

GRADUATION CEREMONY

June 2014 JAMESON HALL

GRADUATION CEREMONIES JUNE 2014

CONTENTS

Faculties of Humanities and Law

The Ceremonies:	
Morning Ceremony - 12 June 2014 at 10h00	ļ
Afternoon Ceremony - 12 June 2014 at 15h00	3
Morning Ceremony - 13 June 2014 at 10h00	
Afternoon Ceremony - 13 June 2014 at 15h00	5

GAUDEAMUS

Gaudeamus igitur, juvenes dum sumus, Gaudeamus igitur, juvenes dum sumus, Post jucundam juventutem, post molestam senectutem, Nos habebit humus, nos habebit humus.

Ubi sunt qui ante nos in mundo fuere? Ubi sunt qui ante nos in mundo fuere? Vadite ad superos, transite ad inferos, Quos si vis videre, quos si vis videre.

Vita nostra brevis est, brevi finietur, Vita nostra brevis est, brevi finietur, Venit mors velociter, rapit nos atrociter, Nemini parcetur, nemini parcetur.

Vivat Academia, vivant Professores, Vivat Academia, vivant Professores, Vivat membrum quodlibet, vivant membra quaelibet, Semper sint in flore, semper sint in flore.

NATIONAL ANTHEM

Nkosi sikelel' iAfrika Maluphakanyisw' uphondolwayo, Yizwa imithandazo yethu, Nkosi sikelela, thina lusapho lwayo.

Morena boloka setjhaba sa heso, O fedise dintwa la matshwenyeho, O se boloke, O se boloke setjhaba sa heso, Setjhaba sa South Afrika - South Afrika.

> Uit die blou van onse hemel, Uit die diepte van ons see, Oor ons ewige gebergtes, Waar die kranse antwoord gee,

Sounds the call to come together, And united we shall stand, Let us live and strive for freedom, In South Africa our land.

FACULTY OF COMMERCE AND FACULTY OF HEALTH SCIENCES

ORDER OF PROCEEDINGS

Academic Procession.

(The congregation is requested to stand as the procession enters the hall and is invited to participate in the singing of Gaudeamus)

The Vice-Chancellor will constitute the congregation.

The National Anthem.

The University Statement of Dedication will be read by a representative of the SRC.

Musical Item.

Welcome by the Deputy Vice-Chancellor, Professor D Visser.

The University Book Award.

The honorary graduand will be presented to the Vice-Chancellor by the University Orator,
Professor A Lewis.

Professor Visser will invite Professor Salim Abdool Karim to address the congregation.

Address by Professor Abdool Karim.

The graduands and diplomates will be presented to the Vice-Chancellor by the Deans of the faculties.

The Vice-Chancellor will congratulate the new graduates and diplomates.

Professor Visser will make closing announcements and invite the congregation to stand.

The Vice-Chancellor will dissolve the congregation.

The procession, including the new graduates and diplomates, will leave the hall. (The congregation is requested to remain standing until the procession has left the hall.)

The music for the recessional march has been composed by Professor Peter Klatzow.

DECLARATION FOR HEALTH SCIENCES GRADUANDS

AT THE TIME OF BEING ADMITTED AS A MEMBER OF THE HEALTH PROFESSION:

I solemnly pledge to serve humanity

My most important considerations will be the health of patients and the health of their communities

I will not permit considerations of age, gender, race, religion, ethnic origin, sexual orientation, disease, disability or any other factor to adversely affect the care I give to patients

I will uphold human rights and civil liberties to advance health, even under threat

I will engage patients and colleagues as partners in healthcare

I will practise my profession with conscience and dignity

I will respect the confidentiality of patients, present or past, living or deceased

I will value research and will be guided in its conduct by the highest ethical standards

I commit myself to lifelong learning

I make these promises solemnly, freely and upon my honour.

UCT BOOK AWARD

The University Book Award recognises the publication of books, written by University staff that brings credit to the University.

Previou	is recipients of the award have been:	
1984	J M Coetzee (Arts)	Waiting for the Barbarians
1985	G M Branch (Science)	The Living Shores of South Africa
1986	L H Opie (Medicine)	The Heart: Physiology, Metabolism, Pharmacology and
	1 (Therapy
1987	M J Hall (Arts)	The Changing Past: Farmers, Kings and Traders in Southern
	,	Africa, 200 - 1860
1988	R G Lass (Arts)	The Shape of English: Structure and History
1989	H Bradford (Arts)	A Taste of Freedom
1990	J M Coetzee (Arts)	Age of Iron
	K M Coleman (Arts)	Book IV of the Silvae of Statius
1991	R Mendelsohn (Arts)	Sammy Marks, "The Uncrowned King of the Transvaal"
1992	P Skotnes (Fine Art &	Sound from the Thinking Strings
	Architecture); S Watson (Arts);	
	J Parkington (Arts) and N Penn	
	(Arts)	
1993	D Chidester (Social Science &	Shots in the Street
	Humanities)	
	W Nasson (Arts)	Ebram Esau's War
1994	G M Branch (Science);	Two Oceans: A Guide to the Marine Life of Southern Africa
	C L Griffiths (Science);	
1006	L Beckley and M L Branch	
1996	D Coplan (Humanities)	In the time of the Cannibals
	P Harries (Arts)	Work, Culture and Identity
	M Shain (Arts)	The roots of anti-Semitism in South Africa
1007	T Rajna (Music)	Harp Concerto
1997	B Warner (Science)	Cataclysmic Variable Stars Companies (in Law of South Africa, first valience Vol.4, parts 1, 2 and 2)
1998	M S Blackman (Law)	Companies (in Law of South Africa, first re-issue Vol 4, parts 1, 2 and 3) Ethnic Pride and Racial Prejudice in Victorian Cape Town: Group Identity and
		Social Practice, 1875 - 1902
	J V Bickford-Smith (Arts)	Social 1 ractice, 10/3 - 1702
1999	M Mamdani (Humanities)	Citizen and Subject: Contemporary Africa and the Legacy of Colonialism
2000	J Higgins (Humanities)	Raymond Williams. Literature, Marxism and Cultural Materialism
2001	N G Penn (Historical Studies)	Rogues, Rebels and Runaways
2002	J Glazewski (Law)	Environmental Law in South Africa
2003	T D Noakes (Health Sciences)	Lore of Running
2004	MS Blackman (Law);	
	RD Jooste (Law);	
	GK Everingham (Law)	Companies Act: Commentary
2005	N Nattrass (Commerce)	The Moral Economy of Aids in South Africa
2006	P Knox-Shaw (Humanities)	Jane Austen and the Enlightenment
2007	W Nasson (Humanities)	Britannia's Empire – Making a British World
2008	P Bruyns (Science)	Stapeliads of Southern Africa and Madagascar
2009	P Skotnes (Humanities)	The Archive of Willem Bleek & Lucy Lloyd
	N Penn (Humanities)	The Forgotten Frontier
2010	C Vaughan (Health Sciences)	Imagining the Elephant: A Biography of Allan Macleod Cormack
2011	JC De Villiers(Health Sciences)	Healers, Helpers and Hospitals: A history of military medicine in the
		Anglo-Boer War
2012	No award made	8.1.1
2013	S Loots	Sirkusboere

THE BOOK AWARD FOR 2014 IS TO BE AWARDED TO:

Nicoli Nattrass

The AIDS Conspiracy: Science Fights Back

The AIDS Conspiracy: Science Fights Back explores the individual and social aspects of AIDS denialism and AIDS conspiracy beliefs in South Africa and the United States. It is a highly accessible, impeccably referenced, scholarly account of the role of conspiracy theories in the social and political history of the AIDS epidemic.

AIDS conspiracy beliefs are harmful because they are associated with adverse health outcomes, but difficult to contest by pointing to scientific evidence because the legitimacy of the scientific evidence itself is at stake in these narratives. Natrass argues that AIDS conspiracy beliefs (such as that HIV was deliberately created by scientists) are strongly mediated by local history and culture, but that the role of leaders in promoting these ideas is also crucial.

A central argument in the book is that AIDS denialism, gains social traction through the linked roles of 'hero scientist' (the dissident scientists who provide intellectual legitimacy), 'cultropreneurs' (alternative healers offering untested remedies in the place of medical drugs), 'living icons' (people who present themselves as living proof of the soundness of these counter narratives to science) and 'praise-singers' (sympathetic journalists who lionise these roles in the media). Pro-science activists, in turn, seek to undermine the credibility of those playing these roles in an effort to counter the conspiratorial move they make against science.

MERITORIOUS PUBLICATION AWARD

The University Meritorious Publication Awards recognise noteworthy monographs and books published by UCT authors. These publications merit recognition for their contribution to learning and scholarship:

Missing and Murdered by Alan Morris

HONORARY DEGREE RECIPIENT

Salim Safurdeen Abdool Karim DSc(Med) (honoris causa)

Slim Abdool Karim, who has held academic appointments at the Universities of Kwa-Zulu Natal, Cornell and Columbia, is an exceptional scholar who has made significant scientific contributions in the fight against AIDS.

Abdool Karim demonstrated that tenofovir gel prevents both HIV and Herpes Simplex Virus Type 2 infection. It was the first microbicide study to show efficacy and among the most significant scientific breakthroughs in the fight against AIDS. Science ranked it among the Top 10 Scientific Breakthroughs in 2010.

In addition he has contributed significantly to research capacity, playing a key role in the initiation or creation of five highly productive research centres in South Africa, and has been instrumental in restoring the status of the Medical Research Council (MRC) as the premier medical research institute in the country. He served for a decade as the Principal Investigator of the Fogarty International Centre which has trained more than 500 South African researchers. He is currently the Chair of the UNAIDS Scientific Expert Panel.

Few researchers in Africa, or globally, have been as influential and have had impact of such major consequence on both HIV prevention and treatment. In serving society, and particularly the women of Africa, he epitomises the contribution that innovative multidisciplinary science and medical technology can make to disease prevention and treatment and global health.

NAMES OF GRADUANDS/ DIPLOMATES

An asterisk * denotes that the degree will be awarded in the absence of the candidate.

1. FACULTY OF COMMERCE

Dean: Professor D Ross

POSTGRADUATE DIPLOMA IN ACCOUNTING

Rayhaan Allie

*Mary-Ann Boakye

Megan Emily Braby

Luigi Enzo Brown

Taryn Joy Buck

Richard Francis Burgess

*Gareth Craig Burton-Durham

*Simbiso Golda Chipidza

Malika Daniels

Nuraan Davids

*Nicola De La Bat

Talent Dzviti

*Samantha Lee Fincham Mogamat Ihtishaam Gallant

Julia Fernanda Gomes Vuvo Jacob

Jubee Ann James

*Hugo Pieter Janse van Rensburg

*Cindy Edwina Johnson

*Gareth Donovan Jollands

*Moegammad Faeez Khan

*Seamus Kevin King

Matthew Michael Lawrence

Hansol Lee

*Nwabisa Nonelela Mabona Gareth Sean Madella

Vuyolwetu Madikane

Casey Doreen Manser

Takalani Emmah Manyage Unathi Siyabulela Manzi

*Mandlenkosi Marwana Markus Mataré-Nimtz

Simone Mava Persad

Nosipho Zakithi Mjiyakho

*Fawaaz Mohamed

*Sandra Millicent Mokhachane

*Kerissa Kelsea Moodley

Zaakirah Moosa

Khanya Mbalenhle Morake

Muneeb Mullajee

Rosa Naita-Yetu Mungandjera

Mpho Mutloane

Arthur Tatenda Muwandi

Nomagugu Mabongi Mvuyana

Kiran Naidoo

*Patrick Kabundama Ngoie Phumla Precious Ngubane Laurelle Anastasia Niemack

*Stephanie Kate Eugenie Pardoe

*Alexander Mark Reimeringer Visser Rida Saban

*Rifka Sallies Abegail Reval Smith

*Abigail Catherine Thompson

*Nicholas Martin Vanlierde Darryl Eric Warren Weimin Zhang

*Wenbo Zheng

treating patients are invited to join in affirming or re-affirming their commitment to ethical patient care.

POSTGRADUATE DIPLOMA IN COMMUNITY EYE HEALTH

*Gugulethu Eugina Mashabane

*Doris Noluntu Mtshwane

POSTGRADUATE DIPLOMA IN DISABILITY STUDIES

Willson Tarusarira

POSTGRADUATE DIPLOMA IN HEALTHCARE TECHNOLOGY MANAGEMENT

*(With distinction) Marie Herbst
(With distinction) Sholine Kedibone

Links Madodana Mfana

*Michael Cecil Whittal

POSTGRADUATE DIPLOMA IN MANAGEMENT

POSTGRADUATE DIPLOMA IN ACTUARIAL SCIENCE

*Shruti Lakshmi Ramanaraganan

In Accounting Conversion:

*Kathryn Ann Dreyer

Keletso Modise

*Mathias Tatenda Mtonga

Zukile Mtotso

In Entrepreneurship:

Walter Brighton Chirombo

*Kirsty Roberts

In Information Systems:

David Mathe

In Marketing:

*Tuuyu Nokhuthula Nhamoinesu Ashley Gower Sims

Nada Namhla Tyilo

In Organisation & Management:

*Mcebisi Bakaqana

In Tourism & Events Management: Thando Makhamba

POSTGRADUATE DIPLOMA IN HEALTH MANAGEMENT

Ishmael Lahlane Mtungwa

Deliwe Lotty Nkosi

(With distinction) Muhammad

Osman

Noxolisa Stella Radebe

Awaatief Railoun

Mmapule Elizabeth Scheepers

Deon Trevor Swigelaar

Ann Mamosa Elsie Teboho

Tshabalala

(With distinction) Katherine

Wiebe-Randeree

Margaret Thandeka Zulu

2. FACULTY OF HEALTH SCIENCES

Dean: Professor W De Villiers

Before presenting the graduands, the Dean will invite all graduating students in the Faculty to stand and to make the Faculty Declaration. All members of the congregation who treat or will be

POSTGRADUATE DIPLOMA IN INTERNATIONAL RESEARCH ETHICS

*(With distinction) Ulundi Aurora Behrtel

POSTGRADUATE DIPLOMA IN NURSING

In Critical Care Nursing (Child):
Jabulani Daniel Maseko
*(With distinction) Elisha Mullen
Okaisu

In Nephrology Nursing:

*Tandiwe Ernestina Makhalemele

POSTGRADUATE DIPLOMA IN PALLIATIVE MEDICINE

Melaku Alazar Eyassu *Taslim Ahmed Shibly *Mandy Swart

POSTGRADUATE DIPLOMA IN PAEDIATRIC RADIOLOGY

Jacqueline Du Toit

DEGREE OF BACHELOR OF SCIENCE IN AUDIOLOGY

Maserame Esther Masemola Sithembile Patience Ndlela

DEGREE OF BACHELOR OF SCIENCE IN OCCUPATIONAL THERAPY

*Zabenguni Valentina Keswa

DEGREE OF BACHELOR OF SCIENCE IN PHYSIOTHERAPY

Esihle Nangamso Dlani Lelethu Lisa

DEGREE OF BACHELOR OF SCIENCE IN MEDICINE (HONOURS)

In Physiology: *Matthew Amoni

3. FACULTY OF COMMERCE

Dean: Professor D Ross

DEGREE OF BACHELOR OF BUSINESS SCIENCE

In Actuarial Science:
Mampeo Helena Leisanyane

In Management Studies:

- *Joshua Bernstein
- *John Stuart Bowen-Davies Lewis Vusumuzi Dube
- *Gregory David Elk Nadia Katija Farr
- *Abigail Goschen
- *Cuan Charles Grunow

Jami Jepthas Leletu Ketse

- *Hung-Yu Lu Siseko Mahlati
- *Glen McKnight

Zwelihle Brian Mfundisi Janet Ndaendalao Mundilo

Raquel Naicker Lushan Naidoo

Nhlanhla Junior Ngulube

Mishka Rajab Matthys Louis Ras Ilhaam Surve

- *Justin Mark Watermeyer
- *Sandiswa Xiphu

DEGREE OF BACHELOR OF COMMERCE

*Dhruv Raj Agarwal
Jason Tuyoleni Akwenye
Ilhaam Allie
Farrah Ameermia
Qhama Dean Babana
Neenu Mary Babu
Awongiwe Booi
Layarn Booley
Thabang Andries Boshomane
Mathombi Charmaine Cele
Tinashe Tambo Arthur Chakamanga
*William James Chennells

*William James Chennells Chileshe Chibowa

Gabriella Michelle Christiane

Nadia Daniels Alia Davids

Ntokozo Mbali Dhlamini Thandeka Sharon Dlamini Babalwa Mvulakazi Dlanjwa

Lerato Lieketseng Dumisa *Francis du Plessis Sean Tomas Duraes Caitlin Jane Edwards Richard Paul Filer Natalie Hellyar Ghislaine Lucy Hock *Mxoleli Jack

Caroline Anne James Chang Joseph Jung Aboobaker Nizam Kalla

Kelsey Jean Kay Sibabalwe Khasa

Lindelwa Siphakanyiswa Khowane Nhlakanipho Bright Khumalo

Thobela Brian Kika Ah Young Kim *Njinu Kimani

*Phindile Elsie Kubheka Reginald Farai Kunyongana

*Jan James le Roux David John Leshnick Thendo Ligege *Nkululeko Luthuli Nakato Luzuka

Giyani Cikizwa Mabunda Karuna Madhanlala

Maribi Elizabeth Maila Edwin Munyiri Maina Siphelo Malinde

*Mthunzi Mantshongo

Sinenhlanhla Pearl Maphumulo

Tendai Mariga

Reuben Oliver Mashimbye Lobatsibeni Lwazi Maswanganyi Nthabiseng Abegail Mbhele

Zilipha Mdidimba Lorraine Tefo Meswele Lukas Metzmacher Theetso Winnie Mfosi

*Xolani Mzomuhle Mkhwanazi

*Bakang Tshepo Moetse Fatima Ali Mohamed Kirsty Leigh Morrison Phindile Tshepo Mota Ntombifuthi Mthembu Muanda Godwill Mulaudzi Karen Nyarai Musingwini Andrew Naicker

*Bongani Ncube

Bongeka Nontobeko Ndlovu

Nqobile Ndlovu

Randy Rendani Nesengani

Samkelo Ngcobo

Sithembile Portia Nhlangulela

Siphiwe Nhlapo Teboho Nthinya Bongani Enos Nt

*Bongani Enos Ntsele Ntando Cyril Ntuli Avika Nunkumar

Nhlakanipho Gift Nyide

Raeez Omar Vedanthan Pather *Candice Leigh Peck Myezo Sivuyile Potelwa John Michael Prentice Thantaswa Qongqo *Lerato Ramolahloane Desigan Reddy Rhiannon Janet Rees Prayer Mikhongelo Rikhotso

*Adam Blake Rundle
Elroy Steve Salie
Phumlani Simon Shabalala
Bandile Crescent Shongwe
Buchule Sibaca
Magan Smith

Megan Smith In'aam Soeker

*Mohammad Yaasiin Soobhany

*Abongile Abi Swapi Nicholas Montagu Surgey Zaid Yusuf Vahed Kirstin Nicole van Wyk

In Actuarial Science:

*Bruce George Austin

DEGREE OF BACHELOR OF COMMERCE (HONOURS)

In Accounting:

*Patrick Kabundama Ngoie

In Economics:

*Rabson Kanyinji

In Financial Analysis & Portfolio Management:

Rushikesh Alur

*(First class) Lance Bezuidenhout Stephanus Jacobus Botha Andrew Brent Bovell

*Alexandra Rose-Mary Braithwaite Dalitso Buluma Hendrik Christoffel Burnett James Reid Campbell (First class) Emily Jane Cartwright Andrew Steven Chouler

*Michael Mark Cockburn

*(First class) Michael Anthony Pelham Kabali Cole

Lehani de Wet

Tinashe Alison Dube

*Brittany Marguerite Fenwick Erica Jayne Flemming George Chapman Friend

*Genevieve Gant

*Rinavhuawelo Gavhi

*Sarah Kate Golding

Bulelani Mbuyekezo Gwabeni

Seung Man Han Unathi Hewana

Paul Harro Hoenck

(First class) Edward Andrew Sankey

James

Gloria Kalala Kapinga George Scaria Karammel Jeremy Edward King Mark Christopher Leshnick *Realeboga Rebecca Maboe

*Yonela Makwetu

*Kgosi Mashigo

*Ross James McChlery Justin David Middleton Nozipho Mnyandu Khutso Paul Mosotho

Tshavhungwa Goodness Musandiwa (First class) Santosh Sagran Naidoo

Baveena Nathoo Nischal Nathoo Mirjam Ndafediva

*Kuchulain O'Flynn

*Gerard Anthony Pacak

*Ashleigh Sarah Page Riccardo Peretti

(First class) Needa Prinsloo

*Kyle Rodal Rix

(First class) Michael James Shean

*Patrick Malcolm Smythe

*(First class) Frederick Pieter Stegmann

*Ashleigh Steinhobel Matthew Astley Symonds (First class) Martin Plamenov Tcherney

*Sean Michael Viljoen Nathan Grant Zietsman Ndumiso Zulu

In Financial Management:

*Philip Rudolph van der Merwe

In Information Systems:
Florence Kudakwashe Boora
Charlie Derick Mboweni

Yolanda Yanela Ninzi Motlotlegi Morty Selelo

In Taxation:

Kudakwashe Svondo

*Tariro Roselyn Taruvinga

*Chandani Vallabh Thasmika Vather

*Mary-Ann Wiggill

In Neurology:

(With distinction in the dissertation) Amina Ismael Daude

In Neurosurgery:

*(With distinction in the dissertation)
Edwin Kimaiga Mogere
David Roytowski

In Obstetrics and Gynaecology:

*Zoe Momberg

In Ophthalmology:

*François Joubert

In Otorhinolaryngology:

*Shazia Peer

In Paediatrics:

(With distinction in the dissertation) Graeme William Spittal

In Pathology (Chemical):

(With distinction in the dissertation)
Philip Hendrik Fortgens

In Pathology (Forensic):

*Akmal Khan

In Pathology (Haematological): Louis Almero du Pisani

In Pathology (Virological):
Lucia Ronell Hans

In Plastic & Reconstructive Surgery: Sean Thirumalay Moodley

In Radiation Oncology: Sebathu Phillip Chiyapo

In Surgery:

A H M Sharfuddin Mahmud Chowdhury

4. FACULTY OF HEALTH SCIENCES

Dean: Professor W De Villiers

Riyaadh Roberts

,

DEGREE OF MASTER OF MEDICINE

In Anaesthesia:

*Nura Afshani-Bau

In Medical Genetics:
Careni Elizabeth Spencer

DEGREE OF MASTER OF MEDICINE IN EMERGENCY MEDICINE

DEGREE OF MASTER OF

MEDICINE IN ANATOMICAL

PATHOLOGY

(With distinction in the dissertation) Meenal Galal

*Bronwen William Roman

DEGREE OF MASTER OF MEDICINE IN PAEDIATRICS

(With distinction in the dissertation) Deveshni Reddy

DEGREE OF MASTER OF MEDICINE IN RADIATION ONCOLOGY

Adriaan Zacharias Albertus van Jaarsveld

DEGREE OF MASTER OF PHILOSOPHY

In Biokinetics:

Mohammed Habib Noorbhai Simone Annabella Tomaz

In Biomedical Forensic Science:
Mohaimin Kasu
Rolanda Sabrina Londt
(With distinction in the dissertation)
Calvin Gerald Mole

In Developmental Paediatrics:
Andrew William Redfern

In Disability Studies:

*Aston Ainea Shiwariael Ndosi

In Maternal & Child Health: Amwe Aku Manyeleti Gladys Sambo Irene Singogo

In Neonatology:
Moegammad Shukri Raban

In Palliative Medicine: Jan Christoffel Grove Frank Anamo Manase

In Public Mental Health:
Bazondlile Marimbe-Dube

In Sports Physiotherapy:
*(With distinction) Ashleigh Anne
Hansen

DEGREE OF MASTER OF PHILOSOPHY IN EMERGENCY MEDICINE

In Clinical Emergency Care: Mohamed Ridhaa Booley

DEGREE OF MASTER OF PUBLIC HEALTH

Elizabeth Brierley Lorrein Shamiso Muhwava *(With distinction) Estin Yang

In Clinical Research:
(With distinction in the dissertation)
Stanzi Maria le Roux
*Mwenya Mubanga

In Epidemiology:

*(With distinction in the dissertation)
Paula Ihozo Akugizibwe
(With distinction) Kirsty Jane
Brittain
Nkosilesisa Mpofu
(With distinction) Tamsin Kate
Phillips
*Sarah Spofford Rohde

In Health Economics:

*(With distinction in the dissertation)
Rebecca Akua Kyerewaa
Dwommoh

*(With distinction in the dissertation)
Damian Hewitt Hacking

*(With distinction) Yan Kwan Lau

*Andrew Philip Scheibe

*Miranda Voss

Jean-Pierre Ettienne Zeelie

In Health Systems:

*Esther Adebayo Dickson Rodney Otieno Okello Remmy Malama Shawa

DEGREE OF MASTER OF SCIENCE IN MEDICINE

In Anatomical Pathology:
Anna Magdalena Rademan

In Bioinformatics:

*(With distinction) Michael Thomas Golden

Mamana Mbiyavanga

*Warwick Jan Alfred O'Donnell Kristen Marie Wolfenden

In Biomedical Engineering:
Chipo Chimhundu
Timothy David Perks
(With distinction) Raphael V Smith
Esther van Heerden

In Cell Biology:

*(With distinction) Shannagh Jane Hare In Clinical Science and Immunology:
(With distinction) Alana Tonya
Keyser
(With distinction) Narjis Khatoon
Thawer
(With distinction) Sumaiyya
Gulamraza Esmail Thawer
*Christophe Toukam Tchakoute

In Dietetics:
Kathryn Manning

In Exercise Science:

Sarah Anne Chantler
*Jacques Gideon du Toit
Paula Roxana Pienaar
(With distinction) Kim Jenna
Stephenson

In Haematology:
Khethelo Richman Xulu

In Human Genetics:
Naseeha Hassen
(With distinction) Sasha Maureen
Mannion
*Reinette Wilhelmina Weideman

In Medical Biochemistry:
Rufaro Chivaura
(With distinction) Karabelo Mosia
Nkoe
Tamlyn Marion Shaw
(With distinction) Muneerah Smith
(With distinction) Akhona Vava

In Medical Virology:
(With distinction) Smritee Dabee
*Emmanuel Aubrey Margolin
*(With distinction) Daniel James
Sheward

In Medicine:
Ilhaam Mohamed
(With distinction) Elana Van Brakel

In Neuroscience:
(With distinction) Loren Leclezio
(With distinction) Hayley Sarah
Tomes

DEGREE OF MASTER OF SCIENCE IN NURSING

(With distinction in the dissertation)
Martha Maria Leonard
Buyelwa Charity MajikelaDlangamandla
*Dzeaye Ngah Veranyuy

Debra Jacqueline Ockhuis Betsy Anita Rafferty Lydia Vero Ssenyonga

DEGREE OF MASTER OF SCIENCE IN PHYSIOTHERAPY

Catherine Ann Chemaly
*(With distinction) Jessica Robyn
Joffe
Cathrine Tadyanemhandu

DEGREE OF MASTER OF SCIENCE IN SPEECH-LANGUAGE PATHOLOGY

Lezanne le Roux

5. FACULTY OF COMMERCE

Dean: Professor D Ross

DEGREE OF MASTER OF BUSINESS SCIENCE

In Actuarial Science:

(With distinction) Brendon Michael Lapham

Szymon Marszalek

In Economic Development: Charlotte Phatsimo Ellis

In Finance:

Deepika Pawan

In Marketing:

(With distinction) Andrew Charles Montandon

(With distinction) Bradley Ryan Wickham

In Tourism:

*Marvin Leugering

DEGREE OF MASTER OF COMMERCE

In Economic Development:

(With distinction) Jessicah Maneya
Zulu

In Applied Economics:

(With distinction in the dissertation and the degree with distinction)
Bianca Lorna Bohmer

Andrew Richard Grant Kim Pamela Ingle

(With distinction in the dissertation) Salma Kagee

In Economics:

*(With distinction) Robert Clive Edward Charles Bowdery

Amina Ebrahim

*Love Odion Idahosa

Maninie Molatseli

Tom Magara Nieru

Diana Komubaizi Nyabongo

Linda Christine Nyabongo

Salma Ahmed Zacharia

In Financial & Risk Management:

*Myles Jay Coelho

Mogamat Reeza Dollie

*Andrew Robert John Haldane

*Bartosz Marszalek

Simone Naidoo

Mziwonke Modridge Mzi Somdaka

Caryn Wendy Wepener

In Financial Management:

*(With distinction in the dissertation)
John Pinckney Causey IV
(With distinction in the dissertation

and the degree with distinction)

Johnathan Dillon

*Sean Brett Neethling

In Information Systems:

(With distinction in the dissertation and the degree with distinction)

Akinlolu Olumide Akande

(With distinction in the dissertation

and the degree with distinction)

Ishmael Hassa

Oluyomi Olufemi Kabiawu

(With distinction) Shirley Catherine

Lavin

*Jonathan Lewis

Mninawe Albert Mankantshu

Susan Mhakure

(With distinction in the dissertation

and the degree with distinction)

Celeste Phillips

Genevieve Shelley Stanton

In Investment Management:

(With distinction in the dissertation)

Monique Cheri Baars

Christopher James Eddy

Frederick Nicholas Eloff

*Alastair Peter Murie

Barry Panulo

In Organisational Psychology:

Kim Lisa Brouze

(With distinction in the dissertation)

Chi-Wen Angel Hung

Carol Ann Mould

Chelsey Ellen Pienaar

(With distinction in the dissertation)

Nicola Claire Thompson

*Tenille Leigh Wernars

In South African Taxation:

Jaco Britz

*Basil Coutsoudis

Robert Frank Driman

(With distinction in the dissertation)

Susanna Janine Fourie

(With distinction in the dissertation)

Ruben Stanley Johannes

*Lauren Gail Ker

Margie Mabudafhasi

Bruce Stuart Russell

DEGREE OF MASTER OF PHILOSOPHY

In Marketing:

Sharlene van Pallander

In Mathematical Finance:

*Cecilia Manka Augustine

(With distinction in the dissertation

and the degree with distinction)

Alexander John Backwell

(With distinction in the dissertation)

Trevor Joseph Brinkmann

Kendall Vernon Carolissen

Servaas Marcus Crowther

Justin Deon de Kock

*Jean-Jacques Duyvene De Wit

Mario Nicolo Giuricich

*Mahzabeen Natasha Hossain

Lillian Dokoria Kasenene

Sören Eckart Königkrämer

Jateen Kooverjee

(With distinction in the dissertation

and the degree with distinction)

Hiltje Kriel

(With distinction in the dissertation

and the degree with distinction)

Sheldon Maze

Richard Neil Moir

(With distinction in the dissertation and the degree with distinction)

Ralph Rudd

Robyn Leigh Tully

Caroline Jean Webber

Nicole Weimar

In Programme Evaluation:
Jameyah Armien-Ally
*Leigh-Ann Kim Julia Behrendt
Rolly Ngandu Lufuluabo
(With distinction in the dissertation)
Mahamed Rage Mahamed
Petunia Reitumetse Mogorosi
Hazel Laura Mugo
*Hellen Mutenheri
Deirdre Margo Rule

DEGREE OF DOCTOR OF PHILOSOPHY

In Economics:
Cecil Saziso Mlatsheni
Thesis Title: Youth unemployment and
the transition from school to work in
Cape Town

Cecil Mlatsheni was schooled in Cape Town and has a BSocSc(Hons) and MSocSc in Economics from UCT. His doctoral research was undertaken while employed in UCT's School of Economics and alongside his extensive engagement in labour market policy discussions.

