DEPARTMENT: PROFESSOR CHRISTIAAN REDELINGHUYS**

**Department Profile**

The Department of Mechanical Engineering includes the following recognized research groupings: Blast Impact and Survivability Research Unit (BISRU), the Centre for Materials Engineering (CME), the Centre for Research in Computational and Applied Mechanics (CERECAM), the Energy Research Centre (ERC) and the SASOL Advanced Fuels Laboratory (SAFL). The research interests of BISRU cover all engineering aspects of blast and impact scenarios, including the impact/blast process, structural response and material characterisation of structural components, as well as human bio-mechanical response under impact conditions. Research in CME is directed at an understanding of the relationships between the production processes and structure, properties and performance of engineering materials. CERECAM focuses on mathematical modelling of complex material behaviour, simulation of processes of deformation and failure of engineering components and artefacts, development of stable and accurate computational solution techniques and computational fluid dynamics. The ERC researches energy efficiency, energy modelling, climate change issues and sustainable energy. The SAFL
is arguably the most sophisticated engines laboratory undertaking fuels research in the country. A number of smaller research groupings focus on areas such as advanced manufacturing, aeronautics, orthopaedics, composite materials engineering, computational fluid dynamics, engineering education, engineering management, fracture and fatigue, non-destructive testing and robotics.

Departmental Statistics

Permanent and long-term contract staff (excluding research officers)

<table>
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<tr>
<th>Position</th>
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<td>Professors</td>
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<td>Adjunct Professors</td>
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Students

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<td>Undergraduate</td>
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Research Fields and Staff

**PROFESSOR KEVIN BENNETT**
Director, Energy Research Centre; Energy research.

**MS TRACY BOOYSEN**
Chief Scientific Officer, Electro Mechanical engineering, robotics and agents.

**ASSOCIATE PROFESSOR BRANDON COLLIER-REED**
Director of the Centre for Research in Engineering Education (CREE); the sociocultural characterization of the student experience; social aspects of technology; technological literacy of adolescents; podcasting in engineering education.

**MR TREVOR CLOETE**
Senior Lecturer; BISRU, CERECAM; deformation and tearing of blast loaded metal plates; high strain rate plasticity; constitutive modeling.

**MR DIRK FINDEIS**
Senior Lecturer; non-destructive testing; portable ESPI and shearography.

**DR WIM FULS**
Senior Lecturer; Centre of specialisation in energy efficiency; power plant process flow modelling

**DR REUBEN GOVENDER**
Senior Lecturer; BISRU; high strain rate material characterisation; composite materials; blast and impact loading of structures and materials.

**EMERITUS PROFESSOR JASSON GRYZAGORIDIS**
CERECAM; heat transfer and refrigeration; combined absorption and compression refrigeration cycles; optical techniques in non-destructive testing; holographic interferometry; ESPI; shearography; materials properties evaluation.

**MR ERNESTO ISMAIL**
Lecturer; BISRU, CERECAM; meshless methods, non-linear elasticity.

**ADJUNCT PROFESSOR LOUIS JESTIN**
Power Generation systems design and operation

**PROFESSOR DORA KARAGIOZOVA**
Honorary Professor; BISRU; analytical and computational analysis of dynamic systems.

**ASSOCIATE PROFESSOR FRANZ-JOSEF KAHLEN**
Lean/advanced manufacturing; laser materials processing; laser diagnostics.

**DR BRUCE KLOOT**
Academic Development Lecturer; sociology of education; higher education studies; foundation and extended curriculum programmes; student success and progression.

**ASSOCIATE PROFESSOR RAMESH KUPPUSWAMY**
Advanced manufacturing; micro/nano systems.

**PROFESSOR ROBERT KNUTSEN**
Deputy Head of Department; Director, Centre for Materials Engineering; physical metallurgy; thermo-mechanical processing; texture; microstructure; microscopy.

**ASSOCIATE PROFESSOR GENEVIEVE LANGDON**
BISRU; CREE; blast response of structures and materials; high strain rate behaviour; structural impact.
ASSOCIATE PROFESSOR ARNAUD MALAN
Computational Fluid Dynamics

Mr STEPHEN MARAIS
Senior Lecturer; Electro Mechanical design.

PROFESSOR GERALD NURICK
Director, BISRU; structural impact; crashworthiness; high strain rates; impact biomechanics.

MR RODGER NKUMBWA
Lecturer; advanced manufacturing processes, manufacturing IT integration, lean & green manufacturing, Engineering Management

PROFESSOR CHRIS REDELINGHUYS
Head of Department; autonomously guided parafoils, airliners in formation flight.

MR PAUL SCHABERG
Lecturer, SASOL Advanced Fuel Lab, engines and fuels research.

MS CORRINNE SHAW
Senior Lecturer; Engineering Management; management and engineering education, systems theory and practice.

