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# GRADUATION CEREMONIES

JULY 2017

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## NATIONAL ANTHEM

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

Morena boloka etjhaba 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.

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# FACULTIES OF HEALTH SCIENCES, HUMANITIES AND LAW

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## ORDER OF PROCEEDINGS

Academic Procession.

*(The congregation is requested to stand as the procession enters the hall)*

The Presiding Officer will constitute the congregation.

The National Anthem.

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

Musical Item.

Welcome by the Master of Ceremonies.

The University Book Award.

The University Creative Works Award.

The Orator will present Zackie Achmat to the Presiding Officer for the award of an honorary degree.

The graduands and diplomates will be presented to the Presiding Officer by the Deans of the faculties.

The Presiding Officer will congratulate the new graduates and diplomates.

The Master of Ceremonies will make closing announcements and invite the congregation to stand.

The Presiding Officer 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.)*

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## UCT BOOK AWARD

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

**Previous recipients of the award have been:**

1984	J M Coetzee (Arts)	<i>Waiting for the Barbarians</i>
1985	G M Branch (Science)	<i>The Living Shores of South Africa</i>
1986	L H Opie (Medicine)	<i>The Heart: Physiology, Metabolism, Pharmacology and Therapy</i>
1987	M J Hall (Arts)	<i>The Changing Past: Farmers, Kings and Traders in Southern Africa, 200 - 1860</i>
1988	R G Lass (Arts)	<i>The Shape of English: Structure and History</i>
1989	H Bradford (Arts)	<i>A Taste of Freedom</i>
1990	J M Coetzee (Arts)	<i>Age of Iron</i>
	K M Coleman (Arts)	<i>Book IV of the Silvae of Statius</i>
1991	R Mendelsohn (Arts)	<i>Sammy Marks, "The Uncrowned King of the Transvaal"</i>
1992	P Skotnes (Fine Art & Architecture); S Watson (Arts); J Parkington (Arts) and N Penn (Arts)	<i>Sound from the Thinking Strings</i>
1993	D Chidester (Social Science & Humanities)	<i>Shots in the Street</i>
	W Nasson (Arts)	<i>Ebram Esau's War</i>
1994	G M Branch (Science); C L Griffiths (Science); L Beckley and M L Branch	<i>Two Oceans: A Guide to the Marine Life of Southern Africa</i>
1996	D Coplan (Humanities)	<i>In the time of the Cannibals</i>
	P Harries (Arts)	<i>Work, Culture and Identity</i>
	M Shain (Arts)	<i>The roots of anti-Semitism in South Africa</i>
	T Rajna (Music)	<i>Harp Concerto</i>
1997	B Warner (Science)	<i>Cataclysmic Variable Stars</i>
1998	M S Blackman (Law)	<i>Companies (in Law of South Africa, first re-issue Vol 4, parts 1, 2 and 3)</i>
	J V Bickford-Smith (Arts)	<i>Ethnic Pride and Racial Prejudice in Victorian Cape Town: Group Identity and Social Practice, 1875 - 1902</i>
1999	M Mamdani (Humanities)	<i>Citizen and Subject: Contemporary Africa and the Legacy of Colonialism</i>
2000	J Higgins (Humanities)	<i>Raymond Williams. Literature, Marxism and Cultural Materialism</i>
2001	N G Penn (Historical Studies)	<i>Rogues, Rebels and Runaways</i>
2002	J Glazewski (Law)	<i>Environmental Law in South Africa</i>

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## UCT BOOK AWARD (CONTINUED)

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2003	T D Noakes (Health Sciences)	<i>Lore of Running</i>
2004	MS Blackman (Law); RD Jooste (Law); GK Everingham (Law)	<i>Companies Act: Commentary</i>
2005	N Natrass (Commerce)	<i>The Moral Economy of Aids in South Africa</i>
2006	P Knox-Shaw (Humanities)	<i>Jane Austen and the Enlightenment</i>
2007	W Nasson (Humanities)	<i>Britannia's Empire – Making a British World</i>
2008	P Bruyns (Science)	<i>Stapeliads of Southern Africa and Madagascar</i>
2009	P Skotnes (Humanities) N Penn (Humanities)	<i>The Archive of Willem Bleek &amp; Lucy Lloyd</i> <i>The Forgotten Frontier</i>
2010	C Vaughan (Health Sciences)	<i>Imagining the Elephant: A Biography of Allan Macleod Cormack</i>
2011	JC De Villiers(Health Sciences)	<i>Healers, Helpers and Hospitals: A history of military medicine in the Anglo-Boer War</i>
2012	No award made	
2013	S Loots	<i>Sirkusboere</i>
2014	N Natrass	<i>The AIDS Conspiracy: Science Fights Back</i>
2015	S Shaikh	<i>Sufi Narratives of Intimacy</i>
2016	L Modisane	<i>South Africa's Renegade Reels</i>

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## UCT BOOK AWARD (CONTINUED)

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**The book award for 2017 is to be awarded to:**

**David Chidester**

*Empire of Religion: Imperialism and Comparative Religion*

*Empire of Religion: Imperialism and Comparative Religion* (University of Chicago Press, 2014) provides a new history of the study of religion that locates knowledge about religion and religions within the power relations of imperial ambitions, colonial situations, and indigenous innovations. The book uncovers the material mediations—imperial, colonial, and indigenous—in which knowledge about religion was produced during the rise of an academic study of religion between the 1870s and the 1920s in Europe and North America.

Focusing on one colonial contact zone, South Africa, as a crucial site of interaction, the book shows how imperial theorists such as Friedrich Max Müller, EB Tylor, Andrew Lang, and James Frazer depended upon the raw materials provided by colonial middlemen who in turn depended upon indigenous informants and collaborators who were undergoing colonisation. Reversing the flow of knowledge production, African theorists such as WEB Du Bois, SM Molema, and HIE Dhlomo turned European imperial theorists of religion into informants in pursuing their own intellectual projects.

By developing a material history of the study of religion, *Empire of Religion* documents the importance of African religion, the persistence of the conceptual divide between savagery and civilization, and the salience of complex mediations in which knowledge about religion and religions was produced, authenticated, and circulated within imperial comparative religion.

Reviewers have described *Empire of Religion* as “game-changing” and “essential,” as “lucid and powerful,” as “reminding us of the materiality, multiple meanings, and power relations of cultural encounters in Africa.” *Empire of Religion* was a finalist for the American Academy of Religion’s Award for Excellence in Religious Studies and the Society for the Anthropology of Religion’s Clifford Geertz Prize. Today it receives the highest recognition from the University of Cape Town, the UCT Book Award.

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## MERITORIOUS PUBLICATION AWARD

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

*A Perfect Storm: Antisemitism in South Africa 1930-1948* by Emeritus Professor Milton Shain

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## THE UNIVERSITY CREATIVE WORKS AWARD

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The University Creative Works Award recognises the production of outstanding and/or influential creative works (art works, performances, productions, compositions, architectural design) that make a scholarly contribution.

### **Francois du Toit**

*'The Five Beethoven Concertii with the Cape Philharmonic Orchestra'*

Francois du Toit is an Associate Professor at the South African College of Music, UCT and a nationally and internationally acclaimed concert pianist. He is the recipient of numerous awards and prizes and is in demand as a pedagogue, performer and juror throughout South Africa.

Being approached by the Cape Philharmonic Orchestra to perform all five Beethoven concertos on two successive nights was a daunting challenge, but also the realisation of a lifelong dream. The five concertos represent the journey that Beethoven undertook as a composer and revolutionary in music, mirroring the times in history. Throughout history, music has proven to be a universal language and to have the ability to draw people from all cultures together. In the words of the eminent conductor, Dr. Bernhard Gueller: "There is something greater than life, that it means something to be a human...and great art, especially great music, gives us a glimpse of it."

In many ways music is apolitical. To give examples of this, the West-Eastern Divan Orchestra of Daniel Barenboim comprises musicians from various Middle Eastern countries such as Egypt, Iran, Israel, Jordan, Palestine, Lebanon and Syria. The aim of this orchestra is to promote understanding and tolerance between different cultures performing the works of great composers including Beethoven. Also, at the darkest times of the blitz in London during the 2nd World War, Dame Myra Hess performed Beethoven Sonatas in the basement of the National Gallery to audiences from all walks of life. Classical music at the College of Music has bridged the diversity of all the students' backgrounds and it continues to enrich everyone's lives with its universal message. For many it is a rediscovered tradition. In life the negative exists for the positive to shine through and rarely is it more true than in music.

The performances of the Beethoven concerti were a collaboration between a Russian conductor, a truly South African orchestra, a local television studio and Francois du Toit. Even though these concerti have been in existence for over 200 years, to every artist they are initially a compilation of black dots on a page that need to be dissected, researched and interpreted. In the words of Beethoven: "Don't only practise your art, but force your way into its secrets, for it and knowledge can raise men to the divine."

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## HONORARY DEGREE

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**Abdurrazak ‘Zackie’ Achmat**  
**Doctor of Laws (honoris causa)**

Zackie Achmat has devoted his life to fighting social injustice and discrimination.

Through his work at the AIDS Law Project and his role as co-founder (and, later, director) of the National Coalition for Gay and Lesbian Equality (NCGLE), Achmat was involved in a number of cases from the mid-1990s onwards that first established, and then enforced, the constitutional rights of gay and lesbian people in South Africa. In 1995, an interdict was secured preventing the police from harassment on the grounds of sexual orientation. Subsequent legal victories followed, including the decriminalisation of gay sex; ensuring that same-sex couples were not discriminated against in their access to medical aid and pension benefits, or denied rights to permanent residence.

The next phase of Zackie Achmat’s social activism commenced with the formation of the Treatment Action Campaign (TAC), which he co-founded in 1998. The TAC fought for, and won, a series of cases that compelled the government to provide treatment for people infected with HIV/AIDS, and to provide nevirapine to HIV-positive pregnant women. It has been estimated that the original failure to provide these treatments resulted in the avoidably premature deaths of more than 300 000 South Africans. The TAC finally resulted in the government antiretroviral treatment programme now being the world’s largest, with more than 3 million South Africans currently on treatment. Having secured the roll-out of treatment, the TAC played an important role in monitoring of clinics to ensure that those on treatment were able to receive their medication.

In more recent years, Zackie Achmat has channelled his activism in new directions, playing a formative role in the establishment of cause-specific social justice-oriented NGOs such as Equal Education and Ndifuna Ukwazi, with foci on school and sanitation infrastructure.

Throughout, Zackie Achmat has combined clever use of the law with mass-based activism to hold national, provincial, and local layers of government to account in meeting the legitimate demands of the poor, the marginalised, and the voiceless.

Zackie Achmat’s life work is an embodiment of UCT’s values which seeks the fostering of an institutional culture that protects and advances the transformative values of the Constitution, and promotes a more equitable and just society based on respect for human rights and human dignity.



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## DECLARATION FOR HEALTH SCIENCES GRADUANDS

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**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.

**NAMES OF  
GRADUANDS/DIPLOMATES**

An asterisk \* denotes that the degree or diploma will be awarded in the absence of the candidate. A dagger † denotes that the degree will be awarded posthumously.

**1. FACULTY OF HEALTH  
SCIENCES**

*Dean: Professor B Mayosi*

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

**POSTGRADUATE DIPLOMA  
IN ADDICTIONS CARE**

Miriam Noxolisa Philiso

**POSTGRADUATE DIPLOMA IN  
CLINICAL DEVELOPMENTAL  
PAEDIATRICS**

\*Alliya Mohamed (with distinction)

**POSTGRADUATE DIPLOMA IN  
CLINICAL PAEDIATRIC  
EMERGENCY CARE**

\*Larko Domeryo Owusu (with distinction)

**POSTGRADUATE DIPLOMA IN  
CLINICAL PAEDIATRIC  
PHYSIOTHERAPY**

\*Stella Elikplim Adrah  
\*Dietrich Celestine Chusi

**POSTGRADUATE DIPLOMA IN  
CLINICAL PAEDIATRIC  
RHEUMATOLOGY**

\*Waheba Slamang (with distinction)

**POSTGRADUATE DIPLOMA IN  
DISABILITY STUDIES**

\*Bokamoso Tshegetsang

**POSTGRADUATE DIPLOMA IN  
HEALTH MANAGEMENT**

\*Seboifeng Lillian Diseko  
Mamogashoa Edwina Mabuela  
Molefi Benedict Motsie  
\*Eunice Thabile Msila  
Balekile Edward Mzangwa  
\*Kathleen Frances Schlebusch (with distinction)  
Kelebogile Sannah Shuping (with distinction)  
Elton Dominique Titus

**POSTGRADUATE DIPLOMA  
IN NURSING**

*In Child Nursing:*

Deidre Hendricks  
\*Alexia Seibes  
Nadia Yusuf

*In Critical Care Nursing (Child):*

\*Jacquiline Dansowaa Adjei

*In Nephrology Nursing:*

Pule Samuel Dikoebe  
Bazana Bonfasia Jobe  
\*Marilynn Monroe Maasdorp

**DEGREE OF BACHELOR OF  
MEDICINE AND BACHELOR OF  
SURGERY**

Sinesipho Jojo

**DEGREE OF BACHELOR OF  
SCIENCE IN AUDIOLOGY**

Laetisha Nel

**DEGREE OF BACHELOR OF  
SCIENCE IN OCCUPATIONAL  
THERAPY**

\*Hope Meredith de Klerk

**DEGREE OF BACHELOR OF  
SCIENCE IN PHYSIOTHERAPY**

Moleboheng Molebo Mokotso

**DEGREE OF BACHELOR OF  
SCIENCE IN SPEECH-LANGUAGE  
PATHOLOGY**

Varisha Hutheram  
Farai Dadirai Mbigi  
\*Sivuyisiwe Shanice Stoto

**DEGREE OF BACHELOR OF  
MEDICAL SCIENCE HONOURS**

*In Infectious Diseases and Immunology:*  
Tamzyn Trevor

**2. FACULTY OF HUMANITIES**

*Acting Dean:*

*Associate Professor H Garuba*

**ADVANCED CERTIFICATE IN  
EDUCATION**

*In Education Management and  
Leadership Development:*

\*Itumeleng Nathan Vuyani Sithuba

**ADVANCED CERTIFICATE IN  
SENIOR PHASE TEACHING**

Lee-Ann Wendy Florence

**HIGHER CERTIFICATE IN  
EDUCATION IN ADULT EDUCATION**

Raqual Claassen  
Nicolene Cupido

DIPLOMA IN THEATRE & PERFORMANCE	DEGREE OF BACHELOR OF SOCIAL SCIENCE	Snothando Nolwazi Mthimunye
*Geoffrey Michael Kukard	*Dylan Arthur Noah George Nhlakanipho Mpendulo Madwe Kopano Tiyana Maroga (with distinction in Dance)	DEGREE OF BACHELOR OF ARTS (HONOURS) TEACHING FRENCH AS A FOREIGN LANGUAGE
DIPLOMA IN MUSIC PERFORMANCE	Dumisa Mguda Tafadzwa Vimbai Tatenda Ngosi Malik Marcel Ntone Edjabe	*Josephine Andrea Alcock *Lauren Julia Maris (first class)
*Mark Macdonald Spence		DEGREE OF BACHELOR OF EDUCATION (HONOURS)
POSTGRADUATE DIPLOMA IN MUSIC IN PERFORMANCE	DEGREE OF BACHELOR OF SOCIAL WORK	Kaswa'Abanga Kolela *Linda Luise Schomer *Daniel Christopher von Ess
Keketso Bolofo *James Grace (with distinction) *Athenkosi Cornelia Hoyi *Dibanisile Thongo Tutsu (with distinction)	Jenna Frances Ziegler	DEGREE OF BACHELOR OF MUSIC (HONOURS)
DEGREE OF BACHELOR OF ARTS	DEGREE OF BACHELOR OF ARTS (HONOURS)	In Musicology: Reghardt de Beer (first class)
Nicholas Fezekile Ngqoleka Mthawelanga Abongile Tshiki	In African Studies: Robyn van Schalkwyk	In Performance: *Michael John Lawrenson
In Film and Media Production: Odwa Gqwede	In English Studies: *Kelsey Ede Gibbs Julia Claire Norrish	
In Theatre and Performance: *Tana Felicia Kyle-Kahr Namisa Mdlalose	In French Language and Literature: *Yanisha Teelock Lallah	DEGREE OF BACHELOR OF SOCIAL SCIENCE (HONOURS)
DEGREE OF BACHELOR OF ARTS IN FINE ART	In Historical Studies: Melissa Angela Engelbrecht Buntu Sixaba	In African Studies: *Irene Honest Marandu *Grace Kabamba Nonde Zizipho Ntobongwana
Emily Allan Caterina Maria Ciani *Heinrich Minnie	In Linguistics: *Candice Leigh Bagley *Sefela Carla Londiwe Garekwe	In Anthropology: Chloe Imogen Cormack Darrin Lee Grey Mistancia Kanengoni *Julia Munroe (first class) Simone Oosthuizen Siwaphiwe Sibeko Shari Mikaela Thanjan
DEGREE OF BACHELOR OF MUSIC	In Media Theory and Practice: *Aisha Abdool Karim *Tasneem Amra *Nicole Micaela Bessick Vuyisile Rethabisitswe Kubeka *Hendrik Christiaan Maas Nandi Thembela Majola (first class) Jamie-Leigh Matroos Mmatseleng Mphanya Grace Bridget Thomson Lauren Jane Vorster (first class)	In Development Studies: Asafika Mpako Donna Parekh
*Robin Zane Kock Johannes Hendrik Visser (with distinction in Music Theory & Analysis, Accompanying, History of Music, Composition, Piano and the degree with distinction)	In Political Communication: Jaimie Leigh de Klerk (first class)	In Economic History: Mabhida Martins

*In Industrial Sociology:*

\*Siphathisiwe Masuku

*In International Relations:*

\*Kabelo Muziwabenguni Gcabashe

*In Justice and Transformation:*

Oratile Aobakwe Kgantsi

*In Philosophy, Politics and Economics:*

Renée Suzanne Hunter

*In Probation and Correctional Practice:*

\*Nomalinde Gladys Nobatana

*In Psychology:*

Kelly Watson

*In Public Policy and Administration:*

\*Alupheli Gxavu

### 3. FACULTY OF LAW

*Dean: Professor P Andrews*

#### POSTGRADUATE DIPLOMA IN LAW

\*Tapiwa Mujaji

\*Terousha Naicker

*In Commercial Law:*

\*Bronwen Hendry

*In Dispute Resolution:*

\*Richard Stanton Bradstreet

*In Labour Law:*

Lindikhaya Mavela

John Derek Ralphs

Sweetness Sixubane

#### DEGREE OF BACHELOR OF LAWS

She Tanita Gandidze

\*Reece Rodney Maharage

Shadrack Ndlovu

\*John Sebastian Noble

#### DEGREE OF MASTER OF LAWS

Jana Rene Boshoff

\*Stefanie Katharina Busch

Lisa de Waal

*In Commercial Law:*

Richard James Bryce

\*Alara Donmez

\*Stefan Mathias Eisele

Zumbe Andrew Kumwenda

Reece May

Nicholas Lindsay Llewellyn Meyer

*In Dispute Resolution:*

\*Stephan Dominikus Klebes (with distinction)

Chisomo Harvey Msokera

*In Environmental Law:*

\*Benjamin Bittermann

\*Sophie Elisabeth Meierhofer

*In Human Rights Law:*

Elkanah Oluwapelumi Babatunde

Allan Nsubuga Basajjasubi

Luyando Chuula

Jamie-Lee Liedeman

\*Nicolas van Zyl

*In Intellectual Property Law:*

Cislé Stella Jacobs

\*Naeema Sadaf

*In International Law:*

\*Gizelle Marie Boyce

Belinda Samkele Teresa Hlatshwayo

\*Jana Lucia Hözel

Agnes Mwaihomba

Raisa Nyirongo

Catherine Theres Stark

*In International Trade Law:*

Jade Gudron Ewers

\*Jason Houston-McMillan

Maude Vitima Jere

*In Marine and Environmental Law:*

Carol-Lee Denise Pick

\*Graeme William Pretorius

Xavier Dominic Rebelo

Tanya Strydom

*In Private Law and Human Rights:*

Ebrahim Abrahams

Opeyemi Olumide Aladetola

*In Public Law:*

Shamima Allie

\*Nicolas Arild Brennecke

\*Loyce Mrewa

*In Shipping Law:*

\*Tom Forster

\*Ina Spasov Radivoev

*In Tax Law:*

Andrew Satiro Coelho

Tsangadzaome Alexander Mukumba

Hulisani Tseisi

\*Bernard Daniël van der Merwe

#### DEGREE OF MASTER OF LAWS IN COMMERCIAL LAW

Lisa Anne Duvenage

\*Shayni Lynne Pappin

#### DEGREE OF MASTER OF LAWS IN ENVIRONMENTAL LAW

\*George Krofa Addae

\*Sarah Baxter

\*Nicholas Britz

\*Mathilda Idalette Cadle

Roelof Cornelis Letter

Kozette Myburgh

Karin Neethling

Kim Candice Pontac

DEGREE OF MASTER OF LAWS IN  
INTERNATIONAL TRADE LAW

\*Cameron Michael Wilson

DEGREE OF MASTER OF  
PHILOSOPHY

*In Criminology, Law and Society:*

Hannes Koekemoer  
Vanja Petrovic

\*Jonas Soerflaten Torgersen

*In Environmental Law:*

\*William Russell Harding  
Rebekah Hughes  
Keith Anthony Wiseman

*In International Law:*

\*Darkowa Awinador-Kanyirige

*In Public Law:*

Kirsten Lee Harris  
Michelle Frederique Van Eeden

#### 4. FACULTY OF HEALTH SCIENCES

*Dean: Professor B Mayosi*

DEGREE OF MASTER OF MEDICINE

*In Anaesthesia:*

Gugulethu Tsakani Jenny Mhlanga  
(with distinction in the  
dissertation)

*In Dermatology:*

\*Thuraya Isaacs (with distinction in the  
dissertation)

*In Family Medicine:*

William Martin Frank Langenhoven  
\*Adil Razack

*In Medicine:*

Shepherd Kajawo  
Leonard Edgar Lutaaya

*In Orthopaedic Surgery:*

\*Mark Anthony Roussot

*In Otorhinolaryngology:*

Evelynn Joy Samson

*In Paediatrics:*

\*Kate Rebecca Browde

*In Paediatric Surgery:*

\*Karen Leslie Milford (with distinction  
in the dissertation)

*In Pathology (Clinical):*

Hendré Swanepoel (with distinction in  
the dissertation)

*In Psychiatry:*

\*Michele Tracy Parker

DEGREE OF MASTER OF MEDICINE  
IN ANATOMICAL PATHOLOGY

\*Garret Jonathan Skead (with distinction  
in the dissertation)

DEGREE OF MASTER OF MEDICINE  
IN CHEMICAL PATHOLOGY

Mbali Thembekile Lynette Ndlovu  
(with distinction in the  
dissertation)

DEGREE OF MASTER OF MEDICINE  
IN DERMATOLOGY

Roxanne Caron De Silva (with  
distinction in the dissertation)

DEGREE OF MASTER OF MEDICINE  
IN EMERGENCY MEDICINE

Martin De Man

DEGREE OF MASTER OF MEDICINE  
IN OBSTETRICS AND  
GYNAECOLOGY

\*Aneeqah Hendricks

DEGREE OF MASTER OF MEDICINE  
IN ORTHOPAEDIC SURGERY

\*Ntambue Kauta

\*Christoff De Villiers Marais

DEGREE OF MASTER OF  
PHILOSOPHY

*In Biomedical Forensic Science:*

\*Jacqui Anne De Jong  
Craig Anthony Richards  
\*Nandi Slabbert  
\*Landi Smith

*In Cardiology (Adult):*

\*Blanche Jeline Cupido (with distinction  
in the dissertation)

*In Child & Adolescent Psychiatry:*

Catherine Adito Abbo (with distinction  
in the dissertation)

*In Disability Studies:*

Cleone Jordan (with distinction)

*In Gastroenterology (Surgical):*

Marc Michael Bernon (with distinction  
in the dissertation)

*In Infectious Diseases & HIV Medicine:*

\*David Francis Stead

*In Maternal & Child Health:*

\*Ekram Abdulmajid Albishti Mohamed  
Elora Sarker

*In Neonatology:*

\*Kunda Mutesu-Kapembwa

*In Paediatric Nephrology:*

\*Adaobi Uzoamaka Solari

*In Palliative Medicine:*

\*Raksha Balbadhur  
\*Johannes Pertus du Plessis  
\*Salamat Ayodele Isiaka-Lawal

*In Public Mental Health:*

\*Tigist Zerihun Kebede  
Megan Malan (with distinction)

*In Sports Physiotherapy:*

Tracy Ellis  
Marlene Oosthuizen  
\*Christopher Matthew Pedra  
Brett John Phillips (with distinction in the coursework)  
\*Alice Jane Rawlinson  
\*Rowan Thorpe (with distinction in the dissertation)

