

University of Pretoria Research Report

# RESEARCH









University of Pretoria **Research Report** 

### Mission

The mission of the University of Pretoria is to be an internationally recognised South African teaching and research university and a member of the international community of scholarly institutions that:

- provides excellent education in a wide spectrum of academic disciplines;
- promotes scholarship through:
  - the creation, advancement, application, transmission and preservation of knowledge;
  - the stimulation of critical and independent thinking;
- creates flexible, lifelong learning opportunities;
- encourages academically rigorous and socially meaningful research, particularly in fields relevant to emerging economies;
- enables students to become well-rounded, creative people, responsible, productive citizens and future leaders by:
  - providing an excellent academic education;
  - developing their leadership abilities and potential to be world-class, innovative graduates with competitive skills;
  - instilling in them the importance of a sound value framework;
  - developing their ability to adapt to the rapidly changing environments of the information era;
  - encouraging them to participate in and excel in sport, cultural activities, and the arts;
- is locally relevant through:
  - its promotion of equity, access, equal opportunities, redress, transformation and diversity;
  - its contribution to the prosperity, competitiveness and quality of life in South Africa;
  - its responsiveness to the educational, cultural, economic, scientific, technological, industrial, health, environmental and social needs of the country;
  - its active and constructive involvement in community development and service;
  - its sensitivity to the demands of our time and its proactive contribution towards shaping the future;
- creates an intellectually stimulating and culturally vibrant, pleasant and safe environment in which its students and staff can flourish; and
- is committed to effective, efficient, caring and innovative approaches to teaching, research and community service, client-centred management and administration, and good governance.

### Research Report 2011

## Contents

| ١. | Introduction  | 1  |
|----|---|--|
|    | 1.1 Message from the Vice-Chancellor and Principal<br>1.2 Message from the Vice-Principal: Research and Postgraduate Education<br>1.3 Research overview   | 2<br>4<br>6  |
| 2. | Awards and achievements   | 11   |
| 3. | Institutional and Faculty Research Themes   | 15   |
|    | Introduction<br>Biotechnology and the Management of Animal and Zoonotic Diseases<br>Energy<br>Food, Nutrition and Wellbeing<br>Genomics<br>Cellular and Molecular Medicine<br>Centre for Sustainable Malaria Control<br>Institute for International and Comparative Law | 17<br>18<br>20<br>22<br>24<br>26<br>28<br>30                   |
| 4. | Research highlights   | 33   |
|    | Economic and Management Sciences<br>Education<br>Engineering, Built Environment and Information Technology<br>Health Sciences<br>Humanities<br>Law<br>Natural and Agricultural Sciences<br>Theology<br>Veterinary Science<br>Gordon Institute of Business Science       | 34<br>46<br>54<br>86<br>108<br>124<br>134<br>176<br>186<br>200 |

5. Acknowledgements

203





### Message from the Vice-Chancellor and Principal

Research and the development of research capacity are defining features of the University of Pretoria's vision and mission. Therefore, it is pleasing to report that in 2011 the University continued to make a significant contribution to the national research output of South Africa. In addition to the large number of publications reflected in this report, an especially pleasing outcome is that over 200 doctoral degrees were awarded; the highest number for any single South African university. In a developing country like South Africa, it is perhaps especially important that research activities at universities give focused attention to research training. The year 2011 showed continued growth in the enrolment and graduation of master's and doctoral students. Close to a third of the University's almost 45 000 contact students were postgraduates with approximately half of these were graduates of other universities, thus indicating that the University of Pretoria is a university of choice for postgraduate study. Creating an enabling environment for high-quality scholarship is of the utmost importance in the University's strategy. By the end of 2011, the University had completed a number of major infrastructure developments, including a new Engineering Complex. (Engineering is one of the areas in which the University of Pretoria enjoys national and international prominence.) A new Knowledge Commons and Library Centre, partially funded by a grant from the Carnegie Corporation, was also officially opened in 2011. Almost immediately after opening, it became a hub for the growing numbers of postgraduate students.

It is very pleasing to note that many of the University's academics and postgraduate students distinguished themselves in 2011 by winning several awards and accolades. Notable too, is that there was a marked increased in the number of researchers rated by the National Research Foundation (NRF) and the proportion of high-impact publications increased.