PROFESSOR ROBERT TAIT
Centre for Materials Engineering; fracture mechanics; fatigue; assessment of residual stresses in structural components; applied non-destructive testing.

DR GEORGE VICATOS
Senior Lecturer; heat transfer and refrigeration; combined absorption and compression refrigeration cycles; bioengineering prosthetic design.

ASSOCIATE PROFESSOR CHRIS VON KLEMPERER
Composite materials; processing and modelling of composite materials and structures.

DR CHRIS WOULARD
Site leader; Sasol Advanced Fuels Laboratory; fuels chemistry; polymeric materials; thermal analysis.

PROFESSOR ANDY YATES
Adjunct Professor, SASOL Advanced Fuels Lab, engines and fuels.

Contract Research Staff

MR VICTOR BALDEN
Research Officer, BISRU; impact dynamics.

MS ANYA BOYD
Assistant Research Officer, ERC; energy, environment and climate change.

MS L CHILOANE
Research Officer, ERC; energy efficiency, measurement and verification

DR STEEVE CHUNG KIM YUEN
Research Officer, BISRU; structural dynamics, blast response, crashworthiness.

DR GARETH FLOWEDAY
Projects co-supervisor, SASOL Advanced Fuels Lab, engines and fuels.

MR ANDREW Hibberd
Energy Efficiency Engineer, ERC; measurement and verification.

MS ALISON HUGHES
Senior Research Officer, ERC; energy efficiency; energy modeling.

MR RICHARD LARMOUR
Research Officer, ERC; climate change.

MR THAPELO LETETE
Research Officer, ERC; climate change.

DR ANDREW MARQUARD
Senior Research Officer, ERC; energy and climate change team.

MS MASCHA MOORLACH
Energy Efficiency Engineer, ERC; measurement and verification.

MR ALFRED MOYO
Research Officer, ERC; energy & climate change group.

DR GISELA PRASAD
Chief Research Officer, ERC; energy, poverty and development.

DR SEBATAOLO RAHLAO
Researcher, ERC; energy, environment and climate change.

DR B RENNKAMP
Research Officer, ERC; energy and climate change

Mrs M Senatla
Research Officer, energy systems analysis & planning
DR DEBBIE SPARKS  
Senior Research Officer, ERC; energy and climate change.

MR AC STONE  
Senior Research Officer, ERC; energy systems analysis, modelling.

DR MIRA TOPIC  
Senior Research Scientist, iThemba Laboratory for Accelerator Based Sciences, Centre for Materials Engineering; solid-state phase transformation, thin films and coatings, materials characterization by nuclear microprobe, X-ray, neutron and synchrotron diffraction techniques.

DR M T ORRES GUNFAUS  
Chief Research Officer, ERC; climate change.

MR AJAY TRIKAM  
Research Officer, ERC; energy efficiency; greenhouse gases; mitigation modeling.

PROFESSOR HARALD WINKLER  
ERC; climate change (economics, mitigation & policy) and environmental economics.

MS HOLLE WLOKAS  
Assistant Research Officer, ERC; energy, poverty & development group.

Contact Details  
Postal Address: Department of Mechanical Engineering, University of Cape Town, Private Bag X3, Rondebosch, 7701  
Telephone: +27 21 650 3231  
Facsimile +27 21 650 3240  
E-mail: MEC-mechanicalengineering@uct.ac.za  
Web: http://www.mecheng.uct.ac.za/

Research output  
Chapters in books  


Articles in Peer-reviewed Journals  

Boyd, A. 2012. Informing international UNFCCC technology mechanisms from the ground up: using biogas technology in South Africa as a case study to evaluate the usefulness of potential elements of an international technology agreement in the UNFCCC negotiations process. Energy Policy, 51: 301-311.


Peer-reviewed published conference proceedings


Creative writing: Short story published in a journal


Doctoral dissertations

Ahmad, M.S. 2012. Study of dynamic behaviour of multi-layered structures subjected to blast loading. Supervised by Nurick, G.N. and Langdon, G.S.


Geretto, C. 2012. The effects of different degrees of confinement on the deformation of square plates subjected to blast loading. Supervised by Nurick, G.N. and Chung K. Yuen, S.

Shaw, C. 2012. Learning systemic management practice. Supervised by Ryan, T.B.

Master’s degrees (by research)


Bizinos, N. 2012. Passenger comfort during formation flight within atmospheric turbulence. MSc(Eng). Supervised by Redelinghuys, C.

Boachie-Yiadom, K. 2012. An extended analysis of the BISRU sled tester ‘s dynamic response. MSc(Eng) Mechanical. Supervised by Balchin, K. and Nurick, G.


Cross, B.A. 2012. An investigation into the effects of diesel fuel properties on the injection characteristics of a common rail injection system. MSc(Eng) Mechanical. Supervised by Schaberg, P.


Dreyer, E. 2012. Development of robotic platform for the exploration of hazardous environments. MSc(Eng). Supervised by Marais, S.