Mlatsheni's Cecil thesis centres on youth unemployment in Cape Town, with a specific focus on the transition from schooling to work. The research utilises the Cape Area Panel Study, which he was involved in compiling. The survev month-by-month data on job search and employment, and tracks individuals over a number of years. The duration of job search for the unemployed is examined in order to investigate the determinants of successful transitions into employment. Further analysis interrogates the extent to which the length of unemployment translates into disadvantage in wages in the first job and the extent to which this effect differs by race.

Supervisor: Professor M Leibbrandt (School of Economics)

In Finance:
Jakobus Daniël Van Heerden
Thesis Title: The impact of firm-specific factors on the cross-sectional variation in Johannesburg Security
Exchange listed equity returns.

Jakobus van Heerden's doctoral research aims to determine the impact of technical and fundamental factors on the cross-section of equity returns on the JSE. Using an extensive data set consisting of approximately eighteen years of data for fifty firm-specific factors for each share that has been listed on the JSE, Jakobus van Heerden applies three approaches to reach this objective. He further examines the potential effect that time, liquidity and/or payoff period may have on the results. Using the identified factors, a first of its kind filter model is developed to isolate the potential best and worst performing shares. Portfolios are constructed based on the potential best (worst) performing shares which significantly outperform (underperform) its benchmark. The filter-model is flexible and can be adjusted to filter according to specific risk and return requirements.

Supervisor: Professor P van Rensburg (Finance and Tax)

In Information Systems:
*Ummaha Tul Hazra
Thesis Title: Understanding
acceptance decisions and identity
associated with smartphones: a
qualitative enquiry

Ummaha-Tul Hazra holds an MMSc in Technology Management and Innovation from the Ryerson University, Canada and a BBA and MBA in Accounting & Information Systems from the University of Dhaka, Bangladesh. She is a junior researcher in the Institute of Technology Management and Innovation at the Ryerson University.

Ummaha-Tul Hazra's thesis investigates how users accept smartphones and construct self and social identities around their devices. Working from the social constructionist paradigm and employing the perspective of symbolic interactionism to understand the acceptance decisions and choice, Ummaha-Tul Hazra develops an integrated model of smartphone adoption through four empirical studies. She utilises a multi-method research approach and synthesises findings from each study to provide a better explanation of smartphone acceptance behaviour.

Unlike traditional technology acceptance models and frameworks, the model developed in this thesis acknowledges the social aspects of smartphone use and acceptance. It also accounts for the nomadic capabilities provided by these devices which is absent from past theoretical frameworks developed on the basis of fixed technological systems mandatorily utilized in organizational settings. This research has significant theoretical and methodological contributions and provides new perspective for device marketers.

Supervisor: Professor Ojelanki Ngwenyama (Information Systems)

Lucas Gervas Mimbi Thesis Title: *Investigating the role of information technology in resolving governance challenges in a transition state - The case of Tanzania*

Lucas Mimbi has a BSc and MBA from Osmania University and University of Dar es Salaam respectively. His PhD thesis emerged as a result of the need to address governance challenges in transition states and to measure the role of Information Technology (IT) in addressing these challenges.

Measuring the role of IT in governance is challenging due to the complex interplay between the many factors involved in IT implementation. By adopting the Gestalts approach, Lucas Mimbi's thesis develops an innovative way for measuring the role of IT in governance. This is achieved by measuring the level of coherence among three aspects of his conceptual model: IT usage, governance processes and external pressures. This study also extends the potential of the Gestalts theory as a valid measure for complex relationships between IT, organisational factors and external factors. It also reveals that weak adoption of IT, weak governance processes and increased external pressures work together to exacerbate the challenges of governance in transition states. The conceptual model developed in this study provides a useful lens through which changes arising from use of technological innovations in governance across Africa can be examined.

Supervisor: Professor M.E Kyobe (Information Systems)

In Management Studies:

*Chao Feramo Mulenga Nkhungulu Thesis Title: Explanatory model of antecedents and outcomes of health and safety climate in the South African construction industry

Chao Nkhungulu has a BSocSc(Hons) and MCom from UCT. Her PhD study emerged as a result of her teaching experiences in the Department of Management Studies at UCT, where she has been a member of the academic staff since 2005.

The primary objective of Chao Nkhungulu's thesis research is the development of an explanatory model of the health and safety (H&S) climate in the South African construction industry. A secondary objective is to provide a theoretical but practical framework for the study of the H&S climate in the construction industry. The proposed explanatory model of H&S climate integrates several streams of theory and empirical evidence to identify organisational factors, strucprocesses and individual behaviours that contribute to H&S behaviour and predict H&S performance on construction sites. The developed H&S climate model helps address the concerns of both the construction industry and government with the human suffering and costs associated with construction sector injuries and fatalities.

Supervisor: Professor JJ Bagraim (School of Management Studies)

6. FACULTY OF HEALTH SCIENCES

Dean: Professor W De Villiers

DEGREE OF DOCTOR OF PHILOSOPHY

In Anatomy & Cell Biology:
Saviour Kweku Adjenti
Thesis Title: An investigation into the ultrastructural parameters of abdominal muscles in children and adolescents with spastic type cerebral palsy and the effect on postural muscle performance

Saviour Adjenti completed his undergraduate studies in Kumasi, Ghana and later obtained an MPhil from the University of Ghana, Legon in Accra. Thereafter he was appointed as a lecturer of Anatomy in the University of Ghana Medical School, where he taught for seven years.

Saviour Adjenti's research covers the macroscopic functional anatomy of the abdominal muscles in children and adolescents with spastic type cerebral palsy (STCP) compared with those of typically developing (TD) individuals. His study shows that the abdominal muscles exist as a heterogenous group, each with a unique set of characteristics with respect to the generation of force. His study concludes that the abdominal muscles of individuals with STCP differ significantly from those of TD individuals in terms of structure and function, and also that the rehabilitative procedures aimed at reducing the increased muscle tone in individuals with STCP may be essential in the strengthening of the abdominal muscles for the provision of trunk stability. This study reinforces the importance of knowledge with regard to clinical practice when performing research in the basic sciences and also highlights multidisciplinarity in the link between theory and practice.

Supervisor: Professor G Louw (Human Biology)

Co-supervisors: Professor M Jelsma, (Human Biology) Dr M Unger, (Human Biology)

*Saeb Aliwaini

Thesis Title: *Identification and* characterization of a novel palladacycle, AJ-5, to treat advanced melanoma and breast cancer

Saeb Aliwaini has a BSc and MSc from The Islamic University of Gaza, where he also taught before registering for a PhD in the Department of Human Biology at UCT.

Saeb Aliwaini's thesis aims to identify novel chemotherapeutic palladium-based drugs in the treatment of advanced melanoma and breast cancer and to understand how these compounds exert their anti-tumour activity in vitro and in vivo. From an initial screening, he identifies a novel binuclear palladacycle complex, AJ-5, as a potential metallodrug and his study

describes its anti-tumour activity in advanced melanoma and metastatic breast cancer cell lines. He provides several lines of evidence that AJ-5 holds a lot of promise as a novel chemotherapeutic drug to treat two of the most treatment-resistant human cancers. Importantly, he shows that AJ-5 displays a high degree of cytotoxicity against cancer cells at low concentrations and without any noticeable side-effects. Finally, he demonstrates that at a molecular level, AJ-5 induces double strand DNA breaks and that its cytotoxic effect is mediated by the MAPK signaling pathway and involves the apoptosis and autophagy cell death pathways.

Supervisor: A/Professor S Prince, (Human Biology)
Co-supervisor: Professor S Mapolie, (Chemistry and Polymer Science, University of Stellenbosch)

In Cardiothoracic Surgery:
Timothy Charles Pennel
Thesis Title: Isolation and optimization of transmural endothelialization as an independent mode of spontaneous vascular graft healing

Timothy Pennel obtained an MBChB from the University of Stellenbosch in 2003, is currently specialising in cardiothoracic surgery at Groote Schuur Hospital, and has concurrently completed his doctoral research at the Cardiovascular Research Unit.

Synthetic blood vessels used to treat patients with peripheral arterial provide poor long-term outcomes due to lack of healing. In his thesis Timothy Pennel describes the development of appropriate animal models that elucidate and differentiate the three main mechanisms of endothelialization. Long, flanking segments of low-porosity grafts are shown to be capable of, and required for, isolation of the highly porous polyurethane grafts to distinguish transmural and fallout healing from transanastomotic outgrowth. Importantly, confluent endothelialization is shown to be achievable without the transanastomotic growth reaching the highly porous midgraft test-segment. Although some fallout healing is observed when the mid-grafts are also ablumenally isolated, it is infrequent and sparse, so that most of the endothelial coverage can be attributed to transmural healing. In

addition, the angiopermissive nature and endothelialization of the porous polyurethane grafts are enhanced by heparin surface modification and growth factor delivery. These findings are extremely useful for the development of clinical peripheral vascular (including endolumenal) grafts, as transmural endothelialization remains a viable healing mode in humans.

Supervisor: A/Professor D Bezuidenhout (Surgery)
Co-supervisor: Professor P Zilla
(Surgery)

In Clinical Pharmacology:
Simbarashe Peter Zvada
Thesis Title: Optimization of 1st-line
antituberculosis dosing regimens
using a populationphamacokinetic
approach: food effects, drug combinations and pharmacological effects

Simbarashe Zvada obtained a BPharm-Hons and an MPhil in Pharmacy Informatics and Drug-Drug Interaction at the University of Zimbabwe.

Simbarashe Zvada's doctoral research aims to optimise the use of antituberculosis drugs in adults and children with tuberculosis, demonstrating the application various pharmacometric approaches. Nonlinear mixed effects analysis is used to develop an integrated drug-metabolite model to evaluate the effects of different meals on the absorption of rifapentine. The impact of rifapentine exposures on the pharmacokinetics of moxifloxacin (its companion drug in a novel treament regimen) is then defined in a second population pharmacokinetic model. Monte Carlo simulations predicting drug exposures, and a predefined pharmacokinetic target are used to compare the activities of moxifloxacin and ofloxacin (a related cheaper drug) against a predefined pharmacodynamic target in multidrug-resistant tuberculosis given the distribution of drug susceptibility of Myocbacterium tuberculosis to the drugs in the Western Cape. The effects of individual pharmacokinetic variability of rifapentine and moxifloxacin on treatment response are assessed in a phase III clinical trial evaluating a simplified antituberculosis novel regimen. Finally population models describe the pharmacokinetics of 1st-line antituberculosis drugs children and model-based simulations

are used to evaluate recently revised dosing guidelines in children, in silico.

Supervisor: A/Professor H McIlleron, (Division of Clinical Pharmacology) Co-supervisor: A/Professor USH Simonsson, (Pharmaceutical Biosciences, Uppsala University)

In Clinical Science & Immunology:
One Bridget Dintwe
Thesis Title: Characterisation of
Mycobacterium tuberculosis specific T
cell immunity with HLA class II
tetramers

One Dintwe has a BSc (Hons) in Molecular and Cell Biology from the University of Cape Town.

One Dintwe's thesis aims to characterise and understand the role of T cells in immunity against the tuberculosis disease causing pathogen, Mycobacterium tuberculsosis. One Dintwe developed new immunological tools, HLA class II tetramers, to characterise the memory phenotype and function of antigen-specific CD4 T cells after vaccination and in natural infection. Her analysis of TB-specific memory T cells led to the identification of a novel subset of memory T cells that display phenotypic properties of naïve cells. Further characterisation of these naïve-like CD4 T cells revealed that they express high mRNA levels of cytotoxic molecules, effector cytokines and chemokine receptors, which direct cell trafficking to peripheral tissues. The results suggest that these TB-specific naïve-like cells are likely to be effector memory cells. The study also highlights limitations of utilizing the commonly applied cell surface phenotyping to classify T cells into different memory subsets and infer functional roles from this classification.

Supervisor: A/Professor TJ Scriba (School of Child and Adolescent Health)

Co-supervisor: Dr E Nemes (School of Child and Adolescent Health)

René Ghislain Essomba Thesis Title: Generation, genetic and immunological characterization of subtype G envelope expressing HIV-1 pseudoviruses

René Ghislain Essomba holds a BSc in Biology from the Faculty of Sciences, University of Yaoundé I, Cameroon, and master's qualifications in Infectious Diseases from the University of Yaoundé I and in Medical Biotechnology from University of Perugia, Italy.

René Ghislain Essomba's doctoral research involves study of HIV-1 subtype G envelope, both by sequence analysis (phylogenetics) and by neutralisation sensitivity (using pseudoviral constructs). HIV-1 subtype G is relatively poorly studied, despite several facts that highlight its importance: (i) an estimated 1.5 million persons are infected with HIV-1 subtype G (ii) most characterized circulating recombinant strains of HIV-1 contain segments related to subtype G, (iii) subtype G is situated at the physical origins of the HIV-1 epidemic in west central Africa and (iv) the origins of subtype G are a matter of current debate. This work both characterises subtype G virus sensitivity to antibody and increases our understanding of subtype G and its place within the HIV-1 epidemic.

Supervisor: Dr J Dorfman (Division of Immunology)

Ngiambudulu Mbandu Francisco Thesis Title: *The role of cell-type* specific tumour necrosis factor in protective immunity against neurotuberculosis

Ngiambudulu Francisco holds a National Diploma from the Institut Supérieur d'Enseignement Technique Médical, Congo-Kinshasa, and BTech and master's degrees from the Cape Peninsula University of Technology.

Ngiambudulu Francisco's thesis investigates the role of neuron specific TNF as well as myeloid and lymphoid specific TNF in host immune responses against tuberculosis using an intracerebral murine infection model. It is well established that TNF synthesis is an absolute requirement for host protection against tuberculosis. His data extends these observations and provides novel insights into the TNF specific contribution from neurons in protective mechanisms showing conclusively that, although neurons generate TNF in response M. tuberculosis infection, neuronal deletion of TNF does not alter immune phenotype, hence its redundancy in host immune protection. In contrast, his findings demonstrate that TNF from lymphoid cells, in particular CD4+ and CD8+ T

cells are critical for host immune protection against neurotuberculosis. His results provide special insight into cerebral immune function and are specifically relevant in the context of recruited T cells as immune regulators of host immune responses. His work lays the foundation for further exploration of neurons, and cells from both myeloid and lymphoid origin as contributors of cell specific cytokines critical for host protection against cerebral infection.

Supervisor: A/Professor M Jacobs (Division of Immunology, Clinical Laboratory Sciences and Institute of Infectious Disease and Molecular Medicine)

*Rajesh Abraham Jacob Thesis Title: Neutralizing antibody response to membrane proximal external regional (MPER) in highly neutralization resistant HIV-1: Implications for vaccine design

Rajesh Jacob has a BSc from Mahatma Gandhi University, Kottayam, India and an MSc from Bangalore University, Bangalore, India.

Rajesh Jacob's thesis involves study of the antibody response to HIV-1 in order to discern better how to effective design an vaccine Anti-HIV-1 broadly neutralising antibodies are those antibodies capable of neutralising a wide range of different HIV-1 isolates. This means that they prevent the entry of the virus into a target cell. Rajesh Jacob studies these responses, particularly with respect to those which target the membrane proximal external region (MPER), a 24 amino acid long portion of HIV-1 envelope gp41 protein. He concludes from his work that the property of neutralising broadly anti-MPER antibodies which make it so, are more related to the antibody's ability to penetrate shielding around MPER than the particular range of MPER sequences it can recognise. This has important implications when using anti-MPER antibodies in the design of a vaccine.

Supervisor: Dr J Dorfman (Division of Immunology)

Fredrick Lutwama
Thesis Title: Comparison of immune
responses induced by Bacillus
Calmette Guerin when given at birth
or at 6 weeks of age in Ugandan
infants

Fredrick Lutwama has an MBChB from Makerere University College of Health Sciences in Uganda. His doctoral research emerged as a result of research on the Bacillus Calmette Guerin (BCG) vaccine in Uganda where Fredrick conducted part of his research.

Fredrick Lutwama's thesis aims to evaluate BCG-specific immune responses in infants who received BCG vaccine at birth or at 6 weeks of age, due to home births in Ugandan infants. His hypothesis was that administration of BCG at six weeks of age would enhaced BCG-specific result in immune responses compared with vaccination at birth. He assessed immune responses in the two groups of infants using state of the art immunology assays and multiparameter flow cytometry. He reports that infants vaccinated at birth had greater induction of Th1 immune responses and higher non-specific IL-10 levels, compared with infants vaccinated at 6 weeks of age. Fredrick Lutwama concludes that the distinct T cell responses induced in the two vaccination groups may impact protective efficacy of BCG against tuberculosis.

Supervisor: Professor W Hanekom (Child and Adolescent Health)
Co-supervisors: Dr BM Kagina (Child and Adolescent Health); Dr CL Day, (Child and Adolescent Health);
Professor H Mayaja-Kizza (Makerere University College of Health Sciences)

Asongwe Lionel Ateh Tantoh Thesis Title: High throughput RNA interference based screen for the identification of genes implicated in Listeria monocytogenes infection

Asongwe Tantoh has a BSc from the University of Buea, Cameroon, and an honours and MSc in Biochemistry from the University of Stellenbosch. His PhD is geared at finding human genes enabling the intracellular survival of the bacteria pathogen Listeria monocytogenes during infection.

Asongwe Tantoh conducted his doctoral research in the field of infectious diseases, with focus on Listeria monocytogenes infection. His thesis uses a combination of visual cell based assays with high-content RNA interference screening approach to screen for and to identify human host factors (genes) involved in Listeria monocytogenes infection. His research provides a set of human genes that will foster our understanding on how the bacteria pathogen sustains its intracellular life style. Asongwe Tantoh's work therefore generates a list of new potential candidate genes of cellular targets that can be used for antibacterial therapy development against Listeria monocytogenes.

Supervisor: Professor F Brombacher (Clinical Laboratory Sciences) Co-supervisor: Dr N Emans Dr M Mhlanga (Clinical Laboratory Sciences)

In Disability Studies:
Ntombekhaya Tshabalala
Thesis Title: An exploration of the
parents' experiences of the inclusion
and retention of their disabled
children in public schools in the
Eastern Cape Province

Ntombekhaya Tshabalala completed a BSocSc degree at UCT in 1993, majoring in Psychology, followed by an MPhil in Housing Development and Management at the same institution.

Ntombekhava Tshabalala's doctoral research interests in disability issues developed while she was involved as a project co-ordinator for the REHAB organisation, a disability NGO in East London and a pilot project for inclusive education within the Amathole District Municipality. The thesis which emerged also focuses on experiences of rural parents of disabled children with regards inclusion and retention of their children in basic education. This qualitative study follows a participatory action research design using critical theory as the lens through which the world of parents with disabled children was examined. Five themes are selected as representative of the main findings, namely: growing up; we live busy demanding lives; inadequate awareness and information about the policy; unsupportive management from the department; and

stunted involvement of parents. The thesis development and recommendations drew out five cross-cutting aspects of parents' participation in the inclusion and retention of disabled children in schools: Constraints, Complexities, Capacity, Compassion and Contradictions.

Supervisor: A/Professor T Lorenzo (Health and Rehabilitation Sciences) Co-supervisor: Professor S Pendlebury (School of Education)

In Emergency Medicine:
*Christopher Stein
Thesis Title: Emergency medical
service response system performance
in an urban South African setting: a
computer simulation model

Christopher Stein has a Bachelor's degree in Emergency Medical Care from the University of Johannesburg, an honours degree from UNISA and a MSc(Med) in Emergency Medicine from the University of the Witwatersrand. His PhD thesis arose from experience of Emergency Medical Services systems acquired over 20 years of experience in pre-hospital emergency care.

Christopher Stein's thesis aims to develop a computer simulation model based on the Western Cape Emergency Medical Services operations in Cape Town. This model, with several hypothetical extensions, is used to assess the effect of two experimental factors related to the dispatch and location of emergency vehicles on response time performance in an urban setting. The effect of increased emergency vehicle numbers on response time performance is also investigated. Results indicate that a system model utilising only transport vehicles strategically positioned in anticipation of demand yields the best response time performance. Numbers of additional emergency vehicles required improve response time performance is found to be substantial, with only a limited gain in performance possible. These results suggest that Emergency Medical Services system resources should be devoted to demand-based. strategic positioning of emergency vehicles rather than the provision of greater numbers of vehicles, in order to improve response time performance.

Supervisor: Professor L Wallis (Surgery) Co-supervisor: Dr O Adetunji (Industrial and Systems Engineering, University of Pretoria)

In Human Genetics:
Mankgopo Magdeline Kgatle
Thesis Title: An investigation of
genome-wide promoter region
cytosine-phosphate-guanine (CpG)
island methylation profiles in patients
with chronic hepatitis B virus infection

Mankgopo Kgatle has a BSc from the University of Limpopo, and a BSc(Med)(Hons) and an MSc(Med) in Medical Virology from UCT. Her doctoral research arose from her interest in infectious diseases and interaction with clinicians at the Liver Clinic, Groote Schuur Hospital.

Mankgopo Kgatle investigates the hypothesis that infection with hepatitis B virus (HBV) and viral DNA integration into the host genome causes unintended methylation of promoters that can explain the clinical phenotype of HBV related liver disease. Genomic viral inserts are silenced through methylation by DNA methyltransferases during which the surrounding genomic DNA is also methylated. If these viral inserts are within gene promoter regions, methylation of surrounding CpG islands would disrupt gene function. She demonstrates the presence genome-wide promoter region methylation in patients with chronic HBV infection. Using bisulfite DNA sequencing, she validates the presence of gene promoter methylation in several genes. Using the highly methylated CCND3 gene, she shows that methylation is present only in HBV infected patients, is associated with viral load and HBV genotype D. She presents a unifying hypothesis that helps to explain the pathophysiology of liver disease seen in chronic HBV infection.

Supervisor: Dr HN Hairwadzi (Medicine) Co-supervisor: Professor R Ramesar (Clinical Laboratory Sciences); Professor W Spearman, (Medicine) Mzwandile Mbele Thesis Title: Molecular genetics arrhythmogenic right ventricular and dilated cardiomyopathy in South Africans

Mzwandile Mbele has a BSc with majors in genetics and advanced biology from the University of the Witwatersrand. He obtained a BSc(Med)Hons) in Human Genetics and an MSc(Med) from UCT.

Mzwandile Mbele's thesis is based on a search for known and new genetic causes of cardiomyopathy (heart muscle disease), a major cause of heart failure among South Africans. His work demonstrates that mutations in genes that code for desmosomal protein genes account a quarter of cases of arrhythmogenic right ventricular cardiomyopathy, whilst contributing little to the causation of dilated cardiomyopathy. One of the gene mutations in desmosomal genes explains nearly a third of mutation positive cases, and appears to have arisen from a common 'founder' ancestor. He shows that this common 'founder' mutation can be verified by means of simple test which should be first for genetic screening of cardiomyopathy. Although he shows that a common variant in a desmosomal gene does not influence total gene expression, use of exome sequencing in a family with severe early-onset cardiomyopathy reveals a new candidate gene in a novel pathway for cardiomyopathy.

Supervisor: Professor B M Mayosi (Medicine)
Co-supervisor: Dr G Shaboodien, (Medicine)

In Medical Biochemistry:
Nailah Conrad
Thesis Title: Characterisation of the structural motifs involved in the cleavage and secretion of human angiotensin-converting enzyme

Nailah Conrad has a BSc and BSc(Hons), and an MSc in Molecular and Cell Biology, all from UCT. While working on her master's degree she co-authored a chapter on "Prospects for using genetic modification to engineer drought tolerance in crops".

Nailah Conrad's thesis investigates the enzymatic release of the metalloprotease angiotensin-converting enzyme

(ACE) from the cell surface. ACE plays a critical role in blood pressure and electrolyte homeostasis and is comprised of two parts, the N- and C-domains. To investigate the cellular machinery responsible post-translational processing, she interrogates the role of the ectodomain by replacing discrete secondary structures on the surface of the C-domain with their N-domain counterparts. In human tACE the mutation H610-L614, to alanines decreased ACE shedding. An extension of this mutation on the N-terminal side to seven alanines resulted in a reduction in ACE activity and, more importantly, it affected the processing of the protein to the membrane, resulting in expression of an underglycosylated form of ACE. These data suggest that this region is more crucial for the processing of ACE than it is for regulating shedding. Finally, soluble fluorogenic peptides mimicking the ACE stalk are used in a cell-based assay to characterise the contribution of the stalk to ACE shedding.

Supervisor: Professor ED Sturrock (Clinical Laboratory Sciences)
Co-supervisor: Ms SLU Schwager (Clinical Laboratory Sciences)

Megan Hendrikse Thesis Title: *Interactions of GPR54* and GPR147 receptors with RF-amide ligands

Megan Hendrikse has a BSc, BSc(Hons) and MSc in Biochemistry from the Nelson Mandela Metropolitan University. Upon moving to Cape Town she embarked on her PhD studies at the MRC/UCT Receptor Biology Research Unit.

Megan Hendrikse's thesis aims to examine the interactions of the GPR54 and GPR147 receptors with their cognate ligands kisspeptin and inhibiting gonadotropin hormone (GnIH), respectively and with several ligand analogs. The GPR54 and GPR147 receptors were recently found to regulate reproduction in an opposing way and both receptors belong to the RF-amide family of receptors. GPR54 chimeras and point mutants were constructed to investigate important residues for kisspeptin binding and receptor activation. The extracellular loops of GPR54 were found to contribute to cell surface receptor expression

and play a role in receptor signalling. Kisspeptin analogs were tested to examine their effects at GPR147 binding and activation. Several of the kisspeptin analogs were found to act as agonists at GPR147. In contrast, the GnIH ligand and its analogs did not bind and activate GPR54. These findings can assist in development of therapeutic ligands that selectively target GPR54 and GPR147 receptors.

Supervisor: Professor A A Katz (Clinical Laboratory Sciences) Co-supervisor: Professor R P Millar (Clinical Laboratory Sciences)

Nina Alison Victoria Holderness -Parker

Thesis Title: Characterizing the role of p21-activated kinase 3 (PAK3) in AP-1-induced transformation

Nina Parker has a BSc and a BSc(Med)(Hons) in Medical Biochemistry from UCT.

Nina Parker's thesis aims to investigate the role of a protein kinase, p21-Activated Kinase 3 (PAK3) in cancer development. PAK3 has been implicated in a variety of pathological disorders and over-expression of other PAK-family members has been linked to cancer. In this study, she investigated the regulation and expression of PAK3 in transformed and cancer cells of different tissue origin. Her results show elevated PAK3 protein in transformed cells as well as in cervical, ovarian, oesophageal and breast cancer cells lines, while poor patient survival tracked with high PAK3 expression in ovarian cancer patient material. Elevated PAK3 levels appear vital for the cytoskeletal changes that govern cell migration. Her work also shows that PAK3 expression in response to the transcription factor, AP-1 is regulated through the transcriptional activation of the PAK3 promoter by AP-1 binding directly to a single site in the promoter. Her study is a first to describe a role for AP-1 in regulating PAK3 expression and identified a potential feedback loop in which PAK3 is an AP-1 target required for cytoskeletal reorganization and migration observed cancer cells.

Supervisor: A/Professor V Leaner (CLS: Division of Medical Biochemistry)

In Medical Virology:
*Gama Petulo Bandawe
Thesis Title: Understanding the
interplay between HIV-1 diversity,
humoral immune responses and viral
fitness

Gama Bandawe completed his BSc at UCT in 1999, majoring in Microbiology and Biochemistry, and went on to complete a BSc(Hons) in Microbiology. After obtaining an MSc in Molecular and Cell Biology in 2003, he joined the Division of Medical Virology as a research officer, becoming a full-time PhD student in 2011.

HIV-1 antibody dependent cell cytotoxicity (ADCC) and neutralizing antibody (nAb) responses are both thought to be important responses to elicit through vaccination. Gama Bandawe's thesis characterises nAb responses in two cohorts in Africa showing more potent responses in the Tanzanian cohort compared to South Africa, primarily influenced by community viral loads. In a detailed study of one individual, he found ADCC responses evolved very early in infection and recognised the same epitope as neutralizing antibodies. This very early pressure by ADCC responses could potentially facilitate a rapid rate of escape. The study defines the first ADCC epitope reported in the V4 region, and where neutralisation escape resulted in increased ADCC sensitivity, this was a dead end escape pathway for the virus. Finally he shows that escape from ADCC and nAb responses have a fitness impact on the virus. This study elucidates the complex interplay between the virus and the humoral immune system; and provides clues to weaknesses in the virus that could be exploited by designers of HIV vaccines.

Supervisor: Professor C Williamson (Medical Virology) Co-supervisor: Professor L Morris (National Institute for Communicable Diseases)

Shameem Zaer Jaumdally Thesis Title: Impact of immune activation and inflammation on the susceptibility to HIV infection and disease progression in HIV serodiscordant and seroconcordant couples Shameem Zaer Jaumdally completed his BSc in Biochemistry, followed by his BSc(Hons) in Infectious Diseases and Immunology. In 2010, he upgraded his MSc degree in the Division of Medical Virology to a PhD.

Shameem Zaer Jaumdally's thesis examines the impact of heterosexual partner HIV status on immune activation and inflammation in blood and at the genital mucosa on susceptibly of HIV infection in the HIV negative partner; and HIV-1 disease progression in HIV positive individuals with partners who are also HIV positive (HIV seroconcordant) or partners who are HIV negative (HIV serodiscordant) in South African couples. His work suggests that immune activation and inflammation detected in blood are likely to be important in HIV susceptibility and pathogenesis in seroconcordant couples, and that higher viral loads in blood of HIV seroconcordant individuals, driven by the immune activation and inflammation, lead to more HIV shedding at the genital tract. Lower levels of immune activation and inflammation in HIV negative serodiscordant individuals in this study could account for their resistance to HIV infection. These findings imply that partner status is an important determinant in both risk for HIV in uninfected individuals and rate of HIV disease progression in infected individuals.