The achievements showcased in this report are due to the commitment and hard work of the University's staff and students and I wish to express my sincere appreciation for their efforts in ensuring that the University of Pretoria continues to be counted among South Africa's leading universities. On behalf of the entire University community, I also wish to thank Prof Robin Crewe, who was the Vice-Principal responsible for research and postgraduate studies for many years. Prof Crewe continues to provide outstanding leadership at the University as the Vice-Principal responsible for all faculties. Prof Stephanie Burton took office as Vice-Principal for Research and Postgraduate Education from April 2011. She has already demonstrated that she will make a marked contribution to the future success of the University.

Thank you too to the many donors, sponsors and agencies who fund the University's research through postgraduate scholarships, equipment and research grants. New large capital projects were funded in part by grants from the Department of Higher Education and Training and the Carnegie Corporation, and we are most grateful for these grants. Without additional support to complement the annual subsidy allocations from the Department of Higher Education and Training, the research outputs reflected in this report would not have been possible.

By the end of 2011, the University Council had approved the University's new long-term strategy, UP2025, which will give increased impetus to ensuring that the University of Pretoria builds on its past achievements to make an even greater impact in the future.

Prof Cheryl de la Rey Vice-Chancellor and Principal



1.2 Message from the Vice-Principal: Research and Postgraduate Education

In offering an overview of research at the University of Pretoria during 2011, this report demonstrates the achievements of the University's academic community and elucidates certain new developments. During 2011, the University continued to make a significant contribution to the total national research output and to improve the proportion of its research publications that are cited internationally. The University's strategic plan, which has guided research since 2006, concluded at the end of 2011, and much attention was paid to the development of new strategic directions for research, which are aligned with the development of the broader academic plan that will take the University up to the year 2025. Renewed focus is being placed on the importance of research outputs in enhancing the international reputation of the University and on the need to expand its research productivity.

The new developments in research at UP are reflected in this report, which highlights, among other features, the University's progress in following the international trend of interdisciplinary research and addressing global challenges through the initiation of institutional and faculty research themes. These themes link multidisciplinary research groups through collaborative participation. The themes were developed on the basis of recognising and fostering excellence in research, and are led by recognised international leaders. They will contribute to the enhancement of the University's research reputation by providing an enabling environment for the growth of scholarship among academic staff, postdoctoral fellows and postgraduate students.

The University's research makes excellent, internationally recognised contributions in the fields of veterinary science, agricultural and biological sciences, engineering and social sciences (as reflected in international databases), and its Institutional Research Themes are aligned with these strengths in the focus areas of animal and zoonotic diseases, energy, food and nutrition, and genomics. The Faculty Research Themes are based on specific areas of expertise, and include the control of malaria, molecular medicine, and international law. The University's current research themes and the progress that has already been made are described in later sections of this report.

Research at the University of Pretoria encompasses a very broad range of disciplines across its nine faculties and one business school, and more than 60 research institutes, centres and units. The Deans' reports give accounts of the research highlights in each faculty, and selected research centres are featured to give a sample of the relevance and expertise of research at UP. The University continues to build and strengthen its relationships with South African industry through research collaborations and contracts, and the establishment of industry-funded research chairs with many major companies as industrial partners.

During 2011, the University bade farewell to the former Director of Research and Innovation Support, Mr Dhesigen Naidoo, and we thank him for his contribution. I would also like to thank the staff of the Department of Research and Innovation Support for the valuable work that is being done to support the research initiatives and developments illustrated in this report.

Prof Stephanie Burton Vice-Principal: Research and Postgraduate Education

## Research overview

The University of Pretoria's research performance for 2011 clearly indicated steady progress in research productivity and confirmed its standing in the top tier of South African research universities. The number of NRF-rated researchers at the University was the highest ever and the research outputs showed an upward trend. Additional highlights for 2011 include the establishment of the Institutional and Faculty Research Themes which advance inter- and intra-faculty multidisciplinary research programmes at the University. Industry partnerships have strengthened and so have the University's international collaborative research programmes. With the solid foundation set in the concluding year of its 2006–2011 strategic plan, the future growth of research and innovation at the University of Pretoria is promising.