Henson, P. 2012. The development of a low-backlash robotic manipulator arm. MSc(Eng) Mechanical. Supervised by Marais, S.

Isaacs, D. 2012. The barriers to lean implementation in high mix, low volume manufacturing - a marine diving engineering case study. MSc (Eng). Supervised by Kahlen, F.-J.

Johnston, O. 2012. Analysis of energy in South Africa’s primary mineral industry: a focus on gold. MSc(Eng). Supervised by Cohen, B. and Von Blottnitz, H.
Knowles, C. 2012. Residule stress measurement and the structural integrity evaluation of SLM TiG 4V. MSc(Eng). Supervised by Tait, R. B.

Leisegang, D. 2012. Study into the feasibility and design of a renewable energy portfolio for the Klein Constantia wine estate. MSc(Eng). Supervised by Hibberd, A.C.M. and Bennett, K.


Makhetha, W. 2012. Phase transformation in platinum-based coatings. MSc(Eng). Supervised by Lang, C.I. and Topic, M.


Mudd, R. 2012. Exploring the range of motion between the acetabular component and the femoral component in hip resurfacing. MSc(Med) Biomedical Engineering. 116pp. Supervised by Vicatos, G. and Sivarasu, S.


Pougnet, M. 2012. New product development as an approach to remain viable in a stagnant market: a case study of a company with technologically (ITS) focused products in South Africa. MSc(Eng). Supervised by Shaw, C.B.


Richardson, N. 2012. An investigation into aspects of rate-independent single crystal plasticity. MSc(Eng) Mechanical. Supervised by Reddy, B.


Tembo, B. 2012. Policy options for the sustainable development of the power sector in Zambia. MSc (Eng). Supervised by Hughes, A. and Merven, B.

Thiart, A. 2012. CFD study of fuel evaporation and related thermofluid dynamics in the inlet manifold, port and cylinder of the CFR octane engine. MSc(Eng) Mechanical. Supervised by Floweday, G. and Meyer, C.


Patents


The research mission of the Centre for Higher Education Development (CHED) is to ensure that its educational development work is based on rigorous and ethical research that will serve the objectives of providing equitable access to higher education, enabling social redress through higher education, and strengthening the quality of teaching and learning in higher education at UCT, in South Africa, and in countries with similar needs.

Dean’s Report

This report attests to the commitment of CHED and its staff to the scholarship of teaching and learning, and to higher education as an emerging field of research and policy. CHED research arises from individual interest, as well as institutional and national imperatives. In 2012, CHED staff published research that was geared to investigating and developing educational theories and practices that contribute to continual improvement in the quality of higher education and educational development. Accordingly, the research dealt with educational development issues such as multimodality, the role of writing centres, academic writing and student voice, language and academic achievement, and sociocultural perspectives on learning.

The research also reflects on innovative strategies adopted by CHED staff and those from other faculties to improve teaching and learning. Some of the research demonstrates the ways in which research and inquiry into aspects of teaching and student learning is being integrated in an iterative way into the curriculum design and development. This is clearly demonstrated by articles on educational technology aspects, such as mobile learning, digital literacies, and podcasting. This increased focus on educational technology in CHED research is very important, given the worldwide recognition of the role of technology in higher education.

It is also important to note that much of CHED research for 2012 was published in peer-reviewed, accredited local journals such as the SA Journal of Higher Education, South African Journal of Accounting Research, South African Medical Journal, Per Linguam, and Southern African Linguistics and Applied Language Studies, and international journals such as the Journal for Higher Education, Teaching in Higher Education, Educational Technology & Society, and Higher Educational Research & Development. A research highlight attesting to the standard and quality of CHED research is the recent inclusion of Dr Lucia Thesen’s 1997 TESOL Quarterly article in the SAGE Benchmarks in Language and Linguistics, which presents collections that bring together the most authoritative and influential research in language and linguistics. The series is edited by world-leading experts in their fields and presents the ‘gold standard’ for university libraries throughout the world, who are seeking to solidify their linguistics reference collections.
In 2012, CHED continued its strong contribution to the scholarship of teaching and learning by organising the Conference on Teaching and Learning, which took place on 25 October 2012. The papers presented at this conference reflected the diversity of research in CHED, and UCT as a whole, in educational development and higher education in general.

Besides conventional research, CHED also undertook institutional research that resulted in different types of research outputs. An example of such research is the Large Classes Project, which was led by Associate Professor Jeff Jawitz. This was an inter-institutional research project that aimed to identify the key mechanisms needed to improve students’ learning in the context of large-class teaching in each of the four case studies. The project concluded at the end of 2012 and its findings were disseminated through institutional seminars, a national symposium, and the publication of articles. Another example is the international project focused on Closing the skills gap in South Africa, commissioned by the World Bank. Although this project was undertaken in 2010 by Professor Ian Scott, in collaboration with Glen Fisher, an education consultant, it is cited here to highlight the role of CHED research in advancing higher education scholarship on both the national and the international level.