Supervisor: Dr J Passmore (Clinical Laboratory Sciences (Virology) Co-supervisor: Dr P Gumbi (Clinical Laboratory Sciences (Virology)

Aime Marcel Simon Tongo Passo Thesis Title: *Immunology and virology* of HIV infection in Cameroon

Aime Tongo Passo has a BSc and MSc in Biochemistry from the University of Yaoundé I in Cameroon. He joined the Division of Medical Virology in the Department of Clinical Laboratory Sciences and registered for a PhD in 2011.

Aime Tongo Passo's thesis illustrates HIV genetic diversity in Cameroon and HIV-specific immunity. An effective HIV vaccine is the main hope for controlling the pandemic and is a global health priority. Aime Tongo Passo characterises the diversity of

HIV gag and nef genes and nine new full length viruses of Cameroonian HIV-1 isolates. He demonstrates the predominance of HIV-1 CRF02 AG viruses alongside viruses belonging to multiple known and unknown group M lineages. This provides further evidence that Cameroon is a major hotspot of HIV diversity, highlights the need for continued molecular epidemiological surveillance. Marcel investigates T cell responses to centralised reagents such as consensus M, and compares immunity in individuals from Cameroon and South Africa. He finds that the central nature of consensus sequences results in their broad recognition both in a highly diverse HIV epidemic (Cameroon) and a homogeneous epidemic (South Africa), but observes a profound lack of immunodominance. These data inform the testing of current candidate HIV vaccines in different regions and have important implications for vaccine development.

Supervisor: Dr WA Burgers (Medical Virology)
Co-supervisor: Dr D Martin (Compu-

tational Biology)

In Medicine:

Gaurang Prabhakar Deshpande Thesis Title: Testing metabolic and pharmacological agents for recovery against de novo acute heart failure in an isolated rat heart model

Gaurang Deshpande obtained a MSc from the University of Sussex (Brighton, UK) and a BSc degree in biotechnology from the University of Nagpur (India). His PhD thesis emerged as a result of a collaboration between India and the Hatter Cardiovascular Research Institute at UCT.

Gaurang Desphand's doctoral research creates a new simple model of a complex and often fatal medical emergency, namely acute heart failure (AHF), for which there is at present no adequate clinical therapy. After reasoning that the patient's severe anxiety would provoke stress hormones which would shoot up the level of toxic blood fatty acids that block glucose oxidation thus leading to energy starvation and AHF, he evolves a model in which the isolated heart is acutely deprived of glucose energy by low pressure perfu

sion to provoke AHF. In these conditions, the failing heart received metabolic therapy by two different experimental therapies, namely glucose-insulin (GI) and the pharmacological agent sphingosine-1-phosphate (S1P). To monitor therapeutic improvement, Gaurang Deshpande studies mechanical function of the heart and expression of cytochrome C and mitochondrial respiration. GI and S1P improved recovery from model AHF by respectively promoting protective glycolysis and by activating the survivor activating factor enhancement (SAFE) pathway. These metabolic and molecular agents show therapeutic promise for clinical treatment of AHF.

Supervisor: Professor Lionel Opie (Medicine)

Co-supervisor: A/Professor Sandrine Lecour (Medicine)

Suzaan Marais

Thesis Title: *Investigations into HIV-associated tuberculous meningitis*

Suzaan Marais holds an MBChB from the University of the Free State and obtained her FC Neurology from the College of Medicine, South Africa. Her PhD thesis arises from research at the Institute of Infectious Disease and Molecular Medicine at UCT, where she has been based since 2010.

Suzaan Marais's thesis investigates HIV-associated tuberculous meningitis (TBM) in the high tuberculosis (TB)/HIV co-infection setting of Cape Town. A clinical TBM case definition is developed for use in all TBM patients regardless of HIV status, or socio-economic setting. Through several studies Suzaan Marais determines the frequency, clinical characteristics and outcome of TBM and a common complication in HIV-co-infected patients who start antiretroviral therapy, namely neurological TB-associated immune reconstitution inflammatory syndrome (IRIS). She further characterises the cerebrospinal fluid and blood immunological profiles of, and determined risk factors for, TBM-IRIS. The end result is a synthesis of clinical and immunological findings that is a distinct contribution to knowledge and will inform health policy in the areas of diagnosis and management of HIV-associated

TBM patients. In addition, the immunological results from the site-of-disease of TBM-IRIS patients contribute significantly to knowledge of TB-IRIS pathogenesis and will be the basis for future studies.

Supervisor: A/Professor RJ Wilkinson (Medicine)

Co-supervisors: A/Prof G Meintjes (Medicine), A/Prof KA Wilkinson (CIDRI, IDM)

In Neurosciences: Ursula Karin Rohlwink Thesis Title: Biomarkers of neurological tissue injury and inflammation in paediatric Tuberculosis Meningitis

Ursula Rohlwink completed her undergraduate studies in Psychology/Neuroscience at the Bosphorous University in Istanbul, Turkey. In 2009 she joined the Division of Neurosurgery at UCT. While based at the Red Cross Children's Hospital she completed her MSc in traumatic brain injury.

Ursula Rohlwink's thesis focuses upon Tuberculous meningitis (TBM), a common and potentially devastating disease in South Africa. It remains challenging to treat because currently available tools are inadequate in determining brain injury severity and prognosis. Her research examines novel biomarkers of neurological injury and inflammation in children with TBM. The findings show that biomarkers of brain tissue injury demonstrate promise as tools to assess injury severity, track the progression or resolution of disease, determine response to interventions, and prognosticate. Additionally, the thesis demonstrates disturbed brain physiology using sophisticated brain monitoring, and advanced radiological characteristics of TBM, most importantly the involvement of cerebral blood vessels and the extensive involvement of the subarachnoid space. spinal findings of this thesis offer novel insights into the pathophysiology of TBM and potential routes for further exploration to enhance patient care and outcomes.

Supervisor: A/Professor A Figaji (Neurosurgery)

In Nursing:

Mandisa Singata-Madliki

Thesis Title: A randomised controlled trial studying the effects of the copper intrauterine device and the injectable progestogen contraceptive on depression and sexual functioning of women in the Eastern Cape

Mandisa Singata-Madliki is a midwife-researcher and Deputy Director of the Effective Care Research Unit in the Eastern Cape. Her PhD thesis emerged from an interest in determining whether some contraceptives affect women's mood and sexual functioning, resulting in the low uptake of long lasting contraceptives among childbearing women.

Mandisa Singata-Madliki's thesis is a randomised, single-blind study that investigated the effects of a long-acting injectable contraceptive, Medroxyprogesterone Depot Acetate (DMPA) compared with the copper Intrauterine Contraceptive Device (IUD) administered immediately after childbirth on depressive symptoms and sexual functioning among women. At the end of the study, it was found that there was a trend towards more women in the DMPA injectable contraceptive group reporting depression and sexual dysfunction at one-month and three-month reviews than women in the IUD group. More women on the IUD resumed sexual intercourse soon after childbirth compared to women on the DMPA. However, there were no statistically significant differences in the risk of depression or sexual dysfunction between women on the DMPA and those on the IUD.

Supervisor: Emeritus Professor DD Khalil, (Nursing & Midwifery) Co-supervisor: Professor GJ Hofmeyr, (Obstetrics and Gynaecology)

In Paediatrics:
Sandra Margaret Pienaar
Thesis Title: Tuberculosis and genes
of the IL12/IL23/IFNy pathway:
exploring functional significance of
novel mutations in the IL12p40
promoter

Sandra Pienaar has a BSc from the University of Witwatersrand, and a BSc(Med)(Hons) and MSc(Med) from UCT. Her PhD evolved as a result of

study and interest in the field of Immunology and Primary Immunodeficiencies at the Institute of Child Health Research Laboratory at Red Cross War Memorial Children's Hospital, where she has been employed since 1989.

Pienaar's Sandra thesis describes the importance of the IL12/IL23/IFNy pathway for protection against TB disease. Her research describes the screening of the IL12p40 gene promoter for genetic changes, reporting two novel mutations. The clinical relevance of these mutations explored by reporter assay and predictive immunophenotype investigated by cytokine measurement, is documented. The work highlights the relevance of genetic studies for greater understanding of infectious diseases.

Supervisor: A/Professor B Eley (Paediatrics and Child Health) Co-supervisor: Doctor S Anderson (Imperial College, London)

In Physiology:
Toni-Lee Sterley
Thesis Title: A role for glutamate and
GABA in attention-deficit/hyperactivity disorder: a study of the
spontaneously hypertensive rat

Toni-Lee Sterley obtained her BSc and BSc(Med)(Hons) degrees at UCT. She upgraded her MSc in neuroscience to a PhD in the Department of Human Biology in 2011. In 2012, she spent 6 months at McGill University, Montreal, Canada, on a Canadian Commonwealth Fellowship.

Toni-Lee Sterley's thesis investigates the role of glutamate and GABA, the main excitatory and inhibitory neurotransmitters in the brain, respectively, in attention-deficit/hyperactivity disorder (ADHD). ADHD is thought to be due to imbalances of the neurotransmitters dopamine norepinephrine in the brain. Toni-Lee Sterley's thesis shows unique interactions between glutamate and GABA with norepinephrine, as well as differences in proteins associated with glutamate and GABA transmission, in the hippocampus of a rat model of ADHD. These findings suggest that a dysregulation in glutamate and GABA transmission may underlie the behavioural symptoms of ADHD. Toni-Lee Sterley's thesis also investigates long-term changes in behaviour and

neurochemistry, specifically glutamate and GABA regulation of norepinephrine, in a rat model ADHD, following early life stress. The results provide insight into how stress early in life interacts with an individual's genetic predisposition to determine the extent to which a disorder, such as ADHD, develops later in life.

Supervisor: Professor VA Russell (Physiology)
Co-supervisor: Doctor FM Howells (Physiology)

Jacqueline Samantha Womersley Thesis Title: Methamphetamine and cocaine effects on dopamine neurons in a rat model of Attention-Deficit/Hyperactivity Disorder

Jacqueline Womersley has a BSc and BSc(Med)(Hons) degree from UCT. Her doctoral research focuses on the neurotransmitter dopamine, and is a combination of her interests in drugs of abuse, stress, animal models of mental disorders and the use of novel techniques in neuroscientific research.

Jacqueline Womersley's thesis aims to investigate further the underlying role of dopamine in attention-deficit/hyperactivity disorder, developmental stress and psychostimulant drug abuse. Using a combination of electrophysiology, behavioural and molecular techniques her work focuses on dopaminergic regulation in the striatum: a brain area involved in movement, reward and saliency. Her experiments provide a potential physiological explanation for the increased risk of developing substance abuse in individuals with a history of developmental stress and/or diagnosed with attention-deficit/hyperactivity Jacqueline Womersley's work suggests that developmental stress may increase the rewarding properties of cocaine and methamphetamine by reducing the efficiency of dopamine reuptake by the dopamine transporter and thereby prolonging the presence of elevated striatal levels of dopamine in an animal model of attention-deficit/hyperactivity disorder.

Supervisor: Professor VA Russell (Human Biology) Co-supervisors: Professor LA Kellaway (Human Biology); Professor DJ Stein (Psychiatry) In Psychiatry:
Sarah May Cotton
Thesis Title: Executive functioning in methamphetamine psychosis

Sarah Cotton obtained her BA through UNISA in 2005. She completed her BSocSc(Hons) in Psychology in 2006 at UCT, where she was introduced to the field of Neuropsychology. She continued with her MA in Neuropsychology at UCT and registered for a PhD in 2010.

Sarah Cotton's thesis investigates executive brain functions in methamphetamine dependence with and without psychosis. She compares performance between these two groups on tasks of attention and working memory, decision making and impulinhibition response sivity, set-shifting, and verbal fluency. In addition she correlates her neuropsychological data with structural MRI data in order to investigate the relationship between brain structure and function in methamphetamine dependence. An improved understanding of the neuropsychology and neuroanatomy of methamphetamine dependence may assist in the clinical management of these individuals.

Supervisor: Professor DJ Stein (Psychiatry & Mental Health) Co-supervisor: Dr KGF Thomas (Psychology)

In Public Health:
Zelda Holtman
Thesis Title: Neurobehavioura

Thesis Title: Neurobehavioural effects of pesticide exposure among emerging farmers in the Western Cape

Zelda Holtman received her BA and BA(Hons) from UNISA and an MA in research psychology from UCT.

Zelda Holtman's thesis is based on research conducted in the Centre for Occupational and Environmental Health Research at UCT. Her doctoral work examines the neurobehavioural effects of long-term exposure to organophosphate pesticides, a problem receiving increasing international attention because of the ubiquity of such exposures. Her study follows up 319 emergent farmers in the Western Cape over a period of 12 months, documenting the extent and nature of exposure to hazardous chemicals and instances of pesticide poisoning. Using a battery of neurobehavioural tests, she finds that workers with a history of past pesticide poisoning are more likely to perform poorly on testing and those experiencing poisoning deteriorate in their performance over a year of follow up. In contrast, the evidence for a decline in neurobehavioural function with ongong low-level exposure is less strong. The findings confirm a pattern suggested in the literature that long-term low-dose exposure to organophosphate pesticides has neurotoxic potential, and highlight the vulnerability of emergent farmers to hazards posed by pesticides to their health

Supervisor: Professor L London (School of Public Health and Family Medicine) Co-supervisor: A/Professor MA Dalvie, (School of Public Health and Family Medicine)

FACULTY OF SCIENCE AND FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

ORDER OF PROCEEDINGS

Academic Procession.
(The congregation is requested to stand as the procession enters the hall and is invited to participate in the singing of Gaudeamus)

The Vice-Chancellor will constitute the congregation.

The National Anthem.

The University Statement of Dedication will be read by a representative of the SRC.

Musical Item.

Welcome by the Deputy Vice-Chancellor, Professor RT Nhlapo.

The honorary graduand, Dr Bernie Fanaroff will be presented to the Vice-Chancellor by the University Orator, Professor A Lewis.

Address by Dr Fanaroff.

The graduands and diplomates will be presented to the Vice-Chancellor by the Deans of the faculties.

The Vice-Chancellor will congratulate the new graduates.

Professor Nhlapo will make closing announcements and invite the congregation to stand.

The Vice-Chancellor will dissolve the congregation.

The procession, including the new graduates, will leave the hall. (The congregation is requested to remain standing until the procession has left the hall.)

The music for the recessional march has been composed by Professor Peter Klatzow.

HONORARY DEGREE RECIPIENT

Bernard Lewis Fanaroff DSc (honoris causa)

Bernie Fanaroff's achievements range from his work as a radio astronomer, contributions to liberation through the trade union movement, and South Africa's winning the Square Kilometer Array (SKA) radio telescope.

A graduate of the Universities of the Witwatersrand and Cambridge, Fanaroff's studies of extragalactic radio sources were pioneering and the 'Fanaroff'-Riley' classification of radio sources (developed with Julia Riley while at Cambridge) is still used today.

After ten years in astronomy at the University of Witwatersrand Bernie Fanaroff decided that he had to make a contribution to his country in a different way. A two-year leave of absence from Wits became eighteen years in the trade union movement in the troubled 1970s and 1980s, during which he helped to set up and build the Metal & Allied Workers' Union, later the National Union of Metal workers (Numsa) as one of the largest and most influential unions in the country. From 1994 to 2003 he held various positions in government, during which he was effectively at the head of the Reconstruction & Development Programme (RDP). In 2003 he was retuned to radio astronomy as part of the nascent SKA project. In this role he played a significant role in raising South Africa's international stature as a world-class research destination. His acumen as a leader and his expertise as a radio astronomer were crucial to South Africa's winning bid. The SKA promises to bring massive infrastructure development, create a significant legacy of skills and be a continuing attraction for young people in Africa to enter careers in science and technology.

NAMES OF GRADUANDS/ DIPLOMATES

An asterisk * denotes that the degree will be awarded in the absence of the candidate.

1.FACULTY OF SCIENCE

Dean: Professor AP le Roex

DEGREE OF BACHELOR OF SCIENCE

James Andrew Combrink Abel Francisco Muxito Diogo

- *Neil du Toit
- *Jason Fourie
- *Brent Andrew Harrison Siphethuxolo James

Vinolia Simangela Mahlangu

- *Sipho Aaron Masimula Lundi Vuyolwetu Mlanduli Muhammad Motala
- *Katlego Kgobalala Moukangwe
- *Sunnyboy Sipha Nhleko
- *Anitah Amanda Nkuna Seema Navaz Premji Tumelo Faith Rasekoala

In Chemical, Molecular & Cellular Sciences:

Candice Louise Koopowitz *Kharan Mahesh Vanmali

In Information Technology:*Mnelisi Bonface S'Luleko Mbeje

In Mathematical, Physical & Statistical Sciences:

Lionel Musa Nhlanhla Dhlamini

*Tawanda Ryan Mupfudze

2. FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

Dean: Professor F Petersen

POSTGRADUATE DIPLOMA IN TRANSPORT STUDIES

*Sabreen Parkar

DEGREE OF BACHELOR OF ARCHITECTURAL STUDIES

*Louise Brukman Hannah Jo Wessels

DEGREE OF BACHELOR OF SCIENCE IN CONSTRUCTION STUDIES

Jean-Marie Yannick Delaire Keatlaretse Mpho Eutricia Mainole Zukile Somyalo

DEGREE OF BACHELOR OF SCIENCE IN ENGINEERING

In Chemical Engineering:
Lindani Buthelezi
(With honours) Takunda Yeukai
Chitaka
Katlego Mmathuto Patience Loeto
Sibusiso Bernard Msani
(With honours) Veronica
Munyongani
Motshamonyane Jacob Phasha

In Civil Engineering:
Alexander Davison
Mathabo Kgabo Sheron Masegela
Akhona Ntshinka

In Electrical Engineering:
Tasneem Abrahams
*Zama Goqo
John Bongane Nhlapo
*Arnold Sagonda

In Electrical and Computer
Engineering:
*(With honours) Brian Adnan
Maposah
*Patrick Mbia

*William Wanyama Opondo

In Mechanical Engineering: Sonnyboy Ofentse Mabe Matthew Derek Purnell

In Mechatronics:
Guy Mark Coulson

DEGREE OF BACHELOR OF SCIENCE IN PROPERTY STUDIES

Muhammad Bilaal Chand Mangaliso Maki Gubangxa Michelle Kate Steel

3. FACULTY OF SCIENCE

Dean: Professor AP le Roex

DEGREE OF BACHELOR OF SCIENCE (HONOURS)

In Biological Sciences: *Alexander Dyer

In Molecular & Cell Biology: Denford Nyasha Banga

4. FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

Dean: Professor F Petersen

POSTGRADUATE DIPLOMA IN PROJECT MANAGEMENT

*Naniki Letta Lukhele

DEGREE OF BACHELOR OF SCIENCE (HONOURS) IN QUANTITY SURVEYING

*Luke Dennis Boyle Mihloti Agreeneth Chauke *Marie Julie Constantin Tinashe Clever Mupangwa Sphamandla Sanele Zuma

> DEGREE OF BACHELOR OF ARCHITECTURAL STUDIES (HONOURS)

*Antony Leon Vervoort

DEGREE OF MASTER OF ARCHITECTURE (PROFESSIONAL)

Melanie van Beuningen

DEGREE OF MASTER OF CITY AND REGIONAL PLANNING

Yolandah Hall

DEGREE OF MASTER OF CITY PLANNING AND URBAN DESIGN

*Aamena Desai

DEGREE OF MASTER OF **ENGINEERING**

In Radar & Electronic Defence: Aadil Valli Essop *Richard Forrester van Schalkwyk (with distinction in the dissertation and the degree with distinction)

DEGREE OF MASTER OF LANDSCAPE ARCHITECTURE

Chantyl Vanessa Dayaram

DEGREE OF MASTER OF PHILOSOPHY

In Conservation of the Built Environment: Janine de Waal Loudine Philip Raymond Smith

In Engineering Education: Stuart Levland Torr

In Engineering Management: Berenice Jean Munian

In Energy Development Studies: Lana Minette Franks Katherine Anne Louw *Dania Ini Petrik Marek Raciborski

In Transport Studies: Danette Jones Hazvinei Tsitsi Tamuka Moyo

In Urban Infrastructure, Design & Management: Karla Booysen

*Olamide Iniobong Udo-Udoma

DEGREE OF MASTER OF SCIENCE IN ENGINEERING

In Chemical Engineering: Chandon Bezuidenhout *Alistair Paul Hughes Nicole Karen Jansen van Rensburg Mopeli Ishmael Khama Kubefu Albert Maduna

*Murray Peter Meissner Nicole Anne Meyer Mogamat Thaabit Nacerodien Conrad Bhekile Ndimande Tsundukani Glen Nwaila Constance Kudakwashe Nyambayo

*Santosh Pani

Yi Zhou

*Yefon Manjo Persis

*Ian Stefanes Scott

Tanaka Casandra Shumba

Nathan Ngwelela Simunika (with distinction in the dissertation and the degree with distinction)

Jacobus van der Merwe Brian Mathew Willis *Peter David Timothy Wynne

In Civil Engineering: Daniel John Avutia Cocou Davis Ruben Aza-Gnandji *Gerard Banzibaganye Mohammed Asaad Essack

Zaahir Mukadam

*Salathiel Mundeli Lombe Mutale

Alton Ruiters

*Kevin Sack (with distinction in the dissertation and the degree with distinction)

Marco Giovanni Talotti

*Tessa Townshend

*Benjamin Samuel Walker

In Electrical Engineering:

*Valerie Edith Chiriseri Hilary Kudzai Chisepo Mpendulo Dlamini Phillip John Lowne Frost

*Ojonav Hazarika

*Bernard Nyakundi Isaac

Charna Tina John

Akrama Khan

Naleli Jubert Matjelo

Molise Mokhomo

Ronnie Mugisha

Emmanuel Namanya

Darcy Heinrich Christian Ocker

Jaco Pretorius

Ndabeni Moses Stenane

Olugbenga Adekunle

Taiwo (with distinction in the

dissertation)

Johanette van der Merwe

Zhezhang Xu

In Energy Studies: Nalini Pillav

Paxis Marques Joao Roque Sydwell Luvo Vanyaza

In Geomatics:

Thabo Meshack Ntsoko Lindy-Anne Siebritz

In Materials Engineering: Luke Marcus Finkelstein Teboho Jacob Molokwane *Philip Theodore van der Meer

In Mechanical Engineering:

Privesh Gosai

Heathcliff John Hartle

*Pieter Leonardo du Toit Meyburgh

*Steven Peter Mortlock Yusuf Mohamed Patel Graeme Raymond Paul Nzudzanyo Ranwaha Leanne Colleen Robertson Drewan Stallard Sanders

Melchior Jacobus Stander (with

distinction in the dissertation)

*Talita van Tonder

Andrew Miles Winstanly

In Structural Engineering & Structural Materials:

*Mfundo Muziwandile Vezi (with distinction in the dissertation)

In Sustainable Energy Engineering: Nicholas Craig Bailey

DEGREE OF MASTER OF SCIENCE IN PROJECT **MANAGEMENT**

Brendon Lee Cloete Kiranmai Jonnalagadda *Jephita Matande Ntoetse Mofoka

DEGREE OF MASTER OF SCIENCE IN PROPERTY STUDIES

*Janet Kathleen Glendinning Samuel Mukori

5. FACULTY OF SCIENCE

Dean: Professor AP le Roex

DEGREE OF MASTER OF PHILOSOPHY

In Applied Marine Science: *Robert William Schlegel

In Climate Change & Development:

*Jesse Thomas Luttik Sarah Reckson Brian Jeffrey Schmitt In Environment, Society &
Sustainability:
Fiona Bonnie Galloway
Yogini Bharat Jivanji
Johanna Regina Catherina von Holdt
(with distinction)
In Information Technology:

In Information Technology:
Nicola du Toit

DEGREE OF MASTER OF SCIENCE

In Applied Marine Science: *Nicole Amy Astor Blessing Kamwi Kamwi

In Applied Marine Science (Zoology): Sifiso Walter Mbambo

In Applied Mathematics:
*Hassana Al –hassan (with distinction)

In Astrophysics & Space Science:
Priscilla Chauke
Sulona Kandhai
Zwidofhelangani Ndamulelo
Khangale
Rajeev Manick
Itumeleng Matuba Monageng
Elizabeth Naluminsa
Riona Ramraj

In Botany:

*Joanne Bentley (with distinction)
Katherine Mary
Bunney (with distinction)
Cherie Janine Forbes (with
distinction)
*Rogan Mark Fourie

In Chemistry:

*Peter Mubanga
Cheuka (with distinction)
Sabena Shaik Yusuf (with distinction)

*Lara Cathryn Sudding

In Climate Change & Development:
*Sarah Angela Haiden (with
distinction)
Akeel Rafiq Hajat
Anna Katharine James
Shakirudeen Abimbola Lawal
Sibongile Muthoni Lenneiye
Beth Mackay
Elizabeth Jane Mcdaid
Christopher Roger Millson
Grete Simanauskaite

In Computer Science:
Duncan Matthew Clough (with distinction)
*Keiran Solomon Dennie
*Julian Christopher Kenwood
*Craig Eric Leach
Rolf Weimar
Daniel Kyle Wood

In Conservation Biology:
Wesley Drummond Bell
Philip Peter Massie
Robyn Milne (with distinction)
Frances Lorelle Morling
Phenias Sadondo
Tabitha Morwenna Constance Stokes

In Environmental & Geographical Science: Sabina Abba Omar Julio Anderson Araujo (with distinction) Eva Liliane Ujeneza Elizabeth Weeks Ward

In Geology:

*David Colquhoun McGibbon Ponani Mthembi

In Information Technology:
*Gerald Philip O'Loghlen
Michael Leith Workman (with
distinction)

In Mathematics:
Daniel Mackenzie (with distinction)

In Molecular & Cell Biology:
Lyle Michael Curry
Halford John Wheatland Dace
Karusha Moonsamy
*Michael Munir Wolf

In Ocean & Atmosphere Science: *Sandi Michelle Smart (with distinction)

In Ocean & Climate Dynamics:
*Laura Valerie Braby
Ahmad Fehmi Dilmahamod
Daneeja Mawren
*Lerato Elizabeth Mpheshea
Bernardino Joao Nhantumbo
Mthetho Vuyo Sovara

In Operational Research: *Thandulwazi Magadla

In Physical Oceanography: Ceinwen Margaret Lana Smith

In Physics:
*Chilufya Mwewa
*Andrecia Ramnath

In Theoretical Physics: Mawande Babuyile Lushozi Jason Alexander Myers

In Zoology:
Kieron James Dunn
Adrian Michael Stanley Hewitt
Megan Loftie-Eaton

6. FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

Dean: Professor F Petersen

DEGREE OF DOCTOR OF PHILOSOPHY

In Chemical Engineering: Zandile Hlengiwe Chonco Thesis Title: Investigation of the promotional effect of Cu and Ag on iron-based Fischer Tropsch catalysts using ferrites as model catalysts

Zandile Chonco has a BSc and BSc(Hons) in Chemistry from the University of the Western Cape. She obtained an MSc in Chemistry from the University of Johannesburg in 2007 and enrolled at UCT for her PhD in 2008. The focus of her research was to understand the promotional effect of copper and silver on the iron-based Fischer-Tropsch catalysts, and led to publications in international journals.

Zandile Chonco's thesis explores the use of model substances to determine the role of promoters, which are typically added to enhance the performance of heterogeneous catalysts. In her study ferrites are used to investigate group 11 promoters (Cu, Ag) on the performance of iron-based Fischer-Tropsch catalysts. These promoters are typically added to facilitate the pre-treatment of the catalyst (as could be shown using in-situ studies). The promoters do also play an important role during the actual catalytic reaction. Zandile Chonco shows in her thesis that these promoters are essential for the conversion of biomass/coal to liquid fuels using these iron-based catalysts. Furthermore, she shows that the iron-based catalyst is not a static

system but cycles various transformations on the time scale of the catalytic reaction, thereby affecting the product selectivity dramatically.

Supervisor: Professor E van Steen (Chemical Engineering) Co-supervisor: Professor M Claeys (Chemical Engineering)

In Civil Engineering:
Mike Benjamin Otieno
Thesis Title: The development of
empirical chloride-induced corrosion
rate prediction models for cracked
and uncracked steel reinforced
concrete structures in the marine tidal
zone

Mike Otieno holds a first class honours BSc from the University of Nairobi and an MSc(Eng) from UCT. His PhD thesis was motivated by the need to predict the rate of deterioration of concrete structures due to corrosion of the reinforcing steel.

Mike Otieno's thesis recognises that the rate of corrosion of the reinforcing steel (i.e. corrosion rate) governs the rate of structural deterioration of reinforced concrete (RC) structures in coastal environments, and hence proposes empirical corrosion rate prediction models. The prediction models were developed using results from laboratory and field corrosion experiments carried out during the study in which the combined influence of the following parameters on corrosion rate were investigated: thickness of the concrete cover to the reinforcing steel (i.e. cover depth), width of cracks on the concrete cover (i.e. crack width) and quality of concrete cover (i.e. resistance to fluid ingress). models not only provide a novel way to select suitable combinations of cover depth, concrete quality and crack width for the design of more durable RC structures but also aid in the quantification of the residual life of RC structures affected by corrosion of the reinforcing steel.

Supervisor: A/Professor H Beushausen (Civil Engineering)
Co-supervisor: Professor M Alexander (Civil Engineering)

In Electrical Engineering:
Oliver Dzobo
Thesis Title: Risk-based interruption
cost index based on customer and
interruption
parameters

Oliver Dzobo graduated with BSc(Hons) Electrical Engineering degree from University of Zimbabwe in 2004. He joined the Department of Electrical Engineering at UCT in 2008 to carry out research into the costs of power interruptions in South Africa. He graduated with an MSc(Eng) in 2010 and continued the research as part of his PhD studies.

Oliver Dzobo's doctoral research developed a technique to derive a new risk-based interruption cost index for power system reliability-worth assessment. The technique applies a time-based probabilistic modelling approach to network reliability-worth parameters. addition, electricity customer specific parameters are used to segment the customers into customer-cluster segments of similar cost profiles. The research shows that probability density functions are superior to deterministic average values as they reflect the variability in reliability-worth parameters through their dispersion and skewness. He discovered that by disregarding the effects of probability distribution of the interruption cost it lead to large errors, up to 40% and more, in the calculated expected interruption costs. Furthermore, the proposed technique allows the uncertainty allowed in power system network planning or operation decision to be quantified. The approach can be used in all areas of power system reliability-worth assessment which have always been exclusively addressed using average values.

Supervisor: Professor CT Gaunt (Electrical Engineering)
Co-supervisor: Dr R Herman (Electrical Engineering)

Milton Edimu
Thesis Title: Using probability density
functions to analyze the effect of
external threats on
the reliability of a South African
power grid

Milton Edimu is from Kaberamaido district in Uganda. He graduated with a BScElec degree from Makerere University in 2005 and completed the Graduate Management Trainee programme with a DIAGEO subsidiary company. He completed his MSc(Eng) in Electrical Engineering at UCT in 2009.