DEGREE OF MASTER OF  
PHILOSOPHY IN CLINICAL  
PHARMACOLOGY

Blessings Richard Thuboy (with distinction in the dissertation)  
Louvina Elizabeth Van Der Laan  
Jana Louise Winckler (with distinction in the dissertation)

DEGREE OF MASTER OF  
PHILOSOPHY IN EMERGENCY  
MEDICINE

*In Clinical Emergency Medicine:*

Zuraida Moolla (with distinction in the dissertation)

DEGREE OF MASTER OF PUBLIC  
HEALTH

Janet Sarah Austin  
\*Siti Mukaumbya Kabanda  
Rutendo Madzima (with distinction in the coursework)  
\*Kelly Khanhuong Nguyen  
Jasantha Odayar (with distinction in the dissertation)  
\*Alexander Paul Paone  
\*Zainab Thawer (with distinction)  
Thuso Tlhaole

*In Community Eye Health:*

\*Ellen Konadu Antwi-Adjei

*In Epidemiology:*

Oluwaseyi Olalekan Arowosegbe (with distinction in the dissertation)  
Natacha Berkowitz (with distinction)  
\*Samuel Lloyd (with distinction)  
Thokozile Rosemary Malaba (with distinction)  
Nomathamsanqa Ndhlovu (with distinction in the coursework)  
\*Thembekile Chengeto Loice Shato  
Plaxedes Shoniwa (with distinction in the dissertation)  
\*Nicola Claire Tiffin (with distinction)

*In Health Economics:*

\*Christabell Abewe (with distinction)  
Zunda Chisha (with distinction in the dissertation)  
\*Kristal Catherine Duncan (with distinction in the coursework)  
Yasmina Johnson (with distinction in the coursework)

*In Health Systems:*

\*Adam Bertscher (with distinction)  
Uchenna Nneka Chukwu  
Ruth Mathys (with distinction in the dissertation)  
Jolly Ann Maulit (with distinction)  
\*Constancia Mavodza  
Angelica Nurian Ullauri (with distinction)  
Liesel van Deventer (with distinction)

*In Social & Behavioural Sciences:*

Sithembiso Mngqobi Sthandwa Ndlovu

DEGREE OF MASTER OF SCIENCE  
IN AUDIOLOGY

Vera-Genevey Hlayisi  
Tarryn Jane Sparg (with distinction)

DEGREE OF MASTER OF SCIENCE  
IN BIOMEDICAL ENGINEERING

\*Elizabeth Kruse (with distinction)  
Albert Nyamolo Opiyo  
Cara Swanepoel (with distinction)

DEGREE OF MASTER OF SCIENCE  
IN MEDICINE

*In Bioinformatics:*

Joel Defo  
Paidamoyo Farai Kachambwa

*In Biomaterials:*

Cindy Chokoza

*In Biomedical Engineering:*

\*Rofhiwa Seletani (with distinction)

*In Clinical Science and Immunology:*

\*Aerin Olivia Breetzke  
\*Phuti Sophia Choshi  
Buchule Mboho  
Trishana Nundalall (with distinction)  
Prishanta Pillay (with distinction)  
Avril Walters (with distinction)

*In Emergency Medicine:*

Emmanuel Kwadzo Ahiable  
Chancy Max Chavula  
\*Jennifer Lee Pigoga (with distinction)

*In Exercise Science:*

Lindsay Toyah Starling (with distinction)

*In Haematology:*

Taahira Goolam Hoosen

*In Medical Biochemistry:*

Melissa Jayne Walcott Blumenthal (with distinction)  
Jeremy Gareth Burgess  
Sarah Louise Carden (with distinction)  
George William Cooper  
David James Scott (with distinction)  
\*Andrew Logan Wishart

*In Medical Cell Biology:*

Ikponmwosa Irene (with distinction)  
\*Breffni Constantine Whitehead (with distinction)

*In Medical Microbiology:*

Bevika Sewgoolam (with distinction)

*In Medical Virology:*  
Samantha Humby (with distinction)  
Fidilia Millicent Omondi (with distinction)

*In Medicine:*  
Jane Elizabeth Christie Botha (with distinction)

*In Neuroscience:*  
Katherine Helen Atmore

*In Surgery:*  
\*Barend Christiaan Grey (with distinction)  
\*Isla Kate McQuaid (with distinction)

*In Trauma Science:*  
\*Esmee Wilhelmina Maria Engelmann

DEGREE OF MASTER OF SCIENCE  
IN NURSING

Agatha Omokhefe Aigbodion  
Abigail Amoah

DEGREE OF MASTER OF SCIENCE  
IN OCCUPATIONAL THERAPY

Patrice Malonza

DEGREE OF MASTER OF SCIENCE  
IN PHYSIOTHERAPY

Jodie Ann Bowers  
Evelyne Anna Rinske Huizinga  
Kirsty Nontsikelelo Jackson (with distinction)

**5. FACULTY OF HUMANITIES**

*Acting Dean:*  
*Associate Professor H Garuba*

DEGREE OF MASTER OF ARTS

*In African Languages and Literature:*  
\*Ziyanda Yola

*In Applied Drama and Theatre Studies:*  
Chiedza Adelaide Chinhanu (with distinction)

*In Clinical Psychology:*  
Slindile Nonjabulo Mbatha  
Esona-Sethu Ndwandwa

*In Creative Writing:*  
Wilken Craill Calitz (with distinction in the dissertation)  
Christiaan Frederick Beyers de Vos (with distinction)

*In Drama:*  
Rehane Abrahams (with distinction)  
\*Prinesh Bikhani

*In Film Studies:*  
Daniël Jan Weys (with distinction)

*In French:*  
\*Patricia Ntombizodwa Mathebula  
\*Norman Neshena (with distinction)  
\*Sarvesh Unuth

*In Historical Studies:*  
\*Michael James Boyd (with distinction)

*In International Relations:*  
\*Christopher Edyegu  
\*Harley Henigson (with distinction)

*In Language, Literature and Modernity:*  
Sophy Kohler (with distinction in the dissertation)  
\*Thembelani Mbatha (with distinction)  
Abby Alexandra Roberts

Kathleen Louise Samson (with distinction)

*In Linguistics:*  
\*Clint Webster

*In Media Studies:*  
Noluyolo Ngomani

*In Media Theory & Practice:*  
Aimee Claire Carelse (with distinction)  
Zakiyah Ebrahim

*In Organisational Psychology:*  
Tamsyn Hudson  
\*Cari Miller

*In Practical Anthropology:*  
Kylie Eve Marais (with distinction)

*In Psychological Research:*  
Gerard Janse van Rensburg (with distinction in the dissertation)

*In Religious Studies:*  
Lauren Catherine Bates (with distinction)

*In Screenwriting:*  
\*Ronan Lafras Steyn

*In Social Anthropology:*  
Claire Jane Fitzgerald (with distinction)

*In Sociology:*  
\*Katherine Anne Morse

*In Theatre and Performance:*  
\*Francesco Pietro Nassimbeni

DEGREE OF MASTER OF ARTS  
IN FINE ART

\*Hester Sophia Wait

DEGREE OF MASTER OF ARTS IN NEUROPSYCHOLOGY	*Sethembile Msezane	<i>In Heritage &amp; Public Culture:</i> Vanessa Letch (with distinction in the dissertation)
*Zoe-Lee Goldberg Patience Vimbayi Mushamiri	DEGREE OF MASTER OF LIBRARY AND INFORMATION STUDIES	<i>In Justice and Transformation:</i> *Andrea Guadarrama Prado Claire-Anne Louise Lester (with distinction in the dissertation) Anye-Nkwenti Nyamnjoh (with distinction)
DEGREE OF MASTER OF EDUCATION	Sipho Mcdonald Fako *Nathan John Kalam (with distinction in the dissertation) Gillian Mary Kerchhoff (with distinction) Kepi David Madumo *Mantoetse Alice Nkuebe (with distinction) Nekulu Selma Takatsu Uugwanga Nazma Vajat	<i>In Philosophy, Politics and Economics:</i> *Michael Smith (with distinction)
<i>In Adult Education:</i> Yasmina Jacobs (with distinction in the dissertation) Emma Jean Sexton (with distinction in the dissertation)	DEGREE OF MASTER OF MUSIC	<i>In Public Policy and Administration:</i> Sakhe Sibabalwe Mkosi (with distinction)
<i>In Applied Language and Literacy Studies:</i> *Marco Saville *Julia Barbara Weyl (with distinction)	*Elizabeth Mary Harper (with distinction)	DEGREE OF MASTER OF PHILOSOPHY IN EDUCATION
<i>In Curriculum Studies:</i> Goitsione Mogomotsi Mokou	<i>In Music (Dissertation and Composition):</i> Michael James Graham (with distinction)	<i>In Information Communication Technologies:</i> *Kinsley Ngwa Ndenge Unathi September
<i>In Educational Administration, Planning and Social Policy:</i> Alexander Barkly Storrar Molteno (with distinction in the dissertation)	<i>In Music (Dissertation and Coursework):</i> Olaolu Lawal (with distinction in the dissertation)	DEGREE OF MASTER OF SOCIAL SCIENCE
<i>In Education Policy, Leadership &amp; Change:</i> *Edward Alan Pike (with distinction)	DEGREE OF MASTER OF PHILOSOPHY	<i>In Clinical Social Work:</i> Alexa Maxwell Kroon-Canning Thandiwe Mkandawire *Azeldri van der Wath
<i>In Higher Education Studies:</i> *Tarryn Hyland (with distinction) *Natalie Anne Moller	<i>In Development Studies:</i> Robyn Jane Anderson Tinashe Stephanie Kushata *Mwando Terry Mutesha *Danielle Lauren Pagano (with distinction) Kate Gaston Rinehart (with distinction) Genevieve Justin Sekumbo (with distinction)	<i>In Environmental and Geographical Studies:</i> Naomi Jayne Cresswell
<i>In Information Communication Technologies:</i> Emma Carla Engers Tasneem Jaffer	<i>In Diversity Studies:</i> *Kershan Panoram	<i>In Gender Studies:</i> *Leah Beth Feiger (with distinction)
<i>In Primary Education:</i> Nabila Abdulla (with distinction in the dissertation)	<i>In Environmental Humanities:</i> *Deepak Bhat Dundi (with distinction) *Dina Dabo Jessica Mallorie Lee (with distinction)	<i>In Global Studies:</i> Leungo Motlhabane
DEGREE OF MASTER OF FINE ART		<i>In International Relations:</i> *Primrose Zvikomborero Joylyn Bimha *Zahira Grimwood
Lungiswa Gqunta (with distinction)		



## 6. FACULTY OF LAW

Dean: Professor P Andrews

### DEGREE OF DOCTOR OF PHILOSOPHY

*In Commercial Law:*  
Carias Tererai Chokuda  
Thesis Title: *The protection of shareholders' rights versus flexibility in the management of companies: a critical analysis of the implications of corporate law reform on corporate governance in South Africa with specific reference to protection of shareholders*

Carias Chokuda holds an LLB from the University of Zimbabwe, an Executive MBA from Africa University and an LLM from UCT. He lectured at UCT from 2009 to 2012 during which time he enrolled for his PhD studies, before moving to the University of Pretoria.

Carias Chokuda's thesis shows how the Companies Act 71 of 2008 shifts the balance of power between shareholders and directors and how this shift affects shareholder protection. He investigates whether the Companies Act balances directors' powers with increased shareholder protection; and he concludes that, although the Act contains new and improved shareholder remedies, some of the changes brought about by the Act leave shareholders vulnerable. Through a comparative study of foreign jurisdictions such as Australia, Canada, New Zealand, USA and the UK he identifies areas in the Act where protection of shareholders could be enhanced. He recommends how the Companies Act might be amended to improve corporate governance and shareholder protection in South Africa.

*Supervisor:* Professor R Jooste  
(Commercial Law)  
*Co-supervisor:* Professor A Van Wyk  
(Law)

Brighton Murisa Mupangavanhu  
Thesis Title: *Directors' standards of care, skill, diligence and the business judgment rule in view of South Africa's Companies Act 71 of 2008: implications for the future of corporate governance*

Brighton Mupangavanhu holds an LLB (Fort Hare University), an LLM (University of Natal) and a Postgraduate Certificate in Legal Practice (School for Legal Practice, UCT). He has presented papers and published on corporate governance and finance, on banking and law of payment instruments, and on corporate and contract/labour/environmental law's intersections.

Brighton Mupangavanhu's thesis considers whether the Companies Act 2008 has adopted clear, improved and effective standards of directors' conduct in light of s76(3)(c) and the adoption of the Business Judgement Rule; whether the new Act has made standards of care, skill and diligence more accessible, clearer, ascertainable and enforceable than previously; and whether it has enhanced corporate governance in South Africa. His study finds both shortcomings and strengths in the Act's relevant complementary statutory provisions. Nonetheless it concludes that the Act's overall legal framework provides potential for high standards of corporate governance. For example, the Act offers a basis for shoring up standards of conduct where they are weak and for giving effect to its spirit, purposes and objects through reviews of such standards. Given the potential provided by the Act, Brighton Mupangavanhu's thesis argues, South African corporate governance has been set on a trajectory for future growth.

*Supervisor:* Professor C Ncube  
(Commercial Law)  
*Co-supervisor:* Professor R Le Roux  
(Commercial Law)

Tshimologo Matlhaga (with distinction in the dissertation)  
\*Chad Sonn (with distinction)

*In Organisational Psychology:*  
\*Alexa Frances de Kock (with distinction)  
Warwick Philip Skerritt

*In Psychology:*  
Gary Ganz (with distinction)  
Siobhan Brenna McCreesh (with distinction)

*In Religious Studies:*  
Danika Audrey Driesen (with distinction)

*In Social Anthropology:*  
Yusra Price (with distinction in the dissertation)

*In Social Development:*  
Jessica Jane Dewhurst (with distinction)  
\*Emelda Vimbayi Foroma  
Victoria Leopoldine Jusme  
Nontsikelelo Nzula  
Micheline Merlin Smith (with distinction)  
†Azinga Tele (with distinction)  
Raylene Rozita Titus  
Osborn Kudakwashe Usaihwevu (with distinction)

*In Sociology:*  
Mohini Baijnath (with distinction)

*In Criminology:*

Irvin Roy Kinnes

Thesis Title: *Contested governance: police and gang interactions*

Irvin Kinnes has an HDE from the University of the Western Cape, and an MSc in Criminology from the London School of Economics at London University.

Irvin Kinnes's thesis examines how organised gangs in Cape Town regulate and impact on the police's methods for policing such gangs. He does this by focusing on police operations relating to gangs and vigilantes on the Cape Flats over the last twenty years. He draws on four sets of literature, including gang, nodal governance, regulation and police operation literatures, to set the stage for viewing contested governance through the lens of policing gangs. His thesis contributes to the governance literature by looking at how gangs contest the governance of the police and how the police attempt to extend their governance over gangs and, by implication, also over communities. Through looking at police operations relating to gangs, and the ways in which respect, authority and belonging are articulated in the gang and the police-gang environments, he shows how gang governance manifests itself in communities and how it challenges the governance of the police.

*Supervisor:* Professor CD Shearing  
(Public Law)

*Co-supervisor:* Professor E Van der Spuy  
(Public Law)

Guy Lamb

Thesis Title: *Jagged blue frontiers: the police and the policing of boundaries in South Africa*

Guy Lamb has a BSocSc(Hons) and a MSocSc, both in Political Studies and both from UCT. He is currently the Director of the Safety and Violence Initiative at UCT. Prior to this he was a Senior Research Fellow and Programme Head at the Institute for Security Studies.

Guy Lamb's thesis argues that territorial and social boundaries have profoundly influenced the strategies and actions of the police, particularly when

boundaries coincide with the othering and threat-framing of populations and/or individuals across such boundaries. Given that, for more than three centuries, policing in South Africa has been fundamentally framed by various boundary forms, he uses South Africa as a case study to examine the relationship between boundaries, the police and policing. Guy Lamb's thesis introduces the concept of 'police frontierism' to indicate how the police tend to concentrate their resources within frontier zones that are immediately adjacent to prominent social and territorial boundaries. He shows that they do this to preserve or extend such boundaries, as well as to restrict, subdue or eliminate those populations and/or individuals that reside beyond boundaries that government authorities or elites have deemed to be a threat to order and peace.

*Supervisor:* Professor E van der Spuy  
(Public Law)

*Co-supervisor:* Professor C Shearing  
(Public Law)

*In Public Law:*

Aaron Olaniyi Salau

Thesis Title: *Right of access to information and its limitation by national security in Nigeria: mutually inclusive or exclusive?*

Aaron Olaniyi Salau has a LLB and LLM from the Obafemi Awolowo University, Ile Ife, Nigeria. His doctoral work emerged as a result of his teaching experiences at the Department of Jurisprudence and International Law, Olabisi Onabanjo University, Ago Iwoye, Nigeria and as a legal practitioner in Nigeria.

Aaron Salau's thesis employs democratic theory as an analytical tool to advocate for the right of access to information as a constitutional value and a minimum requirement for the functioning of a democracy. In so doing, it aims to curtail abuse of executive powers under national security laws that permit excessive restrictions on access to information. The thesis relies on African human rights standards to evaluate how national security laws that limit access to information measure against constitutional standards of reasonableness in a democratic society. The thesis

finds that constitutional protection and jurisprudential recognition of the right of access to information in Nigeria do not comply with minimum international law requirements. The thesis ultimately suggests that limitation of access to information on grounds of national security must be in the public interest.

*Supervisor:* Professor P De Vos  
(Public Law)

*In Private Law:*

Rachel Margaret Adams

Thesis Title: *The creation of 'a world after its own image': a genealogy of transparency*

Rachel Adams completed her BA in English Literature at Royal Holloway, University of London, before undertaking an MPhil in International Human Rights Law at UCT. She began working towards her PhD in 2015.

Rachel Adam's thesis concerns the rise of transparency as a discursive fact of modern society. She seeks to understand both why and how the concept has come to be dominant within global neoliberal capitalism. Through a Foucauldian critique, she comes to read transparency as a depoliticising régime of truth – one that is part and parcel of the Western will-to-power of neoliberalism, one which excludes and, within this exclusion, contains other realities. Her thesis raises questions about an affinity between transparency and a hegemonic neo-colonial project to fashion a world in its own image: an image of whiteness that constitutes a homogenous and depoliticised centre from which all else 'deviates'. Yet her thesis also notes a profound paradox at play. As transparency signals a marked absence it creates a paradoxical invisibility. A consequence, as Rachel Adams shows, is that even as it seeks to create a world after its own image it is in fact working towards its own inevitable unworking and absence.

*Supervisor:* Professor J Barnard-Naudé  
(Private Law)

Beverley Alice Townsend

Thesis Title: *Privacy and data protection in eHealth in Africa: an assessment of the regulatory frameworks that govern privacy and data protection in the effective implementation of electronic health care in Africa: is there a need for reform and greater regional collaboration in regulatory policymaking?*

Beverley Townsend holds BA, LLB, and LLM degrees from the University of South Africa, as well as a Higher Diploma in Tax Law and an LLM specialising in Biotechnology, Ethics and Law from UCT. She began full-time study towards her PhD in 2014.

Beverley Townsend's thesis examines and evaluates the legal protection of privacy and personal data in South Africa and across Africa in the electronic health care industry – that is where medical services are provided to individuals by way of networked technological platforms, including mobile telephones. She argues that, to enable nascent electronic health initiatives to reach their potential in Africa, adequate privacy regulation of electronic health data must (a) be sensitive to societal and cultural differences in what is considered private; (b) be responsive to rapid technological transformation in healthcare industries; and (c) build user confidence in data protection in the electronic data context. She argues further for ensuring ever-greater regulatory collaboration across the continent and for doing that by harmonising domestic and international laws, national policies and industry codes of conduct – but necessarily in ways that are sensitive to local conditions and challenges.

*Supervisor:* Associate Professor AM Price (Private Law)

## 7. FACULTY OF HEALTH SCIENCES

*Dean: Professor B Mayosi*

### DEGREE OF DOCTOR OF PHILOSOPHY

*In Biomedical Engineering:*

Giovanni Sergio Milandri

Thesis Title: *Eccentric cycling rehabilitation after anterior cruciate ligament reconstruction: a randomised controlled trial of strength and biomechanical outcomes*

Giovanni Milandri holds MSc degrees in Biomedical and Mechanical Engineering from Oxford and Stellenbosch Universities, respectively. He joined the division of biomedical engineering in 2013 under the National Health Scholar Programme. Before joining UCT he worked for the Medical Research Council, SA, and has done medical device development and entrepreneurship.

Giovanni Milandri's thesis focuses on improving rehabilitation of patients who have had Anterior Cruciate Ligament (ACL) knee surgery. He investigates long-term asymmetries in male patients, and trains them using a new, locally-developed exercise bike. He checks progress using movement tracking for hip and knee angles and forces, strength testing, and hopping and jumping tests. From the one trial he finds that young males still have long-term changes in their walking and running patterns 5 years after surgery. He also finds that running testing is better for this than traditional walking testing. From the other trial using the exercise bike in the new way (eccentric training), he successfully shows increases in patient strength and movement patterns, and readiness for sport. However, these improvements are only better than traditional cycling in a few measures. These findings help to get patients back to sport faster, while avoiding risks of re-injury or osteoarthritis.

*Supervisor:* Dr S Sivarasu (Human Biology)

*Co-supervisor:* Dr W van der Merwe (Orthopaedics)

*In Clinical Pharmacology:*

\*Andrzej Marek Bienczak

Thesis Title: *Pharmacokinetics, pharmacogenetics and optimisation of treatment with non-nucleoside reverse transcriptase inhibitors in HIV-infected African children*

Andrzej Bienczak holds an MPharm degree from the University of Gdansk, Poland and an MSc in Clinical and Experimental Medicine from University College London, UK. He joined the Division of Clinical Pharmacology at UCT in 2013 for his doctoral studies.

Andrzej Bienczak's thesis describes the pharmacokinetics and pharmacodynamics of non-nucleoside reverse transcriptase inhibitors in HIV-infected African children. He analysed data from a number of paediatric clinical studies from Zambia and Uganda using various modelling approaches including population pharmacokinetic analysis, Cox proportional hazards models, and likelihood profiling. He identified and quantified factors affecting variability in efavirenz and nevirapine exposures, characterised the concentration-effect relationship for both drugs and re-defined their efficacy targets in African children. This allowed him to develop treatment optimisation strategies. His work includes a new dosing algorithm for efavirenz in African children guided by individual patient CYP2B6 genotype and can have potential implications on the current paediatric HIV treatment guidelines. The scientific contributions of this thesis to the field of PhD research comprise of five peer-reviewed publications and six conference presentations.

*Supervisor:* Dr P Denti (Medicine)

*Co-supervisor:* Professor H McIlleron (Medicine)

*In Clinical Science & Immunology:*

Melissa Govender

Thesis Title: *Investigating the role of IL-4/IL-13 signalling through the IL-4 receptor alpha (IL-4R $\alpha$ ) on keratinocytes in murine models of Leishmania major and Schistosoma mansoni*

Melissa Govender completed her BSc, BSc(Hons) and MSc degrees in Biochemistry, at the University of KwaZulu-Natal, Pietermaritzburg, and began full-time study towards her PhD in 2013.

Melissa Govender's thesis focuses on the role of the signalling molecule interleukin 4 receptor alpha (IL-4R $\alpha$ ) in two disease models: leishmaniasis with the *L. major* parasite; and schistosomiasis with the *S. mansoni* worm. She used cell-specific knockout mice (KRT14creIL-R $\alpha$ /lox), in which the IL-4R $\alpha$  gene has been knocked out on all keratinocyte cells, in order to carry out the study. For cutaneous leishmaniasis, KRT14creIL-R $\alpha$ /lox mice were infected with *L. major* parasite in the footpad or ear, and disease progression and outcome was evaluated and compared to control mice. Two genetic backgrounds of mice, BALB/c and C57BL/6 were tested, both exhibiting similar results. For schistosomiasis, KRT14creIL-R $\alpha$ /lox BALB/c mice were infected with the *S. mansoni* worm through the skin. When compared to the control mice, disease progression and outcome were similar. Her findings, in both models, show that the signalling through the IL-4R $\alpha$  on keratinocytes is not important in determining outcome of disease.

*Supervisor:* Professor F Brombacher (Pathology)

*Co-supervisors:* Dr R Hurdal (Molecular and Cell Biology);  
Dr R Guler (Pathology)

Donald David Nyangahu

Thesis Title: *Alterations in pre-conception, antenatal and postnatal maternal gut microbiota influence offspring intestinal microbiota and immunity*

Donald Nyangahu received his BSc and MSc from Kenyatta University, Kenya.

He came to the Division of Immunology at UCT in 2014 to pursue his PhD. Before joining UCT, he worked at the Institute of Primate Research and Mount Kenya University in Kenya.