To enhance their research capacity, many CHED academic staff continued to develop and maintain productive associations with individuals, institutions, and scholarly bodies abroad. Some staff members were invited to present keynote addresses at international conferences. Associate Professor Suellen Shay, for example, was invited to give a keynote address at the Society for Research in Higher Education Conference in Newport, Wales, UK, on 13 December 2012. Associate Professor Rochelle Kapp was a keynote speaker at the Thomas R. Watson Conference on The Economies of Writing, University of Louisville, USA, in October 2012.

CHED staff also participated in research development programmes, such as the Emerging Researcher Programme and a Writers’ Workshop initiated by the Department of Research and Innovation. The Writers’ Workshop entailed a series of workshops with emerging researchers to develop their skills in research writing and preparation of research papers for publication. Approximately 22 staff members signed up for this programme in 2012. The programme concluded with a two-day Writing Development Workshop hosted at Mont Fleur, Stellenbosch, where participants were given the opportunity to finalise their research papers. It is hoped that this intervention will not only result in an increase in research publications, but will also generally increase research activity in the faculty.

Another highlight of CHED research is in relation to research contracts. In 2012, CHED research contracts increased in number from 16 to 28 and also in value from R2.57 million to R7.33 million. Although the number of contracts is still low compared to 2010 (31), the significant improvement made during the past year is likely to have a positive impact on CHED research output in the next few years, and we look forward to building on this base in 2013.
Academic Development Programme

DIRECTOR: PROFESSOR IAN SCOTT

Departmental Profile

Over the last decade the focus of the Academic Development Programme (ADP) has changed from primarily providing direct assistance to individuals from educationally disadvantaged groups to efforts to improve the effectiveness of mainstream academic programmes in catering for student diversity. This involves such means as curriculum restructuring, integrating AD approaches into mainstream courses, and seeking to enable regular academic teaching staff to refine their practice in accordance with the changing environment of Higher Education. The research interests of ADP staff are, in the main, focused on understanding and improving key aspects of learning, teaching and assessment in Higher Education, analysing conditions at institutional and national level that affect learning and teaching, and contributing to educational policy development and implementation. Many ADP staff members have a particular interest in the effects of students’ prior educational experiences.

Departmental Statistics

Permanent and Long-term contract staff

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<th>Position</th>
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Research Fields and Staff

MS MICHELLE ABRAHAMS
Academic Development Officer, Education Development Unit, Faculty of Commerce. Impact of mentoring and student leadership.

ASSOCIATE PROFESSOR SAALIH ALLIE
ADP Co-ordinator, Faculty of Science. Curriculum Development; Physics Education Research.

MS MELANIE ALPERSTEIN
Senior Lecturer; Curriculum Development Officer, Education Development Unit, Faculty of Health Sciences. Introducing Primary Health Care in clinical teaching and assessment; Problem based learning; Inter-professional community-based education/service learning; new graduates in rural health community service.

DR ARLENE ARCHER
Senior Lecturer; Co-ordinator, Writing Centre, Language Development Group. Academic Literacies; Multimodality; Cultural Studies.

MR MOEAIN AREND
Lecturer, Language Development Group. Academic literacy; Language and literacy across contexts; Apprenticeship and collaborative learning practices.

DR ABONGWE BANGEI
Lecturer, Language Development Group. Academic Literacy; Writing in the Disciplines; Postgraduate literacies; Multilingualism; Language Development; Writing and Identity.

MS ANITA CAMPBELL
Lecturer, ASPECT, Faculty of Engineering and the Built Environment. Factors affecting first year success; Dr Math tutoring; facilitation of learning groups using mobile technology; e-learning.

MR JUMANI CLARKE
Lecturer, Numeracy Centre. Excel as a learning environment; Academic literacies. Student identities in academic writing.

DR ALAN CLIFF
Senior Lecturer, Alternative Admissions Research Project (AARP). Academic Literacy and Student Learning; Students’ Conceptions of Learning; Admissions Testing; Diagnostic Profiling of Students’ Academic Literacies and Numeracies.

DR TRACY CRAIG
Senior Lecturer, ASPECT, Faculty of Engineering and the Built Environment. Tertiary mathematics education; Mathematical problem-solving; Language and mathematics; Engineering mathematics education.

ASSOCIATE PROFESSOR BETTE DAVIDOWITZ
Chemistry; Convener: General Entry for Programmes in Science (GEPS). Chemical Education; Curriculum Design; Learning in Laboratories; Writing across the Curriculum; Improving Adjustment to Higher Education, Using student-generated drawings to probe understanding of basic concepts in chemistry.