In order of prominence, the University of Pretoria's most evident research strengths, as measured by the Thompson Reuters ISI Web of Science Index, are as follows:

- Agricultural and Biological Sciences
- Medicine
- Engineering
- Biochemistry
- Genetics
- Molecular Biology
- Plant and Animal Sciences
- Environmental Science
- Earth and Planetary Sciences
- Computer Sciences

In 2011, the largest number of research publications was produced in the fields of agriculture and related fields (17%), engineering (10%), health (15%), physical sciences (12%), and philosophy and theology (12%). Other areas in which the University performed extremely well were in veterinary science, engineering, computing and the social sciences.

The University of Pretoria's research outputs increased to 1187.46 units recorded in 2011. These units included 1087.93 units for publication in internationally and nationally accredited research journals, 23.63 units for books and chapters, and 75.90 units for published conference proceedings.

#### Table 1: Research output units earned per faculty for articles published in accredited journals

| Faculty   | 2010     | 2011     |
|---|----------|----------|
| Economic and Management Sciences                          | 60.7     | 65.5     |
| Education   | 41.07    | 43.95    |
| Engineering, Built Environment and Information Technology | 145.82   | 209.2    |
| Health Sciences   | 153.96   | 153.97   |
| Humanities  | 115.68   | 129.06   |
| Law   | 69.83    | 77.74    |
| Natural and Agricultural Sciences                         | 295.55   | 299.22   |
| Theology  | 108.75   | 111.55   |
| Veterinary Science  | 83.74    | 83.79    |
| Gordon Institute of Business Science                      | 9.33     | 9.77     |
| Support services and other departments                    | 3.5      | 3.72     |
| Total units   | 1 087.93 | 1 187.47 |

#### NRF ratings

The number of NRF-rated researchers at the University of Pretoria has surpassed the 300 mark and continued growth is foreseen in the number of rated researchers at the University in coming years.

#### Table 2: NRF-rated researchers of the University of Pretoria

| YEAR | TOTAL |
|------|-------|
| 2010 | 283   |
| 2011 | 305   |

#### Patents and licences

The University remains committed to ensuring that research and innovation outcomes are converted into economically viable products and services or sustainable social outcomes, wherever possible. In addition to external markets, research at the University also focuses on developing technologies to complement the operations of the University, especially in its teaching and research programmes.

The number of invention disclosures for 2011 increased significantly with a total of 21 disclosures, a marked increase from nine in 2009 and 15 in 2010. Four new licensing agreements were concluded to commercialise technologies developed in the faculties of Natural and Agricultural Sciences, Engineering, Built Environment and Information Technology, and Veterinary Science. This bodes well for further success in the commercialisation of the University's research.

#### Funding for research

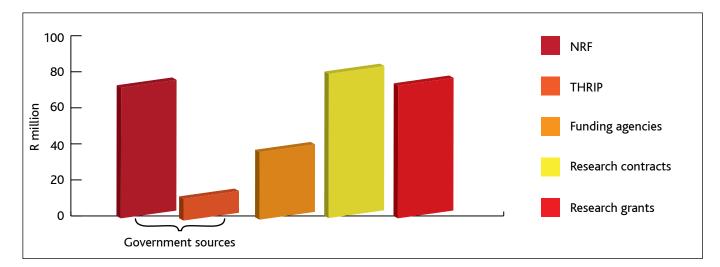
In 2011, the University's researchers were successful in obtaining approximately R387,2 million for research and development projects.

#### **External funding**

Approximately R287 million in research funding was sourced from external national and international sources.

A breakdown of external funding is as follows:

- R88,1 million from government sources other than the Department of Higher Education and Training. This includes R75,5 million from the National Research Foundation (NRF) and R12,6 million from the Technology and Human Resources for Industry Programme (THRIP)
- R39 million from funding agencies
- R83,3 million from research contracts
- R76,6 million from research grants



#### Figure 1: Funding received from external sources

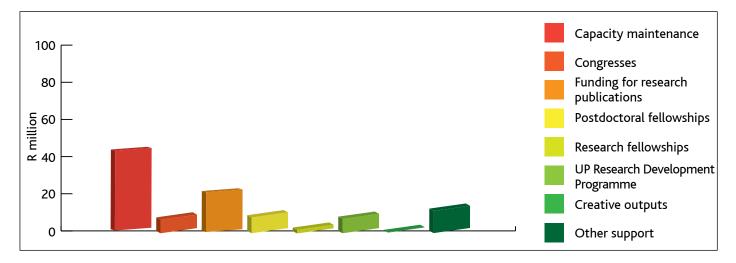
#### Internal funding

The University commits a considerable amount of its own funds to support young and established researchers, research infrastructure, and knowledge-sharing and networking forums.