Donald Nyangahu's thesis aims to understand how alterations in maternal gut microbiota during gestation or while breastfeeding impacts offspring gut colonisation and immunity to both Respiratory Syncytial Viruses and helminths. Further, he addresses the impact of pre-conception helminth infections on offspring gut microbiota and immunity. Donald Nyangahu generates significant evidence on this topic showing a profound impact of maternal gut microbiota during gestation or lactation on infant growth, intestinal microbiota as well as immunity to various pathogens. His findings have relevance when considered in the context of antibiotics which are widely used during pregnancy as well as helminth infections prevalent during gestation, all of which could have gut microbial and immunological implications on offspring. It is therefore important to consider maternal microbiota during this privileged time as an additional immune modulatory feature that could impact the developing infant immune system as well as immune response to various neonatal vaccines.

*Supervisor:* Dr HB Jaspan (Pathology)

*Co-supervisor:* A/Professor WG Horsnell (Pathology)

*In Emergency Medicine:*

Edward Lance Callachan

Thesis Title: *Mode of transport to hospital among patients with ST Elevation Acute Myocardial Infarction (STEMI) in the Emirate of Abu Dhabi: Correlates, physician and patient attitudes, and associated clinical outcomes*

Edward Callachan has a National Diploma in Ambulance and Emergency Care from the University of Johannesburg, and a Post Graduate Certificate, Post Graduate Diploma and Master of Health Sciences in Retrieval Medicine from the University of Otago, New Zealand

Edward Callachan's thesis arises from a long standing interest in prehospital cardiology and efforts to

improve EMS cardiovascular care and clinical outcomes for acute coronary syndromes patients in Abu Dhabi, United Arab Emirates. His research was used in the development of Abu Dhabi's prehospital ST elevation myocardial infarction (STEMI) alert network, which now allows paramedics in the city of Abu Dhabi to activate cardiac catheterisation labs based on their interpretation of patient electrocardiograms. This has meant shorter times from onset of symptoms to opening of blocked vessels in the heart for patients with the most severe of the acute coronary syndromes. His research findings are being used to better educate the UAE public on the importance of early recognition of signs and symptoms of acute coronary syndromes and the importance of using emergency medical services, with the STEMI alert network now being in place. It is anticipated that prehospital activation of cardiac catheterisation labs based on the Abu Dhabi experience will soon be applied throughout the UAE.

*Supervisor:* Professor LA Wallis (Surgery)

*Co-supervisors:* Dr AA Alsheikh-Ali (Mohammed Bin Rashid University of Medicine and Health Sciences, Dubai, UAE); Dr S Chandrasekhar-Nair (Tawam Hospital- Johns Hopkins Medicine Affiliate, Al Ain UAE)

Padarath Gangaram

Thesis Title: *An investigation into recruitment, retention and motivation of advanced life support practitioners in South Africa*

Padarath Gangaram has a National Diploma in Ambulance and Emergency Care, a Bachelor of Technology in Emergency Medical Care from the Durban University of Technology, and an MBA from the Management College of Southern Africa.

Padarath Gangaram's thesis aims to identify factors which influence the recruitment, retention and motivation of advanced life support (ALS) practitioners in South Africa (SA). Emergency medical services (EMS) globally are experiencing problems with recruiting, retaining and motivating these

practitioners. The persistent shortage of ALS practitioners in SA poses a challenge to the effective delivery of prehospital emergency medical care. The global demand for SA-trained ALS practitioners is also on the increase. South African EMS organisations are struggling to compete with the international market for these practitioners. The study highlights significant issues around recruitment factors, retention factors and motivation factors which influence ALS practitioners in SA. These factors cumulatively revolve around the practitioners' working environment, professional development and their employment package. The study concludes that more ALS practitioner training institutions are required to improve the numbers of these practitioners and that EMS organisations must improve the working environment, employment package and professional development opportunities for ALS practitioners.

*Supervisor:* Professor L Wallis (Surgery)  
*Co-supervisor:* Honorary Professor R Bhagwan (Surgery)

\*Bhakti Hansoti

*Thesis Title: Prioritization of critically unwell children in low resource primary healthcare centres in Cape Town, South Africa*

Bhakti Hansoti completed her BSc(Hons) and MBChB qualifications at the University of Edinburgh, followed by an MPH at the Johns Hopkins Bloomberg School of Public Health, after which she joined UCT for her PhD studies. Bhakti Hansoti is a full-time Emergency Physician at Johns Hopkins University.

Bhakti Hansoti's thesis reports a detailed stepped approach to the development, implementation and evaluation of a novel screening tool to prioritise critically ill children in low resource primary healthcare centers. The initial chapters identify the unacceptable waiting times and barriers to care for critically ill children in the clinics which, culminates in the development of the Sick Children Require Emergency Evaluation Now (SCREEN) tool. SCREEN is a simple six-question screening algorithm, administered by lay healthcare workers, to rapidly identify critically ill children and to

expedite their care at the point of entry into a clinic. Throughout the thesis she utilises a vast array of research methodologies including qualitative studies, process mapping studies, and implementation-effectiveness methodologies to complete her research aims. The SCREEN program was sensitive in identifying critically ill children and reducing their waiting times in the clinic setting. The SCREEN program is now widely implemented in Cape Town, South Africa.

*Supervisor:* Professor LA Wallis (Surgery)  
*Co-supervisor:* Professor I Maconochie (Surgery)

*In Exercise Science:*

Shameemah Abrahams

*Thesis Title: The investigation of the neurodegenerative and dopaminergic pathways underlying sports concussion*

Shameemah Abrahams completed her BSc and honours degrees at UCT. Her exposure to sports science in her undergraduate degree led her to pursue her MSc, which was upgraded to a PhD at the Division of Exercise Science and Sports Medicine at UCT.

Shameemah's Abrahams' thesis involves the novel investigation of the potential behavioural and genetic predisposing factors to cerebral concussion, in male South African rugby union players. She found several genetic sequence changes (polymorphisms) within genes involved in the brain's injury response pathway and behaviour-related pathway, which may influence concussion susceptibility in rugby players. These genetic susceptibility factors differ in high school (junior) compared to club and professional (senior) level rugby players. Her thesis is a preliminary investigation which adds to the growing foundation of genetics knowledge underlying concussion injury. This preliminary evidence, if confirmed by further studies, can ultimately be used to improve treatment and management strategies of concussed sports players, and therefore reduce recovery time and possible adverse outcomes following concussion.

*Supervisor:* Dr. M Posthumus (Human Biology)  
*Co-supervisor:* A/Professor AV September (Human Biology)

Nicholas Burger

*Thesis Title: The tackle in rugby – evaluating the nature and mechanisms of injury, and developing a prevention strategy*

Nicholas Burger completed his BSc (Sport Science) and BSc(Hons) (Physiological Science) qualifications at Stellenbosch University, after which he moved to UCT to begin his doctoral studies.

Nicholas Burger's thesis uses the TRIPP (Translating Research into Injury Prevention Practice) framework for injury prevention in sport to report on the aetiology of tackle-related injuries at high-level youth rugby tournaments with the intention to synthesise an intervention. His analyses involve various methods to characterise injury events, including coding of match video footage. Various tactical and technical factors related to the tackle are assessed in his research. The majority of injuries occur during the latter stages of matches, particularly in the final quarter, indicating that fatigue may predispose players to injury. The absence of specific tackle techniques also significantly increase the risk of injury occurring. Considering these findings, a novel biomechanical simulator was developed to study the tackle in detail and to train proper tackle technique. This may be used in conjunction with the technical criteria checklist to identify at-risk players and reduce their risk of serious head and neck injuries.

*Supervisor:* Dr S Hendricks (Human Biology)  
*Co-supervisor:* Professor MI Lambert (Human Biology)

Mohammed Habib Noorbhai  
Thesis Title: *The batting backlift technique in cricket*

Habib Noorbhai has a BAsport Psychology (University of Johannesburg), BSpSc (Hons) Biokinetics (University of Kwa-Zulu Natal) and an MPhil (Biokinetics) (UCT). His doctoral research emerged as a result of his passion for cricket and a paradox that Bob Woolmer was unable to unravel before his tragic death in 2007.

Habib Noorbhai's thesis aims to develop a scientific understanding of the batting backlift technique in cricket as well as provide practical implications of the backlift for cricket coaches and players. The backlift is one of the six components of the overall batting technique in cricket. The thesis firstly shows that the practice of successful batsmen does not match the theory of cricket coaching manuals. Instead, batsmen adopted more of a looped action in which the direction of their bats was towards the slips or beyond and the face of the bat pointed towards the off-side. He documents and analyses which backlift type batsmen adopt across varied levels of cricket ability. In addition, two novel tools have emanated from the thesis: a coaching cricket bat (to enhance the performance of young batsmen) and a mobile application (to assist players and coaches in analysing and improving the backlift).

*Supervisor:* Emeritus Professor T Noakes (Human Biology)

*In Health Sciences Education:*

Rachel Weiss

Thesis Title: *Patient-centred communication and patient education: a multimodal social semiotic approach*

Rachel Weiss holds an MBChB from the University of Pretoria and completed her MPhil (Higher Education) at UCT. She has been a staff member in the Faculty of Health Sciences since 2004.

Rachel Weiss's thesis investigates the phenomenon of patient-centred communication within the South African health context. She looks at how medical students operationalise the 'classroom-taught' principles of patient-centred communication during

a health education encounter with patients. The research is located within Pharmacology, where medical students produce personalised health promotion artefacts for rheumatic heart disease patients. Students' artefacts are instances of patient-centred communication and purposeful pedagogic recontextualisation, in that they realise both epistemic and relational dimensions of health education. Taking a multimodal social semiotic approach, the research focuses on students' communication behaviour in the context of language barriers, cultural value differences and socio-economic inequality. The study highlights the complex, multifaceted, multi-layered nature of doctor-patient communication, argues for realism in what can be taught and assessed in a classroom, suggests novel pedagogic approaches, and brings an African perspective. It also contributes to articulating a semiotic methodological framework for multimodal texts.

*Supervisor:* Dr A Archer (Health Sciences: Education Development Unit, Academic Development Programme)

*In Human Genetics:*

\*Lisa Jane Roberts

Thesis Title: *Genetic analysis of inherited retinal diseases in indigenous Southern African populations*

Lisa Roberts holds BSc, BSc(Hons) and MSc(Med) qualifications from UCT, and has been employed as a researcher in the Division of Human Genetics (UCT) since 1999. She began part-time study towards her PhD in 2014.

Lisa Roberts' thesis investigates the genes and mutations causing inherited blindness. She focuses on indigenous southern African families, who are under-represented in global genomic research. She starts by reviewing 30 years of genetic research and identifies a single genetic mutation which is responsible for ~43% of the cases of Usher syndrome (the most common cause of deaf-blindness) in this population. She goes on to examine 16 families with inherited vision loss, who lacked a genetic diagnosis using older technology. Using next-generation sequencing, she identifies the causative genetic mutation in ~73% of the families,

reporting that 70% of the mutations identified have not been reported elsewhere. Finally, a new retinal-disease gene, responsible for severe vision loss in one local family, was identified. The research generates new knowledge about inherited blindness in South Africa and will improve genetic diagnostic services for indigenous African families.

*Supervisor:* Professor R Ramesar (Pathology)

*Co-supervisor:* Dr A Swaroop (National Eye Institute, National Institutes of Health)

\*Nyarai Desiree Soko

Thesis Title: *Pharmacokinetics and pharmacogenetics of Rosuvastatin in healthy Zimbabweans*

Nyarai Soko holds a BSc(Hons) in Applied Biology and Biochemistry and an MSc in Applied Microbiology and Biotechnology from the National University of Science and Technology in Zimbabwe. Before joining UCT in 2014 for her PhD, she worked at the Scientific and Industrial Research and Development Centre.

Nyarai Soko's thesis focuses on looking for genetic causes of differences that are seen in patients in the amount of cholesterol lowering drugs called statins circulating in the blood after receiving the same doses. She uses Rosuvastatin as an example, evaluating first whether the genetic markers that have been reported in Caucasian populations are also important in African populations. After finding out that the genetic markers reported in Caucasian populations were absent in Africans, she uses a technique called next generation sequence to check the genomes of African participants. She is able to show that the genetic differences that could help explain response of African patients to statins are different to those identified in other populations. Her research moves us closer to precision medicine and allows us to consider genetics assisted personalised dosing.

*Supervisor:* Professor C Dandara (Pathology)

*Co-supervisors:* Professor R Ramesar (Pathology); Dr E Chimusa (Pathology)

*In Medical Microbiology:*

Vineshree Mischka Moodley

Thesis Title: *Improving point-of-care diagnosis of tuberculosis: development and evaluation of novel technologies*

Vineshree Moodley is a specialist microbiologist, having obtained a Fellowship of the Colleges of Pathologists of South Africa, MMed from UCT and an MBChB from the University of Natal. She was also awarded the Diploma of Tropical Medicine and Hygiene from the University of the Witwatersrand.

Vineshree Moodley's thesis aims to develop and evaluate novel diagnostic tests for tuberculosis (TB) that can be used at the point-of-care in low-resource settings. With 9.6 million people developing TB disease in 2014, the need for new diagnostic tools is essential. Her thesis includes several diagnostic research trials including investigation of a TB chemiresistive breath-analyser, a urine lipoarabinomannan lateral flow assay, a modification of the GeneXpert® assay for use on blood, and redesigning the sputum collection device for use in an integrated molecular platform as well as to reduce the risk of occupationally-acquired TB by laboratory staff. The results of her dissertation have led to additional studies for two of the devices and the results of the urine lateral flow assay study have been used in conjunction with other studies to inform the World Health Organisation Expert Committee on their policy guidance for the appropriate use of the test.

*Supervisor:* Professor MP Nicol (Pathology)

*Co-supervisor:* Dr SE Dorman (Associate Professor, Division of Infectious Diseases, School of Medicine, John Hopkins University)

*In Medical Virology:*

Tanko Fatime Ramla

Thesis Title: *Restoration of cellular immunity in HIV-infected individuals on antiretroviral therapy*

Tanko Fatime Ramla completed her BSc and BSc(Hons) in Molecular and Cell Biology at UCT. In 2011, she joined the Division of Medical Virology in the

Department of Pathology as an MSc student and subsequently commenced her doctoral studies.

HIV infects and impairs immune cells that are crucial in controlling the virus itself and a host of other infections. Antiretroviral therapy (ART) has substantially improved the health of HIV-infected individuals, but it does not control the virus long-term, and may not restore the immune system fully. Fatime Ramla's thesis assesses the impact of ART commenced during chronic HIV infection on the functioning of T and B lymphocytes. She demonstrates that the activation levels of T and B cells decrease after 1 year of ART, but do not normalise to levels of HIV-uninfected individuals. In addition, skewed T and B cell memory cell profiles persist. She also finds that the recovery of functional T cell immunity to other co-infections such as TB depends on their memory profile before ART initiation. Overall, this thesis demonstrates considerable but only partial normalisation of T and B cell defects after short-term ART in HIV infection.

*Supervisor:* A/Professor WA Burgers (Pathology)

*Co-supervisors:* Dr C Riou (Pathology); Dr AP Soares (Pathology)

*In Medicine:*

Naomi Folb

Thesis Title: *Non-communicable diseases in public sector primary care clinics in South Africa: multimorbidity, control, treatment, socioeconomic associations, and evaluation of educational outreach with a clinical management tool*

Naomi Folb completed her MBChB at UCT and became a member of the Royal College of General Practitioners in the United Kingdom in 2006. She worked as a General Practitioner in England before returning to South Africa in 2010 when she joined the Knowledge Translation Unit, UCT Lung Institute.

Naomi Folb's thesis reports on a study in two districts of the Western Cape that investigated the needs and potential solutions to the needs of patients with non-communicable diseases (NCDs) attending primary care services. It provides original and recent evidence of poor control and

unmet treatment needs for NCDs. It found associations between socioeconomic characteristics and hypertension control and treatment, and depression symptoms and treatment. It identifies potentially modifiable clinic-level factors that could improve care for these diseases. It provides new evidence from South Africa in support of the bidirectional relationship between poverty and depression. Finally, it reports experimental evidence of the effectiveness of a programme aimed at improving NCD management by supporting and expanding nurses' role in NCD care. The work points to the need for improved strategies for diagnosing and managing NCDs and for better integrated NCD care, including equipping primary health care providers to manage these diseases.

*Supervisor:* Dr LR Fairall (Medicine)

*Co-supervisor:* Professor M Bachmann (Public Health, University of East Anglia)

Kim Anh Nguyen

Thesis Title: *Determining the prevalence and optimising the diagnosis of metabolic syndrome in people living with HIV*

Kim Nguyen qualified as a medical doctor in Vietnam, and obtained her master's in Maternal and Child Health from UCT in 2012. Thereafter she registered for her PhD in Medicine through the Non-Communicable Diseases Research Unit of the South African Medical Research Council.

Kim Nguyen's thesis focuses on the burden of cardio-metabolic risk factors, and how to optimally diagnose them as clusters in the form of metabolic syndrome (MS) in HIV-infected populations. Her meta-analysis shows that about one-third of HIV-infected adults have MS, and therefore are at high future risk of cardiovascular disease. In a multi-clinic-based study of HIV-infected South Africans, she finds very good agreement between different MS diagnostic criteria suggesting that these may be used interchangeably. The optimal waist circumference thresholds for abdominal obesity are lower in men but greater in women than those advocated

internationally for Africans. Therefore, uncritical application of recommended thresholds could misdiagnose MS in HIV-infected Africans. HbA1c correlates well with fasting plasma glucose (FPG) and the oral glucose tolerance test in detecting dysglycaemia. The optimal HbA1c threshold is similar to the internationally recommended, suggesting that HbA1c could be used to replace glucose measurement-defined dysglycaemia to simplify MS screening in HIV-infected Africans.

*Supervisor:* Professor AP Kengne (Medicine)

*Co-supervisor:* Dr N Peer (Medicine)

*In Nursing:*

Gaonyadiwe Lubinda-Sinombe

*Thesis Title: An evaluation of the effects of a lifestyle intervention on eating and physical activity behaviours of urban adolescents in junior public secondary schools in Botswana: a pragmatic randomised controlled trial*

Gaonyadiwe Lubinda-Sinombe completed a BNS and MNS at the University of Botswana, and began full-time study towards her PhD in 2013. Her interest in adolescents' lifestyle patterns emerged from clinical teaching experiences in a primary health care setting from 2010-2012.

Gaonyadiwe Lubinda-Sinombe's thesis focuses on the eating habits, nutritional knowledge and physical activity behaviours of adolescents in urban public junior secondary schools in Botswana. Baseline data of phase one show that respondents engage in unhealthy eating habits, inadequate physical activity and lack nutrition knowledge. Self-reported intentions to eat healthily and engage in physical activities (PA) were good (220/252, 87.3%) and self-efficacy to change eating and PA behaviours was high (180, 71.4%). Most adolescents (188, 74.6%) had a normal body mass index (BMI), few (22, 8.7%) were underweight, 27 (10.7%) were overweight, 4 (1.6%) were obese and 11 (4.4%) were obese with risk. The prevalence of overweight was 16.7% (42) by BMI and 12.3% (31) waist circumference. This led to the development, implementation and

evaluation of a lifestyle intervention movement (LIMO) program through a pragmatic randomised trial. Results for LIMO program are promising for behaviour change but further study is recommended.

*Supervisor:* A/Professor U Kyriacos (Health and Rehabilitation Sciences)

*Co-supervisor:* Dr M Hinds Harris (Professor Emerita North-eastern University Boston MA, UCT Mellon Scholar)

*In Occupational Therapy:*

Pamela Joy Gretschel

*Thesis Title: A case study on designing an occupational therapy intervention for caregivers of children on ART living in low-income conditions in South Africa*

Pamela Gretschel holds a BSc in Occupational Therapy from Stellenbosch University, and a master's in Early Childhood Intervention from the University of Pretoria. She is a lecturer in the Division of Occupational Therapy at UCT, with expertise in child learning and development services across public/private and health/education sectors.

Pamela Gretschel's thesis investigates the process by which a group of occupational therapists designed a new occupational therapy intervention for caregivers of children on ART living in low-income conditions in South Africa. A single, instrumental case study design was used to explore key aspects of the intervention design process. This was accompanied by cooperative inquiry, which allowed the researcher and participants to reflect in, and on their actions, during this process. Drawing on Cultural Historical Activity Theory, the thesis describes and explains how intervention design can be fuelled by historically revered discourses of individualism and a focus on occupational performance, sustained by the largely homogenous composition and associated positionalities of occupational therapists typically in paediatric practice. The thesis introduces an emerging construct; professional role entrenchment, which describes how occupational therapists and perhaps other professionals, may resist becoming conscious of, and disrupting the

unquestioned professional and personal discourses dominant in practice.

*Supervisor:* A/Professor E Ramugondo (Health and Rehabilitation Sciences)

*Co-supervisor:* A/Professor R Galvaan (Health and Rehabilitation Sciences)

*In Paediatrics:*

Alison Rosalie Lupton-Smith

*Thesis Title: An investigation into regional ventilation in infants and children; its distribution and determinants*

Alison Lupton-Smith holds a BSc in Physiotherapy from UCT. She has a keen interest in clinical cardiopulmonary physiotherapy and rehabilitation and is committed to improving the evidence base in this field to optimise patient care.

Alison Lupton-Smith's thesis aims to describe the effects of different body positions, age and disease states on ventilation distribution in infants and children beyond the neonatal period, using electrical impedance tomography. Prior to this research, knowledge on ventilation distribution in infants and children was limited, with no "normal" reference data. She also examines ventilation distribution response to prone positioning in mechanically ventilated children with severe lung disease in the critical care setting. Her findings indicate that the distribution of ventilation in infants and children is complex, with no clear pattern such as that seen in adults. In the critical care setting, her results refute the hypothesis that improved oxygenation in response to prone positioning occurs as a result of redistribution of ventilation to dorsal lung regions. The suggestion of improved homogeneity of ventilation in this position is, however, supported. These novel findings will help to guide therapeutic positioning aimed at optimising ventilation and oxygenation in infants/children with lung disease.

*Supervisor:* A/Professor B Morrow (Paediatrics and Child Health)

*Co-supervisor:* Professor A Argent (Paediatrics and Child Health)



*In Physiology:*

Masouda Rahim

Thesis Title: *Investigation of genes involved in the angiogenesis pathway with risk of musculoskeletal soft tissue injuries*

Masouda Rahim graduated with a BSc in Genetics and Physiology before obtaining her BSc (Med)(Hons) degree in Physiology from UCT. Her PhD research focused on the identification of novel genetic risk factors for common ligament and tendon injuries.

Masouda Rahim's thesis aims to investigate several DNA sequence variants within genes functioning in the angiogenesis signalling pathway with risk of ligament and tendon injuries; commonly injured as a result of regular sports participation. She followed a case-control study design approach to investigate five DNA sequence variants within the vascular endothelial growth factor (VEGFA) and kinase insert-domain receptor (KDR) genes. The novel findings of her thesis highlight specific genetic intervals within genes encoding key angiogenesis proteins which may play a role in the tissue's response to load and thereby contribute to injury risk. Of note are the observed similarities and differences in the genetic basis of acute (spontaneous rupture) and chronic (overuse) injuries. The associated genes serve as targets for future investigations to better understand their biological contribution to the susceptibility of sporting injuries.

*Supervisor:* A/Professor AV September (Human Biology)

*Co-supervisor:* Dr M Posthumus (Human Biology)

*In Physiotherapy:*

Lieselotte Corten

Thesis Title: *The use of assisted autogenic drainage in children with acute and chronic respiratory disease*

Lieselotte Corten holds a BSc and an MSc in Rehabilitation Sciences and Physiotherapy from the Catholic University of Leuven, Belgium. In 2013, she commenced her PhD at UCT (Division of Physiotherapy). Since then, she has

been involved in clinical education, lecturing and supervising students in the Division.

Lieselotte Corten's thesis focuses on a specific respiratory physiotherapy technique, assisted autogenic drainage (AAD), in young children with cystic fibrosis and those admitted to hospital with pneumonia. This thesis firstly presents two systematic reviews of the available evidence, highlighting the current paucity of research in this field. A descriptive study of current practice in children hospitalised with respiratory infections shows that children with pneumonia are more likely to receive respiratory physiotherapy than other diagnostic groups. Owing to relatively small sample sizes in two randomised controlled trials, no clear conclusions on the effectiveness and safety of AAD in children with pneumonia or cystic fibrosis can be made. However, no adverse events were reported and some benefits were seen in children with pneumonia receiving this intervention. This series of studies contributes greatly to the current respiratory physiotherapy evidence base. It also paves the way for future research in these vulnerable population groups.

*Supervisor:* Professor B Morrow (Paediatrics and Child Health)

*Co-supervisor:* Professor J Jelsma (Health and Rehabilitation Sciences)

Nirmala Naidoo

Thesis Title: *The factors associated with childhood obesity in typically developing children and in children with intellectual disability*

Nirmala Naidoo obtained a BSc in Physiotherapy (UKZN), Master in Medical Science (UKZN) and Master in Education (UKZN). She is a Senior Lecturer in the Division of Physiotherapy at UCT.