MISS BONANI DUBE
Student Development Officer, Education Development Unit, Faculty of Commerce. Social and academic support needed by students on academic probation.
MS CARLA FOURIE
Senior Lecturer, Convenor Financial Accounting and Financial Reporting 1 (EDU: Commerce). Academic teaching post

MS VERA FRITH
Senior Lecturer, Co-ordinator Numeracy Centre. Quantitative Literacy in Higher Education curricula; Academic Literacies.

MS TARRYN GRINAKER
Lecturer, Financial Reporting 2 (Commerce). Financial Reporting—IFRS for SMEs; Higher Education in Accounting; Teaching Methodology; Teaching and Learning Structures; Action Research.

DR NADIA HARTMAN
Senior Lecturer, Director: Education Development Unit, Faculty of Health Sciences. Curriculum and Institutional Development; Social Responsiveness; Health Professional Development.

PROFESSOR NIKOLAAS J HENDRI HEIDEMAN
Lecturer, Mathematics, Academic Development Programme (ADP) Science.

DR ADITI HUMNA
Assistant Lecturer, Foundation courses tutoring and evaluation; research into curriculum development for the teaching of reading and writing in the Humanities.

MS CATHERINE HUTCHINGS
Lecturer, Language Development Group. Academic Literacy; Mentorship in Education; Language and Diversity; Writing, language and Identity; Narrative theory; Reflective Literacy.

MR JACOB JAFTHA
Lecturer, Numeracy Centre. Online learning environments (supporting tutorial activities); Adaptive feedback; Operator theory and its applications.

Associate Professor Rochelle Kapp
First-Year Experience Project and Language Development Group. Academic Literacy; English as a Second Language; student development

MR PIERRE LE ROUX
Lecturer, ASPECT, Faculty of Engineering and the Built Environment. Engineering Physics Education; Teaching and Learning.

DR KATE LE ROUX
Senior Lecturer, Numeracy Centre. Mathematics education research; School/university transition; Mathematics learning in extended curricula; Contexts in the teaching and learning of mathematics.

MS PAM LLOYD
Lecturer (part-time), Numeracy Centre. Curriculum Development for quantitative literacy in higher education.

MR TIM LOW
Senior Lecturer, Statistics/Mathematics, Education Development Unit, Faculty of Commerce. Mathematics Education; Technology for teaching and learning mathematics.

MS JEAN LUYT
Clinical Psychologist and Student Development Practitioner, Education Development Unit, Faculty of Commerce. Impact of affective factors on student success and student support and development practice.

ASSOCIATE PROFESSOR KATHY LUCKETT
Director, EDU, Faculty of Humanities; Curriculum Development, Educational Evaluation, Sociology of Knowledge and curriculum, Functional Linguistics.

DR DUNCAN MHAKURE
Lecturer, Numeracy Centre. Mathematics Education research; Quantitative/ mathematical Literacy research; Teacher Education.

MR DANIEL MUNENE
Lecturer, ADP Co-ordinator: Education Development Unit, Faculty of Commerce. Teaching and Learning; Disadvantage and Support; Culture, identity and learning; Institutional Economics; Economics Education; Financial markets and regulation.

MS NISREEN NARKER
Lecturer, Economics. Education Development Unit, Faculty of Commerce. Economics Education.

MS KALPANA NATHOO
Lecturer, ASPECT, Faculty of Engineering and the Built Environment. Teaching and Learning in Mathematics and Engineering Education; Effective learning systems.

MR GIDEON NOMDO
Lecturer, Language Development Group. Academic Literacy; Language and Identity; Curriculum Development; Mentorship.

DR BOB OSANO
Senior Lecturer, Mathematics. Mathematics Education Research; Theoretical Cosmology.
ASSOCIATE PROFESSOR MORAGH PAXTON
Language Development Group. Impact of prior discourses on acquisition of new discourses; Literacy Practices in Higher Education; Multilingualism for learning; Affordances and Barriers to acquisition of postgraduate research genres.

DR HOWARD PEARCE
Senior Lecturer, Co-ordinator, ASPECT, Faculty of Engineering and the Built Environment. Quantitative and Qualitative Learning in Physics; Assessment of student learning in Mathematics, Physics and Engineering; Mathematics for Engineering students; Curriculum development.

MR ROBERT PRINCE
Deputy Director, Academic Development Programme. Algebraic Number Theory; Commutative Algebra; Mathematics Education; Computers in Teaching Mathematics and Quantitative Literacy, Admissions Testing.

ASSOCIATE PROFESSOR JUNE PYM
Director: Education Development Unit, Faculty of Commerce. Barriers to learning; Effect of prior educational experience and context on student learning; the impact of the teaching and learning environment, Identity and agency.

MS SHEENA RUGHUBAR-REDDY
Lecturer, Numeracy Centre. Mathematics Education; Quantitative/Mathematics Literacy; Curriculum Development; Student learning (Extended programmes); Teacher development.