Milton Edimu's thesis develops a new time-dependent probabilistic approach for network reliability analysis and management. Electricity networks are exposed to a wide variety of threats that cause faults and interruptions of supply. Inadequate representation of these threats and the parameters of the electricity networks contribute to misleading assessments of reliability during network planning, potentially leading to under- or over-investment, and during system operations. Improving on traditional techniques, Milton Edimu's approach accommodates variability in the many parameters involved in the analysis and achieves faster computation. The research shows that the perception of a network's reliability depends on the type of failure models applied. Using probability-based component failure models and attaching levels of confidence or risk to the system level outcomes offers additional information to decision-makers. The results of the research have direct application in utility planning, operations and statutory regulation.

Supervisor: Professor C T Gaunt (Electrical Engineering)
Co-supervisor: Dr R Herman (Electrical Engineering)

Petro Pesha Ernest Thesis Title: *Distributed IP Mobility Management for Hosts and Networks*

Petro Pesha Ernest has a BSc (Hon) in Electronic Science and Communication from the University of Dar es Salaam, Tanzania, and an MSc degree in Electronic Engineering from the University of Stellenbosch. He has been pursuing doctoral research in Electrical Engineering at UCT since 2010. He has published seven technical papers in reputable conference proceedings and a journal during this time.

Petro Ernest's thesis investigates the distributed mobility management paradigm and designs three new IP-based distributed mobility management schemes for the future mobile Internet. The thesis extends traditional centralised mobility management protocols in the Internet Engineering Task Force (IETF) standards and enhances them to work in a distributed manner. The newly distributed developed mobility management schemes overcome the limitations of the centralised mobility management schemes, which are the non-optimal routing path, long handover delay, and low scalability. Both analytical and simulation modelling have been used to evaluate the performance of the developed schemes. Results show that the schemes reduce route optimization establishment latency, packet end-to-end delay, handover delay, packet loss, packet header overhead, and total cost, compared to centralised mobility management schemes, and most of the distributed mobility referenced management schemes.

Supervisor: Dr OE Falowo (Electrical Engineering)

Co-supervisor: Professor HA Chan (Electrical Engineering)

Ulrich John Minnaar Thesis Title: *The characterisation and automatic classification of transmission line faults*

Ulrich Minnaar has a BSc in Engineering in Mechatronics from UCT and an MSc in Engineering from the University of the Witwatersrand.

Ulrich Minnaar's focuses on understanding the causes of transmission line faults and developing methods to automatically identify these causes during power system operation. Records of faults on the South African power transmission system over a 16-year period have been analysed to find statistical relationships between local climate, key design parameters of the overhead lines and the main causes of power system faults. The results characterise the performance of the South African transmission system on a probabilistic basis and illustrate differences in fault cause statistics for the summer and winter rainfall areas of

South African transmission system on a probabilistic basis and illustrate differences in fault cause statistics for the summer and winter rainfall areas of South Africa. This lays a foundation for reliability analysis and fault pattern taking recognition environmental features into account. Fault waveforms are characterised by instantaneous symmetrical component analysis to describe the transient and steady state fault conditions. Electrical waveform and environmental features are used to develop single nearest neighbour classifiers to identify the underlying cause of transmission line faults. A classification accuracy of 86% is achieved using a nearest neighbour classifier. The results achieved demonstrate that transmission line faults can be automatically classified according to cause.

Supervisor: Professor CT Gaunt (Electrical Engineering)

Co-supervisor: Dr. F Nicolls (Electrical Engineering)

Paul Kehinde Olulope Thesis Title: *Transient stability* assessment of hybrid distributed generation using computational intelligence approaches

Paul Olulope has a BEng in Electrical and Electronic Engineering from the University of Ado-Ekiti, Ekiti State, and an MEng from the University of Benin, Benin City, Nigeria. Before joining the Department of Electrical Engineering at UCT, he was a lecturer at the University of Ado-Ekiti.

Paul Olulope's thesis examines the effects of renewable energy sources such Solar PV, small hydro power stations and wind generators on the transient stability of a power system. Using Computational Intelligence techniques such as Artificial Neural Networks he is able to improve the analytical method and reduce the computational time required to calculate the critical clearing time of a large power system comprising of hybrid renewable sources. The approach provides a fast assessment of the transient stability and real time monitoring of a power system. His analysis shows that hybrid distributed generation provides improved stability

margins of the power system. In addition, he shows that computational intelligence techniques can deal effectively with large and uncertain data and can provide faster stability margin indexes compared to conventional methods.

Supervisor: A/Professor KA Folly (Electrical Engineering)

In Mechanical Engineering:
*Jean-Paul Victor Pelteret
Thesis Title: A computational neuromuscular model of the human upper
airway with application to the study of
obstructive sleep apnoea

Jean-Paul Pelteret obtained BSc(Eng) and MSc (Eng) degrees, both in Mechanical Engineering, at UCT. His PhD research, in the area of biomechanics, represented a departure from his specialisation at master's level, which had been in fluid dynamics.

Jean-Paul Pelteret's thesis aims at contributing to a better understanding of the pathophysiology of obstructive sleep apnoea, a disorder characterised by intermittent collapse of the airway during sleep. He has developed a detailed model of the soft tissues of the human upper airway, using anatomical data from the Visible Human Project to extract data describing tongue musculature. The model makes provision for the determination of the neural stimulus for each muscle through genetic а algorithm-based neural control model. In addition, a simplified fluid flow model is developed to simulate airflow through the airway. The response of the various muscles of the tongue to the complex loading developed during breathing is found to be physiologically realistic, and has been extended to simulate tongue activity during sleep. The retroglossal movement of the tongue resulting from the pathologies is quantified and their potential to contribute to airway collapse explored.

Supervisor: Professor BD Reddy (Mathematics and Applied Mathematics)

7.FACULTY OF SCIENCE

Dean: Professor AP le Roex

DEGREE OF DOCTOR OF PHILOSOPHY

In Archaeology: Wendy Black

Thesis Title: Dental morphology and variation across Holocene Khoesan people of Southern Africa

Wendy Black graduated cum laude from Unisa with a BA in archaeology. She received her BA(Hons) in Archaeology, and an MA in Rock Art Studies, both from University of the Witwatersrand. At UCT, her interests have broadened to include biological anthropology. She recently took up the post of Curator of Precolonial Archaeology at Iziko South African Museum.

Wendy Black's thesis aims to understand the biological history of indigenous Khoesan peoples of southern Africa. A focus on metric and non-metric variation in the dentition allows for increased sample sizes, particularly in the early Holocene, and provides insight into genetic relationships. Results indicate that the Khoesan phenotype is present early in the Holocene and remains fairly consistent over thousands of years, supporting hypotheses of morphological and genetic continuity in southern Africa across time and space. There is also some evidence for continuity deeper in time between this group and early modern humans (e.g. Klasies River). There is no evidence for gene flow from other regions. In a broader context, these results place the Khoesan dentition at the margins of the range of modern human variation and call into question the fit of this dental map into current sub-Saharan African dental models.

Supervisor: A/Professor R Ackermann (Archaeology)
Co-supervisor: Professor J Sealy (Archaeology)

Siyakha Mguni Title Thesis: *Using the archive to* formulate a chronology of rock art in the south-western Cape, South Africa.

Siyakha Mguni received a BA (Archaeology and Linguistics) from

the University of Zimbabwe and a BA(Hons) in Archaeology from UCT. In 2002 he received his MA with distinction from the University of Witwatersrand. He worked at Bushmans Kloof Reserve and then Wits University while writing his thesis.

Siyakha Mguni's demonstrates the archival capacity of rock art and then uses the archival perspective to analyse several Western Cape sites to build a chronological and interpretative framework for paintings. In this enterprise the notion of datum aided the referencing and correlation of superimposed image categories into sequence. The relative ensuing sequence is a descriptive template reflecting the organic character in the creation, the order of painting phases and cultural continuities and disjunctions. The study also explores an understated image class that is normally eclipsed within broader image classifications. He also partially reviews the changing social and historical landscape to understand relative variation of painting over time. Painting sequences and cultural (dis)continuities are thus intricately entwined and can be disentangled through an analysis of ethnographic and historical sources. This amalgamated approach can produce historicised past narratives and contextual image meanings within a revised chronology framework.

Supervisor: Emeritus Professor J Parkington (Archaeology)

In Applied Mathematics:
*Abdoulkadri Chama
Thesis Title: Three-field mixed finite
element approximations for problems
in elasticity.

Abdoulkadri Chama has a licence from Universite' Abdou Moumouni, Niamey, in the Republic of Niger, a PGDip(MathsSc) from UCT through the African Institute of Mathematical Sciences (AIMS), and an MSc from the University of KwaZulu-Natal.

Abdoulkadri Chama's thesis deals with mixed formulations, which are related to saddle-point variational problems. The context for his work is a three-field mixed formulation for problems in elasticity for which, in addition to the displacement, the stress and strain are treated as additional unknown variables. The focus of his

thesis has been on finite element approximations based on this mixed formulation. Using a previously established theory for uniform convergence in the incompressible limit, he has designed various new families of stable elements. The second contribution of the thesis entails the extension of the linear theory to problems of nonlinear elasticity. The approach taken has been to develop a convergence theory for a linearized version of the problem, of the kind that arises naturally in Newton approximations of the nonlinear problem. Conditions for convergence of the formulation are established. He has in addition presented a number of numerical examples for the linear theory, in which the performance of the new families of elements is illustrated, and second, for problems of nonlinear elasticity in which the linearisation analysed is used to determine the choices of finite element spaces. The numerical examples illustrate the optimal rates of convergence established by the theory.

Supervisor: Professor BD Reddy (Mathematics and Applied Mathematics)

Sean Philip February
Thesis Title: *On the evolution of large-scale structure in a cosmic void.*

Sean February was born and educated in South Africa, receiving his undergraduate degree in Physics from UCT. He then undertook an MSc in Astrophysics also at UCT, as part of the National Astrophysics and Space Science Programme. His doctoral work in Cosmology was funded by a prestigious award from the Square Kilometre Array.

Sean February's thesis concerns mathematically modelling the complex array of structure in the universe using Einstein's General Theory of Relativity. Einstein's theory of gravity is thought to govern the dynamics of the Universe on the largest scales. An unexplored area in the physics of structure formation is the impact of relativistic, non-linear effects, which are challenging to model. He considers the case of a cosmic under-density, both of the type we see scattered throughout the universe, and in the case of a colossal region which can be used to model the dynamics of the universe as a

whole. In doing so, he has pioneered new tests for dark energy, and has written a new code for the calculation of non-linear effects in relativistic structure formation. Such calculations will play an important role in accurately determining the nature of Dark Energy from the next generation of cosmological surveys such as the Square Kilometre Array.

Supervisor: A/Professor C Clackson (Mathematics and Applied Mathematics)

Helena Francine Geromont Thesis Title: *Effective fisheries* management with few data: a management procedure approach.

Helena Geromont holds a Diploma in Graphic Design from the Cape Technical College. She has a BSc with distinction in Applied Mathematics, a first class honours degree and an MSc in Applied Mathematics, with distinction, all from UCT. After many years of research at the University and abroad, she commenced her doctoral studies in 2010.

The first part of Helena Geromont's thesis develops a simple, generic approach for the effective and sustainable management of data-poor fisheries, typified by few data and high levels of uncertainty. The second part focuses on retrospective studies, in which she compares the performances of these simple data-poor algorithms to the complex, data-hungry, assessment-based management approach that is currently adopted for a number of high-value, data-rich fisheries. Her results suggest that this simple generic approach performs almost as well in comparison, and could provide a defensible basis for the provision of scientific management advice for the many data-poor fisheries world-wide.

Supervisor: Emeritus Professor DS Butterworth (Mathematics and Applied Mathematics)

*Asadig Mohammed Mohammed Thesis Title: Some aspects of the mass deformed ABJM theory

Asadig Mohammed has a BSc from the University of Khartoum and an MSc from the International Center for Theoretical Physics (ICTP), Italy. His PhD thesis, in the field of M-theory, arises from trying to understand nature at its most fundamental level.

Asadig Mohammed's thesis began as an attempt to answer the question "What is M-theory?", and aims to develop and refine a matrix-model of the so-called M-theory/ABJM duality. This is the first such attempt at reconciling two completely different descriptions of this 11-dimensional theory of quantum gravity. His research follows this up with a formulation of a completely new and rigorous framework within which to embed the recently discovered AdS/CMT correspondence into a critical string theory. It does so by implementing a consistent abelian truncation of the degrees of freedom of the full theory, a technique invented by Asadig Mohammed. The thesis is a masterful exercise in the breadth and technical depth that the field of string theory encompasses.

Supervisor: Dr J Murugan (Mathematics & Applied Mathematics) Co-supervisor: Dr A Weltman (Matmatics & Applied Mathematics)

In Astronomy: Roger Ianjamasimanana Thesis Title: Interstellar medium properties and star formation in nearby galaxies

Roger Ianjamasimanana has a BSc and honours degree from the University of Antananarivo, Madagascar, and BSc(Hons) and MSc qualifications in Astrophysics from UCT. He has been a member of the Astronomy Department from 2009 to 2014.

Roger Ianjamasimanana's thesis focuses on the dynamics of atomic hydrogen (HI) gas in the disks of nearby, well-resolved galaxies. Using high-quality radio HI observations, the gas velocity dispersions are characterized using a two-component Gaussian model, one consisting of a broad (higher velocities, warmer gas) and the other narrow (low velocity, colder gas) constituents of the interstellar medium (ISM). Separated in this way, the components can be studied with respect to the underlying star formation, and environmental conditions (e.g., metallicity), as well as with the large-scale structural distribution of the stellar backbone and ISM gas

column density. He finds that the gas dynamics are ultimately driven and energized by supernovae explosions, which arise from star formation activity, fueled by the atomic hydrogen, and are fundamental to how galaxies evolve.

Supervisor: Professor TH Jarrett (Astronomy)

(Astronomy)

Co-supervisor: Prof WJG de Blok (Astronomy)

Johannes Paulus Kotze

Thesis Title: Studying the environmental dependence of star formation properties of galaxies in the Abell 1437 galaxy cluster and its surrounding large scale structure

Johannes Paulus (Paul) Kotze obtained a BSc in Physics from the University of Pretoria. In 2004 he continued his studies at UCT, where he received a BSc(Hons) and an MSc in Astrophysics and Space Science, before continuing with his PhD. In the last few years he has actively been involved in the science and technical operations of the Southern African Large Telescope (SALT).

Paul Kotze's thesis focuses on a wide-field study around the nearby galaxy cluster Abell 1437. This involved producing a large catalogue carefully-calibrated multicolour (optical and infrared imaging) and spectroscopic data. This is used to develop a technique for the identification of galaxy groups and clusters surrounding this system. Based on this data set and algorithm he discovers extensive filamentary structure which characterises the large scale structure of this region of the Universe for the first time. This catalogue, together with stellar state-of-the-art population modelling, is used to investigate the star formation properties of galaxies, showing the effect of environment in termination of their star formation activity.

Supervisor: Professor RC Kraan-Korteweg (Astronomy) Co-supervisors: A/Professor PA Woudt (Astronomy); Dr D Gilbank (SAAO); Dr P Vaisanen (SAAO) *Viral Parekh

Thesis Title: Morphological classification and dynamics of X-ray galaxy clusters

Viral Parekh has a BSc and an MSc in Electronics from Pune University in India. His PhD topic emerged from his experience work at the Inter-University Centre for Astronomy and Astrophysics in Pune, India and his interest in the SKA project.

Viral Parekh's thesis involves the investigation of a number of new morphological parameters to classify the dynamical states of galaxy clusters. The project also includes investigating the viability of using the thermodynamic morphology information, which includes electron density, temperature, entropy and pressure maps, to identify substructure. Viral Parekh has analysed the Chandra and XMM-Newton data of over 100 clusters and has classified their dynamical states via the surface brightness morphology parameters. Detailed thermodynamic maps for many of these clusters were derived and analyzed, which facilitated the search for signatures of recent merger activity and correlations with diffuse radio emission (the so called radio halos and relics).

Supervisor: Dr KJ van der Heyden (Astronomy)

In Botany: Mark Digby Cyrus

Thesis Title: The use of ULVA as a feed supplement in the development of an artificial diet and feeding regimes to produce export quality roe from the sea urchin Tripneustes gratilla (Linnaeus)

Mark Cyrus completed a BSc, followed by BSc(Hons) in Botany from UCT, before developing a passion for aquaculture in his PhD studies. He has won a number of student awards for his presentations at scientific conferences.

Mark Cyrus's thesis successfully develops an artificial feed containing Ulva ('sea lettuce') for use in aquaculture of a sea urchin which grows in South Africa but is prized globally as seafood. His research covers effects on consumption, digestibility and growth to optimise the feed

for urchin production and gonad quality. The formulated feed produces high growth rates, and the inclusion of Ulva not only acts as a feeding stimulant, but also significantly improves the colour of the product (the urchin gonad, or roe). This is followed by successful full life-cycle growth trials, and the achievement of a feeding regime which optimises initial somatic growth, followed by rapid production of good quality roe. Further chapters study the use of stable isotope mass spectrometry, which demonstrat the possibility of modelling the relative contribution of specific feed ingredients to gonad production, and a study on the manipulation of daylength aimed at the maintenance of gonads in a non-fertile, and thus edible, state.

Supervisor: Professor JJ Bolton (Biological Sciences)
Co-supervisor: Dr B M Macey (Agriculture, Forestry and Fisheries)

Ignatious Matimati Thesis Title: Functional role of plant water fluxes in nutrient acquisition

After his BSc and MPhil degrees from University of Zimbabwe, Ignatious Matimati completed an MSc at the University of Western Cape. His PhD thesis resulted from dissatisfaction with the prevailing wisdom that plant water loss is mostly an unfortunate consequence of micro-meteorology, rather than an important physiological function.

Ignatious Matimani's thesis tests and confirms the hypothesis that nutrient acquisition is an important function of plant water fluxes, and that water fluxes respond positively to nutrient limitation. Transpiration is thus assigned the function of facilitating nutrient mass-flow towards roots in soil. These water fluxes are modulated by the nutrient fluxes, particularly of nitrogen. which regulates mass-flow of nutrients towards root surfaces. His findings have important consequences for plant ecophysiology, including 1) variations in the importance of nutrient mass-flow with climatic edaphic conditions; trade-offs between mass-flow and root proliferation; 3) suppression mass-flow acquisition of nutrients by

increased atmospheric CO2 concentrations.

Supervisor: A/Professor MD Cramer (Biological Sciences)

Co-supervisor: A/Professor GA Verboom, (Biological Sciences)

In Chemistry:
Melvin Anyasi Ambele
Thesis Title: The role of lipid in
malaria pigment (haemozoin)
formation under biomimetic
conditions

Melvin Ambele has a BSc in Chemistry and MSc in Biochemistry from Buea University in Cameroon.

Melvin Ambele's thesis aims to understand the mechanism of haemozoin (malaria pigment) crystal nucleation. Formation of haemozoin is a crucial pathway by which the malaria parasite avoids haem toxicity while resident in the human red blood cell.

He investigates the proteins and lipids associated with haemozoin extracted from malaria parasites and shows that lipids are exceptionally efficient in mediating rapid formation of haemozoin under biomimetic conditions. He further shows that crystals of haemozoin form on the surface of lipid particles dispersed in aqueous solution. These lipid particles control the size of the crystals and nucleation of crystal growth is shown to occur from one face of the crystal. These findings make a weighty contribution to understanding this important pathway that is known to be blocked by a number of clinical antimalarials, and will aid in the future design of antimalarials.

Supervisor: Professor TJ Egan (Chemistry)

Werner Crous Thesis Title: A simple link atom for saccharide hybrids method: the mammalian ST3Gal-1 siallytransferase case study

Werner Crous has a BSc, BSc(Hons) and MSc in Chemistry from the University of Stellenbosch. He joined the Scientific Computing Research Unit (SCRU) in 2009 as a doctoral student. His PhD research centres on computer code development for

problems in Chemical Biology.

Werner Crous's thesis produces a method that makes it possible to accurately model carbohydrate molecules in enzymatic reactions using multi-scalar computational simulations. A hybrid quantum classical (QM/MM) approach to simulating chemical reactions depends on resolving the boundary between the classically described unreactive molecular surrounds and the reactive molecules embedded inside an enzyme. The reactive molecules require the greater degree of accuracy gained from Quantum Mechanics. Previously, quantum classical boundary methods have been developed for bonds between atoms of the same type, particularly carbon-carbon bonds. However, bonds between oxygen and carbon atoms, that are at the heart of glycobiology (the biology created from carbohydrate molecules), had no algorithmic solution. Werner Crous developes a method to treat the quantum classical boundary between oxygen and carbon atoms that lie at the divide between the reactive end of a carbohydrate molecule and the non-reactive end. Using this method he is able to accurately simulate for the first time the catalytic mechanism of a key enzyme ST3Gal-1 siallytransferase used in the development of anti breast cancer drugs.

Supervisor: Professor Kevin J Naidoo (Chemistry)

Preshendren Govender

Thesis Title: The development of new bioorganometallic metallodendrimers as in vitro anticancer agents

Preshendren Govender has a BSc and BSc(Hons) in Chemistry from UCT. In 2010, he obtained an MSc degree in Chemistry with distinction and received a UCT Research Associateship Award in 2013 in recognition of his contribution to research at the university.

Preshendren Govender's thesis in the field of Organometallic / Bioorganometallic Chemistry investigates conjugating metal-based antitumor agents onto dendrimers, affording novel metallodendrimers to circumvent the limitations of current anticancer therapies, such as drug resistance and toxicity. Two series of rutheniumand

osmium-arene metallodendrimers, and heterometallic ferrocenyl-derived metallodendrimers were developed and their in vitro antitumor activity evaluated against human ovarian cancer and embryonic kidney cells. These metallodendrimers demonstrate moderate to high nanomolar cytotoxicity (in selected cases, superior to the clinical metal-based anticancer drug, cisplatin), with lower toxicity towards healthy cells and no cross-resistance with cisplatin observed. This strategy to use multivalent metallodendrimers as drug delivery vectors to target tumors specifically, results in increased interactions between the dendrimer-drug conjugate and biological targets bearing multiple receptors, which ultimately results in superior activity. In addition, metallodendrimers bearing photoactivatable CO-releasing moieties were prepared, affording new ways for the delivery of carbon monoxide to cellular systems, in an effort to target the disease.

Supervisor: A/Professor GS Smith (Chemistry)

David Kuter

Thesis title: Probing the structure and solvation of ferrihaem and its chloro-quine complex in aqueous solution: An experimental and computational approach

David Kuter has BSc and MSc degrees in Chemistry from UCT. In 2010, he began full-time study towards a PhD at the University.

David Kuter's thesis investigates the interaction of the antimalarial chloroquine with iron(III)protoporphyrin IX (ferrihaem), its target in the malaria parasite. He has used a battery of experimental and computational methods to investigate this molecular interaction. Based on these findings, he has proposed a new model of the chloroquine-ferrihaem complex. This involves the docking of chloroquine between two ferrihaem molecules linked by an oxide bridge. The model is able to explain many observed structure-activity relationships in this class of antimalarial. These findings are expected to aid in understanding the behaviour of novel antimalarials with similar modes of action and may be useful in future rational design of such compounds.

Supervisor: Professor TJ Egan (Chemistry)

Co-supervisor: Professor K J Naidoo (Scientific Computing Research Unit, Chemistry)

*Peggoty Chepkoech Mutai

Thesis Title: The medicinal chemistry progression of phytochemicals from Dalbergia melanoxylon as potential antimycobacterial and antitumor agents

Peggoty Mutai has a Bachelor of Pharmacy and a Master of Pharmacy from the University of Nairobi, where she is also an academic member of staff. She was funded by the USHEPiA programme, which allowed her to carry out part of her studies at the University of Nairobi.

Peggoty Mutai's thesis aims investigate the potential of compounds obtained from a plant native to Africa as potential drug candidates. This is based on the fact that mankind has depended on plants as a source of medicines from time immemorial. Peggoty Mutai isolates compounds from Dalbergia melanoxylon and modifies them through synthetic chemistry to improve their pharmacological activity and drug-like properties. Her work results in synthetic compounds with potent activity against lung and colon tumor cells and other compounds with activity against Mycobacterium tuberculosis, causative agent of tuberculosis. Peggoty Mutai's work has contributed significantly to drug discovery by providing vital information that will be used as the basis for further research.

Supervisor: Professor K Chibale, (Chemistry) Co-supervisors: A/Professor A Yenesew, A/Professor G. Thoithi, (UON) *Dennis Sure Bagwasi Ongarora Thesis title: Antimalarial drug rescue through safety improvement: design, synthesis and evaluation of amodiaquine analogues

Dennis Ongarora holds BPharm and MPharm degrees, both from the University of Nairobi.

Dennis Ongarora's doctoral research aims to design and synthesize analogues of the antimalarial drug amodiaguine that potentially circumvent its bioactivation to the quinone and aldehyde metabolites responsible for its toxicity following chronic use. The analogues are also designed to maintain efficacy against both drug sensitive and resistant Plasmodium falciparum strains. Towards this aim, Dennis Ongarora reports the synthesis and evaluation of four different chemical series of amodiaquine analogues for their potential to form reactive metabolites. Based on this evaluation, he selects the benzoxazole series for further exploration and comes up with several analogues that have potent antiplasmodial activity in vitro and reasonable metabolic stability. He carries out a limited mechanistic investigation on the amodiaquine analogues and finds them to partly act like amodiaguine. Cytotoxicity testing reveals that these compounds are highly selective for the malaria parasite over normal mammalian cells. Three of these analogues are found to cure Plasmodium-berghei-infected mice when administered orally. Dennis Ongarora's findings demonstrate the potential of the benzoxazole amodiaquine analogues to serve as useful lead compounds for further development as antimalarial drug candidates.

Supervisor: Professor K Chibale (Chemistry)
Co-supervisor: Dr C Masimirembwa (African Institute of Biomedical Science and Technology, Harare, Zimbabwe & Division of Pharmacology, UCT)

Tameryn Stringer
Thesis Title: Development of
quinoline and non-quinoline based
organometallic complexes
and their ligands conjugated to
polyamine scaffolds as
pharmacological agents

Tameryn Stringer has a BSc(Hons) and MSc in Chemistry from UCT. In 2011, she commenced her doctoral work and in 2013 received a UCT Research Associateship award in recognition of her contribution to research.

Tameryn Stringer's thesis investigates the development of new quinoline and non-quinoline compounds as potential antiplasmodial agents. Various polyamines were used to synthesise mono- and multimeric systems. It was found that compounds possessing the quinoline motif exhibit enhanced antiplasmodial compared to those without it. Antiplasmodial data obtained for mono- and dinuclear rhodium(I) complexes are comparable to their corresponding quinoline ligands. The dinuclear complexes display enhanced activity against chloroquine-resistant strains of Plasmodium falciparum compared to chloroquine-sensitive. All compounds were tested for their ability to inhibit Trichomonas vaginalis growth, the causative agent of trichomoniasis. Α ferrocene-containing quinoline exhibits enhanced activity against this parasite, compared to compounds that do not possess the quinoline motif. The research demonstrates that incorporation of bioactive moieties onto polyamines may be a viable approach for the development of compounds that may be able to overcome chloroquine-resistance. It is conceivable that Tameryn Stringer's research could lead to the development of new compounds that could be used as antiparasitic agents.

Supervisor: A/Professor GS Smith (Chemistry)
Co-supervisor: Professor TJ Egan (Chemistry)

Nicola Mary Wheat Thesis Title: An ethnobotanical, phytochemical and metabolomics investigation of plants from the Paulshoek Communal Area, Namaqualand

Nicola Wheat completed obtained her BSc, BSc(Hons) and MSc degrees in Botany at UCT. Her growing interest in interdisciplinary research led her to undertaking PhD studies in an area which would combine ethnobotanical and molecular insights in the investigation of plants and their uses.

Nicola Wheat's thesis documents outcomes of her interactions with members of the community of Paulshoek, combined with her own field observations of the flora and a critical evaluation of the work of a succession of scientists in the region, which allowed selection of 102 distinct plant species for further study. Extracts prepared from these plants were assayed for a range of biological activiincluding antibacterial anti-helminthic activity. The extracts were also subjected to metabolic profiling using HPLC-MS and 2D NMR spectroscopy, with appropriate bio-informatics methods used analyse the extensive data sets. This narrowed the focus to just five active plant extracts and their major metabolites, with good correlation between analytical data and reported plant use. The demonstration that the entire analysis can be carried out on very small samples of plant material confirms the potential of this approach for environmentally and ecologically sensitive research on medicinal plants.

Supervisor: A/Prof David W Gammon (Chemistry)
Co-supervisors: Prof T Hoffman (Biological Sciences), Prof K Chibale (Chemistry)

In Conservation Biology:
*Potiphar Menaheim Kaliba
Thesis Title: Faunal turnover between
east and southern African terrestrial
vertebrates: is Malawi the geographical break?

Potiphar Kaliba has a BSc from the University of Malawi and an MSc in Conservation Biology from UCT. His PhD thesis emerged as a result of collaborative research between Museums of Malawi and Field Museum of Natural History (Chicago, USA) on the distribution and genetic relationships of birds of Malawi in relation to other eastern and southern Africa geographical zones.

Potiphar Kaliba's thesis aims to develop a theory that The Malawi Rift is important as it acts as the crossroads between eastern and southern African evolutionary lineages. Many east African species reach their southern-most limits in northern Malawi, whereas many species typical of

southern Africa reach their northern limit in the southern half of the Malawi Rift. This prospect for lineage turnover makes the Malawi Rift important to sample for biogeographic studies. The rift depression is occupied by Lake Malawi, forming a physical barrier to the east, and to the west highlands rise to almost 3000 m a.s.l. The rift falls within the Zambezian ecozone vegetation. The climate of the Malawi Rift is tropical with maritime influences from the Mozambique Channel. It is also influenced by Lake Malawi.

Supervisor: Professor TM Crowe (Biological Sciences)
Co-supervisor: Professor RCK Bowie (Ornithology, University of California at Berkeley, USA)

In Environmental & Geographical Science:
Tyrel James Flügel
Thesis Title: The evolution of the
Congo - Kalahari watershed: African
mega - geomorphology

Tyrel Flügel has a BSc(Hons) from the University of Kwazulu-Natal. He upgraded his MSc research to a PhD as his focus shifted from river knickpoints to sub-continental scale geomorphology.

Tyrel Flügel's thesis maps the longitudinal profiles of rivers forming the Congo-Kalahari Watershed using both geographic information system and satellite imagery. The Congo -Kalahari Watershed is a sub-continental drainage divide that separates two of the world's large rivers: the Congo and Zambezi Rivers form a major geomorphic and biologic boundary between southern and central Africa. Tyrel Flügel finds that the smooth central region of the divide is the oldest and has been relatively stable since the break-up of Gondwana. In comparison the western region is topographically rougher and has undergone substantial change in the Cenozoic becoming bifurcated by the headwater erosion of the coastal rivers. The eastern watershed is the youngest and topographically roughest, having been substantially modified in the Neogene due to tectonic activity associated with the recent extension of East African Rift. Recognizing three distinct landscapes allows for a better interpretations of Africa's present day continental geomorphology.