Nirmala Naidoo's thesis investigates the factors associated with childhood obesity in typically developing children and in children with intellectual disability (ID). The prevalence of overweight/obesity was 26%, and the correlates of standardised body mass index (BMI) were socio-economic status, maternal weight and physical activity

levels. Additionally, high intensity physical activity levels and proficiency in speed and agility skills contributed to decreased weight status in both typically developing children and children with ID. Although children with ID had a higher prevalence of overweight/obesity than their peers (37%) regression analysis indicated that this was mediated by the amount of physical activity rather than the disability. Interventions should thus address the household and family, based on the association between socio-economic status, maternal BMI and that of their children. The modifiable factors of physical activity and poor motor skills, particularly in children with ID, need to be targeted in school physical education and sports activities.

*Supervisor:* Professor J Jelsma (Health & Rehabilitation Sciences)

*Co-supervisor:* Professor EV Lambert (Human Biology)

*In Psychiatry:*

\*Maxine Faith Spedding

Thesis Title: *Perinatal psychological distress in the South African context: the road to task shifting evidence based interventions*

Maxine Spedding holds a BA(Hons) and Master's in Clinical Psychology from Stellenbosch University. She began her doctoral studies at UCT's Psychiatry Department in 2013. Prior to this, in addition to practising as a psychotherapist, she worked as a consultant lecturer and clinical supervisor to trainee psychologists.

Maxine Spedding's thesis focuses on using Registered Counsellors to task shift an evidence-based therapy intervention to treat perinatal psychological distress in public health settings. She starts by using secondary data to estimate the prevalence rates of antenatal psychological distress, as well as the associated risk and protective factors. Thereafter, she explores the perceptions that pregnant women have of perinatal mental illness, including their views on causes and most appropriate treatments. After demonstrating high prevalence rates amongst a large Western Cape sample, as well as finding that women

show a preference for talking therapies such as psychotherapy and counselling, she piloted an adapted counselling intervention delivered by a Registered Counsellor. She found that psychological distress was significantly reduced, while functioning in social, work and family life were all improved. The intervention was deemed feasible and acceptable to both participants and stakeholders.

*Supervisor:* A/Professor KR Sorsdahl (Psychiatry and Mental Health)  
*Co-supervisors:* Professor DJ Stein (Psychiatry and Mental Health); Dr T Naledi (Public Health & Family Medicine)

*In Public Health:*

Annibale Cois

*Thesis Title: Understanding blood pressure dynamics in the South African population: a latent variables approach to the analysis and comparison of data from multiple surveys*

Annibale Cois holds master's qualifications in Electrical Engineering from the University of Cagliari, Italy, and in Public Health from UCT. Before commencing doctoral studies in 2012, he worked in the private and public health systems in Italy in addiction rehabilitation programmes.

Annibale Cois's thesis deals with the estimation of trends in blood pressure and hypertension in the South African adult population between 1998 and 2015, and the identification of predictive factors. Analysing data from a series of national surveys, he investigates the applicability of a set of analytical techniques within the framework of structural equation modelling to overcome problems arising from between-survey methodological differences in data collection and management. An important finding is a decline in average systolic blood pressure from the mid-2000s, particularly among women. Some of this decline is explained by hypertension treatment, but none by conventional risk factors. He contributes to a better understanding of the dynamics of the hypertension epidemic in South Africa and the challenges facing public health intervention in chronic disease. He also provides innovative methods for

improving the reliability and validity of estimates of blood pressure and similar measures in epidemiological studies.

*Supervisor:* Emeritus Professor RI Ehrlich (Public Health and Family Medicine)  
*Co-supervisor:* Dr S Er (Statistical Sciences)

Naomi Leone Lince-Deroche  
*Thesis Title: Provision of safe abortion services in South Africa: estimating women's and health service costs and exploring opportunities for improving efficiency and access*

Naomi Lince-Deroche holds a Bachelor of Arts degree in Biology and International Affairs from Macalester College, a Masters of Public Health from Columbia University, and a Masters of International Affairs with specialization in economic development, also from Columbia University.

Naomi Lince-Deroche's thesis addresses costs associated with safe abortion services in South Africa. Her analysis of national data revealed that safe abortion provision in the public sector has declined recently, and that in 2016, just one in five abortions were provided in the public sector. She surveys women to explore their experiences accessing safe abortion services in the public sector and determines that they face many obstacles and incur unnecessary costs. She also studies current clinical practice, estimates the costs per abortion procedure, and identifies means through which South Africa could provide more safe services for less cost, potentially resulting in a reduction in morbidity and mortality from unsafe abortion. Given that 2017 marks the 20th anniversary of the passing of South Africa's abortion law, these findings are timely and will prove helpful to policymakers hoping to address the country's commitments to achieving universal access to sexual and reproductive health.

*Supervisor:* A/Professor E Sinanovic (Public Health & Family Medicine)  
*Co-supervisor:* Dr K Blanchard (President of Ibis Reproductive Health)

\*Helene Schneider

*Thesis Title: The emergence of a national community health worker programme in South Africa: dimensions of governance and leadership*

Helen Schneider holds an MBChB from UCT and an MMed from the University of the Witwatersrand. She is a medical doctor and public health specialist. Her doctoral research arises from a long-standing interest in the evolution of South Africa's community-based health sector.

National community health worker programmes are returning to favour across the globe. While such programmes expand access, and deepen community engagement in health, they require considerable resources and support to sustain. Helen Schneider's thesis seeks to enhance understanding of the system-wide changes and governance of large-scale community health worker programmes. Empirically, it examines the provincial level implementation of reforms to the community-based sector, referred to as the Primary Health Care Ward Based Outreach Teams Strategy, adopted in South Africa since 2011. It highlights the diverse and context specific ways in which the strategy emerged at a sub-national level, as a negotiated product of local histories of community-based services and new mandates from the top; and the pervasive and multifaceted nature of governance and leadership required, spanning analytic, managerial, technical and political roles. The thesis concludes by proposing a multilevel governance and leadership framework for national community health worker programmes.

*Supervisor:* Professor D McIntyre (Public Health and Family Medicine)

Alison Swartz

*Thesis Title: Coming of age in Khayelitsha: gender identity, sexual partnerships and the transition to adulthood*

Alison Swartz holds a BSocSc(Hons) in Social Anthropology and a master's in Public Health, both from UCT. She has worked as a lecturer in the Division of Social and Behavioural Sciences in the School of Public Health and Family

Medicine since 2013.

Alison Swartz's thesis explores what it means to be a young man or woman navigating towards adulthood in the context of socioeconomic marginalisation. It looks at how youth negotiate the tensions between the structures that shape their lives as well as their opportunities for agency. Based on long-term ethnographic fieldwork with young people in Town Two, Khayelitsha, she explores how youth transition to adulthood in the two interrelated domains of gendered identity and sexual partnerships. Within these domains, living up to individual and social ideals associated with masculinity and femininity is persistently challenging. Faced with these challenges, young people employ creative and dynamic strategies in their endeavours to maximise the precarious gains they make in their transition towards adulthood. The findings highlight that youth in Khayelitsha are neither complete victims, nor entirely free agents with the capacity to radically change their circumstances. This highlights the need for interventions with youth that balance their capacity for individual-level behaviour change but also the structures that shape their lives.

*Supervisor:* A/Professor CJ Colvin  
(Public Health and Family Medicine)  
*Co-supervisor:* Professor A Harrison  
(Public Health and Family Medicine,  
Public Health, Brown University)

*In Surgery:*

Mogamat Rushdie Hendricks  
Thesis Title: *Evaluation of the clinical outcome of curvilinear transport distraction osteogenesis and revascularised fibula free flaps in the reconstruction of large post-maxillectomy defects*

Rushdie Hendricks is an oral and maxillofacial surgeon with BChD (1979) and MChD (1987) degrees obtained from the University of the Western Cape. His special interest in head and neck tumours led to the present PhD thesis, following the quest for an optimal solution for closure of large post-maxillectomy defects.

Maxillary defects caused by trauma or tumour resection in the head and neck region can be devastating

to the patient from a cosmetic and functional perspective. Patients who undergo maxillectomy procedures experience a substantial deterioration in primary oral functions and quality of life. The revascularised free fibula flap (RFFF) has been the current 'gold standard' in maxillary reconstruction, but it demands advanced technology and concomitant expense. Rushdie Hendricks thesis develops an affordable and novel method of regenerating bone and soft tissue through the process of curvilinear transport distraction osteogenesis (CTDO) and compares his findings with the RFFF technique. He produces five prototypes that can successfully recreate an excellent quality and volume of new bone and soft tissue. His results have shown that the CTDO method produces a quality of bone and soft tissue that in most respects better the RFFF method; accordingly, a new 'gold standard' has been established.

*Supervisor:* A/Professor G Vicatos  
(Mechanical Engineering)  
*Co-supervisor:* A/Professor D Hudson  
(Surgery)

## 8. FACULTY OF HUMANITIES

*Acting Dean:*

*Associate Professor H Garuba*

### DEGREE OF DOCTOR OF PHILOSOPHY

*In African Languages and Literature:*

\*Angeline Masowa  
Thesis Title: *Gender and humour: complexities of women's image politics in humorous Shona narratives*

Angeline Masowa has BA(Hons) and master's degrees in African Languages and Literature from the University of Zimbabwe. Her doctoral work was motivated by the fact that, despite its abundant use, humour is an ignored genre that has not received adequate scrutiny in academic study – particularly in comprehending how it can be used to understand gender relations in society, especially in a Shona-language context.

Angeline Masowa makes use of the superiority theory of humour as well as feminist theory to examine how women in particular are presented in Shona humour that is circulated on social media. Her study offers insights for understanding perceptions, beliefs, fears and worries about women among members of Shona-speaking society. Angeline Masowa's thesis contributes to the body of knowledge in humour studies, and in the Shona language in particular. It does this because, despite the long history of studying humour in many other parts of the world, such studies are still in their infancy in Zimbabwe.

*Supervisor:* A/Professor A Nyamende  
(Languages and Literatures)  
*Co-supervisor:* Dr NE Mberi (University of Zimbabwe)

*In African Studies:*

\*Christian Ernsten

Thesis Title: *Renaissance and revenants in an emerging global city: discourses of heritage and urban design in Cape Town's District One and District Six, 2002-2014*

Christian Ernsten has an MA in contemporary history from the University of Groningen, Netherlands, and an MPhil in African Studies from UCT. His PhD draws on his experience as an urban practitioner and researcher in Cape Town and Amsterdam.

Christian Ernsten's thesis combines embedded ethnographic research, qualitative in-depth interviews, archival research, and a form of embodied research to identify an historical pivot upon which heritage and urban-design discourses in the City of Cape Town hinge. His study offers a series of insights into links between colonial modernity and the origins of contemporary heritage and urban-design discourses in Cape Town. He examines the function of an official discourse concerning the design of the city as also the sudden eruptions of public dissent that disturb that official discourse. He points to "moments of poignancy" in the construction of Cape Town's recent urban transformation. The central argument of Christian Ernsten's thesis is that an in-depth critique of the shifts,

transformations and internal workings of the discourses of heritage and urban design provides a means to understand how contemporary Cape Town has been repositioned in relation to the city's past, present and future.

*Supervisor:* A/Professor N Shepherd (African and Gender Studies, Anthropology and Linguistics)

*In Education:*

Simangele Gladys Mayisela  
Thesis Title: *Corporal punishment: cultural-historical and socio-cultural practices of teachers in a South African primary school*

Simangele Gladys Mayisela has a BA from the University of South Africa, a BA(Hons) from the Rand Afrikaans University, and a master's in Educational Psychology from the University of the Witwatersrand (Wits). Simangele Mayisela lectured in the School of Education at Wits, before pursuing doctoral studies at UCT.

Simangele Mayisela's thesis employs Vygotsky's Cultural-Historical Activity Theory (CHAT) framework to investigate teachers' cultural-historical practices of corporal punishment in a rural South African school context. Corporal punishment continues to be practised in many South African schools, in spite of the practice having been legally abolished more than two decades ago. Simangele Mayisela's thesis contributes a theory informed yet empirically grounded account of the persistence of corporal punishment. Her work reveals culturally embedded and contextually grounded justifications for teachers' lack of appropriation of the, for them, new forms of learner-discipline practices that constitute alternatives to corporal punishment. Her findings have crucial implications for future intervention aimed at changing existing practices of corporal punishment in order to bring them into line with the demands of contemporary post-apartheid, South Africa's schooling and society.

*Supervisor:* Dr. AE Muthivhi (Education)  
*Co-supervisor:* Emeritus Professor S Pendlebury (Education)

Rene Toerien

Thesis Title: *Mapping the learning trajectories of physical sciences teachers' topic specific knowledge for teaching chemical bonding*

René Toerien has a BSc(Hons) from the Stellenbosch University, a postgraduate diploma in education from the University of South Africa, and an MPhil from UCT. Her doctoral work extends her master's degree research to further address the quality of science teaching in South Africa.

René Toerien's thesis captures teaching expertise in response to ongoing concerns about poor learner performance on international science benchmark tests. Focusing on the quality of science teachers' knowledge for teaching, her study maps the learning trajectories of physical sciences teachers, and identifies the factors which play a significant role in the teachers' growth in knowledge for teaching chemical bonding over time. She shows that teaching the same content multiple times and at multiple grade levels, embracing changes in the curriculum as opportunities for learning, and completing post-graduate studies in education, all played a role in shifting the teachers' teaching approach from being text book bound and teacher-centred to focussing on student learning. René Toerien's thesis provides guidelines for professional development programmes in terms of differentiated support to teachers according to their career stages, and the inclusion of content specific training programmes which make teaching for conceptual progression explicit.

*Supervisor:* A/Professor A Hattingh (Education)

*Co-supervisor:* Professor M Rollnick (University of the Witwatersrand)

\*Nicolette Sarah Wolmarans

Thesis Title: *The nature of professional reasoning: an analysis of design in the engineering curriculum*

Nicolette Wolmarans has a BSc(Eng) and MSc(Eng) in Mechanical Engineering from UCT, and a postgraduate diploma in Higher Education Studies. Her doctoral work emerged from her experiences of

practising and teaching engineering and noting that many graduates seem to leave their theoretical knowledge behind when they enter professional practice.

Nicolette Wolmaran's thesis aims to develop an understanding of the nature of professional reasoning, using engineering design as a case study. Her study is undertaken in the social realist tradition of the sociology of education. But she challenges established models of professional action as simply the application of disciplinary knowledge to solve external problems. She shows that engineering judgement lies in making sense of complex contextual details rather than in applying disciplinary knowledge. She indicates that professional reasoning is a form of reasoning located in the particular and is thus different to the logic of research; and that while research is intended to develop generalisable theory, professions specialise theory to specific cases. She concludes by pointing out that when professional education models itself on the logic of research, students are left with a dislocated view of knowledge and are left unready to use it in practice.

*Supervisor:* A/Professor K Lockett (Education)

*Co-supervisor:* Professor JM Case (Chemical Engineering)

*In English Language and Literature:*

Kamil Emma Naicker

Thesis Title: *Return to the scene of the crime: the returnee detective and postcolonial crime fiction*

Kamil Naicker completed her undergraduate and honours qualifications at UCT and went on to receive her MA from the University of Leeds in 2011. She returned to UCT to begin her PhD studies in 2014.

Kamil Naicker's thesis is in the field of postcolonial literature and genre studies. Her thesis research investigates the ways in which the crime novel genre has been taken up and adapted in order to depict and grapple with ideas of justice in selected postcolonial contexts. She has approached this investigation through considering the figure of the 'returnee detective' in these novels. That work has led her to determine how this recurring

figure is used to mediate the reader's understanding of civil conflict in the postcolonial world.

*Supervisor:* A/Professor M Samuelson  
(English Language and Literature)  
*Co-supervisor:* A/Professor S Young  
(English Language and Literature)

*In Linguistics:*

David Wanjala Barasa  
Thesis Title: *Ateso grammar: a descriptive account of an Eastern Nilotic language*

David Barasa has a BEd (Arts) from Masinde Muliro University of Science and Technology in Kenya, and an MA (Linguistics) from the University of Nairobi. He has been working towards his PhD since 2014.

David Barasa's thesis discusses the structure of Ateso, an Eastern Nilotic language. Based on interview and recorded data from fieldwork conducted in areas in both Uganda and Kenya where Ateso is spoken, his study provides the first comprehensive description of the phonology, morphology and syntax of the language. His linguistic analysis of the language is conducted by describing the phonological system of the language and its complex noun and verb morphology. He further develops an explanation of its verb-subject/verb-object (VS/VO) syntactic pattern while also assessing linguistic insights found in earlier analysis of the sentence patterns in other Eastern Nilotic languages. David Barasa's thesis offers, firstly, a scholarly description of Ateso addressed to an academic audience, mainly Africanists and linguists. Secondly, it provides a grammar that may be used to inform language activities conducted by Ateso community members, such as in the development of various teaching materials.

*Supervisor:* Professor A Deumert  
(African and Gender Studies,  
Anthropology and Linguistics)  
*Co-supervisors:* Dr MR Motinyane-  
Masoko (Languages and Literature);  
Professor G Dimmendaal (University  
of Cologne);  
Dr H Schroeder (University of Nairobi)

*In Music:*

\*Elizabeth-Anne Hastings  
Thesis Title: *Musical momentum in the sonata-form movements of Beethoven's late string quartets*

Elizabeth Hastings holds UCT music degrees and Rhodes University theology degrees (including a PhD). She has presented papers and published peer-reviewed articles in South Africa, the USA, Belgium and the UK – all in theology which she regards as her second research field. Her earlier performing experience as a concert pianist motivated her choice of her present doctoral topic.

Elizabeth Hastings' thesis seeks to re-envision music as a structure in motion through the contributions of a concept of musical momentum and accompanying analytical guidelines. Musical momentum is neither an established formal concept in the field of music theory and analysis, nor has it received any sustained investigation in that field. Elizabeth Hastings conducts an innovative transfer and translation of the concept of momentum from scientific to musical discourse, and has devised analytical guidelines which are intentionally tested on complex music works as a means of identifying and quantifying sources and deployments of musical momentum. Her work intends to have gone some way to establish musical momentum as a field of research, and to promote a closer reciprocity between music theory and performance.

*Supervisor:* Professor H Hofmeyr (South African College of Music)

*In Philosophy:*

Anna Margot Hartford  
Thesis Title: *The vicious & the ignorant: a question of blameworthiness*

Anna Hartford has BA and BA(Hons) degrees from UCT and a master's from New York University.

Anna Hartford's thesis concerns the challenge that moral ignorance poses to theories of moral responsibility and blameworthiness. The view that moral ignorance is potentially exculpatory has largely been taken to rely on a volitionist interpretation of moral responsibility

which considers "conscious control" a necessary condition for blameworthiness. Hartford endeavours to resituate the moral ignorance excuse in a Quality of Will account of moral responsibility which focuses on the pattern of moral concern (the good will, ill will or indifference) with which an agent acts. Reconciling this view with the moral ignorance excuse requires advancing the claim that it is possible to have sufficient moral concern and still come to hold reprehensible moral beliefs. Despite this claim, one of the most important features of Anna Hartford's Quality of Will approach to the moral ignorance excuse is how restrictive it is: it acknowledges that our ignorant beliefs often emerge precisely because of insufficient moral concern, and it is able to explain why ignorance of this kind is blameworthy. This is a distinction that accounts which preoccupy themselves with conscious control struggle to make.

*Supervisor:* Dr G Hull (Philosophy)  
*Co-supervisor:* Professor D Benatar  
(Philosophy)

\*Richmond Kwesi

Thesis Title: *Understanding assertion and truth in relation to metaphor*

Richmond Kwesi has a BA(Hons) in Linguistics and Philosophy and an MPhil in Philosophy, both from the University of Ghana.

Richmond Kwesi's thesis examines the semantics of metaphorical statements. Many writers have claimed that there is no figurative meaning attributable to metaphors. Instead such statements are seen as only having literal meaning and are useful because they affect hearers in a variety of ways. Richmond Kwesi demurs, primarily because views of this sort fail to explain how metaphors have uses in constructing arguments, in sustaining disagreements and in sentences possessing logical complexity. Using these insights into the potential roles of metaphor, he argues that failure to see metaphors as having meaning is generally a product of an unmotivated tendency to see meaning in terms of the portrayal of facts. Rejecting this Representationalist prejudice, he argues that metaphors have meaning precisely because of the ways

in which they are caught up in practices of inferring. He allies his view to aspects of the Inferentialist programme recently developed, primarily by Robert Brandom.

*Supervisor:* Professor B Weiss  
(Philosophy)

John Montague Ostrowick  
Thesis Title: *“Whether God exists”*

John Ostrowick received an HDipEd in Physical Science in 1994 and a MA degree in Philosophy in 2006 from the University of the Witwatersrand. He started his PhD at UCT in 2010, after a year at University of Edinburgh.

John Ostrowick’s thesis uses the techniques of formal epistemology to analyse inductive arguments for and against God’s existence. He shows that all such arguments depend on assumptions about how likely we take God’s existence to be prior to any evidence – what formal epistemologists call the prior probability of the hypothesis. Having analysed various ways scientists and statisticians have of fixing the prior probabilities, he demonstrates that these are either inapplicable to the hypothesis that God exists (or does not exist) or make the prior probability of God’s existence vanishingly small. Hence, he argues, no inductive argument of this kind can ever be rationally compelling. John Ostrowick concludes by showing how non-evidential, faith based belief is consistent with certain theories of formal epistemology.

*Supervisor:* Dr J Ritchie (Philosophy)

*In Psychology:*

Malgorzata Lipinska  
Thesis Title: *Associations between sleep and cognitive-affective functioning in Posttraumatic Stress Disorder*

Malgorzata (Gosia) Lipinska completed her BSocSci, BSocSci (Hons), and MA qualifications at UCT and began studying toward her PhD in 2011.

Gosia Lipinska’s thesis research explores whether the sleep disruptions typical of post-traumatic stress disorder (PTSD) are essentially related to the

cognitive and emotional difficulties characteristic of the disorder. Women with PTSD, with trauma experience but no PTSD, and with no psychopathology completed neutral memory, emotional memory and emotional reactivity tasks before and after 8-hour periods of sleep and waking. The research generated two important results. First, PTSD-diagnosed individuals slept more lightly than other participants and retained less neutral information after a night of sleep than the others. This pattern of results was predicted only by the degree to which rapid eye movement (REM) sleep was fragmented during the night. Second, after a sleep-filled but not wake-filled delay, all participants recognised pictures with varying valence and arousal properties equally accurately and demonstrated attenuated emotional reactivity to these pictures. Gosia Lipinski’s thesis-research findings bolster the neuroscientific view of sleep as a critical biological process linked integrally to psychological well-being.

*Supervisor:* A/Professor KGF Thomas  
(Psychology)

Inge Marie Wessels

Thesis Title: *Parental engagement in parent training interventions: findings from the Sinovuyo Caring Families Project*

Inge Wessels completed a BA at Stellenbosch University before moving to UCT to begin postgraduate studies. After completing a BSocSci(Hons) and MA, she began full-time study towards her PhD in Psychology in 2014.

Inge Wessels’ thesis investigates parental engagement in the Sinovuyo Caring Families Programme (SCFP), a parenting programme for low-income parents of young children. Effective provision of such programmes is one way to support parents to break the cycle of poverty for their children. Inge Wessels explored the factors associated with parents’ likelihood of joining the SCFP, attending sessions, and completing home practice. She also investigated how their attendance at sessions is associated with programme gains. The results of her study indicate that structural, personal,

and programmatic factors play a role in whether or not participants engage with SCFP services. They also reveal a dose-effect relationship between high attendance and successful outcomes for parents. Inge Wessels’ thesis will contribute to shaping recruitment and retention strategies for future implementation of parenting services in low-income communities, to ensuring that as many parents as possible benefit from such services and to improving SCFP cost-benefit ratios.

*Supervisor:* A/Professor CL Ward  
(Psychology)

*In Social Anthropology:*

Idah Makhosazana Makukule  
Thesis Title: *The role of language in the performance of male township youth identities on Thokoza street corners*

Idah Makukule has bachelor’s and master’s degrees in Anthropology from the University of Johannesburg.

Idah Makukule’s thesis investigates the role of language in the construction of identity amongst male youth in the township of Thokoza on the East Rand in Gauteng. Her ethnographic research examines the multimodal nature of male youth communication and how speech and gesture function in the performance and authentication of black male youth identities as shaped by local and global associations, aspirations and male youth social structures. Her thesis uncovers current male youth alignments and the factors that shape them; how identities are distinguished through speech styles; and how language works in constructing and negotiating different identities in every day interactions, particularly within local male youth social structures and divisions, as also in terms of local and global cultural formations and orientations.

*Supervisor:* Dr H Brookes (African and Gender Studies, Anthropology and Linguistics)

*Co-supervisor:* Emeritus A/Professor AD Spiegel (African and Gender Studies, Anthropology and Linguistics)

Jennifer Jeanne Marie Rogerson  
Thesis Title: *Constructing birthing models, building care relations: motherhood and recognisability in an elite version of midwifery care in South Africa*

Jennifer Rogerson holds a BSocSc and an MSocSc in Anthropology from UCT. Her earlier research examined how sea-users understand climate change. Her doctorate is part of the First Thousand Days of Life programme of research.