MS MEGAN RILEY
Writing Consultant (part-time), Education Development Unit, Faculty of Commerce. Academic literacy.

PROFESSOR IAN SCOTT
Director, Academic Development Programme. Higher Education Policy related to Teaching and Learning; Widening Participation in Higher Education; Curriculum Development; Professional Development.

MS MEKE SHIVUTE
Lecturer, Information Systems (ADP), Telemedicine, Medical Informatics and competence-based curriculum development for higher institutions.

MS RIASHNA SITHALDEEN
Lecturer, Biological, Earth and Environmental Sciences.

DR LEONARD SMITH
Senior Lecturer, Economics. Education Development Unit, Faculty of Commerce. Economics Education; Academic development.

MS SHERRY STUART
Academic Development Officer, Education Development Unit, Faculty of Commerce. Impact of affective factors on student success.

MR GARY STEWART
Lecturer, Computer Science. Computer Education.

MS DALE TAYLOR
Lecturer, Physics. Physics Education Research; Teacher Education.

DR LUCIA THESEN
Senior Lecturer, Language Development Group. Access to Academic Literacies; Postgraduate literacies; Multimodal communicative practices.

MR STUART TORR
Lecturer, Mathematics, Education Development Unit, Faculty of Commerce. Mathematics Education; Contextual priming and mathematical abstraction.

DR MATHILDE VAN DER MERWE
Lecturer, Language Development Group. Postgraduate quantitative literacies, Postgraduate publication patterns: Biological Sciences.

DR ERMEN VAN PLETZEN
Senior Lecturer and Coordinator, Language Development Group. Academic Literacy; Medical Education; Public Health.

MS EVELYN VICATOS
Lecturer (part-time), ASPECT, Faculty of Engineering and the Built Environment. Introduction to academic literacy and scientific writing for 1st year engineering students in the academic support programme.

Contact Details
Postal Address: Academic Development Programme, Centre for Higher Education Development, 5th Floor, Hoenikwaggo Building, North Lane, Upper Campus, University of Cape Town, Private Bag X3, Rondebosch, 7701
Tel: +27 21 650 2251
Fax: +27 21 650 5045
E-mail: ian.scott@uct.ac.za
Web: http://www.ched.uct.ac.za
Research output

Chapters in books


Articles in peer-reviewed journals


Peer-reviewed published conference proceedings


Centre for Educational Technology

ACTING DIRECTOR: STEPHEN MARQUARD

Centre Profile

The Centre for Educational Technology has been an established unit in CHED since 2005. While the Centre has a broad focus, its core activities focus on encouraging and supporting the innovative and effective use of ICTs for educational purposes. CET’s work focuses on the areas of learning technologies, staff development, curriculum projects, postgraduate teaching, and also includes research and special projects. Research in CET has largely been centered on the professional interests of individuals and the focus of funded projects. It can be grouped into some dominant themes including: access to and use of...
ICTs; academic literacies; learning design; mobile learning; lecture recording and podcasting; innovation by educators; teaching with new media; the educational technology profession; open educational resources; open research; communities of practice in staff development; the effects of organisational cultures on technology adoption; the rhetoric of staff development; and online conferences for professional development. Together with the UCT Research Office, CET hosts the Scholarly Communication in Africa Programme which is a three-year, IDRC-funded initiative aimed at increasing African universities’ contribution to regional and global knowledge production.

**Departmental Statistics**

**Permanent and Long Term Contract Staff**

<table>
<thead>
<tr>
<th>Position</th>
<th>Number</th>
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<tr>
<td>Associate Professors</td>
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<tr>
<td>Senior Lecturers</td>
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<td>Lecturers</td>
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<td>Support, administrative and technical staff</td>
<td>12</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>19</td>
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</tbody>
</table>

**Research Fields and Staff**

**MR LUBABA LO BADI**  
Learning Technologies Consultant: promotion of and support for the use of educational technologies among staff.

**DR CHERYL BROWN**  
Lecturer: digital identity, first year students’ experiences of ICTs at university, discourses of ICTs and access to ICTs.

**MR ROGER BROWN**  
Educational Technology Consultant; promotion of and support for the use of educational technologies among staff.

**MR TONY CARR**  
Senior Lecturer; Co-ordinator Staff Development; on-line conferences, online communities of practice, use of interactive computer-mediated approaches for teaching and learning.

**MS RULISHA CHERTY**  
Digital Learning Materials Designer; use of video in curriculum development.

**MS GLENDA COX**  
Lecturer: Curriculum Projects; teaching and learning with technology, curriculum development; Open Education Resources.

**ASSOCIATE PROFESSOR LAURA CZERNIEWSICZ**  
Seconded to OpenUCT; open scholarship broadly, scholarly communication, students’ digitally-mediated practices, digital identities and the field of learning technology as a scholarly domain.