Supervisor: Dr FD Eckardt (Environmental and Geographical Science)
Co-supervisor: Dr FPD Cotterill
(Botany and Zoology, University of Stellenbosch)

Kelly Louise Kirsten-Sardinha Thesis Title: Late Holocene diatom community responses to climate variability along the southern Cape coastal plain, South Africa

Kelly Kirsten-Sardinha completed her undergraduate and honours qualifications at UCT and for her MSc utilised a range of palaeoenvironmental proxies on lake sediments from Groenvlei, near Kynsna.

Kelly Kirsten's doctoral research further develops the use of diatoms - algae with silicate frustules that preserve well in certain lacustrine conditions - to explore long-term changes in water chemistry and catchment conditions in coastal lake systems. In conjunction with several geochemical characteristics of the sediments, a high resolution record is revealed of environmental dynamics in the Wilderness lakes and Princess Vlei. At Wilderness, changes are driven largely by salinity dynamics, which are in turn a response to sea level and climatic fluctuations, in particular those related to the dynamics of moisture availability. The Princess Vlei system, on the other hand, is governed mainly by changes in nutrient supply and turbidity. Moisture availability emerges as the primary controlling factor over the late Holocene environment along the southern coastal plain, with shifts between wet and dry periods occurring rapidly at times. Notable excursions in precipitation coincide with global climatic phenomena, including the Medieval Warm Period and the Little Ice Age.

Supervisor: Professor Michael E Meadows (Environmental & Geographical Science)

Ndidzulafhi Innocent Sinthumule Thesis Title: Land use change and bordering in the Greater Mapungubwe Transfrontier Conservation Area

Ndidzulafhi Sinthumule has a Masters of Environmental Science from the University of Venda. The topic of his PhD thesis emerges from his interest in teaching ecology and resource management at the University of Venda, and from his experience at the Southern African Wildlife College in 2003.

Ndidzulafhi Sinthumule's thesis was motivated by the need to test the claims that transfrontier conservaareas enhance biodiversity tion economic management, promote development and improve the livelihoods of local communities. His thesis pays attention to the changes in land use and ownership as a necessary condition for constructing Mapungubwe as a bioregion. Ndidzulafhi Sinthumule adopts an interpretive approach which allows for understanding the process by which changes in land use for conservation purposes become a highly contested terrain. In his thesis he argues that current scholarship on transfrontier conservation areas has a narrow methodological focus that limits our understanding of the transboundary nature of conservation areas. Research on transfrontier conservation areas demands innovative methodologies that probe the entire process on both sides of the international border, and that provides avenues for gaining insights into the similarities and differences that bioregionalism creates on its wake, and the environmental (in)justice it engenders.

Supervisor: A/Professor M Ramutsindela (Environmental and Geographical Science)

Kathryn Jessica Vickery Thesis Title: *The nature of pan* sediments: A case study on dust supply from the Makgadikgadi Pans, Botswana

Kathryn Vickery has a BSc, BSc(Hons) and MSc from UCT. Her doctoral thesis was developed through the Dust Observation for Climate Models (DO4) project hosted by Oxford University.

Kathryn Vickery's field work for her thesis emerged from UCT's involvement in long-term monitoring the Makgadikgadi Pans. The importance of dust in atmospheric and terrestrial systems, sourced from a number of discreet surface types, including large, ephemeral pans, has been well considered, although surface conditions remain poorly constrained.

Kathryn Vickery's thesis determines the chemical and morphological nature of Makgadikgadi pan sediments, which contributes to our understanding of salt pans and their role in dust production. The thesis also develops methodologies for analysing soluble sediments, which contribute to the emissive potential of the pan surfaces. These results are further set within a seven year synoptic and climatic study considering meso scale controls on the pan system. The value in Kathryn Vickery's study is in the mineralogical and morphological quantification of Makgadikgadi sediments and the potential to include such results into climate models and inform future biogeochemical studies on the effects of transport from the region.

Supervisor: Dr FD Eckardt (Environmental and Geographical Science)

In Geology: Hayley Candice Cawthra Thesis Title: The marine geology of Mossel Bay, South Africa

Hayley Cawthra has BSc(Hons) and MSc degrees in Geology from the University of KwaZulu-Natal. The focus of her doctoral research at UCT was the offshore geology of Mossel Bay.

Haley Cawthra's thesis uses a series of geophysical techniques, along with scuba diving, to document the marine geology offshore of Mossel Bay. Her work provides detailed maps of the seafloor, the types of sediment and rock exposed on the seabed as well as seismic profiles of the subsurface. She dates the rocks using Optically Stimulated Luminescence (OSL). From these data she is able to work out the complex evolution of the terrestrial landscape now submerged by high sea levels offshore of Mossel Bay. She documents a total of nine discrete depositional sequences, and describes major offshore geomorphic features, as submerged sea palaeo-coastal zones and fluvial systems. The offshore geology reflects ancient geological events and the deposition of beach and dune deposits related to large-amplitude fluctuations in sea level over the last one million years. The geological deposits on the emergent shelf indicate a periodic

expansion of the southern coastal plain including low-gradient meandering rivers and wetland lakes. These extensive wetland environments provided a rich source of diverse food types, which, along with abundant intertidal marine resources, made it an ideal habitat for our ancestors.

Supervisor: A/Professor JS Compton (Geological Sciences)

Charles Kasanzu
Thesis title: Dating the uplift and
cooling histories of the Archaean
Tanzania Craton, eastern
Africa: using a combination of apatite
fission track and (U-Th)/He thermochronometric techniques

Charles Kasanzu obtained his BSc and MSc degrees from the University of Dar es Salaam, Tanzania. Thereafter, he was employed as an assistant lecturer at the Sokoine University of Agriculture of Morogoro, Tanzania, and subsequently joined UCT as a PhD student.

Charles Kasanzu's doctoral research focuses on the underlying geological causes of continental erosion and landscape evolution, with particular focus on the Tanzanian rift valleys and associated high altitude plateaus. The cooling and exhumation history of the ancient crust of Tanzania has been studied using apatite fission track and (U-Th)/He thermochronometry data measured on rock samples collected from drill core and surface exposures. All ages obtained from the samples predictably record some level of open system behavior, since they were formed in the Precambrian. The age patterns record two periods of accelerated exhumation in the Ordovician – Triassic (460 – 250 million years before present) and Cretaceous -Tertiary (100 - 30 million years before)present). These increased erosion rates have been interpreted to reflect a combination of processes that operated for geologically short periods. The earlier event involved mountain building by continental collision, glacial action and associated isostatic rebound, while the second was caused by continental breakup and reorganization of the crustal plates.

Supervisor: Professor DL Reid (Geological Sciences) Co-supervisor: Dr M de Wit (Geological Sciences) In Molecular & Cell Biology: Rosemary Lauren Meggersee Thesis Title: Metronidazole resistance in clinical Bacteroides fragilis isolates from Groote Schuur Hospital, Cape Town, South Africa

Rosemary Meggersee completed both her undergraduate and postgraduate degrees in the Department of Molecular and Cell Biology at UCT.

Rosemary Meggersee's thesis focuses on investigating the antibiotic resistance mechanisms in clinical isolates of the anaerobic opportunistic pathogen, Bacteroides fragilis, found in patients at Groote Schuur Hospital. Her findings show that many of the bacteria have genetic changes which allow them to survive treatment with a range of antibiotics. Two of the isolates are highly resistant to metronidazole, the drug usually used to treat these serious infections, but the bacteria do not demonstrate any of the known metronidazole resistance mechanisms. In her research, Rosemary Meggersee identifies a novel gene which may be responsible for the drug resistance. It produces a protein that can potentially degrade metronidazole and that makes Escherichia coli, a related bacterium, more resistant to the drug. The thesis provides a clearer understanding of the antibiotic resistance characteristics of Bacteroides fragilis isolates in Groote Schuur Hospital, and provides information on a novel mechanism of metronidazole resistance in this bacterium, thus pointing the way towards the development of more effective treatment.

Supervisor: A/Professor V R Abratt (Molecular and Cell Biology)

Natashia Muna

Thesis Title: Sociogenetic investigation of the southern harvester termite, Microhodotermes viator, via genetic and behavioural bioassays

Natashia Muna completed her BSc at UCT and her honours degree (cum laude) from Stellenbosch University, where she worked on the behaviour and communication of the ant, Crematogaster peringueyi. She returned to UCT and received an MSc for her molecular work on the ant, Camponotus klugii.

Natashia Muna's thesis maintains her focus on eusocial insects, working on the southern harvester

termite, Microhodotermes viator that is endemic to South Africa. As part of her doctoral research, she develops the first microsatellite library for M. viator, which she uses to elucidate the genetic structure within and between 12 discrete colonies, from four areas across the Western Cape. In addition to genetic structuring, the behavioural interactions between colonies are explored, using aggression assays. The genetic data indicate moderate to strong differentiation between all colonies, with higher than average relatedness within geographic areas, cumulatively suggesting mild population viscosity and genetic structuring at a local scale. In addition, M. viator has a higher propensity for mixed-family colonies than other termite species. This is supported by the fact that although capable of discriminating between nestmates and non-nestmates, as a species M. viator is only mildly aggressive.

Supervisor: Dr C O'Ryan (Molecular and Cell Biology)

In Physical Oceanography:
*Yonss Jean Saranga José
Thesis Title: Mesoscale structuring of
the pelagic ecosystem in the
Mozambique Channel: a modelling
approach

Yonss José was born in Mozambique. She has a BSc Honours from the University of Eduardo Mondlane (Mozambique) and an MSc from the University of the Mediterranean (France), graduating top of her class for both degrees. Her PhD forms part of a collaborative research programme involving South African and French scientists.

Yonss José's thesis aims to quantify the roles played by large (tens to hundreds of km), rotating bodies of water in influencing biological production in the Mozambique Channel. She uses computer models to create a virtual reality, representing the ocean between Africa and Madagascar. Using the computer models, a series of experiments were carried out. By manipulating computer code, she was able to remove aspects of the motion of the eddies in her virtual ocean, determining how these eddies influence temperature, salinity and nutrient concentrations from the sea surface to the seabed. In turn, the physical and

chemical factors in the virtual ocean affect plant and animal production, and these effects were investigated and quantified. Her results extend theoretical understanding of the dynamics of ocean **eddies**, showing how interactions between deep and shallow waters can substantially alter transport within and near the eddies.

Supervisor: Professor FA Shillington (Oceanography)
Co-supervisors: Dr O Aumont (French IRD), Dr E. Machu (IRD), Dr O Maury (IRD and Oceanography),
A/Professor CL Moloney (Biological Sciences), Dr P Penven (IRD)

Brett Kuyper

Thesis Title: An investigation into the source and distribution of bromoform in the southern African and Southern Ocean marine boundary layer

Brett Kuyper obtained BSc and BSc(Hons) degrees at UCT. He then commenced his postgraduate research with an MSc, and subsequently upgraded to a PhD.

Brett Kuyper's PhD thesis describes the development and application of a system and method to quantify atmospheric bromoform at Cape Point. Bromoform is a climatically important trace gas that catalytically destroys ozone and may lead to negative climate change feedbacks. This gas is critically under-sampled in the southern African region. His thesis further examines some of the mechanisms governing the variability of the concentration of bromoform in the atmosphere at Cape Point. The concentrations at Cape Point appear to be generally elevated compared to previous studies and driven by the local kelp beds. Additional work relating to the production mechanism of bromoform in phytoplankton under nutrient limitation was done. The species of phytoplankton examined did not produce bromoform, suggesting that alternate anti-oxidant pathways are used.

Supervisor: Professor CJC Reason (Oceanography)
Co-supervisors: Dr. HN Waldron (Oceanography), Dr CJ Palmer (Oceanography), Mr C Labuschagne (South African Weather Service)

*Benjamin Loveday

Thesis Title: Modelling wind-driven inter-ocean exchange in the greater Agulhas using the Regional Ocean Modelling System.

Benjamin Loveday has BSc and MSc degrees in Physics from the University of Durham and an MSc degree in Oceanography from the University of Southampton. His PhD research arose from the multi-member European Union "Gateways" programme, designed to investigate potential configurations of the greater Agulhas system on palaeo-climatic timescales.

Benjamin Loveday's thesis aims to quantify the response of the greater Agulhas system to imposed changes in the Indian Ocean winds, providing a framework under which palaeo-oceanographic data may be interpreted. Western boundary transport, inter-ocean exchange and eddy variability and trajectories are all assessed using a newly developed high-resolution regional ocean model, which is analysed under a wide range of wind conditions. The research advances our understanding of the greater Agulhas system, breaking a number of pre-existing climate paradigms and providing new insights into Agulhas leakage structure, the link between inter-ocean flux and western boundary transport, and the various roles of the Antarctic Circumpolar Current and Subtropical Front.

Through extensive local and international collaboration, the ocean model developed is applied to a number of additional applications, including; tropical cyclone genesis, biological connectivity in the Indian Ocean and the climatic link between the temperature of the Agulhas Current and Madagascan coral records.

Supervisor: Professor C Reason (Oceanography) Co supervisor: Professor P Penven (Oceanography)

Majuto Clement Manyilizu Thesis Title: Simulation of variability in the tropical western Indian Ocean

Majuto Manyilizu is a graduate from the University of Dar es Salaam and worked at the Institute of Marine Sciences in Zanzibar before coming to UCT to read for the MSc in Applied Marine Science. He was then appointed as a lecturer at the University of Dodoma and did his PhD in Oceanography at UCT on a part-time basis

thesis The investigates variability in the circulation and properties of the western tropical Indian Ocean. Both seasonal and interannual time scales are considered and the relative roles of local and remote forcing are examined through a suite of numerical experiments using the Regional Ocean Modeling System (ROMS). At the annual scale, the East Madagascar Current advects relatively warm and fresh waters from the north of Madagascar towards the Tanzanian shelf and interrupts the upwelled water from the Seychelles-Chagos thermocline ridge. At interannual timescales, the variability is stronger offshore than on the shelf. Local surface heat flux exchanges, mainly driven by changes in shortwave radiation, are largely responsible for the variability in the Tanzanian shelf waters with some contribution by advection of heat anomalies by the North East Madagascar Current. Offshore, local Ekman pumping together with remote forcing by ENSO and the Indian Ocean Dipole mainly drives the variability.

Supervisor: Professor CJC Reason, (Oceanography) Co-supervisor: Dr P Penven (IRD), Dr F Dufois (CSIRO)

Mark William Matthews Thesis Title: *Distinguishing cyanobecteria from algae using bio-optical remote sensing*

Mark Matthews has a BSc(Hons) and an MSc from UCT. His doctoral research includes the use of satellite remote sensing of ocean colour in the ocean and inland waters, as well as the deployment of in situ bio-optical sensors

Mark Matthews' thesis advances the use of satellite remote sensing for cyanobacterial bloom detection and tests the hypothesis that prokaryotic cyanobacteria can be systematically differentiated from algae (or eukaryote species) on the basis of distinctive bio-optical features, using remote sensing techniques. He uses both simple empirical and advanced algorithms based on novel bio-optical data sets

from three optically diverse South African inland water bodies collected between 2010 and 2012 to test the above hypothesis. He characterises the optical absorption characteristics of the water constituents of these water bodies in detail. To achieve this, he uses a two-layered sphere model and in situ field measurements to simulate how internal gas vacuoles might affect the optical properties of the cyanobacterium Microcystis aeruginosa. His results demonstrate that internal gas vacuoles are bio-optically distinctive features of cyanobacteria causing enhanced backscattering. Finally, he uses his models to examine the occurrence and severity of eutrophication for the 50 largest reservoirs in South Africa.

Supervisor: Professor FA Shillington (Oceanography)
Co-supervisor: Dr S Bernard (CSIR Earth Observation)

In Physics:
Sebastian Bodenstein
Thesis Title: Precision determination
of QCD fundamental parameters from
sum rules

Sebastian Bodenstein has BSc, BSc(Hons), and MSc degrees from UCT.

Sebastian Bodenstein's doctoral work deals with precision determinations of the fundamental parameters of Quantum Chromodynamics, the current theory of the strong interactions among quarks and gluons. These elementary particles are the building blocks of protons and neutrons that combine to form the nuclei of all atoms, which in turn combine to form molecules, out of which the rest of matter emerges.

Quarks and gluons are permainside nently confined protons, neutrons and other hadrons, thus implying that their properties cannot be measured directly. Instead, a combination of theoretical and experimental input is required. Sebastian Bodenstein's thesis provides the currently most accurate values of the masses of the light and heavy quarks, and also deals with other fundamental issues, such as the magnetic moment of the muon, and the value of the electric charge of the electron which impacts on the mass of the Higgs particle.

Supervisor: Professor CA Dominguez (Physics)
Co-supervisor: Dr WA Horowitz (Physics)

Emmanuel Ohieku Jonah Thesis Title: *The topology and electrical properties of nanoparticle networks*

Emmanuel Ohieku Jonah obtained a BSc(Hons) degree from Ahmadu Bello University, Zaria in Nigeria, followed by a postgraduate diploma at the African Institute for Mathematical Sciences, South Africa. He further completed an MSc degree in the Nano-Sciences Innovation Centre in the Department of Physics at UCT.

Emmanuel Ohieku Jonah's thesis provides an insight in understanding the topology of silicon nanoparticle aggregates and how it relates to the bulk electrical properties of the layers. By using a careful analysis of X-ray scattering properties of the nanoparticle networks, he establishes that the topology of the rough surface of the nanoparticle layers is consistent with the topology of the nanoparticles in the layer. Using laboratory and synchrotron based Ultra-Small angle X-ray scattering techniques; he shows that a new model originally developed to describe branched polymers is also applicable in the description of the networks of silicon nanoparticles. Emmanuel Ohieku Jonah's thesis also presents a novel X-ray scattering technique described as wide angle low q, which is designed to study the topology of very rough surfaces of layers of nanoparticles. The approach and techniques presented by him for the study of silicon nanoparticles are further applicable when describing the electronic behaviour of a wide range of other conducting and semiconducting nanoparticles in relation to their fractal properties.

Supervisor: Professor DT Britton (Physics)

Co-supervisor: Professor M Härting

(Physics)

In Tertiary Physics Education:
John Edward Fearon
Thesis Title: Strategies adopted by
undergraduate physics students when
modelling solutions to hands-on tasks.

John Fearon completed a Technician's Diploma (T4) in 1974, obtained an Electrical Engineer's Certificate of Competency in 1985, and after a career in industry, enrolled at UCT to obtain a BSc and an MSc. He is presently a Principal Scientific Officer at UCT.

John Fearon's thesis develops a theory on the students' engagement with enquiry-based laboratory tasks. This study advances on two fronts: firstly on the use of problems that require the application of both theory and data (derived from direct observation), and secondly, in providing evidence for the actual strategies adopted. The study appeals to a particular view of physics, where the model takes on a mediating role between physics theory and measurement in the real world. Models in physics take different forms and the appropriate translation between these forms has been shown to be a prerequisite for the understanding of the relevant physics. Students of physics thus need to develop their abilities to use these representational forms, and from this study a taxonomy of students' application of modelling strategies has emerged which may be used in designing tasks which focus on model-building, rather than on the mere production of an answer.

Supervisor: Professor A Buffler (Physics)

Co-supervisor: Professor FE Lubben (University of York, UK)

In Zoology:

*Lulu Tunu Kaaya

Thesis Title: Biological assessment of tropical riverine systems using aquatic macroinvertebrates in Tanzania, East Africa

Lulu Kaaya received a BSc and an MSc in Aquatic Science and Microbiology from the University of Dar Es Salaam, Tanzania. She is currently employed in the Department of Aquatic Sciences and Fisheries at the University of Dar Es Salaam, with leave granted to pursue her PhD studies at UCT.

Lulu Kaaya's PhD study is designed to modify a current South

African bioassessment method for use in tropical East Africa, particularly Tanzania. This method uses aquatic invertebrates to evaluate the condition and state of water quality in rivers. In order to provide a robust and legally acceptable technique that can be applied throughout the country (and, ultimately, further afield in the Afrotropical region), Lulu Kaaya develops a typology of Tanzanian rivers. In collecting environmental and biological data at over 100 sites, during both dry and wet seasons, in several different ecoregions, varying from near-pristine to heavily impacted, she is able to quantify environmental conditions and invertebrate assemblages over the widest possible array of sites. From these data she identifies reference sites as benchmarks, against which the degree of impairment of impacted sites can be measured. As well as providing the basis for a technique for evaluating the state of Tanzania's rivers, these results represent the first detailed, systematically collected, quantitative analysis of riverine invertebrates in the region.

Supervisor: A/Professor J Day (Biological Sciences) Co-supervisor: Dr H Dallas (Biological Sciences)

Alison Ann Kock Thesis Title: Behavioural ecology of white sharks (Carcharodon carcharias) in False Bay, South Africa: Towards improved management and conservation of a threatened apex predator

Alison Kock obtained her BSc(Hons) from UCT and upgraded her Masters to a PhD in 2005. She completed her PhD whilst in the full time employment of the City of Cape Town's acclaimed Shark Spotters Program.

Alison Kock's thesis aims to understand the movement patterns and feeding behaviour of white sharks (Carcharodon carcharias) - a globally threatened apex predator. Using a combination of acoustic tracking technology and boat-based observations; she succeeds in identifying False Bay as a globally important aggregation site for both male and female sub-adult and juvenile white sharks. Her thesis provides the first evidence of marked seasonal segregation of the sexes within coastal waters.

While both sexes aggregate at Seal Island in winter to feed on naïve young seals, only the females then move to the inshore region during the spring and summer months. There is thus a high spatial overlap between human recreational users and female sharks in the warmer months of the year. Despite this sharing of the surf zone, incidents between sharks and recreational beach users are extremely rare, which bodes well for a management framework that allows co-existence between this top predator and people in False Bay. This is the first doctoral thesis on white sharks in Africa and adds substantially to our knowledge of global white shark ecology and conservation challenges.

Supervisor: Professor MJ O'Riain (Biological Sciences)
Co-supervisors: Emeritus Professor CL Griffiths (Biological Sciences); Ms K Mauff (Statistical Sciences)

Tshifhiwa Gift Mandiwana-Neudani Thesis Title: *Taxonomy, phylogeny* and biogeography of francolins ('Francolinus' species) Aves: Order Galliformes - Family Phasianidae

Tshifhiwa Mandiwana-Neudani has BA and BSc(Hons) degrees in Biology from the University of Venda, and an MSc degree in Systematic Biology from the University of Cape Town. She has studied at UCT (Department of Biological Sciences, Percy FitzPatrick Institute of African Ornithology) since 2004.

Tshifhiwa Mandiwana-Neudani's thesis on the taxonomy of gamebirds (particularly francolins and spurfowls) also investigates their evolutionary relationships, distribution patterns and the processes that shaped them. Using both qualitative genetic and quantitative organismal data, she demonstrates that francolins and spurfowls do not share the same evolutionary path. The Crested Francolin, a putative taxonomic 'link' species between francolins and spurfowls, is related to two of the unplaced Asian francolin species - Grey Francolin and Swamp Francolin. Additionally, the structure of the syringes (voice box) and vocalizations supports the francolin-spurfowl dichotomy hypothesis. Another important discovery is that the phylogenetically unplaced enigmatic species, Nahan's Francolin, is not a

francolin, but is sister to the African Stone Partridge. This African 'duo' is phylogenetically related to the New World quails (Odontophoridae). Francolins and spurfowls appear to have Asian, not African origins.

Supervisor: Professor TM Crowe (Biological Sciences, Percy FitzPatrick Institute)
Co-supervisor: Professor RCK Bowie (Museum of Vertebrate Zoology and Integrative Biology, University of

California, Berkeley, USA)

Neil Midlane

Thesis Title: *The conservation status* and dynamics of a protected African lion Panthera leo population in Kafue National Park, Zambia

Neil Midlane has an honours degree in Accounting and an MPhil in Environmental Management from the University of Stellenbosch.

Neil Midlane's thesis is based on three years of fieldwork, surveying and monitoring the lion population in Kafue National Park, Zambia. Lions are threatened through much of Africa, and, having lost more than 80% of their historic range, the future of the species will rely heavily on viable populations inhabiting large protected areas. However, the status of, and threats faced by, these populations are often not well understood. As one of Africa's largest protected areas, Zambia's Kafue National Park is an example of such a potential lion stronghold, yet, prior to Neil Midlane's work, no data existed on the park's lion population. He identifies the key drivers of lion distribution in the park, produces the first empirical estimate of its lion population, investigates the spatial ecology of the species in a seasonally inundated system and, based on his results, presents a suite of recommendations to management to improve the conservation status of the species in Kafue.

Supervisor: Professor J O'Riain (Biological Sciences) Co-supervisor: Dr L Hunter (Biological Sciences), Dr G Balme (Biological Sciences) Vere Ross-Gillespie

Thesis Title: Effects of water temperature on life-history traits of selected South African aquatic insects

Vere Ross-Gillespie completed his undergraduate degree at UCT. His upgraded PhD thesis, emerged as a result of his work for the Water Research Commission of South Africa.

Vere Ross-Gillespie's thesis aims to address the general lack of life-history data for aquatic insects in South Africa, as well as some of the fundamental questions and challenges that arise from attempting to incorporate thermal guidelines into Ecological Reserve/environmental flow assessments within a data-deprived country. He achieves this by testing the overarching hypothesis that while the life-history traits of aquatic insects could be constrained to some degree by their evolutionary history, they would also be impacted by thermal and hydrological regimes, inducing a degree of plasticity in their life cycles. By combining field work, manipulated growth experiments in the laboratory, as well as molecular analyses, the key life-history traits of three representative taxa of aquatic insect are shown to reflect both evolutionary constraints and phenotypic plasticity. The end result is a practical template for the collection, analysis and interpretation of data that allow for the incorporation of thermal guidelines into environmental flows, as well as for future climate change modelling scenarios.

Supervisor: A/Professor M Picker (Biological Sciences)
Co-supervisors: Dr H Dallas (Biological Sciences), Emeritus A/Professor J Day (Biological Sciences)

FACULTY OF COMMERCE GRADUATE SCHOOL OF BUSINESS

ORDER OF PROCEEDINGS

Academic Procession.
(The congregation is requested to stand as the procession enters the hall and is invited to participate in the singing of Gaudeamus)

The Vice-Chancellor will constitute the congregation.

The National Anthem.

The University Statement of Dedication will be read by a representative of the SRC.

Musical Item.

Welcome by the Deputy Vice-Chancellor, Professor Crain Soudien. Professor Soudien will introduce the guest speaker, Advocate Thulisile Madonsela, the Public Protector.

Address by Advocate Madonsela.

The graduands will be presented to the Vice-Chancellor by the Director of the Graduate School of Business, Professor Walter Baets.

The Vice-Chancellor will congratulate the new graduates.

Professor Soudien will make closing announcements and invite the congregation to stand.

The Vice-Chancellor will dissolve the congregation.

The procession, including the new graduates, will leave the hall. (The congregation is requested to remain standing until the procession has left the hall.)

The music for the recessional march has been composed by Professor Peter Klatzow.

NAMES OF GRADUANDS/ **DIPLOMATES**

An asterisk * denotes that the degree will be awarded in the absence of the candidate.