South Africa's birthing sector is highly medicalised. Most births take place in medical institutions. Jennifer Rogerson's thesis examines the binary between 'biomedical'/'technocratic' and 'natural' birth as it materialises in middle-class women's birthing choices. In it she proposes that the binary is a product of a myth-making process that animates birthing ideals and configures possibilities, practices and forbearances. Drawing on research with women who choose 'natural' midwife attended births, she elucidates the dynamics of care in a consumer-driven birthing model. She shows how an imaginary is created of a universal and timeless 'feminine' that valorises 'natural' birth and birthing pain for women who are prepared and informed. Exploring these phenomena through themes of trust, accompaniment and relationality, Jennifer Rogerson shows that care produces affects, effects and dispositions that produce a 'good birth'.

*Supervisor:* Professor FC Ross (African and Gender Studies, Anthropology and Linguistics)

*In Social Development:*

Deirdre Margo Rule  
Thesis Title: *Factors that influence reporting of child sexual abuse amongst primary school teachers in South Africa: an application of the theory of planned behaviour*

Deirdre Rule has a BBusSc and MPhil from UCT. She has taught in UCT's School of Management Studies. Her doctoral work emerged whilst she was pursuing her Master's degree in programme evaluation at UCT in 2013 and from her keen interest

in child protection practices amongst South African teachers.

Deirdre Rule's thesis research investigated factors influencing the reporting of child sexual abuse suspicions amongst primary school teachers in South Africa. Utilising the theory of planned behaviour, she examined factors that influence primary school teachers' likelihood of reporting and of failing to report suspected child sexual abuse, notwithstanding their statutory obligation to report. She tests the predictive abilities of attitude, subjective norm and perceived behavioural control (as antecedents to behavioural intention) in order to determine their applicability to the reporting intentions of primary school teachers in South Africa. Deirdre Rule extends this conceptual framework by testing additional factors, including teachers' past reporting behaviour, their knowledge of mandatory reporting and their sociodemographic characteristics. Her thesis provides new insights into ways to support South African primary school teachers in their additional statutory responsibility to report suspected child sexual abuse.

*Supervisor:* Dr J John-Langba (Social Development)

*In Sociology:*

\*Elli Kriel  
Thesis Title: *Jewish converts, their communities and experiences of social inclusion and exclusion in post-apartheid South Africa*

Elli Kriel has a master's degree from the University of Johannesburg and an honours degree from Rand Afrikaans University. She lives in the United Arab Emirates and teaches sociology at the American University in Dubai.

Elli Kriel's research focuses on why certain individuals in post-apartheid South Africa choose to change their religion to Orthodox Judaism. She argues that religious conversion to Orthodox Judaism is a social process of becoming ethnically "Jewish". Seeking to understand conversion as a facet of the politics of belonging, Elli Kriel's research explores the subjective experiences of citizenship at an individual and a group

level. At an individual level, she shows, becoming Jewish through conversion helps converts to avoid social exclusion and achieves other social inclusions that enable them to acquire membership of new communities and to form new social identities. At a group level, Elli Kriel's research shows that religious conversion is part of the host group's broader concern for maintaining ethnic boundaries and is therefore an element of the politics of belonging and identity. Elli Kriel's thesis concludes that conversion to a minority ethnic group in a plural environment is a social means to protect that group's ethnic identity and to avoid assimilation.

*Supervisor:* Professor A Sitas (Sociology)

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# FACULTY OF COMMERCE

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## ORDER OF PROCEEDINGS

Academic Procession.

*(The congregation is requested to stand as the procession enters the hall)*

The Presiding Officer will constitute the congregation.

The National Anthem.

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

Musical Item.

Welcome by the Master of Ceremonies.

The graduands and diplomates will be presented to the Presiding Officer by the  
Director of the Graduate School of Business.

The Presiding Officer will congratulate the new graduates and diplomates.

The Master of Ceremonies will make closing announcements and invite the congregation to stand.

The Presiding Officer 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.)*



**NAMES OF  
GRADUANDS/DIPLOMATES**

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

**FACULTY OF COMMERCE**

*Dean: Professor I Woolard  
Director of the Graduate School of  
Business: Associate Professor M Soko*

**POSTGRADUATE DIPLOMA IN  
MANAGEMENT PRACTICE**

Suama Winny Abiatar  
Megan Abrahams  
\*Stephanie Claire Ainsworth (with distinction)  
Rhiyana Bassier  
Samantha Jade Brass (with distinction)  
Sydwell Siyabonga Buthelezi  
Alforde Charumbira (with distinction)  
Bradley Chetty (with distinction)  
Luke Ernest Davis-Ferguson  
Enver Kenneth De Koker  
\*Dirk Dirksen (with distinction)  
Nomfundo Constance Dlamini  
\*Nqobile Pamela Dlamini  
Ricardo Dos Santos  
Craig Brendon Dummett  
\*Nomandlovu Dumse  
\*Michelle Ann Eadie  
Etienne Wayne Erasmus  
Andreas Seven Frai  
Ielyaas Gamiet  
Ahmad Feisal Gangat (with distinction)  
Zachary Beck Hartwanger (with distinction)  
Rowena Yvette Hess  
Bjorn Gerald Hiestermann (with distinction)  
\*Fransiskis Ihuhua  
Keeno Johnson  
Isabeau Joubert (with distinction)  
Shameeg Kamalie  
Mukonazwothe Ether Khalushi  
Minah Vuyiswa Koela  
\*Alain Kolver  
Tharlikha Suhasini Krupandan  
Zuko Ngobe Lukrozo  
\*Mogamat Rida Lutta (with distinction)  
Noluthando Roselyn Majola  
\*Bernice Vivian Mizee

Lisa-Ann Mini  
Mbali Rebacca Mkhize  
Aveshan Moodley  
Lamuel Tinashe Mudzamiri  
Mphoentle Rachael Musa  
Bea Busisiwe Ndlovu  
Nontokoza Saloma Nene  
Jakobus Johannes Niemand  
Paul Charles Olivier (with distinction)  
Mogamat Shamil Orrie  
Erin Mellissa Pienaar  
Fawwaaz Rakiep  
Anthony Charles Ryba  
Yasser Sayed  
Trevor Bongani Sibisi  
Nkululeko Dwight Sibiya  
Viroshe Siripal  
\*Devin Neilson Stuart (with distinction)  
Granville Daniel Swigelaar  
\*Ryno Marius Van Der Merwe (with distinction)  
Pochia Wessels  
Shiela Yabo (with distinction)

**DEGREE OF MASTER OF BUSINESS  
ADMINISTRATION**

Arastu Agarwal  
Scott Patrick Alexander (with distinction)  
\*Rasheel Amritlal (with distinction)  
\*Abhishek Anand  
Abdurazak Seid Atta  
\*Alexis Katherine Nadin Banks (with distinction)  
\*Sophia Campello Beckwith  
Daniel Alexander Bentinck  
\*Edward Andrew Beukes  
\*Kaashifah Beukes  
Nellis Pieter Brink Beyers  
Regina Cecilia Bezuidenhout  
Shubha Balakrishna Bhat  
Nishana Bhogal (with distinction)  
Catherine Louise Blersch (with distinction)  
\*Keitumetse Bolata  
Kerry Anne Booth  
Wiehahn Alwyn Carstens  
Tatenda Chagonda  
\*Chiedza Caroline Chigumba  
John Mulenga Chundu  
Jelrick Hendricus Richard Claus  
Jason Cooper  
Emma Corder  
Benjamin Robin Crede (with distinction)  
Neil Stanley Crompton

Micah Daniels  
Jonathan David Davies  
\*Kevin Shelley Davis  
Leana de Beer  
Max Etienne Joseph De Bollivier  
Pélagie de Mac-Mahon  
\*Jeroen Therese Derkx  
\*Brechtje Carolien Derkx-Houten  
Joy-Mare de Wet (with distinction)  
\*Mbasa Dinga  
Sara Susanna Dotan (with distinction)  
Adrian Francois Du Plessis  
James William Earle  
\*Yvonne Erwee  
Max Christian Essmann (with distinction)  
Daniel Johann Esterhuyse  
Wesley Fallon  
Peter John Fisher (with distinction)  
Warren John Gatcke (with distinction)  
Katharine Mary George  
Jesse Nathanael Green  
Raymond Neville Greig  
Daniel Martin Gumberger (with distinction)  
Stefan Guntern  
Andrew Crampton Hamman (with distinction)  
\*Leya Hassanally (with distinction)  
Robyn Margaret Joy Hobson  
Zack Ryder Hodgson (with distinction)  
Fleur Margaret Howells  
Ryan Michael Hunter  
\*Timiebi George Itanisa  
Bilal Ahmed Jakhura  
Heloise Janse Van Rensburg (with distinction)  
\*Tharunraj Jayaraj  
Alim Hassanali Jinnah  
Kondwani Kachika  
\*Muwonge Benon Kagezi  
Mogammad Aneeq Kamedien  
Jennifer Korrin Katchmark  
\*Lorato Ludo Kenosi  
Nicola Desree King  
Louis Kinunda  
Byarugaba Emmanuel Kiremire  
Peter Kraus  
Christiaan Kriek  
Tapfumanyei Kudzurunga  
Unathi Prudence Kunju  
Baboni Sethunya Kupe  
Peter Langley  
Chantel Alison Lindeman  
Lesley Joan Lombard  
Abraham Hendrik Petrus Louw (with distinction)  
Connor Mace

Claudette Mackenzie (with distinction)  
 Shree Maharaj  
 \*Kotsai Booker Makamure  
 Lori Elizabeth Manthey (with distinction)  
 Andries Johannes Nicolaas Maritz  
 Matthew David Marrian  
 \*Kudzanai Pfavai Masamba  
 Linley Mary Mayi Mataya  
 Celeste Leigh Mayes  
 Barend Cornelius Mitton  
 Shilan Modi  
 Sarvesha Moodley (with distinction)  
 Jill Chown Morse  
 Bathabile Londiwe Mpofo  
 Ednah Mulea  
 Thaheer Mullins  
 Mary Immaculate Wanjiku Mwaura  
 Gulamo Nabi Sulemangi Nabi (with distinction)  
 Pragasen Naicker  
 Trisha Naicker (with distinction)  
 Nirusha Naidoo (with distinction)  
 Ayanda Ndimande  
 Pieter-Johan Nieuwoudt  
 Shakira Nursoo (with distinction)  
 Michal Janusz Nycz  
 Ferdinand Oosthuizen (with distinction)  
 In Soo Park  
 Adam Thane Parsons  
 \*Vimendree Perumal  
 Samenthea Sanobia Pheko  
 \*Mark Garikayi Powell  
 Adinda Elizabeth Preller (with distinction)  
 Inge Prins  
 Lambert Petrus Prinsloo  
 Marie Pascale Kathleen Agnes Prosper  
 \*Kamila Rajkotia  
 Ray Munyaradzi Rambanapasi  
 Prashaen Reddy (with distinction)  
 \*Zeek Rees  
 \*Nolan Lloyd Reuben  
 Amanda Joy Ritchie  
 \*Stephanus Nicolas Robertson (with distinction)  
 Elze-Mari Roux (with distinction)  
 Anton Johan Runhaar (with distinction)  
 Mathias Sven Schutz  
 Moreri Sefako  
 \*Alloycious Oratile Sematle (with distinction)  
 Divesh Singh  
 Marthinus Beyers Slabber  
 Nicole Lucy Snyders  
 Lloyd Tapiwa Stephano  
 Jomari Swarts  
 \*Katsuro Taniguchi

\*Stephen Andrew Taylor  
 Marisane Clan Thobejane  
 Vinu Lukose Thomas (with distinction)  
 Ntokozo Nobuhle Tshabalala (with distinction)  
 \*Douglas Karisa Tuva  
 Scott David Unwin (with distinction)  
 Junaid Vally  
 Vicki Van Der Westhuizen (with distinction)  
 Jennifer Van Geesbergen  
 \*Himanshu Ashok Vidhani  
 Wouter Jacob Vink  
 Adolph Jurgens Vogel  
 Eugene Roy Webb  
 \*Yu Yang  
 Samukelo Sifiso Sifiso Zwane

*In Executive Management:*

Kgolagano Banabothle  
 Farana Pramrajh Boodhram  
 Keith Hamilton Boyd (with distinction)  
 Mlungisi Wensislous Thulasizwe Cele  
 Henry Chandler  
 Nushreen Coutts  
 Arnaud Dabancourt (with distinction)  
 Ernest Alfred De Bruyn (with distinction)  
 \*David James Edmondson  
 Timothy James Harper  
 Andrew Peter Jansen  
 Nkhensane Hubert Khosa  
 Willem Adriaan Laubscher (with distinction)  
 Tobias Johannes Louw (with distinction)  
 Monwabisi Albert Luxande  
 David Gordon MacLean  
 \*Mangaliso Mahlaba  
 Imraan Mahomed  
 Melusi Dalton Malinga (with distinction)  
 Phathizwe Ewart Malinga  
 Musawenkosi Trueman Mbeje  
 Amos Mboweni  
 Hilton Ian Mentor (with distinction)  
 Hamilton Ngubesilo Mhlom  
 \*Richard Louis Moshal  
 Leon Mouton  
 Duke Benneth Mpapele  
 Edmund Albert Nel  
 Thulane Collin Ngele  
 \*Jonathan Rousseau  
 Reshaad Sha  
 Duncan Marcel Souchon  
 \*Kaare Spange (with distinction)  
 Isaac Matheta Swafo

Nora Victoria Thiel  
 Johannes Lodewikus Van Niekerk (with distinction)  
 Yasmeen Vawda (with distinction)  
 Joseph Zitha  
 Nomvuzo Zongo

DEGREE OF MASTER OF  
 COMMERCE

*In Development Finance:*

\*Olufunmilayo Christiana Adesiyan  
 Larry Harry Anderson  
 Nicholas Avramis  
 Obed Bwalya  
 Isaac Chipswa  
 Mandisa Pearl Dlamini  
 Lovisa Ndapewelao Hashikutuva  
 \*Derby Bwalya Kapota  
 William Kabwe Kasase  
 Silimela Lallie  
 Sekhametsi Tshepo Leboea  
 \*Mathalea Victoria Lukhele  
 \*Tahane Shirilele Mahlaole  
 Bongani Thomas Majaya  
 Sarah Vicki Marot  
 Fani Lucky Mbanjwa  
 George Tshegofatso Mogaladi  
 Kholofelo Molewa  
 Nambwenga Muyangwa  
 Hanifa Noor  
 \*Lerato Riba  
 Cuthbert Tafadzwa Tinavapi  
 Yonela Tukwayo  
 \*Akyere Andiswa Whyte  
 Timisela Zunguze

DEGREE OF MASTER  
 OF PHILOSOPHY

*In Inclusive Innovation:*

Sean Khaya Andrew  
 Eduard Louis Coetzee  
 Karen Hidden  
 \*Bongani Andy Mabaso  
 Lulamile Makaula  
 Rudzani Mulaudzi  
 \*Zarina Nteta (with distinction)

*In Management Practice:*

Ingrid Kathryn Lola Harmse

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# FACULTIES OF COMMERCE, ENGINEERING AND THE BUILT ENVIRONMENT AND SCIENCE

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## ORDER OF PROCEEDINGS

Academic Procession.

*(The congregation is requested to stand as the procession enters the hall)*

The Presiding Officer will constitute the congregation.

The National Anthem.

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

Musical Item.

Welcome by the Master of Ceremonies.

The graduands and diplomates will be presented to the Presiding Officer by the Deans of the faculties.

The Presiding Officer will congratulate the new graduates and diplomates.

The Master of Ceremonies will make closing announcements and invite the congregation to stand.

The Presiding Officer 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.)*

## NAMES OF GRADUANDS

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

### 1. FACULTY OF COMMERCE

*Dean: Professor I. Woolard*

#### ADVANCED DIPLOMA IN ACCOUNTING

\*Nicole Rousseau

#### ADVANCED DIPLOMA IN BUSINESS PROJECT MANAGEMENT

Nonkonzo Thando Bangiso  
\*Emil Burger  
\*Daniel Eric Chetty  
\*Lloyd Stanley Evans  
\*Pumeza Kalipa  
Kagisho Moses Metlhe  
Tshepiso Oarabile Mganga  
Gugulethu Mbuku  
Baxolile Yanela Mvunge  
Ntando Ntando Ndlotyeni  
Linda Gideon Ntuli  
Analeah June Royeppen  
Johnson Shambare  
\*Kutlwano Adelaide Simelane  
Fabiola Munganga Sukadi  
Constance Andrea Talliard  
\*Natasha Tomkinson  
Siyabonga Cyprian Boh Zungu

#### POSTGRADUATE DIPLOMA IN ACCOUNTING

\*Chabani Hlohani Makhubela  
Nontuthuzelo Articia Mboniswa  
Sesethutsipho Mbotshelwa

#### POSTGRADUATE DIPLOMA IN ACTUARIAL SCIENCE

Sanelisiwe Ziningi Nkuta

#### POSTGRADUATE DIPLOMA IN MANAGEMENT

*In Business Systems & Analysis:*  
(With distinction) Lisa Macario

*In Entrepreneurship:*  
\*Kirstin Cathlin Boyes Moffatt  
Tsedzuluso Nethshimbupfe

*In Marketing:*  
\*Jullie Nkonshi Beya  
\*Cassandra Delmare Julius  
Moekadi Manko Sekgobela  
Sihle Sogaula  
Mushaisano Ludwick Thathana

*In Sport Management:*  
\*Nicholas Ryan Tinkler

#### POSTGRADUATE DIPLOMA IN SURVEY DATA ANALYSIS

\*Amiena Bayat  
Mashabane Christinah Ledwaba  
Phumudzo Elliot Madzivhandila  
Maria Masego Mere  
Mbulelo Brian Selebe  
\*Sive Sitole  
Isaac Thapelo Tshabadira  
\*Azwianzi Tshirado Tshirado

#### DEGREE OF BACHELOR OF BUSINESS SCIENCE

*In Management Studies:*  
Michael Aplas  
Siyasiya Sinalo Nonkonela  
Simphiwe Sigaba

#### DEGREE OF BACHELOR OF COMMERCE

\*Qayiya Siphosethu Kobese  
Mphiwe Karabo Mashilo  
\*James Philip Quick  
\*Sivuyile Rafuza  
\*Mbaki Wotheo

### 2. FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

*Dean: Professor A. Lewis*

#### POSTGRADUATE DIPLOMA IN PROPERTY STUDIES

\*Ana-Paula Giuricich

#### POSTGRADUATE DIPLOMA IN TRANSPORT STUDIES

\*Mcebisi Jobela  
\*Colleen Elizabeth Michaels

#### DEGREE OF BACHELOR OF ARCHITECTURAL STUDIES

Bilali Rashid Mwayeya  
Paballo Potlako Wessie

#### DEGREE OF BACHELOR OF SCIENCE IN CONSTRUCTION STUDIES

Ranjevee Beenessreesingh

#### DEGREE OF BACHELOR OF SCIENCE IN ENGINEERING

*In Chemical Engineering:*  
\*Liam James Metcalfe  
Dandr  Pienaar

*In Civil Engineering:*  
Lauren Patricia De Waal (with honours)  
Brita Magan

*In Electrical Engineering:*  
\*Lindani Prince Shelembe

*In Mechanical Engineering:*  
Kevin Jared Chessman  
\*Bradley Jason Hammond  
Joel Daniel Lewis  
Njabulo Happy Madonsela (with honours)

*In Mechatronics:*  
Julian Borhan Lai  
Adam Leo Zar

### 3. FACULTY OF SCIENCE

*Dean: Professor A. le Roex*

#### DEGREE OF BACHELOR OF SCIENCE

\*Zayyad Lawal Funtua  
\*Michael Mac Donald  
Fadzai Melissa Mupfunya  
Kgotso Sechaba Nkosi

### 4. FACULTY OF COMMERCE

*Dean: Professor I. Woolard*

#### DEGREE OF BACHELOR OF COMMERCE (HONOURS)

*In Accounting:*  
\*Lee Sandisiwe Hlalo

*In Economics:*  
\*Phenyo Victory Kgongwana

*In Financial Analysis &  
Portfolio Management:*  
Farheen Abdurahman  
\*Irshaad Ahmed Allie  
\*Daniel Anderson  
\*Nde-Asaa Akongnwi Awasom  
\*(First class) Luca Sebastian Baumann  
Lee Corbin Betheldo  
\*Kim Jade Alana Campbell  
Dane William Clifton  
(First class) Sean David Cohen  
\*Justin Grant Commerford  
\*Michael Haig Daly  
\*Tyrin Maarten De Gidts  
Vuyelwa Dlungana  
\*Monica Tafadzwa Dodzo  
\*Shellen Callie Edy  
\*Jonathan Gabriel Frame  
Noluthando Gatya  
Parusha Gihwala  
Henk Gouws

\*Matthew Kenneth Hendricks  
Ninah Bianca Hendricks  
\*Welile Siphesihle Hlope  
Bradley Brian Janse Van Rensburg  
\*(First class) Muhammad Zeidi Shakoor  
Jaypul  
Roland James Kesler  
\*Ross Wylde King  
Martin Craig Lukey  
Tumelo Audrey Maake  
Itumeleng Mangwedi  
(First class) Ryan Darren Manley  
(First class) Michael Joseph Maxwell  
Nomxolisi Mayekiso  
(First class) William Robert Millatt  
Duduetsang Lerato Motlatsi  
Motshologane  
\*Gift Abigail Mwale  
Natasha Nkhoma  
Bhekumusa Ronnie Nombela  
Matthew Keegan Padayachee  
(First class) Bruce Hylton Potgieter  
Kirstyn Jade Raasch  
Orefemetse Mmaseapei Semakane  
\*Tiaan Braam Slabbert  
Anastasia Emily Smith  
Vaughn Soobramoney  
Michael Staniforth  
\*Qi Sun  
Christine Tapiwa Tabana  
Anda Teke  
Mbuso Thabethe  
\*Salome Mathapelo Themba  
\*Ludan Theron  
\*Bryan Marc Vally  
Marlecia Van Der Walt  
\*Nayan Khusal Vanmali

*In Information Systems:*  
\*Jean-Jacques du Plessis  
\*Mark Alistair Prevost

*In Taxation:*  
Tshisuaka Panda Bashala  
Daniella De Gouveia Pinto  
Refilwe Olebogeng Boitumelo De Jaar  
Gerard de Vink  
Catherine Belle Edmunds  
Lauren Jankielsohn  
(First class) Camilla Koker  
Elsie Kruger  
\*Sarah Jayne Linde  
\*Claire Elizabeth Lofthouse  
Ntsika Maki  
Kwena Refilwe Matsapola  
\*Caitlyn Beth Mullins

\*Nabeehah Sayed-Osmany  
Ntsikelelo Zenani

*In Tax Technical & Compliance:*  
Sinethemba Trustworthy Mathabela

#### DEGREE OF MASTER OF BUSINESS SCIENCE

*In Actuarial Science:*  
\*Galen Matthew Sher (with distinction  
in the dissertation and the degree  
with distinction)

*In Marketing:*  
\*(With distinction) Christine Sarah Pitt

#### DEGREE OF MASTER OF COMMERCE

*In Applied Economics:*  
Johanna Maria Brühl (with distinction  
in the dissertation and the degree  
with distinction)  
Rinelle Chetty (with distinction in the  
dissertation)  
\*Monique Kirsten Melis (with distinction  
in the dissertation and the degree  
with distinction)  
Kirsten Thelma van der Zee (with  
distinction in the dissertation and  
the degree with distinction)

*In Economic Development:*  
Stephanie Ella Craig  
\*(With distinction) Musawenkosi Nxele  
\*Nicholas Calbraith Owsley (with dis  
tinction in the dissertation and the  
degree with distinction)  
Emma Helen Rasmussen

*In Economic Science:*  
\*(With distinction) Jacob Johan George  
Muller

*In Economics:*  
\*Gary Joshua White  
\*Basil Thomas Whitehead (with  
distinction in the dissertation and  
the degree with distinction)  
Junyan Yu

*In Finance:*

\*James Newton Laird-Smith

*In Financial & Risk Management:*

\*Anthony Denys Rogers

*In Financial Management:*

Simone Nicole Abramson  
Richard James Brandt  
Jason Graham Ker-Fox

*In Information Systems:*

\*Carl Jacobs  
Gerald Edmund Leak  
Edison Wazoel Lubua  
Martin Tafirenyika Munetsi  
\*Lulama Ntombana Ngobeni  
Nawal Nasser Omar Al-Haidari  
Nomusa Paula Penelope Khumalo  
Jeanne Moore (with distinction in the  
dissertation)  
Joseph Geoffrey Morrison  
Segomotso Mosiane  
Tina Seale

*In Investment Management:*

\*Terry Murugi Chacha  
Janet Mate  
Akshay Kumar Panday  
\*John Raphael Segeritz  
\*(With distinction) Donovan George  
Stefan