**MR ANDREW DEACON**  
Instructional Designer; learning environments, evaluation of interactive computer mediated approaches for teaching and learning, learning analytics.

**ASSOCIATE PROFESSOR CHERYL HODGKINSON-WILLIAMS**  
Online learning design, interactive whiteboards, open scholarship, open education resources and electronic portfolios.

**MR DAVID HORWITZ**  
Online Learning Environments developer, design of interactive environments and the effective use of databases to support interactive computer-mediated approaches for teaching and learning.

**MS SETA JACKSON**  
Learning Technologies Consultant: promotion of and support for the use of educational technologies among staff.

**DR CATHY KELL**  
Research Lead, Scholarly Communication in Africa Programme; scholarly Communication.

**MR STEPHEN MARQUARD**  
Acting Director; Learning Technologies Coordinator: design, implementation and support of online environments for effective teaching and learning, group collaboration and personal workspaces and portfolios, higher education ICT strategy and governance.

**MS DESIREE MCKIE**  
Coordinator: ICT Literacy Project, ICT proficiency training, assessment and integration into learning and teaching, ICT policy, multilingualism and technology.

**MR EDMORE MOYO**  
Online Learning Environments developer, design of interactive environments and the effective use of databases to support interactive computer-mediated approaches for teaching and learning.

**ASSOCIATE PROFESSOR DICK NG’AMBI**  
Coordinator – postgraduate programme (ICT in Education); mobile learning, ubiquitous technologies, emerging technologies, open educational resources, podcasting, social networking, and informal learning.

**MR IAN SCHROEDER**  
Staff development, use of interactive computer-mediated approaches for teaching and learning, peer instruction and collaborative learning.
MS STACEY STENT
Graphics and animation designer: teaching with images, visual literacy.

MS MICHELLE WILLMERS
Programme Manager, Scholarly Communication in Africa Programme; scholarly Communication.

Honorary Research Associate

MS EVE GRAY
Conducts donor-funded research projects on policy and strategy for ICT and scholarly communications in Africa, with a specific focus on open access and new publishing models.

Contact Details
Postal Address:
Centre for Educational Technology, PD Hahn Building, North Lane, Upper Campus, University of Cape Town, Private Bag X3, Rondebosch, 7701
Tel: +27 21 650 3841
E-mail: Shirley.Rix@uct.ac.za
Web: http://www.cet.uct.ac.za

Research output
Chapters in books

Articles in Peer-reviewed Journals

Hodgkinson-Williams, C.A. and Paskevicius, M. 2012. The role of postgraduate students in co-authoring open educational resources to promote social inclusion: a case study at the University of Cape Town. Distance Education, 33(2): 253-269.


Peer-reviewed published conference proceedings


Higher and Adult Education Studies and Development Unit

UNIT HEAD: ASSOCIATE PROFESSOR LINDA COOPER

Unit Profile
The Higher & Adult Education Development & Studies Unit forms part of the Centre for Higher Education Development at the University of Cape Town. HAESDU supports the ongoing professional development of both higher education professionals and adult education practitioners through a range of courses, research and development projects. HAESDU recognizes the importance of its work being research-led, and all staff are actively engaged in research. There are two NRF rated researchers in the unit – Associate Professors Suellen Shay and Jeff Jawitz.

Unit Statistics
Permanent and long-term contract staff

<table>
<thead>
<tr>
<th>Staff Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Professors</td>
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<tr>
<td>Senior Lecturers</td>
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<td>Lecturers</td>
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</tr>
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<td>Administrative and Clerical Staff</td>
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</tr>
</tbody>
</table>

Research Fields and Staff

DR ALAN CLIFF
Senior Lecturer: Academic literacy and student learning; admissions testing; diagnostic profiling of students’ academic literacies and numeracies; understanding how adults learn; assessment of academic potential. MCQ assessment: design and impact; assessment and evaluation in adult and continuing education contexts.

ASSOCIATE PROFESSOR LINDA COOPER
Theorising different forms of knowledge; impact of changes in the broader political economy and labour markets on knowledge and pedagogy; relationship between higher education and the workplace; RPL and continuing professional education within higher education; worker education and training: the role of education in workplace and social change.

DR JEANNE GAMBLE
Senior Lecturer: The relation between knowledge and practice in curriculum, pedagogy and assessment; vocational and professional education; education and training policy

DR SALMA ISMAIL
Senior Lecturer: Adult education curriculum and changing student needs, challenges of retaining a critical transformative educational practice and inclusion of feminist pedagogy; relationship of indigenous knowledge to adult education; learning in social movement contexts; staff experiences of institutional culture in a changing university context.

MS KASTURI BEHARI-LEAK
Lecturer: Academic identity and social agency; nascent academics – ‘being and becoming’; knowledge and knower structures; social inclusion and difference; structure, culture and agency; the power of performative texts.