FACULTY OF COMMERCE

Dean: Professor D Ross Director of the Graduate School of Business: Professor W Baets

ASSOCIATE IN MANAGEMENT

(With distinction) Nico Shaun Adriaans

Razaan Africa

Rhivana Bassier

Stuart Phyfer Crooks

Sharon Charmaine Damonze

Charmaine Davids

Mogamat Wajdi Erasmus

Mubeen Fakier

(With distinction) Michelle Joy

Flynn

Tasneem Gydien

Mooneera Isaacs

Moegamat Ieshaam Jacobs

(With distinction) Nathan January

Allan Kalau

*Kgaiso Mauba Kotane

Noluthando Makhunga

Kagisho Athenasiun Mamaile

(With distinction) Tauhir Manuel

Olive Tamara Mars

Sipokazi Masebe

Dylan William Mcclusky

Casarine Mehlomakulu

Christian Milongo

Mangaka Lettie Motlohi

Themba Harry Mpulampula

Mashudu Lucas Munzhelele

Nomzamo Nkwentsha

Warren Oliver Owen

Chantal Petersen

*Lou'En Pillay

Mohapi Lebohang Ramokhoabane

Lorraine Salies

(With distinction) Stefan Sander

Ndeshihafela Melao Shipila

(With distinction) Alawia Sieed

Yandisa Sizamo

Kristen Carlene Terblanche

(With distinction) Christelle van

Noordwyk

Alistair David van Wyk

Silindile Mkhize Vilakazi

Pochia Wessels

Lindile Yiwani

In Management Practice:

*Lilian Benuta Antonie

*(With distinction) Muhammed Haroon Bhayat

*Susanna Catharina Margaretha Blignault

*Frederick Jacobus Blom

*Luniel Botes

Sekou Camara

*Leon Hubert De Haas

Robert Sandile Dlamini

Sibongiseni Wycliff Gcelu

(With distinction) Varsha Jagernath

*Stephanus Janse van Rensburg

*Monga Dieudonné Kasongo Baasia Ivan Malebye

*Fulufhelo Faith Manenzhe Sweetness Ncedisa Mata

Morris Moetsi

*Fezekile Pearl Mosiane

*Ruth Owusu Akyaw

*Craig Russell Pearce

*(With distinction) Mogomotsi Edith Phatlhanyane

*Arnold Pillay

David Jack Shackleton

(With distinction) Ronnel Yankanna

POSTGRADUATE DIPLOMA IN BUSINESS ADMINISTRATION

(With distinction) Wayne John Adams

(With distinction) Sean Raymond

Bezuidenhout

Matthew Michael Biller

Shabier Cassim

(With distinction) Nangamso

Buntukazi Cawe

(With distinction) Chiedza Caroline

Chigumba

*Itumeleng Will Choene

Arlene Grace Cloete

(With distinction) Cosmo Cobin

Cloete

*(With distinction) Linda Caldeira De

Gouveia

Amy Ann de Morney

*(With distinction) Duduzile

Charmaine Dhladhla

Sonia Dibakwana

*Zandile Zimkitha Dinwayo

Nomthandazo Bongiwe Dumisa

Calvyn du Toit

*(With distinction) Douwe Gerbrand

Ganzevoort

Sharon Rose Garoes

Bukiwe Patience Gomo Sivuyile Anthony Gulwa

Wavne Hair

Sharon Charlene Hendricks

Tammy Ho

(With distinction) Gauri Jain

Yazeed Kasu

Zimkhitha Portia Khambi

(With distinction) Gustav Johannes Kleingeld

Matthew Charles Knott-Craig

Cornelius Johannes Koch

Khotso Mxolisi Koetle

Colin Petro Leshou

Asanda Makumese

John Masilo

*(With distinction) Andre Mathee

Michael Mfanafuthi Mbatha

*Xolani Mncedane

(With distinction) Grant Clifford

Moller

Anthea Sonia Mouton

(With distinction) Bathabile Londiwe

Mnofu

(With distinction) Karen Naidoo

Shannon Naidoo

Patient Mukuta Nzonde

(With distinction) Dominique Oebell

*Jun Onozawa

*Chesterfield Harry Phiri

Jacques Pottas

(With distinction) Brendan Kyle

Pramjee

(With distinction) Jason Ronald Ouibell

Keorapetse Phemelo Johannes

Ramoenyane

(With distinction) Zoe Rohde *(With distinction) Conrad Armand

Roos Shuaib Samsodien

Lorraine Mahlatse Semenya

(With distinction) Cosmos Dylan

Shaduka *(With distinction) Ernest Shongwe

Ruddy Ngoy Shutcha Derrick Gary Sissons

Jacobus Johannes Smit

(With distinction) Mujahid Solomons

Zonja Terblanche

Adelaide Grace Tobias

Sipho Kodjo Kwadwo Twum

*Claire May van Blerck

*Julia Wedeinge

Leo Louis Ziervogel

POSTGRADUATE DIPLOMA IN MANAGEMENT PRACTICE

(With distinction) Haroon Ahmed Abrahams

*Anthony Brian Abrams

*Sylvia Araba Addo

*William Kwakwo Addo Deidre Denise Alexander

*Kunzo Azanga

Craig Alan Barrington Graham Robert Bell Bernard Basil Berkowitz *Garth Tilbury Boersma *Jacobus Stephanus Bolton *Hendrik Johannes Botha *Neels Botha Andre Louis Johannes Brink (With distinction) Mogamat Faeez Davids Mohsin Daya Melanie de Lange Andre Willem Dempers *Hendrik Johannes Jacobus de Winnaar *Elizabeth-Jane Dinve *Damian Eugen Egumbo Petrus Johannes Els *Hayford Etteh Morne Ferreira *(With distinction) Lloyd Eschel Flanagan *Norman Stanley Galli Lindy Geyer Hieronymus Bartholomeus Goraseb Kubeshini Govender Aneez Hendricks Eduard Heusdens Shafiek Ho-Kim *Pieter Jansen van Vuuren Mulanduleni Kasita Bonifasius Kasuto Richardt Kharuchab Indran Srinivasa Kistan Carla Bianca Kolbe Bianca Busisiwe Kumalo Kobus Gerhard Landy Tebogo Maleme Lefifi *Gregory Lesabe Sophia Elhen Maasdorp Andisiwe Makupula Jacobus Johannes Meyer *Fundisa Sheilla Mgidi Rebecca Daphney Montsho Sarah Mowes (With distinction) Kerusha Naidoo Rennisha Naidoo Louise Newitt Jeanette Nigrini Richard Odongo Ojendo Charl Oosthuizen (With distinction) Lurette Redelinghuvs (With distinction) Shamima Ross Johannes Shigwedha

Timothy Silombela

Sydney Wisani Sithole

*(With distinction) Victoria Jane

Amith Singh

Spinks

Tania Steenkamp

Avin Supershad

Glenda Norma Steyn *Hendrik Johannes Steyn (With distinction) Carl Anthony Taylor Ranthako Andries Thaele *Björn Thiel *Tjatjitua Zahua Tjijahura Irma van Hoogdalem *Deon van Niekerk

*Marina van Zvl

Charmill Zamuee

DEGREE OF MASTER OF COMMERCE

In Development Finance:
Alain Bertrand Feudjou Momo
Loise Mwiyeria Gitonga
*Tamara Govender
Ephraim Monde Hamnca
Annie Chibwe Mulenga Kapepula
Teboho Louis Lekatsa
Lerato Lebogang Lentsoane
(With distinction) Jochen
Luckscheiter
Edwin Mwangi Maitho
*John Mbu Mbu
*Njoki Zipporah Muthuuri
*Tendayi Nyatondo
Michelo Mitchell Nzila

Michelo Mitchell Nzila Temitope Ojo Laura Carlin Peinke (With distinction) Lelemba Phiri Eloise Rousseau Maurizio Santamicone

Mutemwa Tendavi Ushewokunze

In Management Practice: Welbert Ockhuizen Thomas Cehill Van Der Walt

In Trade Law and Policy:
Amina Mohamed
Emmah Monyanga
Mamosa Molapo Mosito
Siyathaba Muremba
Elisha Dwandwari Tshuma

DEGREE OF MASTER OF PHILOSOPHY

In Inclusive Innovation: Lee Brooks *Heloise Greeff

In Management Practice: *Leon Ernest Steyn

DEGREE OF MASTER OF BUSINESS ADMINISTRATION

*Mark Hugh Attwood-Smith
Brynley Robyn Bath
Waldo Bezuidenhout
Willem Jacob Botha
*Gregory Robert Branfield
Gregg Phillip Branquinho
(With distinction) Carl Henk
Bredenoord
*Boyd Erin Brown
Amelia Esther Burger
(With distinction) Mark Albert John
Cawood
Khethiwe Rejoyce Cele
*Ryan Chazen

*Ryan Chazen
Richman Chivinge
Pieter Lafras Cilliers
*Keith John Comline
(With distinction) Hou

(With distinction) Henning Cosman *(With distinction) Arnab Das

David Neville Davis
Eduard Ernest de Jager
Simryn de Jager
Lambert Hendrik de Wet

*(With distinction) Susan Alexandra de Witt

*Nametsegang Morulaganyi Diseko Hugh Craig Dudley *Gert Viljoen du Plooy Jason Floyd Falken (With distinction) Brett Craig Farley (With distinction) Scott Richard Ferreira

(With distinction) Leonardo Gianfranco Fiorini

(With distinction) Peter Jeffery Fish *(With distinction) Luke Wren Fiske (With distinction) Jeremy Emil Flax (With distinction) Karimi Karungi

Fondaumiere
Jan Jurie Fourie
Karen Mary Fourie
Michael Craig Francis
(With distinction) Philippe Vincent

Joseph Franiatte

Rowen Grant Robert Newton Fraser Shayne Canton Fuller Dane Edward Gavin

Paul William Fraser

Warren Guy Gething

Baldip Singh Gill

Sonya Maria Helene Girnat

Lushen Govender Justin Matthew Green Jihaan Haffajee Darrell Aston Hammond Dirk Peter Hanekom

*Tiago Serpa De Vasconcelos Hart Andries Carl Hauptfleisch Saskia Janine Hickey Dumisani Hlabano Andre Hoffmann

Dan Andrei Horga Felix Theodor Humberg Authur Uzoma Iweze *Kam Wah Kent Hung Rachel Marie Jackson Clare Ashleigh Jacobs Nobathembu Monica Jilingisi (With distinction) Keethan Kander *Fabian Kauer *Hlamalani Jimmy Khosa Timothy John Kidson (With distinction) Jacobus Pieter Kok *Sho Kovama Cornelis Krogscheepers Sang-Woo Lee Jason Leimer (With distinction) Romano Emilio Lupini *Nathan Stuart Maas Justine MacDonald Gregory Richard MacFarlane Brian Gicheru Maina Bhekuyise Henry Makedama Wilson Nhlanhla Masango Fikizolo Vincent Mativandlela Pvi Sone Maung Nadine McLean Robert Anton Menne *Mthokozisi Muziwandile Nkosingiphile Mgwabi Nomzamo Mlungu *Bruno Raphael Mognayie (With distinction) Tefo David Mokaila Bruno Alexandre De Azevedo Botelho Moniz Anne Morgenroth Ettienne Mostert Mehluli Mpofu Tafadzwa Mudyiwa *(With distinction) Taryn Rosalie Murray Jonathan Revayi Muwanga *Michael Kamau Mwangi Purity Nomthandazo Hloniphile Mzotho *Dumisani Ncala *Mahlomola Rudolph Nchodu Sipho Nengovhela Vusumuzi Francis Xavier Nondo *Waldo Noordermeer (With distinction) Ryan Alan Norrie Tinashe Innocent Nyawata *Jürgen Richter Olivier *Rajiv Paladh (With distinction) Mathew Bruno Palin (With distinction) Anne Pao Zunaid Ahmed Parker *(With distinction) Thomas Iain Edward Pedrick Avinesh Pillai

(With distinction) Amanda Denisha

Pillay

Nicholas Grantley Pilz (With distinction) Mark William Pretorius Tebogo Ronald Ramokolo Anvy Ramsamy (With distinction) Tina Retief (With distinction) Jacobus Nicolaas Richter *Ines Serrano Laboreiro De Paula Risques *Igor Felipe Rivera Green Baphumze Rubuluza Micah Sarkas *Candida Joy Schörger Faried Parvez Shariff (With distinction) Jaston Sikaundi Michaela Kim Smith Simangele Thokozile Soni (With distinction) Gerald Ernst Steenkamp Sylvester Ayuk Taku Sissel Robstad Tellefsen Tshepo David Thobejane Thapelo Tsheole Sydney Muvhangisano Tshibubudze (With distinction) Mark Maximilian (With distinction) Dylan van Bylevelt Albertus Andreas van der Merwe Adriaan de Waal van Renen Carl Bradley van Rooyen (With distinction) Jacques van Tonder Samara Jane Velthuvsen *Johannes Marthinus Venter Stanley Purvis Vorsatz (With distinction) Clifford Andrew Warburton Carolyn Anne Whale Andrew Gordon Wills Peter George Wingrove Alexander Florian Wörz *Vusa Vundla (With distinction) Stelio Zakkas

*Thiren Pillay

In the Executive Programme: Waleed Abrahams (With distinction) Ryan Neal Barrett Rian Bornman Rabogajane Jacob Busang (With distinction) Sara Louisa de Kock Ian Christen Greager Matthew John Higgins *Oregan Percival Mark Hoskins Ahmed Ismail Kajee Nkosingiphile Lady-Thatcher Kunene Richard Michael Lain Johannes Jurie Lombard Roland Martin Magg André Abel Mahoney

Tebogo Edward Mekoa Aldrin Zimisele Ndawo Tsakani Clarence Nethengwe Bongisipho Nyembe Andre Oelofsen Mohamed Zaid Patel Yaseen Patel Jogandren Pather (With distinction) Dr Hendrik Hans Martin Schäfer Daniel Wilhelmus Schoeman (With distinction) Justin Charles Spreckley *Bridgett Julia Stanford (With distinction) Jill Thorne Conroy Eugene van der Westhuizen Anne van Niekerk *Kurt Wade van Staden (With distinction) Natascha Viljoen (With distinction) Nils Wormsbacher

DEGREE OF DOCTOR OF PHILOSOPHY

In Business Administration:
Farai Kapfudzaruwa
Thesis Title: Investigating business' contribution to climate change governance in areas of limited statehood: the case of South Africa and Kenya.

Farai Kapfudzaruwa has a BSc(Hons) from the Midlands State University in Zimbabwe and an MPhil in Environmental Management from UCT. Since late 2009 he has been conducting PhD studies at the UCT Graduate School of Business, where he is now a lecturer.

Farai Kapfudzaruwa's thesis investigates how and why business organisations contribute to climate change governance in areas of limited statehood - that is, areas where the state has varying degrees of deficits in its ability to steer effective climate change mitigation and adaptation. The results from a survey and case studies in South Africa and Kenya produce a conceptual model illustrating the inter-linkages between legitimacy and competitiveness as drivers of firms' climate change responses. These two main drivers manifest in the institutional, ecological and organisational contexts and lead to different levels of corporate responses, which are characbv four configurations: terised laggards, emergent planners, efficiency drivers and visionaries.

Supervisor: A/Professor R Hamann (Graduate School of Business)

FACULTY OF HUMANITIES AND FACULTY OF LAW

ORDER OF PROCEEDINGS

Academic Procession.

(The congregation is requested to stand as the procession enters the hall and is invited to participate in the singing of Gaudeamus)

The Vice-Chancellor will constitute the congregation.

The National Anthem.

The University Statement of Dedication will be read by a representative of the SRC.

Musical Item.

Welcome by the Deputy Vice-Chancellor, Professor RT Nhlapo.

The honorary graduand will be presented to the Vice-Chancellor by the University Orator, Professor A Lewis.

The graduands and diplomates will be presented to the Vice-Chancellor by the Deans of the faculties.

The Vice-Chancellor will congratulate the new graduates and diplomates.

Professor Nhlapo will make closing announcements and invite the congregation to stand.

The Vice-Chancellor will dissolve the congregation.

The procession, including the new graduates and diplomates, will leave the hall. (The congregation is requested to remain standing until the procession has left the hall.)

The music for the recessional march has been composed by Professor Peter Klatzow.

HONORARY DEGREE RECIPIENT

William Daniel Carmichael LLD (honoris causa)

William (Bill) Carmichael studied Economics at Yale, Princeton and Oxford. He came to South Africa in the mid-1970s as head of the Ford Foundation's Office for the Middle East and Africa, and in the 1980s led Ford's work in South Africa as Vice-President of the Ford Foundation, responsible for its Developing Country Programmes.

Bill Carmichael's leadership and understanding of the potential of think-tank type organizations in repressive societies enabled the Ford Foundation to play an important role in support of a wide range of individuals and organisations working in civil society both inside and outside universities.

He led a shift from economic modernisation theory to supporting the full set of institutions characterizing an open democratic society and re-focused the Ford South Africa programme to support human rights (including right to trade unions), transformation of the historically white universities, alternative education programmes such as SACHED, and other dimensions of a society struggling for democracy, including the Legal Resources Centre and the Centre for Applied Legal Studies.

Bill Carmichael, both through the generosity of the Ford Foundation and the advice and the wisdom which he shared, made a significant contribution to South African universities and the wider South African society, particularly in education and law.

MERITORIOUS PUBLICATION AWARD

The University Meritorious Publication Awards recognise noteworthy monographs and books published by UCT authors. These publications merit recognition for their contribution to learning and scholarship:

Collective Bargaining in South Africa by Shane Godfrey

NAMES OF GRADUANDS/ **DIPLOMATES**

An asterisk * denotes that the degree will be awarded in the absence of the candidate.

1. FACULTY OF **HUMANITIES**

Dean: Professor SM Buhlungu

ADVANCED CERTIFICATE IN **EDUCATION**

In Adult Education: *Pololo Ivan Kula

In Education Management and Leadership Development: Mogamat Riedewaan Bassier Jacob de Bruyn Hebrew Godden *Pumla Linda Hlomela Michael Jezile Buyile William Nomnganga Sonwabo Christopher Peter Mphicothi Qantolo Fundile Tyalana

DIPLOMA IN EDUCATION

*Mmusi Moses Serobatse

PERFORMERS DIPLOMA IN **MUSIC**

Kwazi Mkula

HIGHER DIPLOMA IN **EDUCATION** (POSTGRADUATE) **SECONDARY**

Agreement Sizwe Mbathana

In Intermediate and Senior Phase: *Thandiwe Aranes Raynetia Angelique Krieger Keomo Kriel

POSTGRADUATE CERTIFICATE IN EDUCATION

In Senior Phase and Further Education: *Philippa Colly

Tasneem Jakoet

- *Bevan Rhyse Lategan Akhona Mali
- *Joan Noelle Tunbridge
- *Etienne van Bart

In Further Education:

*Kelly Lee Steyn

POSTGRADUATE DIPLOMA IN **EDUCATION**

(With distinction) Soraya Abdulatief

- *(With distinction) Erica de Greef
- *Jerome Terpase Dooga
- *Thandiwe Ida Goxo
- *Innocente Uwineza

2. FACULTY OF LAW

Acting Dean: Professor DM Chirwa

POSTGRADUATE DIPLOMA IN LAW

*Frederick Ian Ofwono

In Criminal Justice:

*Vuyo Ntlangu

In Environmental Law:

*James Austin Brand

In Information Communication

Technology Law:

*Lincoln Benn Zomba

In Labour Law:

Celeste Jacqueline Crowther

In Tax Law:

Stefanie Maria De Saude

- *James During
- *Ferdinand Wessel Hoffman
- *Huai-Tzu Huang Asanda Jama
- *Guv Terence Kabot
- Madelein Marais Sibusiso Mdlalose
- *Mabalane Barley Mogano Andiswa Mohapi
- *Mpho Mokotso

Kgwedi Sinawo Mosala

Nomagugu Mabongi Mvuyana

Yosha Naidoo

Nailah van der Schyff

Grant Harcourt Ward

DEGREE OF BACHELOR OF LAWS

*Ashleigh Geraldine Christians

*Kamila Domagala

Nekwaya Helalia Nalitye Iileka Christopher Winston Kassianides

Benson Sibonelo Mchunu

Karabo Mponang

Msizi Experience Sigasa

Samantha Smith

Pamela Lethu Stuurman

*Ayden Peter Thompson

3. FACULTY OF **HUMANITIES**

Dean: Professor SM Buhlungu

DEGREE OF BACHELOR OF ARTS

Elsa Rose Dovey Xiao Xia Gong

Nuraan Hendricks

*Brian Martin Joffe

*Alexa Josephine Masucci Lara Antoinette Meter

- *Sibongile Given Ndamane
- Qama Qukula
- *Mpono Annah Raphiri
- *Cherona Margaretha Reisenhofer-Drever
- *Jessie Elisabeth Scheepers Damien Ashley Terblanche Miscka van Nelson

Kaede Wildschut

In Film and Media Production:

Tayla Megan Africa Keelan Joshua

Kudzai Mazvarirwofa

In Theatre and Performance:

*Khanyisile Siphiwe Ngutshane

DEGREE OF BACHELOR OF ARTS IN FINE ART

*Caleb Georgiades

DEGREE OF BACHELOR OF MUSIC

In Education:

Thurloe Carlo Ernstzen Thalia Tarryn Vollenhoven *In Performance:* Madri Gerber Eben Meyer

DEGREE OF BACHELOR OF SOCIAL SCIENCE

Christopher Lewis April Jannous Nkululeko Aukema Dylan Raphael Buchalter **Rosie Cumming** Matthew Benjamin Falken *Talva Michelle Galasko Patrick Brian Gilfillan Edward John Gregory *Ageelah Hassen

*Benasse Kabanzi

Roxanne Cherizaan Maree Oratile Remoamogetse Mashazi

*Jade Tayla Mathew Sidwell Mziyanda Mbusi Kyla Jade Mc Nulty Diketseo Charmaine Mgubungu Nomakhosazana Mgweba Dharshan Dayanand Moonasar

*Harry Elvin Mootoo Rajah

*Muvambi Tatenda Mudzamba Khanyisile Nondumiso Ndlela

*Khangelani Kenneth Lesedi Noxwe

*Christina Keta Kyusa Nsekela Willard Petros Nyoni Vinasha Ramjee Wadeisor Tendiso Rukato Annika Schrenk

*Ntombi Priscilla Sibiya

*Noluthando Lucia Tayitayi Emmanuel Ekirikubinza Alexander Tibatemwa Adrian Wilson

In Labour, Organisational Psychology and Human Resource Management:

Butjilo Priscilla Vundla

DEGREE OF BACHELOR OF SOCIAL WORK

Phumza Jam Jam

DEGREE OF BACHELOR OF EDUCATION (HONOURS)

*Joy Gloria Stevens

DEGREE OF BACHELOR OF ARTS (HONOURS) IN APPLIED LINGUISTICS AND AFRICAN LANGUAGES

*Lwandile Noludwe

DEGREE OF BACHELOR OF ARTS (HONOURS)

In African Studies:

*Charlenne Tatenda Muranda

In English Studies: Thaheer Mullins

*Consuelo Mary Enrica Roland (First class) Mary Helen Teede

In Film and Television Studies: James Edward Honiball

In Film Studies:

*Husayn Adams

In Linguistics:

*Lesleigh Ann Alexander

In Philosophy:

Rebecca Elizabeth Freund

*Noa Even-Zahav

In Philosophy, Politics and Economics:

*Marin Jay Cundall

*Amos Slayer Odhav

In Television Drama:

Chantel Clark Lorna Rae Daniel (First class) Colt David Wentworth-Browne

DEGREE OF BACHELOR OF MUSIC (HONOURS)

In Performance:

*Andrew John Duncan

*(First class) Coila-Leah Enderstein

DEGREE OF BACHELOR OF SOCIAL SCIENCE (HONOURS)

In African Studies: Samanthaclaire Nomusa Ncube

In Clinical Social Work: *Unathi Samora Filita

In Development Studies: Dillon Ward

In Gender and Transformation: Anya Diana Editha Kovacs

In Philosophy:

*Ashleigh Henderson

In Philosophy, Politics and Economics:

*(First class) Charlotte Rose Scott

In Public Policy and Administration: Senzo Hlophe Lindiswa Monica Jan

In Sociology:

*(First class) Shaun Joe Kraak

DEGREE OF MASTER OF ARTS

In Drama:

(With distinction) Pedzisai Maedza

In Afrikaans:

(With distinction) Marsha Bernely Luané Barnes

In Clinical Psychology:

Graham Leonard Gauntlett (With distinction) Taryn Harverson

*Nicholas Gilmour Hazell

In Creative Writing:

*Dorothy Celia Dyer Monica Jacobs

*(With distinction in the dissertation) Juanita Louw

Calvin Scholtz

*(With distinction) Dina Segal

In Documentary Arts:

*(With distinction in the dissertation) Sandra Maytham-Bailey (With distinction in the dissertation) Jonathan Nicholas Riordan Damien Robert Schumann

In Economic Development: *(With distinction) Lucy Evelynn Martin

In French:

*(With distinction in the dissertation) Carla Howard Gordon *Kudakwashe Mahanya *(With distinction) Lovejoy

Masendeke Luke Andrew Merrick Christina Doreen Sefu

In French Language and Literature: (With distinction) Amy Ruth Wawn

In Historical Studies: (With distinction) Joline Young

In International Relations:

*(With distinction in the dissertation)
Abigail Long

*(With distinction) Valentina Subow *(With distinction in the dissertation)

Tiffani Tristan Wesley

In Language, Literature and Modernity:
Gareth Scott Langdon

In Linguistics:

Kathryn Mary-Gwyneth Luyt (With distinction) Oscar Sibabalwe Masinyana

In Media Studies: Havard Ovesen

In Media Theory and Practice:Mia Heleen du Bois(With distinction) Lauren ClaireGranger(With distinction) Alice Lily Inggs

In Organisational Psychology:*(With distinction in the dissertation)Sibusiso MdlongwaSikho Mgweba

In Political Communication:
Mava Albert Lukani

In Politics:

*Stephanie Schwartner

In Psychological Research:
(With distinction) Faye Helen
Bozalek
Margaret Jean McGrath

In Social Anthropology:
Kefiloe Sello
*Alexis Strimenos

DEGREE OF MASTER OF FINE ART

(With distinction) Alta Rachel Botha Christine Cronjé (With distinction) Madeline Groenewald *(With distinction) Jody Paulsen Joanna Cara Loening Voysey

DEGREE OF MASTER OF EDUCATION

In Adult Education:
(With distinction) Zelda Joyce
Thompson

In Curriculum Studies:
Makengo Bonaventure Ndungu

In Educational Administration, Planning and Social Policy: Anna Hilliar MacMahon Alison Jane van der Merwe

In Education:

(With distinction) Anya Caroline Morris

In Higher Education Studies:
Beulah Tertiens Reeler

DEGREE OF MASTER OF MUSIC

In Music (Dissertation and
Performance):
(With distinction) Antoinette
Elizabeth Blyth
Emily Jane Bruce
*(With distinction) Justin Munro
Carter

DEGREE OF MASTER OF PHILOSOPHY

In African Studies: Lethiwe Nkosi

In Development Studies:
Tebogo Precious Chiyapo
Katrin Hülsekopf

In Justice and Transformation:

(With distinction in the dissertation)

Jessica Ruth Boast

*(With distinction in the dissertation)

Leigh Mckellan Hamilton

*(With distinction in the dissertation)

Marijana Toma

Kate Hannah Sidley van Niekerk

In Public Policy and Administration: *Ashleigh Claire Fraser

*Caroline Jean Walker

*Thamsanqha Mlumisi Ledwaba

DEGREE OF MASTER OF PHILOSOPHY IN EDUCATION

In Adult Education:
(With distinction in the dissertation)
Gillian Mary Faris

In Applied Language and Literacy Studies:

*(With distinction) Laura Ellen Layton

*(With distinction in the dissertation) Warren Lilley

(With distinction) Jill Ruijsch van Dugteren

In Curriculum Studies:
(With distinction in the dissertation)
Lucia Rosina Petersen

In Educational Administration,
Planning and Social Policy:
(With distinction) Jennifer Anne
Wallace

In Higher Education Studies:
(With distinction) Ilhaam Behardien
Nawaal Davids

In Primary Education:
*(With distinction) Karen Ariella
Roberts

DEGREE OF MASTER OF SOCIAL SCIENCE

In Gender Studies:
(With distinction) Michelle Robyn
Botha

*Chenai Ashlee Chair *Ann-Kristina Rönchen *(With distinction) Sophia

In Global Studies:

*(With distinction) Sophia Olivia Rosochacki

*Tikwiza Rayleen Silubonde

*Megan Elizabeth Weinstein Tatenda Jacqueline Zvoutete

In International Relations:
Shawn Duthie
Kira-Leigh Kuhnert
*Boikanyo Gaone Modungwa

In Organisational Psychology:
Adele Croucamp
Victoria Louise Gross
(With distinction) Tara Kiffin
Howard
Timothy Calderwood Koch
(With distinction in the dissertation)
Sayyideena Aleeshah Nujjoo
*Zaakiyah Sait

In Political Studies:

*(With distinction) Rochella Riva Schollij

In Psychology:

(With distinction) Lauren Ruth Barkhuizen

*Loyiso Maqubela

In Religious Studies:
Halim Gencoglu
(With distinction) James Roger
Lappeman

In Social Anthropology:

(With distinction in the dissertation) Andreas Joachim Buhler

*(With distinction) Paula Hay

*(With distinction) Catherine Louise Jackson

*(With distinction) Andrew McKenzie Reid

(With distinction) Katleho Kano Shoro

*Nikiwe Solomon

In Social Development:
Jonelle du Pont

*Kapalu Muswala

(With distinction) Christine Mwape

*Jeniphar Kokusima Rwechungura

In Social Planning and Administration:
Joanne Harding

In Social Policy and Management: Thabiso Wilson Nyapisi

In Sociology:

*Tasnim Motala (With distinction) Lyndsey Melissa Petro

4. FACULTY OF LAW

Acting Dean: Professor DM Chirwa

DEGREE OF MASTER OF LAWS

*Astrid Chauwin

*Nicola Susanne Hösl Omowamiwa Olugbenga Kolawole

*Baker Mugaino

In Commercial Law:

*Adekunbi Yewande Adeleye Funmilayo Ronke Alonge

*Lindani Baiketlile

*Matthias Bornhäusser Reon Cloete

Reon Cloete

Kirsty Ann Dean

*Martin Albert Arthur Eisenring Frank Edgar Kapanda Mafaro Kasipo Peter Maganga Kituri

*Barbara Kolbeck

(With distinction) James Lorimer Leach

Milingo Lungu Kelly Jo Martin

Nswana Faith Matambo

Tsoarelo Molapo *Abigail Emilomo Osiki

*Matthew van Eden

Taswell Deveril Papier
Wainedon Henri Christopher Parry

*Samantha Dionne Phumaphi

*Samantha Dionne Phumaphi *Edward Kisioki Prosper

Zandile Matlotlo Ramalohlanye Chanza Kephas Sikazwe

*(With distinction) Richard Simon Thompson

In Constitutional and Administrative

*Leroy Glam Justice Alfred Mavedzenge Phumelele Octavia Pinky Ngema Gregory Paul Solik

In Environmental Law:
Eishe Heitmann
Xoliswa Faith Mapoma

In Human Rights Law:

*Ronald Hofmann

*Motion Jaravani

*Lara Eleanor Kristina Wallis

In Intellectual Property Law:

*William Abraham Agan Jade Katherine Kouletakis *In International Trade Law:* Jacques Bwana Mwamba

In Labour Law:

Rutendo Shylyn Mudarikwa

*Ruan Pottas

In Marine and Environmental Law:

Ernesta Swanepoel

*Jonathan Eugene van der Westhuizen

In Shipping Law:

Jacqueline Lisa Kaufmann

*Caroline Emilie Lepee

*Helen Louise Renggli

*Christian Zygmont Triay

In Social Justice:

*Martin Emmerich Hermann

In Tax Law:

Preshnee Govender Zulpha Karriem Robert James Siddle Vimbai Tanyanyiwa

DEGREE OF MASTER OF PHILOSOPHY

In Criminal Justice: Luke Lee Skywalker Nadia Elizma Smit

In Human Rights Law:
Daniel Jamie McLaren
*Mia-Maria Michels
*(With distinction) Jon Karl Nickell

Jerome Albertus Patrick September

In Labour Law: Imran Nakueira Jan Harm Venter

In Tax Law:

Marvan Abraham Beukes

DEGREE OF DOCTOR OF PHILOSOPHY

In Commercial Law:
Chukwuechefu Okwudiri Ukattah
Thesis Title: General average and the
York-Antwerp Rules: the historical
quest for international conformity, the
divisive effect of more recent amendments to the rules and a discussion of
a possible way forward to regain more
universal acceptance of rules in
today's global maritime industry.

Chukwuechefu Ukattah has an LLB degree from Abia State University in Nigeria and an LLM in Shipping Law with distinction from the University of Cape Town. He was admitted to practise as a barrister and solicitor of the Supreme Court of Nigeria in 2004.

Chukwuechefu Ukattah's thesis analyses conceptions of general average and processes for obtaining sufficiently widespread acceptance of revisions to the York-Antwerp Rules, intended to achieve international uniformity in general average adjustments, to effect recommendations regarding substantive amendments to certain of the Rules and to the processes of achieving multi-sectoral acceptance of such changes in the maritime industry and ensuring their implementation. The recommended substantive changes to certain of the Rules take account of a fundamental tension between differing conceptions of general average that inform what may be claimed by way of general average contribution in a general average adjustment, a tension evident in the compromises of the first (1864) York-Antwerp Rules and in subsequent revisions to the Rules. Ukattah's recommendations regarding process of achieving sufficient support for revisions to the Rules draw on learnt from successful revisions of the Rules between 1864 and 1994, and reasons for the failure of the 2004 revisions to the Rules.

Supervisor: A/Professor G Bradfield (Commercial Law)
Co-supervisor: Professor A Rycroft (Commercial Law)

In Criminology:
Laura Elisabet Drivdal
Thesis Title: The politics of leadership
organizing in informal settlements:
ambiguities of speaking publicly and
mediating conflicting institutional
logics.

Laura Drivdal holds a Bachelor degree (2005) and a Master's degree (2008) in political science at the Department of Administration and Organisation Theory, both from the University of Bergen. Her Master's degree specialized in environmental politics and regulation, political theory and governance. In 2006 she studied African politics at the University of Ghana.