The University provided internal funding to an amount of R82,2 million for the following:

- Upgrading and maintenance of research capacity and equipment (R42,1 million)
- Congresses (R3,8 million)
- Funding for research publications (R20,6 million)
- Postdoctoral fellowships (R4,4 million)
- Research fellowships (R1 million)
- The UP Research Development Programme (RDP) (R4 million)
- Creative outputs (R0,1 million)
- Other support (R6,2 million)





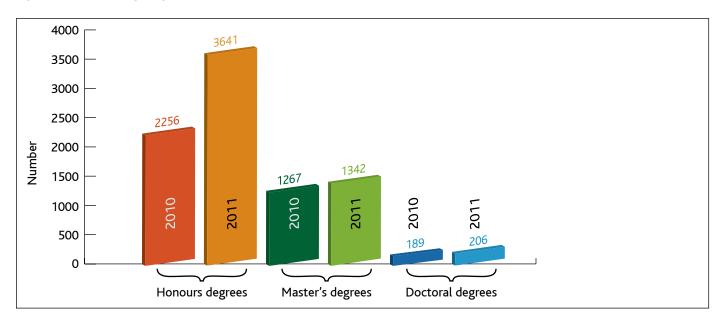
#### Postgraduates and postdoctoral fellows

The University continues to play a significant role in the country in training postgraduate students at all levels. A total of 5 189 degrees were granted to postgraduates in 2011. These were as follows:

3 641 honours' graduates 1 342 master's graduates

206 doctoral graduates

#### Figure 3: Increase in postgraduate students



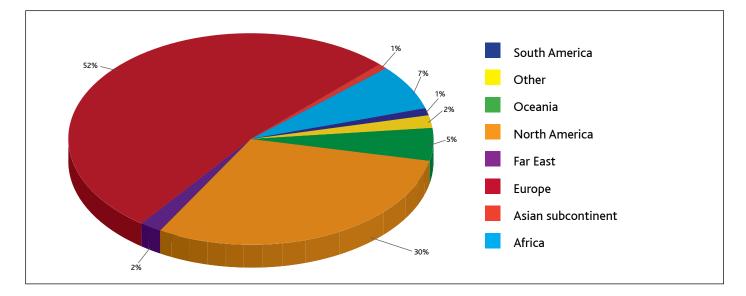
The postdoctoral cohort at the University of Pretoria increased by 45% in 2011 when compared to the number of fellows in the previous year. Of the 77 postdoctoral fellows hosted, 79% were from other countries. This important group of emerging researchers contributes significantly to the diversity and enrichment of research and will continue to increase at the University.

#### Internationalisation

Internationalisation activities feature prominently at the University and involve an array of instruments to support these activities. The instruments range from agreements for research collaborations, and staff and student exchanges, the enrolment of international students at undergraduate and postgraduate level, postdoctoral fellowships for international fellows and participation in international postgraduate programmes such as the European Union Erasmus Mundus Programme and the United Kingdom Commonwealth Scholarship Programme.

The greatest number of international postgraduate students in 2011 came from the rest of Africa, with countries in the Southern African Development Community (SADC) taking the lead with 1 108, followed by Northern Africa with 344 and Middle Africa with 248. Other regions with noteworthy numbers of students included Europe with 125, Asia with 77 and North America with 70.

The University's international collaborations, networks and partnerships have expanded and it has over 150 agreements with international universities around the globe. These agreements facilitate research collaborations, and staff and student exchanges. They also contribute to raising the University's international profile.



#### Figure 4: Percentage of international research partnerships on different continents

In terms of international research partnerships, the University of Pretoria had the most partnerships with institutions based in Europe (52%), followed by North America (30%) and Africa (7%). Research partnerships with other parts of the world were those with Oceania (2%), the Far East (2%), South America and the Asian subcontinent (1% each). Other regions comprised 5% of the international research collaborations.

Awards and Achievements

### National and international awards received by researchers of the University of Pretoria during 2011



Prof Namrita Lall

Prof Fhumulani Mulaudzi

Prof Jolanda Roux

Researchers of the University have received a number of prestigious awards. This affirms the standing and contribution of UP researchers and students to science, nationally and internationally.