ASSOCIATE PROFESSOR JEFF JAWITZ
Professional development of academics in teaching; the impact of race on academic practice; the academic identity and the academic workplace; educational development initiatives and large class teaching

DR JANICE MCMILLAN
Senior Lecturer: Social responsiveness in teaching and learning; building university-community partnerships; citizenship and ethics in service learning; role of critical reflection in service learning; theorizing service learning from a social justice perspective.

MS JUNE SALDANHA
Lecturer: Understanding the challenges which women encounter when trying to pursue further learning in formal and informal contexts; investigating the opportunities that exist for adult learners who have completed the Diploma in Education.

ASSOCIATE PROFESSOR SUELLEN SHAY
Developing an understanding of assessment as a socially-situated practice; understanding the formative influences on curriculum which influence what is valued in assessment; the relationship between disciplinary knowledge and curriculum; curriculum differentiation and progression.

Contact Details
Postal Address: Centre for Higher Education Development, Suite 7.38 PD Hahn Building, North Lane, Upper Campus, University of Cape Town, Private Bag X3, Rondebosch, 7701
Tel: SA (21) 650-3478
Fax: SA (21) 650-5045
E-mail: kashiefa.hearne@uct.ac.za
Web: http://www.haesdu.uct.ac.za/
Research output

Chapters in books

Articles in Peer-reviewed Journals


Centre for Open Learning

ACTING DIRECTOR: MEDEÉ RALL

Centre Profile
The Centre for Open Learning comprises two divisions: the Third Term and the Public and Continuing Education Divisions. The Public and Continuing Education Division is responsible for the annual Summer School programme. This programme encourages a diverse community of students to enjoy adult study by making University research available to the general public, by drawing on different disciplines and by stimulating debate about important issues. The Public and Continuing Education Division also offers continuing education opportunities to the general public, work-related courses aimed at career development and customised courses designed for specific organisations. It also makes focused interventions in the adult education and cultural sector, working with other partners. The Third Term Division offers University accredited courses to University students during the University’s winter and summer vacations. This division draws on the University’s academic resources for its courses.

Centre Statistics

Permanent and long-term contract staff

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<th>Position</th>
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<tbody>
<tr>
<td>Professor</td>
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<tr>
<td>Senior Lecturers</td>
<td>2</td>
</tr>
<tr>
<td>Technical and Support Staff</td>
<td>1</td>
</tr>
<tr>
<td>Administrative and Clerical Staff</td>
<td>9</td>
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<tr>
<td>Total</td>
<td>13</td>
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</tbody>
</table>

Research Fields and Staff

DR KEVIN WILLIAMS
Senior Lecturer: Social agency and student learning; Heideggerian insights on being in relation to research ethics.

PROFESSOR INGRID FISKE
Adult education provision, adult education practices at cultural institutions such as museums, contemporary South African literary practices, poetry writing.

MEDEÉ RALL: SENIOR LECTURER: Adult education provision, multimodality, museum studies.

Contact Details
Postal address: Centre for Open Learning, Kramer Law Building, Middle Campus, University of Cape Town, Private Bag X3, Rondebosch, 7701
Tel: +27 21 650 2888
Fax: + 27 21 650 2893
Email: col-ched@uct.ac.za
Web: http://www.uct.ac.za/continuinged/col/

Research output

Articles in Peer-reviewed Journals

Creative writing

Anthology of poems

Poems in journals
De Kok, I. 2012. Three poems in The Common 4 (Amherst) The poems are ‘Today I do not love my country’ (p129), ‘Histoplasmosis’ (pg130) and ‘Shards’ (pp131-3).


Dean’s Office

Profile

Apart from its central leadership, management and administrative role in CHED, the Dean’s Office houses special projects, including the Multilingualism Education Project, headed by Associate Professor Mbulungeni Madiba, the OpenUCT Initiative (OUI) under the directorship of Associate Professor Laura Czerniewicz, the Confucius Institute, and student fellowship and scholarship programmes that comprise the Equity Development Programme.

Office Statistics

Permanent and long-term contract staff

<table>
<thead>
<tr>
<th>Associate Professors</th>
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<tbody>
<tr>
<td>Total</td>
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</tbody>
</table>

Research Fields and Staff

ASSOCIATE PROFESSOR M BULUNGENI MADIBA
Language policy and planning; sociolinguistics; terminology and terminography; corpus linguistics, human language technology, concept literacy, language acquisition, politics of language; phonology.

ASSOCIATE PROFESSOR LAURA CZERNIEWICZ
Educational technology in higher education; academics’ and students’ digitally mediated scholarship and educational practices; scholarly communication.

MS NOLUBABALO TYAM
Second language acquisition; second language teaching; intercultural communication; code-switching.

Contact Details

Tel: +27 21 650 4158
Fax: +27 21 650 5045
E-mail: nan.yeld@uct.ac.za
Web: http://www.ched.uct.ac.za

Research output

Articles in Peer-reviewed Journals