*In Organisational Psychology:*

Albertus Abraham Jacobs  
Ntombeziningi Lungelo Nzima  
Timothy Oghenefega Oghenetega  
\*Stephen Graham Price

*In South African Taxation:*

Sarah Kay Elliott (with distinction in  
the dissertation)  
\*Amit Rajendra Gopal  
Bilal Hassim  
Peter John Heeger  
\*Nicholas Simon Lock  
Esther Maria Van Schalkwyk  
\*Peter Wiese

*In International Taxation:*

Carien Strauss

DEGREE OF MASTER  
OF PHILOSOPHY

*In Demography:*

\*Susan Njoki Maina

*In Development Policy and Practice:*

\*Louis Johannes Du Plooy  
\*Lauren Hermanus  
\*Ines None Izere  
Ishmael Motswane Malale  
Denver Barry Moses  
Mercy Chiluba Munoni

*In Mathematical Finance:*

Christopher James Baker  
\*Jarred de Beer  
\*Cameron John Macdonald Hutchison  
(with distinction in the  
dissertation and the degree  
with distinction)  
Christopher Lindsay McPetrie  
\*Christopher Douglas Roberts  
\*Nina Alexandra Sender  
\*Luc Philip Varejes

*In Programme Evaluation:*

\*Alex Benkenstein  
Nicholas Robert Hardwick  
Michael Ralph Kelderman  
Danielle Kelly Lemmon (with  
distinction in the dissertation and  
the degree with distinction)  
\*(With distinction) Candice Jade Linde  
Cynthia Mendoza  
Nqobile Shelly Mogale  
Mlungisi Khulani Zuma

**5. FACULTY OF ENGINEERING  
AND THE BUILT ENVIRONMENT**

*Dean: Professor A. Lewis*

DEGREE OF BACHELOR OF  
SCIENCE (HONOURS) IN  
CONSTRUCTION MANAGEMENT

Matthew James Smithers

DEGREE OF BACHELOR OF  
SCIENCE (HONOURS) IN  
MATERIALS SCIENCE

Ntombikayise Precious Bhengu  
\*Ntombi-Zanele Chinyanta (With first  
class honours)

DEGREE OF BACHELOR OF  
SCIENCE (HONOURS) IN  
QUANTITY SURVEYING

\*Rory Alan Chandler  
Erica Sinqobile Moyo  
\*Ines Nel

DEGREE OF MASTER OF  
ENGINEERING

*In Civil Infrastructure Management  
and Maintenance:*

Zac James Prins

*In Nuclear Power:*

Megan Donna Hartnick

*In Structural Engineering &  
Structural Materials:*

(With distinction) Kaylee Folster  
Moghammad Sameeg Hendricks  
(With distinction) Dane Mc Gillewie

*In Transport Studies:*

Dibuseng Lesedi Mokoma  
Lavern Moodley

DEGREE OF MASTER OF  
GEOTECHNICAL ENGINEERING

Abhilash Alex

DEGREE OF MASTER OF  
PHILOSOPHY

*In Conservation of the Built  
Environment:*

Adre Aggenbach  
Jayson Clark  
Tyrone Gregory Ontong

*In Electrical Engineering:*  
\*(With distinction) Michael John Heyns

*In Engineering Management:*  
Franco Alberti De Vries

*In Energy Development Studies:*  
\*Brenda Martin

*In Sustainable Mineral Resource Development:*  
Shuhei Kato (with distinction in the dissertation)

*In Transport Studies:*  
Michael Leighton Baylis  
\*Katharine Mary Mckenzie

*In Urban Infrastructure, Design & Management:*  
Linley Cara Damon  
Louise Gardner Meek

#### DEGREE OF MASTER OF SCIENCE IN ENGINEERING

*In Chemical Engineering:*  
Thobile Thenjiwe Dube  
\*(With distinction) Motlokoa William Khasu  
Buhle Samantha Manana  
\*Matthew Dean Myers  
\*(With distinction) Francois Dignus De Flamingh  
Wesley Mitchell Van Niekerk

*In Civil Engineering:*  
Claire Birungi  
Kuvshan Govender (with distinction in the dissertation)  
\*Nishalin Manogran Govender  
\*Philbert Habimana  
(With distinction) Gary Martin Hopkins  
\*Andrew Graham Holmwood (with distinction in the dissertation)  
Masoabi Ignitius Malunga  
\*Abby Jane Robertson  
Alastair Robert Rohrer  
\*Sahil Teeluckdharry

*In Civil Infrastructure Management & Maintenance:*  
Primesh Jassa

*In Electrical Engineering:*  
Mpati Boleme  
Dominique Mateus Fragoso Gouveia  
\*Andrew Matthew Ipurale  
\*Jamlick Kinyua  
(With distinction) Aleksa Knezevic  
\*(With distinction) John Arundel Lewis  
(With distinction) Ndamulelo Marara kanye  
Tlhoriso Gerard Matlokotsi  
Loini Nakadhilu Methimbo  
Tshiningayamwe

*In Geotechnical Engineering:*  
\*Joan Evelyn Ongodia  
Paul Wanyama

*In Materials Engineering:*  
\*(With distinction) Rabelani Rofhiwa Masindi  
\*(With distinction) Leebashen Naicker

*In Mechanical Engineering:*  
(With distinction) Alexander Becker  
(With distinction) Colin Francois du Sart  
\*(With distinction) Tanimu Jatau  
Muhluri Calvin Mathebula  
Cameron Cedric McKenzie  
Matthew Robert Meas  
(With distinction) Damien Nicholas Pond  
\*Andrew Roginsky  
(With distinction) Dale Matthew Warncke

*In Radar & Electronic Defence:*  
\*Turki Abdulaziz Alhadyan  
Kaveer Manickchand

*In Sustainable Energy Engineering:*  
Guy Edward Cunliffe  
Doreen Kanetey-Essel

*In Water Quality Engineering:*  
Mburu Mwangi

#### DEGREE OF MASTER OF SCIENCE IN PROPERTY STUDIES

\*Melissa Potgieter

### 6. FACULTY OF SCIENCE

*Dean: Professor A. le Roex*

#### DEGREE OF BACHELOR OF SCIENCE (HONOURS)

*In Biological Sciences:*  
\*Nicola Kathleen Cathcart  
Kate Smorenburg

*In Mathematics of Computer Science:*  
\*Tapiwa Chadenga

*In Molecular & Cell Biology*  
\*Hilja Hambeleleni Eelu

*In Ocean & Atmosphere Science:*  
Chriselle Joubert

#### DEGREE OF MASTER OF PHILOSOPHY

*In Applied Marine Science:*  
\*Rebecca von Koslowski

*In Archaeology:*  
Liesl Sonnenberg

*In Climate Change & Development:*  
Roy Bouwer

*In Environment, Society & Sustainability:*  
Elizabeth Naude Binge  
Monique Ann Classen  
Toshca-Lee Chevonne Gilliland  
\*Tatiana Iversson Piazza

DEGREE OF MASTER OF SCIENCE

*In Applied Marine Science:*

\*Brandon Wesley Foor  
\*Samantha Paige Grusd  
\*Luke Douglas Scott Jones  
\*David Levy  
\*Fisokuhle Lungile Mbatha  
Kathryn Louise Morris

*In Applied Mathematics:*

Kossi Etekpó  
\*Naseera Moosa  
(With distinction) Zamashobane  
Siphumelele Nyandeni

*In Biological Sciences:*

\*Yolanda Tendai Chirango  
\*Andrew Dirk De Blocq Van Scheltinga  
(With distinction) Leigh De Necker  
Kirti Narendra Gihwala  
\*(With distinction) Otilie Kandiwapá  
Hasiike Katali  
\*Jody-Lee Reizenberg  
(With distinction) Annabelle Jade  
Rogers  
Storme Viljoen  
Liesl Ann Vorster  
Amy Grace Wright

*In Botany:*

Leila Mical Mitrani

*In Chemistry:*

Jessica Nicole Akester  
(With distinction) Irwin Cassells  
\*Zaheer Timol  
(With distinction) Matthew Aaron  
Williams

*In Climate Change & Development:*

Anais Marie Marie  
Joan Nyaboke Momanyi

*In Computational Science:*

Tharindu Nuwan Senapathi

*In Computer Science:*

\*Jason John Bissiet  
Rickert Lambert Mulder

*In Conservation Biology:*

Michelle Claire Blanckenberg  
\*Sarah Marie Casola  
Christie Anne Craig  
\*Carles Dura  
Wesley Gurney Gush  
Corey Alexander Jeal  
\*(With distinction) Alicia Liann Ly  
Matthew Benoit Macray  
Elelwani Nenzhelele  
\*Ryan Matthew Olinger

*In Decision Sciences & Analytics:*

(With distinction) Timothy John  
Wolff-Piggott

*In Environmental & Geographical Science:*

(With distinction) Gemma Kendall  
Pelton Bluff  
Claire van Wyk

*In Environment, Society & Sustainability:*

(With distinction) Michael-James Stowe

*In Geology:*

Maxwell Amponsah-Dacosta  
\*Leslie Huang  
(With distinction) Andile Lucky Msolo  
Mhairi Lesley Reid  
\*Teboho Sebetlela  
Ellwin Taleni Shiimi  
Christopher Van Der Linde

*In Information Technology:*

Joang Adolf Khethisa  
Jessica Kirsten Mantel

*In Mathematics:*

\*Melusi Manqoba Mavuso  
Tshenolo Daniel Mofokeng  
\*(With distinction) Andriamanankasina  
Ramanantoanina

*In Mathematical Statistics:*

Lipika Bhagwandin  
Shravan Lalbahadur

*In Molecular & Cell Biology:*

Humaira Lambarey

*In Statistical Ecology:*

\*(With distinction) Francois Stephanus  
Becker

*In Tertiary Physics Education:*

Maria Munene Tlowana

*In Theoretical Physics:*

(With distinction) Abdullah Khalil  
Hassan Ibrahim

**DEGREE OF DOCTOR OF  
PHILOSOPHY**

*In Applied Mathematics:*

\*Aminu Ma'aruf Nass  
Thesis Title: *Point symmetry methods  
for Itô Stochastic Differential Equations  
(SDE) with a finite jump process*

Aminu Nass obtained a BSc(Hons) in Mathematics from Kano University of Science and Technology, Wudil, Nigeria in 2010, and an MSc from King Fahd University of Petroleum and Minerals, Saudi Arabia in 2014. Before joining UCT, he worked as a lecturer in King Fahd University of Petroleum and Minerals, Saudi Arabia.

Aminu Nass' thesis extends the Lie point transformation of Itô stochastic differential equation driven by a jump process, by implementing a more generalized Itô formula. The Itô formula and the random change of time in stochastic differential equations are the main tools of determining admitted transformations for stochastic differential equations.

*Supervisor:* Dr E Fredericks  
(Mathematics and Applied Mathematics)

*In Archaeology:*

Catherine Julie Luyt  
Thesis Title: *Stable light isotopes in  
fauna as environmental proxies in the  
Southern African winter and year-round  
rainfall zone*

Catherine Luyt holds a BSc(Hons) and MSc (with distinction) from UCT. Her doctoral research arises out of a long-



standing interest in environmental science and especially in past environments, including those in which humans evolved.

Catherine Luyt's thesis explores the effects of climatic variables, such as precipitation, temperature, and others on the stable isotope ratios of carbon, nitrogen and oxygen in contemporary wild fauna from the winter rainfall zone of South Africa. It provides a modern baseline for interpreting similar analyses of ancient fauna from archaeological and palaeontological sites. This kind of work has previously been done in summer rainfall areas in South and East Africa, but as the thesis shows, patterning in the winter rainfall zone is very different. Among other things, this research makes a significant contribution to our understanding of stable light isotope systematics in large mammals. Applications include reconstruction of the environments within which modern humans first emerged in this region, and which probably contributed to shaping us into our current form.

*Supervisor:* Professor J Sealy  
(Archaeology)

Kerryn Ashleigh Warren  
Thesis Title: *Of mice and hominins: using the craniomandibular morphology of hybrid mice to better understand hybrid morphologies in the hominin fossil record*

Kerryn Warren holds a BSc in Archaeology and Human Biology, and a BSc(Hons) in Archaeology from UCT. She received her MSc in Archaeology in 2013, with research focusing on the dental morphology of Iron Age populations in southern Africa.

Kerryn Warren's thesis aims to understand how hybridization between taxa has shaped the evolution of our hominin lineage. Mouse models are used to quantify cranial and mandibular variation across hybrids between several species and subspecies, in terms of size and shape variation, and also qualitative trait variation. Results emphasise the importance of hybridisation for producing skull diversity. Hybrids are quite variable, and are frequently outside of the range of variation (transgressive) of

parent lineages, both quantitatively and qualitatively. Modelling based on these data provide guidelines for detecting hybridisation in samples, making it feasible to extend this model to the fossil past. Such extrapolation suggests that a number of Middle Pleistocene hominins (including humans and Neanderthals) are likely to be hybrids. More broadly, this research highlights hybridisation as an important evolutionary force for the production of variation and the evolution of new forms.

*Supervisor:* A/Professor R Ackermann  
(Archaeology)

*In Astronomy:*  
Enrico Juan Kotze  
Thesis Title: *Transforming Doppler tomography to unravel the accretion dynamics in cataclysmic variables*

Enrico Kotze has a BCom from the University of the Free State and a BSc from the University of South Africa. He completed his BSc(Hons) in Astrophysics and Space Science at UCT in 2011, and his subsequent MSc was upgraded to a PhD in 2014.

Enrico Kotze's thesis investigates the development and application of a new projection method for the established Doppler tomography imaging technique used extensively in the study of cataclysmic variable stars. Doppler tomography, as applied to the spectroscopic observations of this type of interacting binary star system, constructs two-dimensional velocity images of the emission structure associated with the accretion flows and other emission producing components in the system. Incorporating the new projection method, he developed in the base construction of the Doppler image effectively turns it 'inside-out'. His investigation shows that the inside-out image is more intuitive to interpret than the standard image, and reveals features previously indiscernible, or weakly detected. The inside-out projection is especially effective in resolving details in the accretion structure of highly magnetic cataclysmic variables.

*Supervisor:* Dr VA McBride (Astronomy)  
*Co-supervisor:* Dr SB Potter (South African Astronomical Observatory)

\*Toky Herimandimby  
Randriamampandry  
Thesis Title: *Correcting the rotation curve of spiral galaxies for the non-circular motions induced by a bar*

Toky Randriamampandry has a BSc degree in Physics from the University of Antananarivo (Madagascar) and honours and MSc degrees in Astronomy from UCT, as part of the National Astrophysics and Space Science Programme (NASSP).

Toky Randriamampandry's thesis aims to correct the rotation curves of spiral galaxies for the non-circular motions induced by a bar. The current techniques that are used to derive galaxies' rotation curves either fail, or produce velocities which do not trace the underlying gravitational potential. Since a large fraction of nearby galaxies is barred and many of these objects will be observed with the SKA and its precursor MeerKAT, which is under construction in the Northern Cape Karoo desert, it is important to correct for this effect. He uses existing simulations to quantify the non-circular flows and investigate its causes. These simulations are also used to test the limitation of the current algorithms. He introduces a new method of simulating strongly barred galaxies using Bayesian inference. This method is able to reproduce the bar properties and velocity fields of the actual galaxies. The results show that a tailored numerical simulation is a viable option to infer the mass distribution of barred galaxies when the standard techniques fail.

*Supervisor:* Professor C Carignan  
(Astronomy)

\*Khaled Said Ahmed Soliman  
Thesis Title: *Peculiar flow fields in the Zone of Avoidance from the Near-infrared Tully-Fisher relation*

Khaled Soliman obtained a BSc in Physics and Astronomy and a MSc in Theoretical Physics from Cairo University. He then joined UCT to pursue honours and master's qualifications in Astrophysics and Space Science (NASSP), before starting his doctorate.

Khaled Soliman's thesis has led to a map of dynamically important large-

scale structures like the Great Attractor, Puppis and the Local Void that lie hidden behind the thick star and dust layer of our Milky Way. A full census of the sky is required to explain the origin, formation and evolution of the large-scale structure and associated cosmic flows. The obscured galaxies were first identified with the 64 m Parkes radio telescope through the 21 cm line emission of their redshifted neutral hydrogen gas. All detected galaxies were then imaged in the near-infrared using the 1.4 m Japanese telescope in Sutherland. Both these wavebands are little affected by dust absorption. Applying a by him derived optimised near-infrared Tully-Fisher relation led to peculiar velocities for a suitable subsample of galaxies. These describe a flow field that is induced by the underlying total mass density distribution (both baryonic and dark matter), and therewith lead to new insight into the total mass-density of these previously hidden structures.

*Supervisor:* Professor RC Kraan-Korteweg (Astronomy)

*Co-supervisors:* Professor TH Jarrett (Astronomy); Professor L Staveley-Smith (ICRAR, University of Western Australia)

*In Biological Sciences:*

\*Saachshaini Sadchatheeswaran  
Thesis Title: *Sequential alien invasions on rocky shores: implications for architectural complexity, community structure and ecosystem functioning*

Saachshaini Sadchatheeswaran holds a BSc(Hons) degree from the University of Toronto, Canada, and joined UCT in late 2012 for a master's degree, which was upgraded to a PhD in 2014. She is also connected to the Centre of Excellence for Invasion Biology at Stellenbosch University.

Saachshaini Sadchatheeswaran's thesis describes and uses two new computer tools to assess the impacts of invasive species on a marine intertidal rocky shore over a 35-year period. Historical data were combined with field investigations at a study site on Marcus Island, Saldanha Bay. Three sequential invasions were identified, involving alien mussel and barnacle species that altered

the physical structure of the shore. A new measure of architectural complexity was developed (Blender interstitial volume). This measure uses a 3D computer tool to estimate available habitat created by the invasive species in the gaps between their shells. The ecological function of this complexity is to provide substrate, shelter or feeding grounds for native species. This functioning was investigated using a series of computer models, ultimately leading to the development of a second computer tool, Ecoengineer. This thesis blends new and old technology to explore vulnerable coastal ecosystems in a non-destructive way.

*Supervisor:* A/Professor CL Moloney (Biological Sciences)

*Co-supervisors:* Emeritus Professor GM Branch (Biological Sciences); Dr LJ Shannon (Biological Sciences); Dr TB Robinson (Botany & Zoology, Stellenbosch University)

*In Botany:*

\*Allan James Macpherson  
Thesis Title: *Ecological resilience at semi-arid and temperate boundaries of the Mediterranean-type Fynbos Biome, South Africa, during the Holocene*

James MacPherson has a BSc in Geography from Plymouth University in the UK and an MSc in Quaternary Science from University College London.

James MacPherson's thesis uses palaeoecology to study ecological dynamics of fynbos, a mega-diverse ecosystem unique to the Cape Floristic region. Fossil pollen, charcoal and fungal spores from sediment cores from semi-arid and temperate ecotones were analysed to assess the effects of changes in climate, fire and land use on vegetation. At the fynbos-succulent Karoo, fynbos responded to changes in climate, and was replaced by a no-analogue community dominated by Asteraceae and Poaceae when moisture was lower. Fynbos vegetation recovered during wetter periods. This sensitivity to climate reflects the dominant influence of physiological stress at the semi-arid limits of Mediterranean-type ecosystems. In contrast, at the fynbos-afrotemperate forest ecotone, physiological stress is lower and fynbos-forest boundaries are

maintained by fire.

*Supervisor:* A/Professor L Gillson (Biological Sciences)

*Co-supervisor:* Professor T Hoffman (Biological Sciences)

*In Chemistry:*

Stephen Fienberg

Thesis Title: *Development of N-domain selective Angiotensin-1 Converting Enzyme (ACE) inhibitors using Computer Aided Drug Discovery (CADD)*

Stephen Fienberg completed his BSc and BSc(Hons) qualifications at UCT. He joined the Department of Chemistry for his doctoral studies in 2013.

Stephen Fienberg's thesis details the use of Computer Aided Drug Discovery (CADD) approaches to design selective small molecule inhibitors of one specific domain of the enzyme Angiotensin Converting Enzyme (ACE), with implications on the treatment of various forms of fibrosis. He explores the computational screening of a chemical library of fragments of small molecules. He also uses the clinically used ACE inhibitor drug Enalaprilat as a template to design new inhibitors using the protein structure of the two domains of ACE. He then chemically synthesizes the designed new inhibitors and evaluates them for their activity on ACE. From this, he identifies one new promising analogue of Enalaprilat, which represents the first documented selective inhibitor of the relevant domain of ACE. Overall his research lays the groundwork for future discovery and development of selective ACE inhibitors for the potential treatment of cardiac and pulmonary fibrosis.

*Supervisor:* Professor K Chibale (Chemistry)

*Co-supervisor:* Professor E Sturrock (Integrative Biomedical Sciences)

Lee Elizabeth Hunt

Thesis Title: *The supramolecular modification of trans-resveratrol and related antioxidant molecules*

Lee Hunt completed her BSc and BSc(Hons) qualifications in Chemistry at UCT, and commenced full-time study towards her PhD in 2011 in the Centre for Supramolecular Chemistry Research, engaging in a project aimed at generating new solid forms of bioactive molecules.

Lee Hunt's thesis reports the preparation and physicochemical characterisation of designed, multi-component crystals containing various well-known antioxidant molecules (trans-resveratrol, hydroxycinnamic acids, acetophenone derivatives) with the aim of increasing their aqueous solubility to facilitate their future formulation as medicinal agents. She isolates forty new multi-component crystalline phases (namely cyclodextrin-antioxidant inclusion complexes and antioxidant-coformer co-crystals) and determines both their molecular structures in the solid state and their thermal stabilities. Nuclear magnetic resonance spectroscopy and isothermal titration calorimetry are subsequently used to establish structural and thermodynamic parameters of several new inclusion complexes in aqueous solution. She finally demonstrates that significant increases in the aqueous solubility of representative antioxidants can be achieved via their incorporation in both inclusion complexes and co-crystals, rendering this methodology a promising strategy for their further development.

*Supervisor:* Emeritus Professor MR Caira (Chemistry)

*Co-supervisor:* Professor S Bourne (Chemistry)

Lutete Peguy Khonde

Thesis Title: *Synthesis of thiohistidines and its metabolic pathway precursors*

Lutete Khonde holds a BSc(Hons) from the University of Kinshasa, Democratic Republic of Congo (DRC). He joined UCT in 2011, and after completing an MSc degree in Chemistry, pursued his doctoral studies. Before joining UCT, he worked at Heineken brewery in DRC.

Lutete Khonde's thesis reports new synthesis of natural thiohistidines (ergothioneine and ovothiols) and metabolic intermediates involved in their biosynthetic pathway. He develops an improved and scalable process for the synthesis of the newly discovered vitamin, ergothioneine. He also develops a novel synthetic route towards the most powerful natural antioxidant, ovothiol. In order to better understand the biological importance of these antioxidants, the synthesis of stable isotopically labelled derivatives is of utmost importance for low level quantitation in biological matrices. The intellectual property of these developments have been captured in a patent which will expedite the commercialisation of ergothioneine manufacturing. Recent knowledge established a link between the antioxidant activity of natural thiohistidines and diseases such as Alzheimer's and cancer. The inhibition of enzymes implicated in thiohistidine biosynthesis in pathogenic bacteria would provide essential tools and a platform for the development of novel drugs against diseases such as tuberculosis and African sleeping sickness.

*Supervisor:* Dr A Jardine (Chemistry)

Shankari Nair

Thesis Title: *Towards the development of a cancer diagnostic through radiolabelling studies on the ADAM10 inhibitor GI254023X*

Shankari Nair completed her BSc(Hons) at UCT in 2010. Thereafter, she studied for an MSc in Medicinal Chemistry, before commencing a PhD in 2013 on a project supported by NTeMBI (Nuclear Technologies in Medicine and the Biosciences Initiative) allied to Necsa.

Shankari Nair's thesis addresses the pressing issue of early detection of cervical and oesophageal cancer. These are amongst the more common cancers afflicting South Africans, for which currently there are no small molecular probes for detection. The project involved synthesising a known chemotherapeutic and radiolabelling it for imaging purposes using a gamma camera. The organic synthesis was carried out at the iThemba labs in Cape Town. Subsequently, the

radiolabelled "hot" inhibitor was shown to be taken up into cervical and oesophageal cells, demonstrating a primary level of proof of principle. Future studies will be undertaken to establish mechanistic aspects, and to develop the technology for clinical use.

*Supervisor:* Professor R Hunter (Chemistry)

Charles Onyango Omollo

Thesis Title: *Developing methods to prioritize in vitro drug combinations against Mycobacterium tuberculosis: fusidic acid as potential combination partner with known antitubercular agents*

Charles Omollo obtained his BSc and MSc degrees from Moi University and the Jomo Kenyatta University of Agriculture and Technology, Kenya. Prior to enrolling at UCT to pursue a doctorate, he worked in the pharmaceutical industry.