Laura Drivdal's thesis contributes to the literature on urban theory and leadership through her focus on South African neighbourhood politics and organization. Specifically, she applies social constructivist theories and institutional analysis to examine the link and conflicts between the symbolic and the pragmatic sides of leadership in informal settlement contexts. Her empirical insights are based on observations of, interviews with, leaders and residents in three of Cape Town's informal settlements for a period of almost three years. Her findings highlight how leadership is shaped by historically informed and conflicting organizational logics, and how the leaders work to mediate them.

Supervisor: Professor CD Shearing (Public Law) Co-Supervisor: Professor J Froestad (Administration and Organization Theory, University of Bergen)

Tariro Mutongwizo Thesis Title: *Contours of non-state governance: encountering states in South Africa and Zimbabwe.*

Tariro Mutongwizo graduated with a BSocSc in Labour, Organisational Psychology and Human Resource Management in 2005, BSocSc (Hons) in Criminal Justice in 2007 and an MPhil in 2009 all from the University of Cape Town.

Tariro Mutongwizo's thesis explores how states, through their levels of service delivery, shape peoples' lives

and non-state governance. In a comparative study of urban Cape Town and Harare, Zimbabwe, encounters with these states, by individuals and non-state groups, were investigated. The study explores non-state governance systems at micro and macro levels through what Mutongwizo terms 'social support organisations'. Community level and formal, registered support organisations social compared. Conditions that promote, or hinder, the development, activities and sustainability of non-state groups and their interactions with state institutions are probed. The research examines formal and informal shifts in the identities of social support organisations and the adaptations they make to cope with changes in their environments. Thus, the thesis identifies factors that influence the existence of these organisations in the two urban contexts and uncovers how the urban poor, in these two sites, negotiate with states as they seek to ensure their survival.

Supervisor: Professor CD Shearing (Public Law)

In Private Law:
Cheri-Leigh Young
Thesis Title: Public trusteeship and
water management: developing the
South African concept of public
trusteeship to improve management of
water resources in the context of South
African water law.

Cheri-Leigh Young holds an LLB from the University of Cape Town. She currently works as a candidate attorney at Edward Nathan Sonnenbergs.

Cheri-Leigh Young's thesis investigates the concept of trusteeship in the context of water law. She identifies the relationship between poverty and a lack of access to water resources against the historical development of water law. She discusses and evaluates the content and meaning of trusteeship by looking at the current legal framework, as well as historical and comparative sources. She identifies three components which form the basis of trusteeship, namely, sustainability, equity and efficiency. She further identifies the practical requirements and remedies available in the context of water law, as well as their deficiencies. An overview of the

flaws in the current system is provided and key areas where the system can be improved are proposed. She concludes that trusteeship is nothing more than rhetoric and has not changed the nature of the state's duties, save in the manner that these duties have been altered by the constitutional and statutory requirements

Supervisor: Professor H Mostert (Private Law)

In Public Law: Louise du Toit

Thesis Title: Promoting renewable energy in South Africa through the inclusion of market-based instruments in South Africa's legal and policy framework with particular reference to the feed-in tariff.

Louise du Toit holds BA LLB and LLM (Environmental Law) degrees from the University of Cape Town. She has been working towards her PhD degree since 2011.

Louise du Toit's thesis explores the implementation market-based instruments (broadly defined) to promote renewable energy South Africa. Against background of global climate change and South Africa's own fossil fuel-powered economy, the thesis shows that increasing the uptake of renewable energy and developing a sustainable renewable energy industry in South Africa could have important environmental and socio-economic benefits. In light of the generally higher initial costs of renewable energy technologies, a number of countries implemented market-based have instruments to promote the uptake of renewable energy. Through a discussion of the literature and country examples, the thesis identifies that feed-in tariff policies have thus far been the most effective in promoting renewable energy worldwide. With reference to feed-in tariff policies that have been implemented internationally Germany, Spain, India and China) the thesis identifies and examines the elements of a possible feed-in tariff framework in the South African context.

Supervisor: Professor JI Glazewski (Public Law)

Livingstone Sewanyana Thesis Title: *Towards an enabling* NGO regulatory framework in

Uganda: comparative experiences from Eastern and Southern Africa.

Livingstone Sewanyana's professional life has been dedicated to the cause of human rights in Africa, recognised most recently by the conferral on him of the Pan Africa Human Rights Award. Born in 1963, he achieved his LLB (Hons) from Makerere University, and his LLM, with distinction in International Human Rights Law, from Essex. Since 1992, he has served as the Executive Director of the Foundation for Human Rights Initiative, Uganda's leading NGO.

Livingstone Sewanyana's thesis situates the regulatory regime governing NGOs in Uganda within an historical, continental and global context. Having traced the development of voluntary organisations in British colonial East Africa and their fluctuating fortunes after independence, he compares the current regulatory regime as experienced by several Eastern and Southern Africa countries, against the ideal benchmark of an environment conducive to the effective and accountable operation of NGOs. He also employs the standards set by democratic constitutionalism international human rights instruments as the basis for critical analysis. His thesis concludes that the shortcomings he identifies could be addressed by adoption of a State-NGO led regulatory model that allows for self-regulation alongside a minimal level of State interference, a model which could equally serve in other African countries.

Supervisor: Professor HM Corder (Public Law)
Co-supervisor: Professor DM Chirwa (Public Law)

5. FACULTY OF HUMANITIES

Dean: Professor SM Buhlungu

DEGREE OF DOCTOR OF PHILOSOPHY

In African Languages and Literature: Ruby Magosvongwe Thesis Title: Land and identity in Zimbabwean fiction writings in English from 2000 to 2010: a critical analysis

Ruby Magosvongwe holds a BA, Graduate Certificate in Education, BA English Special Honours and an MA in English, from the University of Zimbabwe. She has published four articles in refereed journals.

Ruby Magosvongwe's thesis brings Zimbabwe's seemingly mutually exclusive black and white literary voices into a dialogue on land and identity in their country's tumultuous post-2000 period. Using African-centred approaches, including Asantian Afrocentricity Literary Theory, she critiques the writers' trajectories and the foundational values that have shaped their fictional representations. Her critical analysis establishes that partisan and exclusionary approaches in discourses on land entrench existing class and racial prejudices that threaten to split a society striving for peace, oneness, co-operation and sustainable human and social development; and that contrasting the fictional narratives she has examined underscores the need for equitable and transparent land redistribution in post-2000 Zimbabwe. Suggesting that all Zimbabweans' struggles for land revolve around the securities it offers - securities that involve conceptions of human worth and human dignity upon which social identities are predicated – she argues for African-centred approaches that centralise peace and oneness as guiding principles in defence of human dignity, human worth and collective survival and that influence people's participation in and contribution to community development.

Supervisor: Associate Professor A Nyamende (African Languages Section, School of Languages and Literature) Co-Supervisor: Professor Z Makwayarara (University of

Zimbabwe, Post-Graduate Centre)

In Art Historical Studies: Annabelle Selina Wienand Thesis Title: Strategies of representation: South African photography of the HIV epidemic.

Annabelle Wienand graduated BA(FA), with a distinction in History of Art, in 2000. In 2007, she gained an MA for her dissertation on drawing as a tool for HIV literacy training in South Africa. She has taught the History of Photography in the Department of Historical Studies, and Photography at the Michaelis School of Fine Art.

Annabelle Wienand's thesis is concerned with how South African photographers have engaged with the HIV epidemic. She examines the different visual, political and intellectual strategies that photographers have used to document the disease and the complexity surrounding it. Her discussion of the photographic work is situated in the context of other studies including the history of photography in Africa, the documentation of the HIV epidemic since the 1980s and people's on-the-ground political and social experience of the epidemic in South Africa. While she considers various photographers in the thesis, her major focus is on the work of Gideon Mendel, Gisèle Wulfsohn, David Goldblatt and Santu Mofokeng. Her close of South examination African HIV/AIDS-focused photography reveals complex and layered visual responses to the epidemic, many of them countering negative stereotypes about the disease in Africa and aiming to preserve the humanity of the photographs' subjects.

Supervisor: Emeritus Professor M Godby (Visual and Art History) Co-Supervisor: Professor N Nattrass (Centre for Social Science Research)

In English Language and Literature: Merriman Eckard Smuts Thesis Title: Displaced romanticism: searching for the self in J.M. Coetzee's autobiographical fiction

Eckard Smuts has a BA (Hons) and an MA from the University of Stellenbosch. After a brief spell working in London, he came to UCT to pursue his enduring fascination with the writing of the South African Nobel Laureate, J.M. Coetzee.

Eckard Smuts's thesis is a literary critical investigation into the strategies of self-definition in J.M. Coetzee's autobiographical fiction. The thesis focuses on those of Coetzee's novels that have a more or less explicit autobiographical resonance (Boyhood, Youth, Elizabeth Costello, Diary of a Bad Year, Summertime), with supplementary forays into two additional works (Age of Iron and The Childhood of Jesus). His argument centres on the observation that Coetzee's derives its affective force from the conflict he stages, time and again, between a desire for a transcendent sense of being. Romantic in origin, and a realization that being derives its co-ordinates from the discursive formations - ideological, socio-historical, philosophical, linguistic - that provide the structure of meaning for self-expression in writing. Smuts's thesis concludes by showing how this conceptual framework can be used to gain an improved understanding of Coetzee's most recent novel, The Childhood of Jesus.

Supervisor: Professor C Clarkson (English Language and Literature) Co-supervisor: Dr P Anderson (English Language and Literature)

Studies: Gerald Adlard Thesis Title: Collaboration at the crossroads: the enabling of large-scale cross-sector collaborative

developments.

In Environmental and Geographical

Gerald Adlard has a BSc (Economics) from the University of London [University College of Rhodesia] and an MPhil from the University of Cape Town. He has been engaged, since 1984, in the facilitation of large, complex housing projects for the poor.

Gerald Adlard's thesis examines the Integrated Service Land Project in Cape Town which began as an attempt to develop land from which sixty thousand people had been violently displaced to thirty different locations. Stakeholders included members of those communities, warlords, apartheid government agencies, recently unbanned political parties and civic movements, municipalities and local industrialists. Although ultimately the project met its objective of housing

over 32 000 families, Adlard demonstrates that the gap between failure and success in large-scale cross-sector collaborative projects is created by underestimating both incessant turbulence and stakeholder incapacity. Through intensive analysis of project archival materials, particularly of actual participation in collaborative processes, he shows that a few people, those he conceptualises as 'enablers,' played a critical role. Extensive interviews with them, and reflection on his own participation in the project, confirmed the enablers' unique and until now un-theorised role in contributing critically to improving planning and coordination of cross-sector collaboration

Supervisor: Associate Professor S Oldfield (Environmental and Geographical Studies)

Gareth Duff Haysom
Thesis Title: Food system governance
for urban sustainability in the Global
South

Gareth Haysom holds an MPhil in Sustainable Development from Stellenbosch University. He spent fifteen years in the food sector before joining Stellenbosch's Sustainability Institute where he coordinated research and teaching and, for three years, led the MPhil programme in Sustainable Agriculture. Since 2011 he has participated in the UCT-based African Food Security Urban Networks programme (AFSUN).

Gareth Haysom's thesis reviews the developing world's urban food challenge within the context of intersecting and mutually reinforcing global transitions. The dominant response to food security, which focuses on producing more food, presupposes a rural, agricultural challenge. Yet Africa is urbanising rapidly, and its urbanisation typologies require new approaches to urban food system engagement and food security.

Haysom's thesis investigates emerging urban food governance approaches that challenge the conventional roles of both city government and society. It tests the utility of these approaches within the context of South African urban areas. He shows that South African urban food governance approaches are in their formative stage,

yet offer insights into how developing world cities are engaging with urban food challenges. Haysom's thesis concludes that cities can gain a measure of control over the food system but that this requires new governance and leadership approaches.

Supervisor: Dr J Battersby (Environmental and Geographical Studies and African Centre for Cities)

Co-supervisor: Professor G Pirie (African Centre for Cities)

Ndeyapo Martha Nickanor Thesis Title: Food deserts and food insecurity in the informal settlements of Windhoek, Namibia.

Ndeyapo Nickanor has a BSc from the University of Namibia (UNAM) and a Post Graduate Diploma and MA from the University of Botswana. She has taught in the Department of Statistics and Population Studies at UNAM and has been a research collaborator with the UCT-based African Food Security Urban Network (AFSUN).

Ndeyapo Nickanor's thesis aims to provide an understanding of how the urban poor remain resilient to food insecurity. Urban food insecurity has become a major challenge in Southern Africa, given rapid urbanization and rising urban poverty, and the fact that livelihoods in urban areas are determined by people's ability to earn a cash income. Yet most responses to food insecurity continue to be oriented towards rural areas. In her thesis, Ndeyapo Nickanor extends the idea of food deserts - an idea developed in inner city areas of Europe and North America – to an African setting, and she conceptualizes it in that context. She does that in order to account for the variety of food sourcing ways that can be observed in many African cities.

Supervisor: Professor S Parnell (Environmental and Geographical Studies)

Co-Supervisors: Dr J Battersby and

Co-Supervisors: Dr J Battersby and Professor J Crush (Environmental and Geographical Studies)

U 1

In Film Studies: Philip James Llewellyn Roberts Thesis Title: Feature film scriptwriting and the neuropsychology of the cinema experience. Philip Roberts has a BA with distinction from the University of Cape Town and conducted postgraduate research in the Philosophy of Psychology at the University of Exeter. He trained as a psychotherapist under R.D. Laing at the Philadelphia Association in London and currently holds the Chair of Screenwriting at AFDA Film School.

Philip Roberts's thesis examines the role of primary affective meaning-making systems in the craft of feature-film scriptwriting in relation to the screenwriter's prevision of the emotional impact of his narrative on the film viewer. Creative, structural and narrative choices, in tandem with their anticipated effect on the film's spectator, are analysed eventual through reference to the field of affective neuropsychology. This process is exemplified by a reflexive analysis of Roberts's own screenplay for a psychological thriller entitled One Last Look and of the ensuing feature film of the same name. The thesis proposes a new perspective on screenwriting methodologies in the light of the role of Jaak Panksepp's description of the dopaminergic SEEKING system. It concludes that effective screenwriting is linked to the desire of the screenwriter to arouse and structure the appetitive interests of the potential viewer.

Supervisor: Professor I Glenn (Centre for Film and Media Studies)
Co-supervisor: Dr M Rickards
(Boondogle Films)

In Linguistics:
Tracey Lynn Toefy
Thesis Title: Sociophonetics and class
differentiation: a study of workingand middle-class English in Cape
Town's Coloured community

Tracey Toefy holds a BA (Hons) and MA from the University of Cape Town.

Tracey Toefy's thesis uses variationist sociolinguistic principles to characterise the variety of English of Cape Town's Coloured community in the post-apartheid era. Her research utilised comprehensive acoustic methods afforded by new Forced Alignment and Formant Extraction techniques that enable the measurement of a very large data set of vowels. Hers is the first study in South Africa to do this. Applying the technique enabled her to generate a detailed characterisation of minute but socially meaningful

differences in accent. Tracey Toefy's thesis shows that there is ongoing differentiation, especially in the realisation of vowels of the TRAP, GOOSE and FOOT sets. Middle class youth socialised to a large extent in ex-Model-C and private schools have lower TRAP vowels and fronter GOOSE and FOOT vowels than their working class counterparts who maintain the older variants that are found amongst members of Cape Town's Coloured community. While her thesis provides clear evidence of the partial deracialisation of accents among middle class youth, it also shows that the middle class subjects of her study did not fully adopt the norms of their white counterparts.

Supervisor: Professor R Mesthrie (Linguistics Section, School of African & Gender Studies, Anthropology & Linguistics)

In Political Studies: Zwelethu Bulelani Jolobe Thesis Title: Getting to CODESA: an analysis on why multiparty negotiations in South Africa began, 1984-1999.

Zwelethu Jolobe has a BSocSc, BSocSc(Hons), and MSocSc from the University of Cape Town. He joined UCT's Department of Political Studies in 2005.

Zwelethu Jolobe's thesis examines the pre-negotiation stage of the multiparty negotiation process in South Africa, dated between 1984 and the Convention for a Democratic South Africa (CODESA) in 1991. Using William Zartman's theory of ripeness and Brian Tomlin's five-stage model of pre-negotiation, he shows how a pre-negotiation stage is understood as a period when negotiated solutions towards a political settlement are considered and accepted as an option by the major parties to a conflict. He then demonstrates that, in the South African case, this stage involved parties' decision to negotiate and events leading to the South African government negotiating with the African National Congress (ANC) rather than another major party. He explains how and why the South African government and the ANC reached a shared understanding that the South African conflict could be solved through negotiations, how committed to such a solution, and how

they overcame the many barriers to the opening of multiparty negotiations.

Supervisor: Professor A Seegers (Political Studies)

In Psychology: Amy Louise Duncan Thesis Title: Euphoria in multiple sclerosis: an investigation of symptoms and constructs

Amy Duncan has a BA from UNISA and a BA(Hons) in Psychology and MA in Research Psychology from UCT. Since 2009 she has been based mainly in Groote Schuur Hospital's Neurology Department gaining clinical Neuropsychology experience and training through the Department of Psychology.

When multiple sclerosis (MS) was first described by Jean-Martin Charcot in the late nineteenth century, he included a description of a mental state that he called 'morbid happiness' alongside the better-known physical symptoms of the disease. This aspect of MS - which came to be known as 'euphoria', received considerable attention in the early twentieth century but it is now barely known. Amy Duncan's thesis revives interest in this issue through clarifying the incidence and nature of this symptom in contemporary MS patients. She demonstrates that the symptom does indeed still manifest in a significant subset of patients, when compared to those suffering other auto-immune and neurodegenerative and diffuse cerebral disorders. She shows that the euphoria consists in two distinct sub-types, 'unawareness' and 'positivity' which she links with other components of the disease. Her research revives an important issue with implications for treatment and management, and simultaneously opens new avenues of research into the brain mechanisms of mood.

Supervisor: Professor M Solms (Psychology)
Co-supervisor: Dr S Malcolm-Smith (Psychology)

In Religious Studies: Elaine Nogueira-Godsey Thesis Title: The ecofeminism of Ivone Gebara

Elaine Nogueira-Godsey holds a BA in Theology from the Faculdade

Teologica D'Oest do Brasil and an MSocSc in Religious Studies from the University of Cape Town. While working on her PhD, she served as a lecturer in Religious Studies, researcher in the Institute for Comparative Religion in Southern Africa, and managing editor of the *Journal for the Study of Religion*.

Elaine Nogueira-Godsey's thesis investigates the ecofeminist work of the Brazilian theologian Ivone Gebara. One of the foremost feminist liberation theologians of Latin America, Gebara has developed an ecofeminism in solidarity with the underside of society, especially through recognising the experiences of poor women. Nogueira-Godsey's thesis demonstrates how Gebara developed a new theological methodology and anthropology. Exposing the ideological gap between ecofeminist work in the Global North and South, Nogueira-Godsey argues that forms of dualism and imperialism that linger within the Global North's ecofeminist movement have led to Gebara's theology-based ecofeminist perspective having been largely misunderstood in the Global North. She proposes that a postcolonial perspective can bridge ecofeminism's North-South gap. An original contribution to the analysis of ecofeminist discourse, her thesis demonstrates that Ivone Gebara's theology provides a key component for working towards an inclusive dialogue between North and South ecofeminism.

Supervisor: Professor D Chidester (Religious Studies) Co-supervisor: Associate Professor S Shaikh (Religious Studies)

In Rhetoric Studies:
Sifiso Eric Ngesi
Thesis Title: Treading a tightrope: a rhetorical study of the tension between the executive and collective leadership of the African National Congress (ANC): from Nelson Mandela to Thabo Mbeki.

Sifiso Ngesi has a Master's Degree in Political Science from the University of Bordeaux's Institute of Political Studies (France), a BA(Hons) in French and an MPhil in Rhetoric Studies with distinction, all from UCT.

Drawing largely from Chaïm Perelman, a French-speaking scholar and pioneer in modern rhetoric studies,

Sifiso Ngesi's thesis looks at the rhetorical techniques employed by Nelson Mandela and Thabo Mbeki in their capacities as presidents of both the ANC and South Africa. Ngesi's thesis examines the argumentation and rhetorical operations that were used by then Presidents Mandela and Mbeki to define, advocate and perform a vision of "collective leadership". His enquiry is carried out through an analysis of the "State of the Nation" addresses and selected other speeches. His study reveals that each president strove to ensure that there was "collective leadership" within the ANC, between the ANC and its allies, the South African Communist Party (SACP) and Congress of Trade Unions (COSATU), as well as amongst South Africans from all walks of life. Notwithstanding this endeavour, Ngesi shows that there were various instances where there was a deviation from "collective leadership".

Supervisor: Distinguished Professor P-J Salazar (Centre for Film and Media Studies)

Eric Opoku Mensah Thesis Title: *The rhetoric of Kwame Nkrumah: analysis of his political speeches.*

Eric Opoku Mensah holds an MPhil degree in English Language from the University of Cape Coast (Ghana) where he currently lectures in the Department of Communication Studies. He is interested in the interface between rhetoric and politics and is emerging as a foremost scholar on recent Ghanaian political discourse.

Eric Opoku Mensah's thesis discloses and traces the rhetorical dynamics and rhetorical history of Kwame Nkrumah's effort to define and lead an anti-colonial movement through the rough waters of struggle, independence, constitution and leadership on the African continent. His thesis focuses on six specific and key moments in Nkrumah's "rhetorical career," a set of defining speeches that shed light on Nkrumah's evolving and in some sense cumulative effort to invent a rhetorical-argumentative platform that enacts a political struggle, independence and transition. Opoku Mensah's thesis sheds lights in two key directions: it reveals how rhetorical theory can inform our understanding of the

defining terms and tropological turns that defined Nkrumah's leadership. Secondly, it suggests ways in which standing theoretical accounts of rhetorical invention can be expanded in light of the dilemmas that mark the limits of Nkrumah's approach to leading Ghana from past to the future.

Supervisor: Distinguished Professor P-J Salazar (Centre for Film and Media Studies)

In Social Anthropology:
Kate Christine Abney
Thesis Title: At the foot of Table
Mountain: paediatric tuberculosis
patient experience in a centralised
treatment facility in Cape Town, South
Africa.

Kate Abney has a BA from Boston University, and a BA(Hons) (first class) and MA (with distinction) in Social Anthropology from the University of Cape Town. As a medical anthropologist, she has lectured part-time in the UCT Medical School.

Pursuing her particular interest in infectious illness in South Africa, Kate Abney's thesis traces one year of ethnographic research within a paediatric tuberculosis treatment facility. It provides a historical and political economic analysis of the persistence of TB in South Africa, with reference to poverty and structural forms of inequality - reflecting the hallmark of critical medical anthropology. particular, the thesis documents the many entanglements TB presents to patients, their physicians, teachers, and nursing staff at the Brooklyn Chest Hospital in Cape Town. Kate Abney depicts how children are figured and classified within the different contexts of biomedicine, child rights and ethics discourse, and by the volunteers and teachers who shape children's life worlds at the hospital. The 'child' appears here in many forms, among them as a biomedical object, as a student patient, as a child 'in need', and, notably too, as an individual agent burdened by and seeking their own ways to shape their time in the hospital.

Supervisor: Dr S Levine (Anthropology Section, School of African and Gender Studies, Anthropology and Linguistics) Grant Stephen McNulty
Thesis Title: Custodianship on the
periphery: archives, power and
identity politics in Post-Apartheid
Umbumbulu. KwaZulu-Natal

Grant McNulty has a BA and MA in Zulu from the former University of Natal in Durban, KwaZulu-Natal. He has worked as a researcher for University College London. His doctoral research stems from an interest in digital community archiving and the politics of the past in KwaZulu-Natal.

Through a study of contemporary Umbumbulu in southern KwaZulu-Natal, Grant McNulty's thesis explores a host of custodial and record-keeping forms and practices, often in settings not conventionally associated with custodianship and archives. The thesis argues that the activities of the subjects of the study reveal a blurred distinction between practices of custodianship and the production of versions of history, practices which might be best understood as curations of the past. McNulty maintains that the types of knowledge that flow from those people's activities at a local level serve to shape socio-political relations in the region; and that they unsettle dominant modes of knowing, including those related to custodianship, archives and identity. His thesis shows that, in present-day KwaZulu-Natal, historical records are not consigned to the archives, but are actively negotiated and navigated in social and political life.

Supervisor: Professor C Hamilton (Anthropology Section, School of African and Gender Studies, Anthropology and Linguistics)

Patience Mususa

Thesis Title: There used to be order: life on the Copperbelt after the privatisation of the Zambia consolidated copper mines.

Patience Mususa completed her Bachelor of Architecture at the Copperbelt University, Zambia. She was awarded a Rhodes Scholarship and holds two Masters degrees; one in Development Practice (Oxford Brookes) and the other in Material Anthropology and Museum Ethnography (Oxford). She was awarded a prestigious Wadsworth Fellowship to conduct her PhD.

Patience Mususa's thesis builds on and critically engages with a rich historical

and ethnographic corpus of materials on urbanisation on the continent. Set in the period after the Zambian copper mines were privatised, she explores the constitution of everyday life among former mid-level employees of the mines. She argues that, in a context of insecurity, everyday life is established in bodily engagements with the environment's affordances. Drawing on phenomenological approaches, she develops a theoretical model of 'trying', an experimental, poetic, textural, and processual account that is both an ethnographic description and a theoretical intervention. Her thesis is significant for its exploration of the life worlds of a former social elite and for its theoretical interventions, particularly its emphasis on improvisation and effort.

Supervisor: Professor FC Ross (Anthropology Section, School of African and Gender Studies, Anthropology and Linguistics)

Crystal Powell Thesis Title: ICTs and the reconfiguration of marginality in Langa Township: A study of migration and belonging.

Crystal Powell holds a BA in Cultural Anthropology from Lehman College University, New York, and an MA in Social Anthropology from the University of Cape Town. Her book, Me and My Cell Phone, and Other Essays on Technology in Everyday Life, published in 2012, contributed significantly in sharpening her ideas and PhD research.

Crystal Powell's thesis aims to reveal the nuanced and complex reality of marginality among the mobile population of Langa Township, in Cape Town, South Africa. The work is a significant contribution towards the reappraisal of often problematic ideas around marginal populations in relation to identity and belonging. The thesis is part of a larger project to investigate the diverse transformations in South Africa wrought by new Information and Communication Technologies (ICTs). particularly phones. Crystal Powell provides empirical data on the role of ICTs in negotiating migration and belonging. She explores the ways that ICTs have provided opportunities for development, facilitated the negotiation of various

marginalities, and offered new ways of belonging for the mobile population of Cape Town's Langa Township.

Supervisor: Professor FB Nyamnjoh (Anthropology Section, School of African and Gender Studies, Anthropology and Linguistics)

In Social Development: Chance Arisitaliko Chagunda Thesis Title: South Africa's social assistance interventions as a building block of a developmental state.

Chance Arisitaliko Chagunda has a BPhil from St. Joseph's Theological Institute, Pietermaritzburg and Urbanian University, Rome, a BTh, a BTh(Hons) and a MTh (Theology and Social Development) from the University of KwaZulu-Natal and a MPhil in Public Policy from UCT.

Chance Chagunda's doctoral research considers the disconnect between South African parliamentary development of social policy regarding social security, and the impacts of such policy on micro level Western Cape developmental initiatives. Questioning the extent to which South Africa's social assistance programme constitutes a building block of a developmental state, he uses a critical research approach, and a conceptual framework drawn from Sen's understanding of development as freedom, to explore the impact of cash transfers on households, on access to socio-economic opportunities and on the development of local democracy. He argues that, because social assistance in the form of social grants contributes to the alleviation of diverse poverty-induced hardships, it has a developmental component that is fundamental to a developmental state. His thesis expands theoretical and policy understanding of social assistance beyond its impacts on just income poverty, and provides new insights into the multiple ways that cash transfers enable poor people's participation in enterprise development and in building local democracy.

Supervisor: Associate Professor V Taylor (Social Development)

Wondimu Ketsela Mengistu Thesis Title: Exploring the peacebuilding potential of development NGOs in areas of protracted conflicts in Ethiopia: with special reference to Oromia and Gambella regional states.

Wondimu Mengistu has a BA (Philosophy) from Addis Ababa University (Ethiopia) and a MA (Social Work) from Andhra University (India).

Wondimu Mengistu's thesis responds to the Ethiopian Federal Government's proclamation pertaining to NGOs. He examines the potential of peacebuilding NGOs using an 'indigenous empowerment perspective' drawn from peace research and conflict resolution theory. He applies the perspective across Ethiopia's Oromia and Gambella regional states. His thesis's core hypothesis is that, in NGOs examined within these two regions, working with and building on the activities of indigenous institutions and local actors is of key importance. This is particularly so in Ethiopia where, it is argued, the State has somewhat restricted the role of peacebuilding NGOs despite the State's local agencies (the local administration and the local judicial system) having limited capacity to enable sustainable peacebuilding. Since much analytical work on indigenous empowerment and 'peacebuilding from below' fails to engage with grounded case studies and remains abstract and untested, Mengistu's original contribution lies in his discussion of how theories of indigenous empowerment – characteristic of recent conflict resolution literature - were utilised in his case study areas. He thus both tests the theory and presents empirical data that nuances and enhances it.

Supervisor: Dr C. O'Brien (Social Development)

In Sociology:
Singumbe Muyeba
Thesis Title: Does low-income
homeownership work? The effects of
titling among beneficiaries in Cape
Town and Lusaka.

Singumbe Muyeba comes from Zambia and has a UCT MPhil in Development Studies. He has tutored and taught in UCT's Sociology Department, has assisted in the Centre for Social Science Research. He spent a year at Yale as a Fox Fellow, and is currently a UCT post-doctoral research

fellow.

Singumbe Muyeba's thesis examines the effects of property ownership on poverty in parts of Cape Town (South Africa) and Lusaka In one area of Lusaka, residents were given title to their homes in 1996, whilst residents of a neighbouring area were not. In Cape Town, some poor people have been given public housing, whilst others have not. The thesis uses quantitative and qualitative data to compare various economic, social and human capital outcomes among recipients and non-recipients of title deeds. He finds that ownership of formal housing is associated with improvements in human health in Cape Town and with raised earnings in Lusaka, but not in Cape Town. In both cases, it leads to increased social status. The thesis strengthens the theory on the

The thesis strengthens the theory on the effects of titling by going beyond orthodox titling theory.

Supervisor: Professor J Seekings (Sociology)

ACADEMIC DRESS

OFFICERS OF THE UNIVERSITY

CHANCELLOR

The Chancellor wears a gown made from dark blue silk. The front of the gown has facings down each side made of dark blue velvet embroidered with a gold floral design. The gown and sleeves are lined with pale blue silk and the sleeves are looped up in front with a gold cord and button. The yoke of the gown is edged with gold cord. The gown is worn with a square blue velvet hat with a soft crown and gold tassel.