- Three UP researchers distinguished themselves at the Women in Science Awards of the Department of Science and Technology (DST):
  - Prof Namrita Lall was awarded the DST Women in Science Award for 2011 in recognition of her research on bioprospecting from traditional knowledge on medicinal plants.
  - Prof Fhumulani Mulaudzi was a runner-up in the Distinguished Women in Science Award in Indigenous Knowledge Systems for her contribution to the advancement of indigenous knowledge systems in health care.
  - Prof Jolanda Roux won the Distinguished Young Women in Science Award in the Life, Natural and Engineering Sciences category for her research focusing on the health of trees, particularly diseases caused by fungi and their insect associates.

- Prof Jolanda Roux was also awarded the Commonwealth Forestry Association's Queen's Award for Forestry. Queen Elizabeth II endorses this award that highlights contributions to forestry in an innovative way.
- Prof Resia Pretorius was among several of Africa's top women scientists honoured at a ceremony to mark the founding of a new Pan-African University by receiving a Kwame Nkrumah Science Award. Her award was for research on the use of electron microscopy in studying inflammation in the human body.
- Prof Annie Joubert of the Department of Physiology was awarded the AG Oettlé Memorial Silver Medal by the Cancer Association of South Africa for her significant contribution to the fight against cancer in South Africa.

- Prof Thokozani Majozi was awarded the National Science and Technology Forum Award for Research and its Outputs for his research in the development and application of novel techniques in chemical process engineering related to freshwater use and wastewater generation.
- Prof Amanda Minnaar and Prof Dave Berger won the first and second prizes respectively at the European-South African Science and Technology Advancement Programme (ESASTAP) Awards for research in the field of food production and food security.
- The Advanced Sensor Networks Research Group in the Department of Electrical, Electronic and Computer Engineering won the 2011 Department of Trade and Industry (the dti) Award of the Technology and Human Resources for Industry Programme (THRIP) for Advanced Hi-Tech Research for the second consecutive year.
- Dr Joyce Mothabeng received an International Service Award from the World Confederation for Physical Therapy in Amsterdam in June 2011.
- Dr Stephan Geyer was awarded the Association of South African Social Work Education Institutions (ASASWEI) Award for the best Young Up and Coming Academic in Social Work in South Africa.
- Mr Mattheüs Theodor Loots, a graduate of the Department of Mathematical Statistics, won the Southern Africa Association for the Advancement of Science (S<sub>2</sub>A<sub>3</sub>) Award for his master's degree research.
- Mr Josua Goodman, a second-year student in the Department of Information Science, won the 2011 Sparky Awards for Best Live Action in an international video contest. This contest showcases students' call for open access and is organised by the Scholarly Publishing and Academic Resources Coalition (SPARC).

#### Chancellor's Award in the Research Category

The Chancellor's Award recognises exceptional achievement in the field of research aimed at the advancement of science and the associated promotion of interests of the University of Pretoria. This award for 2011 was presented to:

#### **Exceptional Academic Achievers**

This annual award is bestowed on senior academics who have already achieved the status of professor, are regarded highly by their peers and have consistently excelled in the areas of undergraduate and postgraduate teaching and learning, research, community service and administration over a period of time. This also includes current A-rated researchers of the National Research Foundation (NRF). In 2011 the following academics received this award:

- Prof Wlady Altermann Geodynamic processes in ore and basin formation
- Prof Patrick Erikson Sedimentology and basin analysis
- Prof Marion Meyer Phytochemistry
- Prof Sue Nicolson Pollination biology
- Prof Danie Prinsloo African languages (Sepedi)
- Prof Sergei Rakitianski Quantum resonances in physics
- Prof Egmont Rohwer Chromatography and mass spectrometry
- Prof Clarke Scholtz Biology and conservation of insects
- Prof Gert Steyn New Testament studies (Theology)
- Prof Anton Ströh Mathematics
- Prof Braam van Wyk Botany

#### **Exceptional Young Researchers**

Young emerging researchers are important and are recognised for their research productivity and potential. This award is given to exceptional achievers in the field of research, as seen against the University's strategic goal of achieving academic excellence, international competition and local relevance. NRF P-rated researchers are automatically awarded Exceptional Young Researcher status. The exceptional young academics for 2011 are:

- Dr Brighton Dzikiti
- Prof Zander Myburg
- Prof Christian Pirk
- Prof Mathieu Rouget