Charles Omollo's thesis focuses on the development and application of improved methods to identify and advance novel drug combinations for tuberculosis therapy. In considering drug repurposing and repositioning approaches, he utilizes the natural product antibiotic, fusidic acid, and its semi-synthetic derivatives as test agents. By applying checkerboard and time-kill analyses, he investigates potential synergism with a panel of known anti-tuberculosis drugs as well as protein synthesis inhibitors, and demonstrates that fusidic acid potentiates drugs from diverse classes. He also examines the potential to counter pre-existing drug resistance using strongly synergistic combinations. This work reveals that, even for pre-existing genetic resistance against a combination partner, positive therapeutic outcomes are possible with the use of appropriate potent drug combinations. Finally, he provides preliminary evidence suggesting the utility of rapid and robust methods for delineating bactericidal drugs, a key consideration in TB drug discovery programmes.

*Supervisor:* Professor K Chibale (Chemistry)

*Co-supervisor:* A/Professor D F Warner (Pathology and Institute of Infectious Disease and Molecular Medicine)

*In Computer Science:*

Omowunmi Elizabeth Isafiade

Thesis Title: *Ubiquitous intelligence for smart cities: a public safety approach*

Omowunmi Isafiade holds a BSc(Hons) in Computer Science and a Postgraduate Diploma in Mathematical Sciences from the African Institute for Mathematical Sciences (AIMS), South Africa. She subsequently obtained her MSc at UCT and has a number of good quality publications in her current research field. She has been a recipient of various awards, such as the Paul G. Allen Family Prize at AIMS, the Google Anita Borg Memorial Scholarship, an AIMS-DAAD PhD Scholarship and a L'Oreal-UNESCO Women in Science Award.

Omowunmi Isafiade's thesis presents a novel crime clustering model, CriClust, for crime series pattern detection and mapping, in order to derive actionable knowledge from a crime dataset. The analysis is augmented using a dual-threshold scheme, and pattern prevalence information is encoded in similarity graphs. Clusters are identified by finding highly-connected subgraphs using adaptive graph size and Monte-Carlo heuristics in the Karger-Stein algorithm. The thesis introduces interest measures that reveal the propagation effect of a series and the underlying characterising features for a series. Visualisation of clusters promotes prompt identification of important areas demanding attention. CriClust contributes knowledge services for public safety authorities and intelligence organisations in developing nations, thereby promoting a sustainable "safe and smart" city.

*Supervisor:* A/Professor S Berman  
(Computer Science)

*Co-supervisor:* A/Professor AB Bagula  
(Computer Science, University of the Western Cape)

*In Conservation Biology:*

Dominic Paul Rollinson

Thesis Title: *Understanding and mitigating seabird bycatch in the South African pelagic longline fishery*

Dominic Rollinson completed his BSc, BSc(Hons) and MSc qualifications at the University of Kwazulu-Natal, and began full-time study towards his PhD at UCT in 2013.

Dominic Rollinson's thesis summarises seabird bycatch from the pelagic longline fishery off South Africa for the period 2006-2013, while also investigating the foraging ecology of seabird species commonly recorded as bycatch, as well as the feasibility of a new mitigation device to reduce seabird bycatch. He found that seabird mortality in this fishery has reduced since the previous summary (up to 2005) and identified the factors influencing bycatch rates. His research into the diving depths of commonly caught seabird species will be useful to reduce their bycatch. His sea trials testing the addition of weight to fishing lines demonstrate its applicability for mitigating seabird bycatch, without compromising fishing activities. Dominic Rollinson's research has greatly enhanced our understanding of seabird bycatch from pelagic longline fisheries and is a significant contribution towards the ongoing conservation of seabirds, both locally and worldwide.

*Supervisor:* Professor PG Ryan  
(Biological Sciences)

*Co-supervisor:* Dr R Wanless (Biological Sciences)

Rowen Van Eeden

Thesis Title: *Understanding the decline of Martial Eagles *Polemaetus bellicosus* in the Kruger National Park, South Africa*

Rowen van Eeden has BSc, BSc(Hons) and MSc degrees from UCT. His research interests at the Percy FitzPatrick Institute of African Ornithology are vested in using modern telemetry, such as GPS, to understand avian movement and population ecology.

Rowen van Eeden's thesis investigates the population decline of

Martial Eagles in Kruger National Park, where the species has declined by 54 % over the last 20 years. These declines may be driven by factors within the Park such as low breeding performance, or factors in the surrounding landscape. For example, high mortality of dispersing individuals ranging beyond the Park's borders could lead to recruitment failure. GPS tags fitted to juvenile and adult eagles were used to determine their movements. Juveniles dispersed beyond protected area boundaries but did not incur high rates of mortality, as hypothesised. Adults held large territories, limiting the carrying capacity of even the largest protected areas. Some adults, however, ranged more widely into non-protected areas, where they incurred high rates of mortality, as was expected for juveniles. Breeding productivity was lower than any previous study on the species and may further contribute to the declines.

*Supervisor:* Dr A Amar (Biological Sciences)

*Co-supervisor:* Dr DP Whitfield (Natural Research Ltd., Scotland)

*In Environmental & Geographical Science:*

\*Beth Tirza Oppenheim

Thesis Title: *The Periphery as the centre: trajectories of responsibility and community support in Maputo, Mozambique*

Beth Oppenheim completed her bachelor's degree in Metropolitan Studies and master's in International Development at New York University. After working for nearly a decade in the humanitarian field, she began her doctorate at UCT in 2014.

Beth Oppenheim's thesis focuses on the ways in which two communities in Maputo, Mozambique think about and participate in acts of 'self-development.' Her research uses theories from both Geography and Development literature to examine how Development has evolved from a North-South trajectory into something different. She looked at the local practices of what some have referred to as 'philanthropy' from members of a community towards each other. She spent nearly two years conducting qualitative research, including interviews and focus

groups in the neighbourhoods of Mafalala and Zimpeto. Through her research, she developed theories around the connection between identity and how people help one another in these communities and beyond. She also explored the connections between concepts of 'help' and how this is impacted by political realities.

*Supervisor:* Dr S Daya (Environmental and Geographical Science)

*In Geology:*

Kenneth Chukwuma

Thesis Title: *Spatial and temporal variations in the geometry and composition of the Permian Whitehill Formation of South Africa*

Prior to studying for his PhD at UCT, Kenneth Chukwuma completed his BSc(Hons) and Masters in Petroleum Geology in Nigeria at Nnamdi Azikiwe University and University of Benin, respectively.

Kenneth Chukwuma's thesis uses field descriptions, vintage borehole data, micro- to nano-scale petrographic observations, and geochemical proxies to investigate the spatial and temporal variations in the stratigraphy and distribution of organic carbon in the Lower Permian Whitehill Formation in the main Karoo Basin. His integrated approach allows the identification of five sedimentary facies (i.e., stratigraphic subunits), which show specific variations in the quality and quantity of organic carbon in the Whitehill Formation. He demonstrates how the changes in the geometry and composition of this Permian unit are systematic across time and space within the main Karoo Basin. Furthermore, he demonstrates how the deposition of this potentially shale gas bearing geological unit is influenced by the complex interplay among bioproductivity, bottom-water conditions (e.g., oxygen concentration, energy level of sediment transporting currents), sediment accumulation and burial rates, and early diagenetic alternations.

*Supervisor:* Dr EM Bordy (Geological Sciences)

*In Mathematics:*

Pierre de Jager

Thesis Title: *Isometries on symmetric spaces associated with semi-finite von Neumann algebras*

Pierre de Jager completed his BSc, BSc(Hons), and MSc degrees in Mathematics at UCT. He began his PhD in the Department of Mathematics and Applied Mathematics in 2013.

Pierre de Jager's thesis provides new results and characterisations of isometries between non-commutative function spaces associated with von Neumann algebras. A von Neumann algebra is an algebra of linear maps acting on a Hilbert space (a certain type of infinite dimensional vector space) which is closed with respect to a certain natural topology. Symmetric spaces are a class of non-commutative function spaces which generalise spaces of functions associated with positive measures. In particular, he develops new techniques and extends several results from the setting of finite von Neumann algebras and commutative von Neumann algebras of functions to the non-commutative and semi-finite setting.

*Supervisor:* Dr RTW Martin

(Mathematics and Applied Mathematics)

*Co-supervisor:* Dr J Conradie

(Mathematics and Applied Mathematics)

*In Molecular & Cell Biology:*

\*Flavia Flaviani

Thesis Title: *Microbial biodiversity in the southern Indian Ocean and Southern Ocean*

Flavia Flaviani has a BSc in Bio-ecology, plus a two year MSc in Marine Biology, followed by a one year Master's in Bioinformatics, from the University of Cagliari (Italy). Her doctoral work in the Department of Molecular and Cell Biology brings together the multidisciplinary nature of her background.

Flavia Flaviani's thesis aims to characterise microbial diversity from the southern Indian Ocean and the Southern Ocean using next generation sequencing technologies. Current knowledge has been slowed by the unculturable nature of the majority of microorganisms and the requirement for large sample volumes.

Flavia Flaviani's project uses molecular tools and DNA extracted from a small volume of water to overcome these obstacles. Through the development of bioinformatic pipelines both amplicon and metagenomic data are analysed to characterise prokaryotes, eukaryotes and viruses from water collected at the chlorophyll maximum. The end result of this project is the full characterisation of microbial diversity in two southern hemisphere oceans, bringing a new insight in the study of marine microbes.

*Supervisor:* Professor EP Rybicki

(Molecular and Cell Biology)

*Co-supervisors:* Dr DC Schroeder

(The Marine Biological Association);

Dr M Pfaff (Biological Sciences)

Sandiswa Mbewana

Thesis Title: *Development of Rift*

*Valley Fever virus candidate vaccine*

*and reagents produced in Nicotiana*

*benthamiana*

Sandiswa Mbewana completed a BSc at the University of the Western Cape, followed by BSc(Hons) and MSc qualifications at Stellenbosch University. Thereafter she joined the Biopharming Research Unit in the Molecular and Cell Biology Department at UCT as an Assistant Scientific Officer.

Sandiswa Mbewana's thesis reports research carried out to develop the production of a recombinant vaccine to Rift Valley fever virus (RVFV) in plants. In addition, the plant production of a diagnostic reagent that can be used in an assay to detect RVFV antibodies in human and animal serum is described. Two modified RVFV vaccine candidates and the diagnostic reagent were successfully expressed in plant leaves and their production subsequently scaled up. Suitable purification protocols were established for all the recombinant proteins. The two vaccine candidates showed they were able to stimulate the production of anti-RVFV-specific antibodies. The diagnostic reagent was shown to be successfully functional in distinguishing between animal sera which had anti-RVFV antibodies and those which did not. This shows that the plant-produced product can potentially

be used as a diagnostic reagent, which is preferable to use from that currently produced reagent.

*Supervisor:* Professor EP Rybicki  
(Molecular and Cell Biology)  
*Co-supervisor:* Dr AE Meyers  
(Molecular and Cell Biology)

Karis Moxley

Thesis Title: *The probiotic effect of Vibrio midae SY9 on the growth and survival of post-larval Haliotis midae*

Karis Moxley holds a BSc (Biochemistry and Microbiology) and a BSc(Hons) in Applied Microbiology from the University of Kwazulu-Natal. She has two first-author publications stemming from her honours research.

Karis Moxley's thesis investigates whether novel feed strategies using probiotics improve the growth and survival of post-larval abalone. The growth rate of post-larval abalone on these feeds increased three-fold. Karis showed that the probiont persisted in the digestive tract of post-larval abalone for up to ten days and could be detected in the intestine of post-larval abalone using in situ hybridisation. The use of these feed strategies for production of post-larval *H. midae* could have significant economic implications for commercial abalone hatcheries since post-larval abalone are provided with a reliable and consistent source of nutrition in comparison to existing feed strategies.

*Supervisor:* A/Professor V Coyne  
(Molecular and Cell Biology)

*In Ocean & Atmosphere Science:*

Josephine Ffion Atkins

Thesis Title: *Using cell size to represent phytoplankton diversity in studies of nitrogen dynamics in the southern Benguela*

Josephine Atkins obtained a BSc(Hons) degree in Environmental Science from the University of Plymouth (UK) and a co-badged Erasmus Mundus MSc (with distinction) in Water and Coastal Management from the University of Plymouth and the University of Cadiz, Spain.

Josephine Atkins' thesis uses

three case studies to investigate nitrogen use by different groups and size classes of phytoplankton on the west coast of South Africa. Two case studies involve harmful algal blooms off Lamberts Bay, where nitrogen is mainly used in the form of urea. The third case study uses two-monthly sampling over a year in Saldanha Bay, where variability in nitrogen uptake is explained by nitrogen availability and light. Organism size influences uptake rates in all three studies. Parameters for computer models are estimated, based on measurements from these natural assemblages. Not surprisingly, parameter values vary, although the shapes of the functions are as expected. Using theoretical arguments, she reconciles aspects of the observed variability with variability in size compositions of the natural assemblages. These results will be used to help analyse data from natural communities and predict variability in modelled primary productivity in the coastal ocean.

*Supervisor:* A/Professor CL Moloney  
(Biological Sciences)

*Co-supervisors:* Dr S Bernard (Council for Scientific and Industrial Research); Dr E Machu (Institut de Recherche pour le Développement, France)

\*Luke Gregor

Thesis Title: *Improved estimates and understanding of interannual trends of CO<sub>2</sub> fluxes in the Southern Ocean*

Luke Gregor completed his BSc and MSc in Oceanography at UCT. In 2013, he began his doctoral work with the Southern Ocean Carbon and Climate Observatory, based at the CSIR. Throughout the course of his studies he has taken part in several research cruises in the Southern Ocean.

Luke Gregor's thesis improves the estimates and understanding of carbon dioxide (CO<sub>2</sub>) fluxes in the Southern Ocean, which is important in regulating climate change. He uses two machine learning methods, support vector regression and random forest regression, to extrapolate measurements of CO<sub>2</sub> with satellite observations. The extrapolated estimates show that CO<sub>2</sub> uptake had increased in the Southern Ocean during the 2000's, but could once again decrease

from the 2010's onward. The decadal interannual variability was driven by large changes in winter uptake, with the Indian sector of the Southern Ocean being the dominant driver. In summer, more frequent 4 – 6-year variability was driven by changes in phytoplankton concentration. Future predictions show that stronger winds will increase outgassing of CO<sub>2</sub> from the Southern Ocean. These findings are important in the context of this region as a positive feedback mechanism of climate change.

*Supervisor:* A/Professor M Vichi  
(Oceanography)

*Co-supervisors:* Dr P MS Monteiro (Oceanography Council for Scientific and Industrial Research, CSIR); A/Professor S Kok (Engineering, University of Pretoria)

*In Physics:*

Mawande Babuyile Lushozi

Thesis Title: *The Rho-Meson propagator at two-loop order in the Kroll-Lee-Zumino Quantum Field Theory*

Mawande Lushozi has a BSc in Physics and Pure Mathematics from the University of the Witwatersrand, a BSc(Hons) in Theoretical Physics from UCT, a BSc(Hons) in Pure Mathematics from the University of the Witwatersrand, and an MSc in Theoretical Physics from UCT.

In his doctoral work Mawande Lushozi carries out original research on the fundamental theory describing the strong interaction among pions and rho-mesons, known till now only at the one-loop level in perturbation theory. He extends this theory to the two-loop quantum level, a novel and important result. This theory is a fundamental tool to understand the behaviour of strongly interacting microscopic matter at low energies. As an application, he obtains the properties of the electromagnetic structure of the pion, a strongly interacting particle composed of a quark and anti-quark, which are in turn the most elementary particles in Nature. Mawande Lushozi also makes another application of this theory, determining the so-called "scalar" structure of the pion, which differs from the electromagnetic structure. His results

are in very good agreement with those from other methods, thus supporting his approach.

*Supervisor:* Emeritus Professor CA Dominguez (Physics)

*Co-supervisor:* Professor K Schilcher (University of Mainz, Germany, and University of Cape Town)

Preshin Moodley

*Thesis Title: A Quantum Field Theory for the interaction of pions and rhos*

Preshin Moodley has a BSc in Physics, a BSc(Hons) in Theoretical Physics, and an MSc in Theoretical Physics (2012), all from UCT.

Preshin Moodley's thesis formulates for the first time a complete theory of the strong interactions among pions and rho-mesons for the non-Abelian case, a subject of great interest in applications. These particles are composite of quarks and gluons, currently the most elementary particles in the Universe. This task is technically extremely complicated, thus explaining why it was never attempted before. In a first approximation the theory renders infinite results for quantities known to be finite, as measured experimentally. The next step requires the process of renormalization, by which all experimental observed quantities are rendered finite. This involves the addition of extra fields, in particular the Higgs field associated with the famous Higgs particle discovered recently at CERN. The rules governing the interactions (forces) among these fields had to be found explicitly for the first time for this particular theory. Last, but not least, many results were not obtainable in analytical close form, i.e. as formulas, so that they had to be computed numerically. This required knowledge of complicated computer programs, a topic. Results for the pion-pion scattering lengths already show better agreement with experiment than the corresponding quantities in the Abelian theory.

*Supervisor:* Emeritus Professor CA Dominguez (Physics)

*Co-supervisors:* Professor K Schilcher (Physics, JG University of Mainz and UCT); Professor H Spiesberger (Physics, JG University of Mainz); Dr GB Tupper (Academic Development Programme)

Vijitha Ramanathan

*Thesis Title: Measuring cross-section data for prompt gammas emitted during proton-nucleus collisions*

Vijitha Ramanathan holds a BSc(Hons) degree in Physics from the University of Jaffna and an MSc degree in Medical Physics from the University of Peradeniya. Her thesis work follows five years of clinical medical physics practice in Sri Lanka.

Vijitha's Ramanathan's thesis investigates the secondary (prompt) gamma radiation produced by elements found in tissue (carbon and oxygen) after they have been irradiated by a beam of protons. Experimental measurements were carried out at iThemba LABS using the gamma-ray detection system AFRODITE with thin carbon and Mylar targets. The work particularly focuses on the production of the characteristic gamma rays from carbon (4.44 MeV) and oxygen (6.13 MeV), and makes an absolute comparison between the experimental measurements and simulated results produced using the Geant4 radiation transport simulation package. These prompt gamma production (or cross-section) measurements will be used to improve our understanding (and modeling) of proton-nucleus collisions. These characteristic gamma rays provide integral data for the design of a new imaging device to quickly monitor and assess in real time the quality of proton radiation therapy cancer treatments.

*Supervisor:* Dr S Peterson (Physics)

*In Zoology:*

Marie-Sophie Garcia-Heras

*Thesis Title: Environmental factors influencing the breeding and health of a scarce avian top-predator endemic to southern Africa: the endangered Black Harrier Circus maurus*

Marie-Sophie Garcia-Heras completed her BSc in Biology in Marseille, France, and followed this with an MSc in Ecology, with a specific focus on biodiversity management and species conservation. She completed this research at the Biological Station of Doñana in Sevilla, Spain, investigating the endangered

population of canarian Egyptian Vultures.

In 2013, she moved to South Africa and started her doctoral work at the Percy FitzPatrick Institute of African Ornithology, working with the Black Harrier population, an endangered and scarce bird of prey endemic to southern Africa. Her thesis aims to develop an overall comprehension of how various environmental factors may affect the breeding and health condition of this species, at both the population and the individual level. Conducting a multifaceted study, she investigates and identifies various parameters that could be limiting the population size of the species. Her main results suggest that a lack of non-urbanised, un-fragmented, un-polluted and food-rich areas for breeding, exacerbated with climate change, may be related to the scarcity of Black Harriers in South Africa. The outputs of her research have important implications for future of effective and sustainable conservation of the Black Harrier, as well as for the conservation of other raptors.

*Supervisor:* Dr RE Simmons (Biological Sciences)

*Co-supervisors:* Dr A Amar (Biological Sciences); Dr Beatriz Arroyo (Instituto de Investigación de Recursos Cinegéticos (IREC), Spain); Dr F Mougeot (Instituto de Investigación de Recursos Cinegéticos (IREC), Spain)

## 7. FACULTY OF COMMERCE

*Dean: Professor I. Woolard*

### DEGREE OF DOCTOR OF PHILOSOPHY

*In Economics:*

Santigie Mohamed Kargbo

*Thesis Title: Foreign direct investment and economic growth in Africa*

Santigie Mohamed Kargbo holds a BSc(Hons) from the University of Sierra Leone, and an MPhil in Economics from the University of Ghana. He is an economist at the Bank of Sierra Leone and joined the PhD Programme at UCT in 2012.

Santigie Kargbo's thesis investigates the determinants of foreign direct investment (FDI) activity in Africa and considers how such investments impact productivity and economic growth. His first study considers the drivers of FDI and asks whether there are differences in FDI motivations of investors from the different source countries. A second study explores the factors that affect firms' decisions to undertake FDI in sub-Saharan Africa, focusing on how the nature of productive activities within a country affects the degree to which foreign affiliates become integrated. A third study investigates the impact of the host country's human capital capacity on the relationship between foreign direct investment and productivity growth. The thesis indicates how countries can better attract FDI and shows that, while results differ from country to country, only countries that have attained a minimum threshold of human capital capacity will see productivity and growth significantly enhanced.

*Supervisor:* Professor JP Dunne  
(Economics)

*Co-supervisor:* Dr AC Peters  
(Economics)

*In Finance:*

Gizelle Demarie Willows

Thesis Title: *The determinants of retirement savings sufficiency: evidence from a South African tertiary institution's retirement fund*

Gizelle Willows has a BAcc from Stellenbosch University, an honours from UNISA and an MCom from UCT. She qualified as a CA(SA) in 2009 and is a member of the academic staff in UCT's College of Accounting.

Gizelle Willows' thesis addresses the factors that influence the sufficiency of retirement savings. Using anonymised data from an institutional retirement fund and other relevant inputs, a customised model projected the retirement incomes of fund members and expressed these as a proportion of earnings to determine "sufficiency". Members were surveyed to ascertain their financial knowledge, financial behaviour and financial attitudes and the importance of these attributes in determining

"sufficiency". The study found that one third of respondents had insufficient retirement savings. Multivariate regression showed that retirement savings sufficiency could be predicted using age, gender, race and education predict. Apart from the timing of a member's decision to start saving, many of the influential factors are beyond the member's control. Therefore, it is proposed that a higher retirement age be imposed to allow for the increased wealth effects of a longer savings horizon. Furthermore, life annuities ought to take differential racial longevity into account, and not only gender, age and marital status.

*Supervisor:* Mr D West (Finance & Tax)

*Co-supervisor:* Professor H Kincaid  
(Economics)

*In Information Systems:*

Patricia Rudo Chikuni

Thesis Title: *The relationship between policy-making processes and e-learning policy discourses in higher education institutions in South Africa*

Patricia Rudo Chikuni holds an honours degree in Library and Information Science from the National University of Science and Technology in Zimbabwe and a master's in Archives and Records Management from the University of Botswana.

Patricia Rudo Chikuni's thesis investigates how policy-making processes affect institutional e-learning policy discourses in higher education institutions (HEIs) in South Africa. She uses a multiple case study of three South African universities to examine the conceptualisation and design of institutional e-learning policies. She analyses the stakeholders involved, the factors impacting policy making, the framing of policy issues and the exercise of power using stakeholder theory. She further analyses the assumptions inherent in the views of policymakers on the nature and role of technology in education. Her thesis offers an explanatory critique of the implications of policy-making processes on e-learning policy discourses in HEIs.

*Supervisor:* Professor W Chigona  
(Information Systems)

Frank Cencil Gabriel Makoza

Thesis Title: *Power relations among stakeholders in the implementation of national ICT policy: case of Malawi*

Frank Makoza has a BSc(Hons) in Business Information Technology from London Metropolitan University, and an MCom. in Information Systems from UCT.

Frank Makoza's thesis investigates Malawi's information and communications technology policy using the case study to demonstrate the importance of power relations in national ICT policy implementation. Since Malawi's government controls membership of the boards governing its national ICT policy, power relations drive the national ICT policy implementation network. These stakeholders mobilise themselves to advance their interests in policy implementation activities. However, the resulting balance of power is unstable and the authority rotates among the stakeholders. The implementation, coordination and oversight of the country's ICT policy is therefore being determined by the rent seeking behaviours of stakeholders.

*Supervisor:* Professor W Chigona  
(Information Systems)

Olalekan Samuel Ogunleye

Thesis Title: *A framework for enhancing government service delivery through the use of mobile technologies: an African countries context*

Olalekan Samuel Ogunleye has a honours degree from the Ladoko Akintola University of Technology and an MSc in Computer Science from UCT. His doctorate emerged from his work at the CSIR as a mobile developer and senior researcher.

Olalekan Ogunleye's thesis examines the potential of mobile technologies to allow a more broad-based access to government services, especially by the disadvantaged. The thesis researches 'mobile government', i.e. citizen access to government services via mobile communication channels. Despite many promising attempts, most mobile government prototypes and initiatives have failed, often because they were



unsustainable or could not be scaled-up. Olalekan Ogunleye explores the possibilities of effectiveness, resistance, opportunities and issues related to supporting government services delivery through the use of mobile cellular technologies. He investigates critical success factors and other causal variables affecting mobile government projects. His thesis involved a public survey and interviews with officials and IT staff in selected departments in both the South African and Nigerian governments. It provides recommendations for the development and implementation of future government initiatives using mobile technologies as a vehicle for the delivery of government services.