VICE-CHANCELLOR

The Vice-Chancellor wears a gown made from bright blue silk. The front of the gown has facings down each side and sleeve-linings of pale blue silk. The sleeves are looped up in front with a gold cord and button and the yoke of the gown is edged with gold cord. The gown is worn with a black velvet bonnet with a silver cord.

DEPUTY VICE-CHANCELLOR

A Deputy Vice-Chancellor wears a gown made from dark blue silk. The gown has closed sleeves with an inverted T-shaped opening at the level of the elbow to free the arms. The front of the gown has facings of light blue down each side. The sleeves are lined with light blue and the yoke of the gown is edged with silver cord. The gown is worn with a black velvet bonnet with a silver cord.

CHAIR OF COUNCIL

The Chair of Council wears a gown, of the same pattern as that worn by the Vice-Chancellor, made from light blue silk. The front of the gown has facings down each side and a yoke of dark blue. The sleeves are lined with dark blue and the facings and yoke are trimmed with gold cord. The sleeves are looped up in front with a gold cord and button. The gown is worn with a black velvet bonnet with a gold tassel.

MEMBERS OF COUNCIL

Members of Council wear graduate-pattern gowns made from black silk. The front of the gown has 10cm wide, light blue facings down each side trimmed with dark blue cord. The gown is worn with a black velvet bonnet with a blue cord.

REGISTRAR

The Registrar wears a gown made from black silk. The front of the gown has 10cm wide facings of blue silk down each side. The gown is worn with a black velvet bonnet with a white cord.

PRESIDENT OF CONVOCATION

The President of Convocation wears a gown made from black silk and has long closed sleeves with an inverted T-shaped opening at the level of the elbow to free the arms. The front of the gown has facings down each side and sleeves of blue silk. The gown is worn with a black velvet bonnet with a blue tassel.

ACADEMIC DRESS (Continued)

GOWNS

A plain black gown styled after the pattern of the Oxford scholar's gown is worn by diplomats, and Bachelor's, Honours and Master's graduands. Senior doctoral graduands wear a scarlet gown, with facings the colour distinctive of the faculty in which the degree is awarded. PhD graduands wear a scarlet gown without facings.

HOODS

The hood is particular to the qualification and the faculty. Diplomates and Bachelor's grdauands wear a black hood lined with white and edged with the colour distinctive of the faculty. Master's graduands wear a black hood lined with the colour distinctive of the faculty and edged with white, except in the case of the hood for the MMed degree, which is edged with red. Senior doctoral graduands wear a hood of the colour distinctive of the faculty and a black velvet bonnet with a cord of the colour distinctive of the faculty in which the degrees is awarded. PhD graduands wear a hood of scarlet lined with black and a black velvet bonnet with a cord of the colour distinctive of the faculty in which the degree is awarded.

DISTINCTIVE COLOURS

Faculty of Commerce
Faculty of Engineering and the Built Environment
Faculty of Health Sciences
Faculty of Law
Faculty of Humanities
Faculty of Science

Yellow
Green
Red
Old gold
Blue
Purple

ORIGINS OF THE BACHELOR DEGREE

The term 'Bachelor' derives from ancient ceremonies (the first such was believed to have been at Oxford in 1432) held to honour achievements of scholarship. The word derives from bacca lauri (laurel berry). Instead of the hoods we use today to signify your graduation, graduands of old wore garlands of laurel leaves and berries.

So the term has nothing to do with our modern understandings of what being a bachelor means, and everything to do with a long tradition of celebrating high achievement.

HISTORICAL SKETCH

Founded as the South African College (a boys' school that aimed to provide higher education as well) in 1829, the University was established as the University of Cape Town in 1918.

The early history was one of great expectations and hard times and it was not until the early years of the twentieth century that the University was developed into a fully-fledged tertiary institution. A significant and pioneering development in the 19th century was the admission of women as degree students in 1886, many years ahead of most universities in the world.

At the start of the 20th century the University incorporated the Diocesan College, the teacher training classes of the Normal College, the South African College of Music and the Cape Town Schools of Fine Art and Architecture

The Medical School was established and in the 1920s the University began a partnership with the local health authority (now the Provincial Government's health department) that saw the Medical School move from the Hiddingh Campus and the Green Point Somerset Hospital to Observatory (the rest of UCT's Upper Campus moved from Hiddingh to its present site, on part of Cecil Rhodes' estate, in 1928). This partnership allowed for the construction of the first Groote Schuur Hospital on a University site. The partnership continues to this day and now involves not only Groote Schuur as a teaching hospital but Red Cross Children's Hospital, Valkenberg and a growing number of primary health care sites.

The period between the end of World War II and 1994 was marked by two themes. Firstly, the University recognised that if it was to be fully South African, it would have to move beyond academic non-segregation to be fully inclusive. It would have to face the consequential and increasing clashes with a government determined to legislate for segregation and enforce the doctrine of apartheid. And secondly, the University intended to transform into a leading research institution.

Before World War II, the University was largely a teaching university and its students were mostly undergraduates. The research undertaken was sporadic, though in some cases notable. A research committee was appointed for the first time in 1945. The next 75 years saw a great expansion of research and scholarly work such that the UCT of 2014 has a greater proportion of highly rated researchers and gains significantly more research grants and awards than any other South African University.

The 1980s and 1990s were characterized by the deliberate and planned transformation of the student body. This was aided by the establishment of the Academic Development Programme aimed at helping students from disadvantaged educational and social backgrounds to succeed and the desegregation of student residences. As a result, a student body that was 90% white in 1979, when UCT marked its 150th anniversary, is in 2014 more than 50% black. The total student enrolment of just above 26 000, includes international students drawn from over 100 countries, a significant proportion of which are from SADC states. Particular emphasis is placed on postgraduate studies and more than 20% of these students will be enrolled in master's and doctoral programmes. A growing number of postdoctoral fellows contribute substantially to the research endeavours and reputation of the University (UCT has more than a third of the total number of post docs in South Africa).

UCT continues to work towards its goal to be Africa's leading research university. Its success can be measured by the scope of study it offers and the calibre of its graduates.

VALUES OF THE UNIVERSITY OF CAPE TOWN

The University is a community of scholars, teachers, students and staff. A community implies the shared acceptance by its members of common values. The concept of values implies not only rights but also obligations, for the community itself and for its individual members.

This statement of values provides a framework that informs and governs what is considered by the University community to be appropriate and acceptable behavior. The statement also serves as the foundation for a range of University policies and guides the management of particular aspects of University life.

As a community, the University commits itself, and expects all its members, to exemplify and uphold these values and to reflect them not only in institutional and personal relationships, but also in all other aspects of University life, including work, sport, recreation, and cultural, intellectual, religious and other activities.

As a values-based community, we aspire to an encompassing ethos which

- promotes academic excellence and the attainment of the institutional goal of becoming a world-class African University;
- preserves what is valuable in the history of the institution and of this country, and responds to the challenges posed by past injustices and unfair discrimination;
- achieves social transformation, empowerment and participative governance;
- · affirms and protects the fundamental human rights enshrined in the Constitution; and
- encourages the institution and all its members to accept responsibility for the welfare of the community and for behaving in accordance with these community values

VALUES

We commit ourselves to

- truth, fairness, consistency, and integrity in both academic and other work, and in all personal and institutional relationships;
- compassion, generosity and concern for the needs and aspirations of others, and in particular for the challenges faced by the less privileged in our society;
- respect and tolerance for cultural, religious, political, and other differences and acknowledgement of the value of diversity in society;
- respect for individual privacy, dignity, and the right to personal choice;
- intellectual honesty, rigour in debate, openness to alternative ideas and respect for other views, beliefs and opinions;
- commitment to high standards, personal fulfillment and the pursuit of excellence;
- the protection and responsible use of the University's assets and resources;
- concern for the personal safety, health and welfare of all members of the community; and
- the protection and conservation of the environment and our natural resources.

MISSION STATEMENT OF THE UNIVERSITY OF CAPE TOWN

UCT aspires to become a premier academic meeting point between South Africa, the rest of Africa and the world. Taking advantage of expanding global networks and our distinct vantage point in Africa, we are committed, through innovative research and scholarship, to grapple with the key issues of our natural and social worlds. We aim to produce graduates whose qualifications are internationally recognised and locally applicable, underpinned by values of engaged citizenship and social justice. UCT will promote diversity and transformation within our institution and beyond, including growing the next generation of academics.

Foundation statement underpinning the mission statement

Our research-led identity is shaped by a commitment to:

- academic freedom as the prerequisite to fostering intellectual debate and free injury;
- ensuring that research informs all our activities including teaching, learning and service to the community;
- advancing and disseminating knowledge that addresses the key challenges facing society South African,
- continental and global;
- protecting "curiosity driven" research;
- nurturing and valuing creativity in the sciences and arts including the performing and creative arts;
- stimulating international linkages of researchers and research groupings.

We strive to provide a superior quality educational experience for undergraduate and postgraduate students through:

- providing an intellectually and socially stimulating environment;
- inspired and dedicated teaching and learning;
- exposure to the excitement of creating new knowledge;
- stimulating the love of life-long learning;
- the cultivation of competencies for global citizenship;
- supporting programmes that stimulate the social consciousness of students;
- offering access to courses outside the conventional curricula;
- attracting a culturally and internationally diverse community of scholars:
- guaranteeing internationally competitive qualifications;
- offering a rich array of social, cultural, sporting and leadership opportunities;
- providing an enabling physical and operational environment.

In advancing UCT as an Afropolitan university, we will:

- expand our expertise on Africa and offer it to the world;
- extend our networks on the continent, along with our global connections and partnerships;
- promote student and staff exchanges and collaborative research and postgraduate programmes;
- engage critically with Africa's intellectuals and world views in teaching and research;
- contribute to strengthening higher education on our continent.

We strive to provide an environment for our diverse student and staff community that:

- promotes a more equitable and non-racial society;
- supports redress in regard to past injustices;
- is affirming and inclusive of all staff and students and promotes diversity in demographics, skills and backgrounds;
- offers individual development opportunities to all staff;
- is welcoming as a meeting space for scholars from Africa and around the world.

DONOR ACKNOWLEDGEMENTS

The University of Cape Town gratefully acknowledges the sustained contributions of the following partners. Their generosity has supported curriculum, staff and student transformation, improved student access to tertiary education, enabled programmes that promote social engagement and community upliftment, and increased research capacity.

FOUNDATIONS CORPORATES AND TRUSTS

Platinum Circle

Organisations that have made gifts to UCT, over R50 million
Carnegie Corporation of New York
Claude Leon Foundation
Hasso Plattner Foerderstiftung,
gGmbH

The Andrew W Mellon Foundation The Atlantic Philanthropies (Bermuda) Ltd

The Ford Foundation USA
The Harry Crossley Foundation

Gold Circle

Organisations that have made gifts to UCT, between R20 million and R50 million

Cancer Research Trust Minerals Education Trust Fund The Michael and Susan Dell Foundation

The Rockefeller Foundation
The South African National Roads
Agency Ltd

The William and Flora Hewlett Foundation

The Wolfson Foundation

Silver Circle

Organisations that have made gifts to UCT, between R5 million and R20 million

Albert Wessels Trust

Andreas and Susan Struengmann Foundation gGmbH Anglo American Platinum Ltd

Boehringer Ingelheim (Pty) Ltd Cape Gate (Pty) Ltd, Vanderbijlpark Donald Gordon Foundation

Doris Duke Charitable Foundation Eskom Holdings Ltd

Eskom Holdings Ltd

Garfield Weston Foundation

John and Margaret Overbeek Trust

Liberty Group Ltd Linbury Trust

Link-SA Fund

National Lottery Distribution Trust Fund

Old Mutual Foundation (South Africa) Open Society Foundation for South

Africa Rockefeller Brothers Fund

Rustenburg Platinum Mines Ltd

Sigrid Rausing Trust

The David and Elaine Potter Charitable Foundation

The DG Murray Trust

The Dora and William Oscar Heyne Charitable Trust

The Doris Crossley Foundation

The ELMA Foundation

The Frank Robb Charitable Trust

The Kresge Foundation

The Mauerberger Foundation Fund

The Nellie Atkinson Trust

The Oppenheimer Memorial Trust

The Raith Foundation

The Raymond Ackerman Foundation

The Standard Bank Group Ltd

The Starr Foundation

The Stella & Paul Loewenstein Educational and Charitable Trust

Tullow Oil South Africa (Pty) Ltd Unilever South Africa Home and

Personal Care (Pty) Ltd Vodacom (Pty) Ltd

Bronze Circle

Organisations that have made gifts to UCT, between R1 million and R5 million

Abe Bailey Trust

Actuarial Society of South Africa

AngloGold Ashanti Ltd

Attorneys Fidelity Fund

Birdlife South Africa

British American Tobacco South Africa

Capebridge Trust Company (Pty) Ltd

CHK Charities Ltd

DaimlerChrysler Fonds im

Stifterverband für die Deutsche Wissenschaft

Die Rupert-Musiekstigting Discovery Fund

Dow Southern Africa (Pty) Ltd

Dr Stanley Batchelor Bursary Trust

Edwards Lifesciences (Pty) Ltd

EJ Lombardi Trust

Foschini Retail Group (Pty) Ltd

Garden Cities Inc

GlaxoSmithKline plc

Guy Elliott Medical Research Trust

HCI Foundation

HSBC Investment Services Africa

(Pty) Ltd

Investec Limited

Joan St Leger Lindbergh Charitable Trust

Johnson Matthey plc

JPMorgan Chase South African Trust

Foundation

Kaplan Kushlick Educational Foundation

Karl Storz GmbH & Co KG

Lonmin Management Services

Misys Charitable Foundation

National Arts Council of South Africa

National Bioproducts Institute

New Settlers Foundation

Novo Nordisk (Pty) Ltd

PA Don Scholarship Trust

Pearson Plc

Percy Fox Foundation

Rand Merchant Bank Holdings Ltd

Ruth and Anita Wise Charitable and

Educational Trust

Sanlam Ltd

Southern African Music Rights Organisation

Stevenson Family Charitable Trust

Swiss-South African Co-Operation Initiative

The Beit Trust

The Chris Barnard Trust Fund

The Hermann Ohlthaver Trust

The Leverhulme Trust

The Lewis Foundation

The Little Tew Charitable Trust

The Maurice Hatter Foundation

The Rolf-Stephan Nussbaum
Foundation
The Vodafone Group Foundation
The Wilfred Cooper Trust
UCT Fund Inc (New York)
Upstream Training Trust
Welton Foundation
Wenner-Gren Foundation for
Anthropological Research Inc
Western Platinum Ltd
Xstrata South Africa (Pty) Ltd

Friends Circle

Organisations that have made gifts to UCT. under R1 million Abbott Laboratories South Africa (Ptv) Ltd AEC Amersham (Pty) Ltd Africa X-Ray Industrial & Medical (Pty) Ltd African Bird Club African Oxygen Ltd Agfa (Pty) Ltd, Cape Town Allergy Society of South Africa Anonymous UCT Alumnus (UK) ArcelorMittal South Africa Ltd Aspen Pharmacare Ltd AstraZeneca South Africa B Braun Medical (Pty) Ltd Barbara Mackenzie Memorial Scholarship Trust Baroque Medical (Pty) Ltd Bayer (Pty) Ltd Beckman Coulter (South Africa) (Pty) Ltd

Birdlife Border Boston Scientific South Africa (Pty) Ltd Brink Cohen Le Roux Inc Business Systems Group (Africa) C & A Friedlander C & D Robertson & M Howie Trust Capitec Bank Holding Ltd Cape Bird Club (SAOS) Cape Colours United e.V. Cape Town Big Band Jazz Festival Cardiac Output (Pty) Ltd Catherine Steensma Memorial Trust Cement & Concrete Institute Charles Pelteret Educational Trust Cipla Medpro (Pty) Ltd Citigroup Foundation City of Cape Town Consulate-General for the Federal Republic of Germany Credit Guarantee Insurance

Corporation of Africa Ltd

Dermatological Society of South

CTP Limited

Africa

Birding Ecotours CC

Dietrich Voigt Mia Inc Discovery Health, Cape Town Distell Foundation Dorma South Africa (Pty) Ltd Dr JPF Dalmeyer & Associates Inc Dr Sylvia Gavron Scholarship Trust E Oppenheimer & Son (Pty) Ltd Edward & Dorothy Cadbury Charitable Trust Eli Lilly (SA) (Pty) Ltd Embassy of Italy Embassy of the Kingdom of the Netherlands **Endangered Wildlife Trust** Fairheads Development Trust Fairheads International Trust Company (SA) (Ptv) Ltd Fine and Decorative Arts Society Fiscal Private Client Services (Pty) Fresenius Kabi South Africa (Pty) Ltd Fresenius Medical Care South Africa (Pty) Ltd General Reinsurance Africa Ltd GlaxoSmithKline SA (Pty) Ltd Haggie Charitable Trust Hollister South Africa (Pty) Ltd HR Hill Residuary Trust HSBC Bank Plc Inner Wheel Club District 9350 Inner Wheel Club of Bloemfontein Inner Wheel Club of Claremont Inner Wheel Club of Constantia Inner Wheel Club of Durbanville Inner Wheel Club of Goodwood Inner Wheel Club of Port Elizabeth West Inner Wheel Club of Saldanha Inner Wheel Club of Sea Point Inner Wheel Club of Tafelberg Inner Wheel Club of Waterfront Inner Wheel Club of Waterkloof Inner Wheel Club of Wynberg International Bar Association Charitable Trust International Women's Club, Cape Town Irma Stern Trust Janssen Pharmaceutica (Pty) Ltd

Irma Stern Trust
Janssen Pharmaceutica (Pty) Ltd
JC Coetzee Trust
John Voelcker Bird Book Fund
Jonker & Barnes Architects (Pty) Ltd
Kaymac Holdings (Pty) Ltd
Khotso Trust
Laboratory Specialities (Pty) Ltd
Labotec (Pty) Ltd
Langeler Bursary Settlement Trust
LASEC SA (Pty) Ltd
Lions Club of Cape Town
Lodge De Goede Hoop Education
Fund
Lorenzo and Stella Chiappini

Charitable and Cultural Trust

Louis Karol Architects Lundbeck SA (Pty) Ltd Lynette Croudace Trust Marcus Medical (Pty) Ltd Mary Dorina Spilman Memorial Trust Medical Protection Society Ltd Mediclinic Southern Africa Medtronic Africa (Pty) Ltd Merck & Co Inc Merck Chemicals (Pty) Ltd, South Africa Minnie Goldman Trust MLH Architects & Planners (Cape) (Ptv) Ltd MSD (Pty) Ltd Murray & Roberts Holdings Ltd Mushet Education Trust Nelson Mandela Metropolitan University Nestlé (South Africa) (Pty) Ltd Noakes Family Charitable Trust Novartis South Africa (Pty) Ltd Nycomed (Pty) Ltd Old Mutual Life Assurance Company (South Africa) Limited Palaeontological Scientific Trust Peninsula Beverage Co (Pty) Ltd Pfizer Laboratories (Pty) Ltd Philips Medical Systems South Africa (Pty) Ltd Pick 'n Pay Stores Ltd PM Anderson Educational Trust Professional Provident Society Insurance Co Ltd Ravenscroft Charitable Trust Red Cross War Memorial Children's Hospital Richemont Holdings (UK) Ltd Roche Products (Pty) Ltd Sanofi-Aventis Sanofi-Aventis South Africa (Pty) Ltd Sappi Ltd Schering-Plough (Pty) Ltd Servier Laboratories South Africa (Ptv) Ltd Shuttleworth Foundation Siemens (Pty) Limited SMIT Amandla Marine (Pty) Ltd Smith & Nephew (Pty) Ltd Smith & Nephew Medical Education Trust Somerset West Bird Club South African Association of Women Graduates South African Medical Association South African Society of Anaesthesiologists South African Society of Obstetricians

& Gynaecologists

Spirit of Africa (Pty) Ltd

St Cyprian's School

Speciality Design Products (Pty) Ltd

SSEM Mthembu Medical (Pty) Ltd

St Francis Bay Bird Club Stanley Parkinson Green Trust Stavro Tsatsos Trust Stephen Lawrence Charitable Trust Suiderland Development Corporation

Tecmed Africa (Pty) Ltd Tema Medical (Pty) Ltd

The A & M Pevsner Charitable Trust The Ackerman Family Educational

Trust

The Adele Searll 100 Club The Association of Municipal **Electricity Undertakings**

The Ben & Shirley Rabinowitz Foundation

The Berdun Charitable Trust

The Cape Institute for Architecture

The Carl and Emily Fuchs Foundation

The Cecil Jowell Family Charitable Trust

The David Graaff Foundation

The Derek Raphael Charitable Trust

The Eleanor Rathbone Charitable Trust

The Eliot and Myra Osrin Trust

The FirstRand Foundation The Foschini Group CSI

The Frank G Connock Trust

The Hatter Cardiovascular Institute

The Heart Foundation of South Africa The Hyman Goldberg Foundation

The Isidore, Theresa & Ronald Cohen Charitable Trust

The Israel and Rose Kurgan Charitable Trust

The John Davidson Educational Trust The John Michael Hansen Scholarship Trust

The Kleyweg Educational Trust

The Law Society Charity

The Lindbergh Arts Foundation

The Mai Family Foundation

The Neil Jowell Family Charitable Trust

The Ohio State University

The Parker Foundation

The Petroleum Oil and Gas Corporation of SA

The Philip Schock Charitable &

Educational Foundation

The Scientific Group

The SG Menell Charitable Trust

The South African Breweries Ltd (SABMiller SA)

The South African Institute of Mining and Metallurgy

The South African Jewish Board of **Deputies**

The South African Society of Otorhinolaryngology Head and Neck Surgery

The Southern African Foundation for the Conservation of Coastal Birds

The Susman Charitable Foundation-

The Woodbridge Charitable Trust Trencor Services (Pty) Ltd

Tygerberg Bird Club

UCT Regional Office: Canada

UCT Trust (UK)

University of Stellenbosch

Van Ewijck-stigting

Victoria League of South Africa Viking Medical & Surgical (Pty) Ltd

Webber Wentzel Bowens Inc

Whitehead Scientific (Ptv) Ltd

Wilfred Orr Trust

William Adlington Cadbury

Charitable Trust

WK Robertson University Trust Zurich Insurance Company South

Africa

INDIVIDUAL DONORS

Chancellor's Circle

Individuals whose gifts to UCT over a five year period have amounted to more than R250,000

Bruce Ackerman

Chief Olu Akinkugbe CON

American author, T. Lee Baumann

Klaus-Jürgen Bathe Anthony Bloom Dieter Bock Roelof Botha

John Boydell

Johan Brink John Copelyn

Vivien Cohen

General Theophilus Danjuma GCON

Kevin Dillon George Ellis Jill Farrant Meyer Feldberg

Angela Frater

Ernest Fullagar

John Grieve

Pauline Groves

Raymond Haas Selwyn Haas

John Field John Graham Charlotte Heber-Percy

Neville Isdell

Johannes Jordaan John Keswick

Robert Knutzen

Charles McGregor

Noel McIntosh and family

Jim and Marilynn McNamara

Tim Noakes

Kate and Ken Owen

Simon Palley

Shafik Parker Elaine Potter

Max Price

Mary Robertson

Patrik Sandin

Duncan Saville

James Simmons

Ben-Zion Surdut Blaine Tomlinson

Vice-Chancellor's Circle

Individuals whose gifts to UCT over a five year period have amounted to between R100,000 and R250,000

John Antoniadis Brian Anziska

Sean Baumann

Frank Berman KCMG OC

Robert Berman

Marthinus Botha

Michael Brownstone

Charles Carter

Stewart Cohen

Louis De Wall

Janette Deacon Alan Drabkin

Colin Dutkiewicz

Martin Epstein

Brian Field

Sheila Frater

David Gibson

William Gild

Pam Golding

Eric Hassall

Michael Hayden

Christopher Holder

William and Yvonne Jacobson

Michael Levett

Michael Levy

Graça Machel

Peter Maggs

Clive McIntyre

Irene Menell Jan Minners

Craig Mullett and family

Kevin Naidoo Simon Nicks

Trevor and Shannon Norwitz

John Oates

Nicholas Oppenheimer

Hawa Patel Flora Pedler Mamphela Ramphele

Mark Raphaely Liam and Penny Ratcliffe

Delise Reich
Peter Reynolds
Katharine Robertson
David Rockefeller, Jnr

Spencer Roditi Lord Sainsbury of Preston Candover

Jonathan Scher

Hyman and Shirley Shwiel

Aristides Sitas Mugsy Spiegel Clare Stannard David Stein

Sybilla and Bruce Tindale

Leslie Underhill
Johannes van Zyl
David Watson
Matthys Wessels
Stephen Westwell
Christo Wiese
Peter Wrighton
Ian Yudelman

Dean's Circle

Individuals whose gifts to UCT over a five year period have amounted to between R60,000 and R100,000

Eric Abraham

Mark and Lynette Alexander

Hugh Amoore Robin Barnett-Harris

Henry and Marcia Blumberg

Marcus Bowman
Neil Braude
Walter Braude
Geoff Burton
Yasmin Carrim
Ian Clark
Beric Croome
Michael Darlison
Ezra Davids
Bryan Davies

Marion Dixon Alan Drabkin Sakhi Dumakude Ian Farlam

Robert Forman Isabel Goodman Siamon Gordon Nigel and Lila Harvey

Peter Hope Craig Howie Georgina Jaffee Kenneth Jones Rochelle Le Roux Thomas Leiden Hugh Livingstone Mutle Mogase David Nurek

Gordy Phelps, family and friends

Anthony Rademeyer
Stephen Schach
Crain Soudien
Sara Spiegel
Margaret Stanford
David Strong
Jennifer Thomson
Martin Tooke
Stephen Townsend
Karen van Heerden

Robert Williams Derek Yach Sandile Zungu

Michael Westwood

Friends of the University of Cape

Individuals whose gifts to UCT over a five year period have amounted to up to R60,000

UCT would like to thank the 2236 donors who have so generously offered us their support.

INDIVIDUAL DONORS

Niel Ackerman Harry Allschwang TS Berwitz Will Trust GR Bock Will Trust Anne Alida Bomford

Simon Bor

CLF Borckenhagen

AM Botha

Arthur Humphrey Bridgman

Edward Carter DI Chilton

David Graham Cunningham

Ilse Margaret Dall
MBM Denny
HS Dyer Will Trust
M Eilenberg Trust
Elsabe Carmen Einhorn
Sybil Elizabeth Laura Gauntlett

Pamela Marcia Glass

BJN Greig

Mrs RB Grosse Pauline de la Motte Hall

GN Hayward

Alfred Harold Honikman

John E Karlin

The Leanore Zara Kaplan Will Trust The Ascher Efrem Kellman Will Trust

Miriam Kluk Ann Kreitzer

Eduard Louis Ladan Will Trust Elias Bertrand Levenstein

Leah Levy

Barbara Mackenzie Bequest Trust

J Melrose RM Moss

Margaret Alice Nash

Neville Owen Neale Will Trust Elizabeth Ethel Barbara Parker

RC Pead

BM Raff Will Trust Kevin Rochford

James Sivewright Scratchley Will

Trust

Hajee Sulaiman ShahMahomed

BG Shapiro

Rolf Richard Spiegel

RM Stegen

Clifford Herbert Stroude Trust

Abraham Swersky

Horace Alfred Taylor Will Trust

Peter Christopher Theron

Sarah Turoff

Rosalie van der Gucht Will Trust

JF Viljoen AN Vintcent

WD Waddell Will Trust Kathleen Warner Bequest

OFFICERS OF THE UNIVERSITY

Chancellor

Graça Simbine Machel, BA Lisbon LLD(hc) *UWC* DU(hc) *Essex* PhD(hc) *Cape Town* DLitt et Phil(hc) *RAU* DHL(hc) *Massachusetts*

Vice-Chancellor

Max Rodney Price, MBBCh Witwatersrand BA Oxon MSc London Dip Occ Health Witwatersrand

Chairman of the Council

Njongonkulu Winston Hugh Ndungane, GCOB BD MTh Kings College PhD(hc) Cape Town DD(hc) Rhodes DD(hc) Virginia DHumLet(hc) Worcester Massachusetts DSocSc(hc) KZN DTh(hc) Stell DD(hc) Episcopal Divinity School Massachusetts DLitt(hc) Unisa DHumSc VUT DLitt(hc) Witwatersrand PhD Walter Sisulu

President of Convocation

Maria Macdiarmid Ingouville Burton, OLS Member of the Order of Disa BA DSocSc(hc) Cape Town

Deputy Vice-Chancellors

Ronald Thandabantu Nhlapo, BA(Law) *UBLS* LLB(Hons) *Glasgow* DPhil *Oxon* DUniv(hc) *Glasgow* Sandra Klopper, BA(Hons) *Witwatersrand* MA UEA PhD *Witwatersrand* Crain Arthur Soudien, BA(Hons) MA PGCE (Sec) *Cape Town* BEd *Unisa* EdM PhD *SUNY Buffalo* Daniel Petrus Visser, B Juris LLB LLD *Pretoria* Dr Iuris Leiden LLD(hc) *Edinburgh* Advocate of the High Court, Fellow of the University of Cape Town

Deans of Faculties

Commerce: Donald Alan Ross, BA MA PhD Western Ontario

Engineering &

the Build Environment: Francis William Petersen, PrEng BEng MEng PhD Stell MSAIChE MSAIMM Willem Johan Simon de Villiers, MBChB MMed(Int) Stell DPhil Oxon

MSc(HCM) Harvard

Humanities: Sakhela Maxwell Buhlungu, BA Transkei, BAHons Cape Town, MA PhD

Witwatersrand

Law: Pamela Jane Schwikkard, BA Witwatersrand LLB LLM Natal LLD Stell

Science: Anton Powter Le Roex, BSc Stell BSc(Hons) PhD Cape Town

Dean of Higher Education Development

Suellen Butler Shay, MA Illinois PhD Cape Town

Director of the Graduate School of Business

Walter Remi Juliaan Baets, BSc MSc Antwerp PhD Warwick

Registrar

Hugh Theodore Amoore, BA Cape Town

Welcome, Wamkelekile, Welkom – today is not the end of your relationship with the university but the beginning of a new phase in your continuing relationship with UCT, one that you share with the UCT community of over 100 000 alumni.

Diverse as this community is, the shared experiences of a critical academic ethos and a spectacular campus make for a strong network that has a wide footprint, not only in South Africa, but across the continent and the globe.

We set a great store by our links with our alumni, and indeed the links alumni have with each other. We promise that we will be in touch, and ask you in turn to let us know not only your current contact details but also, from time to time, something of your lives and where you are in your careers.

Updates can be done on the web – http://www.uct.ac.za/dad/alumni/update/ - or by writing to the Alumni Office, UCT, PB X3 Rondebosch 7701 or by contacting us on (27) (21) 650 3746.

Your alma mater looks forward to welcoming you back, whether to a public lecture, a leadership forum, your class reunion, or just an informal call!