*Supervisor:* Professor J-P Van Belle  
(Information Systems)

*In Management Studies:*

James Roger Lappeman

Thesis Title: *Monthly expenditure category fluctuations and trade-off in South African Bottom-of-the-Pyramid households*

James Lappeman completed his BBusSc and MSocSc qualifications at UCT, and lectures at both undergraduate and postgraduate level in UCT's marketing section. He also conducts research projects for the UCT Unilever Institute of Strategic Marketing.

James Lappeman's thesis explores the monthly variations of income and expenditure in South African low-income households. He completed a panel of financial diaries and in-depth interviews over four months with a sample of households in four South African provinces. The investigation discovered regular, and often large, variations in monthly expenditure patterns and inter-category trade-offs. The study challenges many preconceived ideas about consumer loyalty and decision-making behaviour, especially with low-income households. It also challenges the strength of cross-sectional income analysis in low-income households. The findings of the study will be useful for both researchers and marketing practitioners who often lack a deeper understanding of low-income consumer behaviour.

*Supervisor:* Dr J Chigada (Marketing)

*Co-supervisor:* Dr Pragasen Pillay  
(Marketing)

*In Organisational Psychology:*

Beebee Adiliah Ibrahim Boodhoo

Thesis Title: *Evaluator characteristics and programme evaluability decisions: an exploratory study of evaluation practice in South Africa, Brazil, the United Kingdom, and the United States of America*

Adiliah Boodhoo completed her BSocSc(Hons) in Psychology and MSocSc in Programme Evaluation at UCT. She joined the Organisational Psychology section as a full-time lecturer in 2010 and registered for her PhD in 2012.

Adiliah Boodhoo's thesis discusses programme evaluation in four different countries. She used a simulation design to investigate: (a) evaluators' perspectives on what determines a programme's evaluability, (b) what criteria evaluators prioritise in response to different evaluation scenarios, and (c) the degree to which practice context (developing or developed countries, or both) and self-reported levels of evaluation experience predict programme evaluability decisions. Results of her study suggest that evaluators do not have a unified view of evaluability and that perhaps decisions about evaluability result from discussions between evaluators with varying perspectives and programme stakeholders. Programme evaluation is a stand-alone discipline, applicable to a wide range of other disciplines such as health, education, agriculture, environmental science. Evaluators often have to work in multidisciplinary and geographically dispersed teams. This thesis generated a number of viable propositions for evaluator training and the configuration and management of evaluator teams.

*Supervisor:* Emeritus Professor J Louw-Potgieter (Organisational Psychology)

## 8. FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

*Dean:* Professor A. Lewis

### DEGREE OF DOCTOR OF PHILOSOPHY

*In Architecture & Planning:*

Gilbert Siame

Thesis Title: *Understanding conflicting rationalities in city planning: A case study of co-produced infrastructure in informal settlements in Kampala*

Gilbert Siame obtained a BA (Geography) from the University of Zambia (UNZA) in 2010. In 2013 he graduated with a master's degree in City and Regional Planning at UCT and went on to teach in the MSc in Spatial Planning at UNZA while enrolling for a PhD in 2015.

Gilbert Siame's thesis analyses an innovative form of state-society engagement in urban planning and development in Kampala (Uganda). This is termed 'co-production' and was initiated by international Non-Governmental Organizations (NGOs) involved in informal settlement upgrade in global South cities. The thesis challenges a dominant position in planning theory, termed communicative or collaborative planning, which explains and recommends approaches to state-society engagement. It emerged from experience primarily in the global North where both state and society take on very different forms to that found in many African cities. Consequently there has been little in planning theory to address the question of how the process of planning should take place in global South cities. The case study of co-production in Kampala showed that communities, with NGO support, successfully used co-production as a combination of strategies to assert their claims and demands, and secure improved living conditions.

*Supervisor:* Professor V Watson  
(Architecture, Planning and Geomatics)

*In Chemical Engineering:*  
\*Innocent Achaye  
Thesis Title: *The effect of particle properties on froth stability*

Innocent Achaye holds a BSc Industrial Chemistry from Makerere University and MSc Chemical Engineering from the University of Manchester.

Innocent Achaye's thesis examines the influence of particle properties on the stability of flotation froths. Froth flotation is an important separation process used in the beneficiation of valuable minerals. In order to model and predict flotation responses, it is important to know how froth characteristics respond to changes in the incoming ore. This thesis explored the relationships between froth stability and the two most important particle variables, size and hydrophobicity. A linear relationship was found between particle specific surface area and froth stability. This will be a useful tool in predicting flotation performance. In addition, a model was proposed that relates the froth stability to concentrate particle surface area, in much the same way that surfactant molecules interact at the air-water interface. A novel bench-scale flotation device was developed to use in small-scale characterisation tests. These combined accomplishments help in the development of better flotation models.

*Supervisor:* Dr B McFadzean (Chemical Engineering)  
*Co-supervisor:* Mrs J Wiese (Chemical Engineering)

Cindy-Jade Africa  
Thesis title: *Investigation of microbial metal-sulfide interfacial environments under mineral bioleach simulated conditions*

Cindy-Jade Africa completed a BSc in Microbiology and Biotechnology and MSc(Eng) specialising in Bioprocess Engineering before starting her PhD studies in the Centre for Bioprocess Engineering (CeBER).

Recognising the importance of metals for modern day life, but decreasing grade of reserves, this thesis

explores bioleaching potential for energy efficient extraction of copper. To deepen understanding of bioleaching, Cindy-Jade Africa investigated interactions at the mineral - microbe interface, focussing on the high temperature archaeon, *Metallosphaera hakonensis*. She studied the colonisation of these surfaces with *M.hakonensis* under varying conditions. Her thesis presents the spatial architecture and location of the microorganisms on the mineral surface and the role of the extracellular polymeric substances (EPS) in creating the leaching environment. She presents detailed analysis of EPS and quantifies the rate and extent of microbial colonisation of the mineral surface. The study uses microscopy tools: atomic force microscopy, confocal laser scanning microscopy and epifluorescent microscopy, with lectin and molecular probes. This is coupled with a novel miniaturised reactor to replicate flow conditions at the mineral surface and a quantitative material balancing approach, leading to new insights to inform the mineral bioleaching process.

*Supervisor:* Professor STL Harrison (Chemical Engineering)

Christian De Vries  
Thesis Title: *Adding ammonia during Fischer-Tropsch synthesis: Pathways to product formation*

Christian de Vries holds a BSc and BSc(Hons) degree in Chemistry from Stellenbosch University, and enrolled for an MSc degree in Chemical Engineering at UCT in 2009. The project was upgraded to PhD status in 2010.

Christian de Vries's thesis reports on the mechanistic detail of the pathway to the formation of valuable nitrogen-containing compounds that form when ammonia is added to a synthesis gas (carbon monoxide and hydrogen) feed during iron-catalysed Fischer-Tropsch synthesis (FTS). The work used a combination of theoretical calculations (periodic density functional theory) and co-feeding FTS experiments to reveal important aspects of the route to the formation of the nitrogen-containing compounds. The improved view of the mechanism for this reaction provides detailed information that can

be used in future optimisation studies for the production of these highly desired chemicals and associated process design. Furthermore, the fundamental approach taken here sheds light on the way ammonia affects the pathway to product formation in conventional FTS (without deliberate ammonia addition).

*Supervisor:* Professor M Claeys (Chemical Engineering)  
*Co-supervisor:* Dr M Petersen (Sasol)

Michael Short  
Thesis title: *Synthesis of Optimal Heat and Mass Exchange Networks using a Two-Step Hybrid Approach Including Detailed Unit Designs*

Michael Short completed his bachelor's in Chemical Engineering at UCT, and commenced an MSc study which was later upgraded to a PhD specialising in process integration and optimisation. During his PhD studies, he worked as an assistant lecturer in the areas of heat transfer and process control.

Michael Short's thesis develops a novel hybrid method for synthesizing optimal heat and mass exchange networks based on a 2-step procedure involving simplified exchanger models in a network optimisation step, followed by a detailed design where the exchangers found in the first step are modelled in detail. Subsequent iterations of the network design step are then updated with information from the detailed network designs. The technique is advantageous in that the network optimisation is based on more realistic representations of the units therein and increases the likelihood of attaining a globally optimal solution through the generation and assessment of multiple candidate networks throughout the algorithm. The method can be used in various applications and is demonstrated to be effective for large problems and multi-period scenarios. The thesis also shows that the method can be used in conjunction with multiple individual unit optimisation techniques including heuristics and fully explicit optimisation methods.

*Supervisor:* A/Professor AJ Isafiade (Chemical Engineering)

*In Electrical Engineering:*  
Smart Charles Luboby  
Thesis Title: *Performance analysis and application development of Hybrid WiMAX-WiFi IP Video Surveillance Systems*

Smart Charles Luboby has an MSc(Eng) from UCT. His doctoral work emerged from teaching experiences in Electrical and Electronics Engineering at the University of Zambia (UNZA). This was motivated by his master's research in video compression at UCT.

Smart Charles Luboby's thesis aims to develop scalable Fourth-Generation Surveillance Systems (4GSS)-Hybrid WiMAX-WiFi Video surveillance models and algorithms, with improved performance. The thesis compares, analytically and through simulations, the performance of the proposed models and algorithms for the hybrid WiMAX-WiFi models with the conventional WiMAX surveillance models; under scenarios of fixed and mobile wireless cameras. The hybrid WiMAX-WiFi video surveillance model type has been extended to include a Wireless Mesh configuration on the Wi-Fi part, to improve the scalability and reliability. Finally, a security software application for mobile smartphones that sends surveillance images/videos to either local or remote servers has been developed. The developed software has been tested, evaluated and deployed in low bandwidth Wi-Fi wireless network environments; it has achieved 100% transmission of surveillance images/videos.

*Supervisor:* A/Professor ME Dlodlo (Electrical Engineering)  
*Co-supervisor:* Emeritus Professor G De Jager (Electrical Engineering)  
Dr A Zulu (Electrical and Electronics Engineering, UNZA)

\*Henry Ohiani Ohize  
Thesis Title: *Adaptive and Autonomous protocol for Spectrum Identification and Coordination in Ad Hoc Cognitive Radio Network*

Henry Ohize has a BEng from the Abubakar Tafawa Balewa University, Bauchi and an MEng from the Federal University of Technology Minna, both in Nigeria. He currently holds a lecturing position at the Federal University of Technology Minna, Nigeria.

Henry Ohize's thesis proposes an Adaptive and Autonomous protocol for Spectrum Identification and Coordination in Ad Hoc Cognitive Radio Network (AHCNRN). His research interest stems from the need to migrate to an efficient spectrum management technique, in view of the imminent spectrum scarcity. These contributions are in three folds. First, the work developed an Adaptive Wavelet Scale Space Filter algorithm for spectrum identification at Low Signal to Noise Ratio (SNR). This algorithm performed well relative to existing techniques. Secondly, the control channel (CC) selection challenge in Ad Hoc Cognitive Radio Network (AHCNRN) by employing the Ant Colony System (ACS) algorithm. This ACS reduces the complex objective of selecting CC from an overtly large spectrum space to a path finding problem in a graph. Simulation results reveal ACS as a feasible solution for optimal CC selection. Lastly the ACS was employed in developing a novel channel hopping algorithm towards improving time to rendezvous for CC reselection.

*Supervisor:* A/Professor M Dlodlo (Electrical Engineering)

Joseph Folorunsho Orimolade  
Thesis Title: *Access Network Selection Schemes for Multiple Calls in Next Generation Wireless Networks*

Joseph Orimolade attended Ahamdu Bello University, Zaria, Nigeria, where he obtained his BEng and Msc degree in Electrical Engineering in 1996 and 2004 respectively. He joined the Centre of Excellence for Broadband Networks within the Department of Electrical Engineering at UCT for his doctoral studies in 2011.

Joseph Orimolade's thesis is dedicated to the selection of the most appropriate Radio Access Technology that can satisfy the user simultaneous multiple service requests in an overlapping region of heterogeneous wireless networks. The thesis considers the wireless network environment and provides novel solutions for the selection of appropriate access network that is capable of provisioning the required quality of service for a grouped-call. The research provides suitable algorithms that aggregates the service requirements of each application into a single requirement for the group of multiple calls. These solutions have been validated through rigorous analytical formulations and performance evaluations carried out through simulations.

*Supervisor:* Mr N Ventura (Electrical Engineering)  
*Co-Supervisor:* A/Professor O Falowo (Electrical Engineering)

Richard Ronald Spiers  
Thesis Title: *Dynamic Service Orchestration in the IP Multimedia Subsystem*

Richard Spiers holds a BSc (Eng) in Electrical & Computer Engineering from UCT. He joined the Centre for Broadband Networks as a doctoral student in 2010.

Richard Spiers' doctoral research examines service triggering in the IP Multimedia Subsystem. It investigates the possibility of adding a decision engine and the corresponding framework to the IMS architecture to allow the end-user to dynamically trigger services based on their preferences and external context. It proposes new core

elements that are backwards compatible with existing deployments, allowing the network operator a greater flexibility in routing a user's multimedia session. This functionality is exposed to the end user, allowing them to customise their service usage. A working prototype was designed and implemented, allowing the concepts contained in the thesis to be tested in a real world scenario. Several papers were published in both local and international conferences as a result of this work, and the resulting software has been made available under open source licences to allow other researchers to continue work in this area.

*Supervisor:* Mr M Ventura (Electrical Engineering)

*In Engineering Education:*

Reneé Smit

*Thesis Title: The nature of engineering and science knowledge in curriculum: a case study in thermodynamics*

Reneé Smit has a BSc and honours degree in Chemistry from the University of the North West, and an MSc (with distinction) in Science Education from the University of the Witwatersrand. She works as senior lecturer (Academic Development) in the department of Electrical Engineering at UCT.

Reneé Smit's thesis explores the nature of disciplinary knowledge differences between the contiguous conceptual fields of the sciences and engineering in curriculum texts, in a case study of thermodynamics knowledge. The work is theoretically informed by the sociology of educational knowledge and the applied philosophies of science and engineering science. Starting from broad teleological considerations, she develops the concepts of specialisation, idealisation and normativity into an analytical framework that allows the study to move beyond the typical binary classification of the sciences as 'hard-pure' and engineering sciences as 'hard-applied' disciplines. Knowledge in the engineering sciences is demonstrated to be different from that in the sciences: particulars, rather than universals, are emphasised; strongly normative aspects are prominent, and a constrained form of idealisation in

engineering's commitment to physical realisability is employed. The work has important implications for understanding the epistemic demands made on students in professional programmes.

*Supervisor:* Professor J Case (Chemical Engineering)

*Co-supervisor:* Emeritus Professor J Muller (Education)

*In Geomatics:*

Moreblessings Shoko

*Thesis Title: Three dimensional shack reconstruction using VHR imagery and LiDAR - the organic perspective*

Moreblessings Shoko has a BSc(Hons) from MSU (Zimbabwe). Her Geomatics master's and MBA are from UT (Netherlands) and ZOU (Zimbabwe) respectively. She has been an academic staff member at MSU since 2010. Her doctoral work emerged as a result of her interest in built- environments object detection.

Moreblessings Shoko's thesis develops a theory that derives inspiration from drawing similarities between the layouts of informal settlement (IS) dwellings and biological cells in imagery. The study proposes that IS are born, grow, reproduce and die in the same manner as organic systems would. This perspective drives the selection of the human visual system as an imitation platform towards designing a robust shack reconstruction framework. Moreblessings Shoko unites a set of image processing techniques that embrace organicism using LiDAR and VHR aerial imagery. The results include two and three dimensional spatial datasets that describes IS locations at settlement and individual dwelling unit level. The theory also prescribes the Shoko-Smit shack index and a LiDAR based signature for IS. Data derived from this research can be utilised in settlement pattern and prediction modelling towards the effective management of IS.

*Supervisor:* A/Professor JL Smit (Architecture, Planning & Geomatics)

\*Naa Dedei Tagoe

*Thesis Title: Developing an accurate close-range photogrammetric technique for extracting 3D information from spherical panoramic images*

Naa Dedei Tagoe has a BSc from the Kwame Nkrumah University of Science and Technology, Ghana, and an MSc degree from the Stuttgart University of Applied Science, Germany.

Naa Dedei Tagoe's thesis develops an accurate close-range photogrammetric method for extracting 3D information from spherical photographic panoramas. A component of the research was the design of a novel model for the non-parametric correction of lens distortions for images with fisheye lenses. A second, equally relevant outcome of the research is the development of the Minimum Ray Distance (MRD), for the fully automated approximate relative orientation of spherical panoramas. The work has extended the MRD algorithm to laser scans technology for the approximation of laser scan setup positions and orientation prior to a least-squares based registration using panoramic intensity images derived from full dome laser scans. The developed novel methods can be used for the low-cost documentation of architectural structures and equivalent applications which do not require dense point clouds and in situations with limited access to funds or as a quick field method to document many features in a short time.

*Supervisor:* Emeritus Professor H Rütger (Architecture, Planning and Geomatics)

*Co-supervisor:* A/Professor J Smit (Architecture, Planning and Geomatics)

*In Mechanical Engineering:*

Victor Barend Burger

Thesis Title: *The influence of fuel properties on threshold combustion in aviation gas turbine engines*

Victor Burger completed his BSc (Mech Eng) at Stellenbosch University and, after working for several years at an automotive research facility, he accepted a position at the Sasol Advanced Fuels Laboratory at UCT where he completed his MSc(Eng) in 2009.

Victor Burger's thesis aims to investigate the propensity for flame blow-out in jet engines at high altitude and speed and to study differences associated with synthetically manufactured jet fuels. The project was linked to a collaboration with the Institute of Combustion Technology at the German Aerospace Centre (DLR). By formulating a novel test fuel matrix to independently target variations in the physical and chemical reaction properties, the relative performance of alternative jet fuel formulations was characterised and the information was used deductively to predict the real-world altitude performance. The theoretical foundation provides a technically defensible explanation for an anomalous altitude flame-out result that had been previously observed during an industry evaluation of synthetic jet fuel. The findings contribute significantly towards the development of both technical understanding and practical tools for setting specification limits for alternative jet fuel properties.

*Supervisor:* Adjunct Professor ADB Yates (Mechanical Engineering)

Richard Michael Fyvie

Thesis Title: *Scientific, Engineering and Technical Skills Development Stimulated by Local Content Requirements in the South African Wind Industry*

Richard Fyvie holds a BSc from the Nelson Mandela Metropolitan University (NMMU), an honours degree from the University of KwaZulu-Natal, and an MBA from NMMU. He commenced his part-time PhD studies in 2013 at UCT, whilst simultaneously working in renewable energy development for consulting engineering firm JG Afrika.

Richard Fyvie's thesis evaluated the prevalence of Scientific, Engineering and Technical skills within the South African utility-scale wind energy programme. The work assessed whether the impact of governmental policy in the form of Local Content Requirements affects the growth of these skills, and their importance as gatekeeper professions in the context of Technological Innovation Systems theory. Through the conducting of 82 semi-structured interviews conducted over four years, the research tracks the phases of wind farm development, tracing the involvement of higher-order technical skills. The research revealed how government policies create both an enabling, and a restricting environment for wind energy technologies in South Africa. This provides a valuable contribution to the framework for analysing skills development in emerging economies and the links between state policy and the deployment of renewable technologies.

*Supervisor:* Dr B Rennkamp (Mechanical Engineering)

Jacobus Adriaan Van Rooyen

Thesis Title: *Computational Fluid Dynamic based optimization of an industrial axial fan for rapid prototyping*

Jacobus van Rooyen has a BEng and an MSc Engineering from the Rand Afrikaans University and Stellenbosch University. In addition, he has worked as a mechanical engineer in the steel manufacturing industry; and as an engineering consultant in the building services and energy management industry.

In an increasingly international and competitive market, smaller fan companies find themselves in need of rapid preliminary design. Jacobus van Rooyen's thesis aims to address this need through the development of a novel Computational Fluid Dynamics (CFD) based optimisation tool. The result is an ElementalTM-based multi-disciplinary software tool, comprising 2D CFD, mesh movement, and constrained geometric optimisation. A gradient based optimisation scheme is implemented to optimise the fan static efficiency while delivering the required static pressure rise. The rapid prototyping tool is applied to an under-performing base fan (Fan-D) to create an optimised fan geometry (Fan-Optim). The new fan was manufactured by CFW Fans (Pty) Ltd and critically assessed via rigorous experimental measurements. This proved the CFD tool highly accurate, with the optimised design offering considerable improvements in efficiency. Furthermore, Fan-Optim meets the desired duty point with a reduction of 38% in blade material.

*Supervisor:* Professor AG Malan (Mechanical Engineering)

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## UNIVERSITY OF CAPE TOWN

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An inclusive and engaged research-intensive African university that inspires creativity through outstanding achievements in learning, discovery and citizenship; enhancing the lives of its students and staff, advancing a more equitable and sustainable social order and influencing the global higher education landscape.

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UCT is committed to engaging with the key issues of our natural and social worlds through outstanding teaching, research and scholarship. We seek to advance the status and distinctiveness of scholarship in Africa through building strategic partnerships across the continent, the global south and the rest of the world.

UCT provides a vibrant and supportive intellectual environment that attracts and connects people from all over the world.

We aim to produce graduates and future leaders who are influential locally and globally. Our qualifications are locally applicable and internationally acclaimed, underpinned by values of engaged citizenship and social justice. Our scholarship and research have a positive impact on our society and our environment.

We will actively advance the pace of transformation within our University and beyond, nurturing an inclusive institutional culture which embraces diversity.

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CW Eglin	IN Marks	Clifford Herbert Stroude Trust
M Eilenberg Trust	Dorothea McDonald	Abraham Swersky
Elsabe Carmen Einhorn	J Melrose	Peter Theron
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Azriel Fine	Walter Middelmann	Rosalie van der Gucht Will Trust
Derek Stuart Franklin	Valerie Moodie	LM van der Spy
	IM Monk	Cederic James Vos
	Audrey Moriarty	JF Viljoen
	P Moss Will Trust	

#### **Note:**

As of January 2015, the levels of individual donors' giving circles have changed as follows:

- Chancellor's circle: formerly R250 000+, now R500 000+;
- Vice-Chancellor's Circle: formerly R100 000 – R250 000, now R250 000 – R500 000;
- Dean's circle: formerly R60 000 – R100 000, now R100 000 – R250 000;
- Friends of UCT: formerly <R60,000, now <R100,000.

Please note that these changes only affect donations received after 1 January 2015. All donors who were members of particular circles prior to January 2015, will continue to be recognised in their original circles, until the rolling five-year giving period has elapsed.

*We apologize for any omissions or errors. If you would like to query your donations totals, circle membership, or any other matter related to your gifts to UCT, please email [giving@uct.ac.za](mailto:giving@uct.ac.za).*

*A full list of UCT donors is also available at [www.uct.ac.za/main/donating-to-uct/donor-recognition](http://www.uct.ac.za/main/donating-to-uct/donor-recognition).*

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## OFFICERS OF THE UNIVERSITY

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### **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*

### **Chair of Council**

Sipho Mila Pityana, BA *Essex* MSc *London* DTech(hc) *VUT*

### **President of Convocation**

Lorna Mildred Houston, Certificate in Adult Education *Western Cape* BSocSc *Cape Town*

### **Deputy Vice-Chancellors**

Hugh Micha Corder, BCom LLB *Cape Town* LLB *Cantab* DPhil *Oxon* Advocate of the High Court (Acting)

Loretta Annelise Feris, BA LLB LLD *Stellenbosch* LLM *Georgetown*

Mamokgethi Phakeng, BSc *North West* MSc PhD *Witwatersrand*

Batmanathan Dayanand Reddy, OMB BSc(Eng) *Cape Town* PhD *Cantab* FRSSAf FSAAE MASSAf (Acting)

### **Deans of Faculties**

*Commerce:* Ingrid Denise Woolard, BSc *Natal* BA(Hons) *Unisa* PhD *Cape Town*

*Engineering &*

*the Built Environment:* Alison Emslie Lewis, PrEng BSc(Eng)Chem MSc(Eng) PhD *Cape Town*  
FSAICHe FSAIMM MASSAf FSAAE

*Health Sciences:* Bongani Mawethu Mayosi, BMedSc MBChB *UKZN* DPhil *Oxon* FCP *SA* FRCP  
*London* FESC FACC MASSAf OMS

*Humanities:* Harry Oludare Garuba, MA PhD *Ibadan* (Acting)

*Law:* Penelope Elizabeth Andrews, BA LLB *Natal* LLM *Columbia*

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

### **Dean of Higher Education Development**

Suellen Butler Shay, BA *Lincoln* MA *Illinois* PhD *Cape Town*

### **Director of the Graduate School of Business**

Milford Sibusiso Soko, BSocSc *Cape Town* MA *Stellenbosch* MA PhD *Warwick*

### **Registrar**

Royston Nathan Pillay, BA HDE BEd Executive MBA *Cape Town*

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*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!*

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