Prof Brenda Wingfield

#### Award of the Vice-Chancellor and Principal

These awards are given annually to the top achievers in each faculty. The recipients for 2011 were:

- Ms Charnene Weller (Education)
- Mr Andrew Stuart Graham (Natural and Agricultural Sciences)
- Ms Nikita Edwards (Engineering)
- Mr Justin William Taylor (Theology)
- Ms Danielle Elizabeth Aston (Economic and Management Sciences)
- Ms Sarah Jane McGibbon (Law)
- Mr Dawid Nicolaas Prinsloo (Health Sciences)
- Ms Marinei Nel (Humanities)
- Ms Jeanné Botha (Veterinary Science)

#### **NRF-rated researchers**

The following researchers were rated or re-rated by the NRF in 2011:

- Prof John Annandale
- Prof Lekan Ayo-Yusuf
- Prof Jan Boeyens
- Prof Juan Bornman
- Prof Daniel Bradlow
- Prof Stephanie Burton
- Prof Elna Buys
- Prof Adelia Carstens
- Dr Michael Chapwanya
- Dr Serena Coetzee
- Prof Teresa Coutinho
- Prof Marthie Ehlers
- Prof Lourens Erasmus
- Prof Patrick Eriksson
- Prof Walter Focke
- Prof Erich Friedland
- Prof Robin Green
- Prof Anske Grobler
- Prof Stefan Gruner
- Prof Tania Hanekom
- Prof Benda Hofmeyr
- Prof Jonathan Hyslop
- Prof Johan Joubert
- Prof Elsabé Kearsley
- Dr Magnus Killander

- Prof Robert Kirberger
- Dr Darryn Knobel
- Prof Lize Kriel
- Dr Karina Landman
- Prof Andrew Leisewitz
- Prof Louis Linde
- Prof Braam Louw
- Dr Lindy McGaw
- Dr Ferdi Meyer
- Prof Josua Meyer
- Prof Robert Millar
- Prof Zander Myburg
- Prof Albert Neitz
- Prof Louis Nel
- Prof Jan Nieuwenhuis
- Dr Patrice Ntumba
- Prof Wimpie Odendaal
- Dr Jane Olwoch
- Dr Marietjie Oosthuizen
- Prof Robert Pattinson
- Prof Innocent Pikirayi
- Prof Venitha Pillay
- Prof Leon Pretorius
- Prof Resia Pretorius
- Dr Melvyn Quan
- Prof Mamadou Sango
- Dr Vanessa Scherman
- Prof Clarke Scholtz
- Prof Hettie Schönfeldt
- Prof Emma Steenkamp
- Prof Gert Steyn
- Prof Maryna Steyn
- Prof Gerry Swan
- Prof Chris Theron
- Prof Jacques Theron
- Prof Jan Harm van der Vyver
- Prof Saloshna Vandeyar
- Prof Esté van Marle-Köster
- Prof Louis van Rooy
- Prof Gretel van Rooyen
  - Prof Estelle Venter
  - Prof Marietjie Venter
  - Prof Bart Vinck
  - Prof Maretha Visser
  - Prof Edward Webb
  - Prof Rusell West-Pavlov
  - Dr Xudong Zhou

### Institutional and Faculty Research Themes

© Nico de Bruyn Photography

### Introduction

As a research-intensive university, the University of Pretoria believes that it can make a positive contribution to the economic and social development of the country. Its research agenda is focused on a number of carefully selected themes, on which proven capacity exists in the University, and which build on the work of excellent researchers and research leaders.

A process was therefore initiated to identify the unique research strengths of the institution and to support the development of strong multidisciplinary research groups, clustered around these identified strengths.

This process is developed around two tiers: Institutional Research Themes (IRTs) and Faculty Research Themes (FRTs):

- The IRTs are major research initiatives that involve a set of participating faculties.
- The FRTs involve the participation of researchers on a more limited scale by fewer faculties.

Both the IRTs and FRTs are designed to recognise and foster excellence in research and are led by acknowledged international leaders in their specific disciplines. Four IRTs and three FRTs have been identified so far. More are in the pipeline.

#### Institutional Research Themes

- Biotechnology and the Management of Animal and Zoonotic Diseases: Established to build and expand on the University's current strengths and research capacity in animal and zoonotic diseases in the faculties of Health Sciences, Veterinary Science, and Natural and Agricultural Sciences.
- Energy: Established to provide the best balance between the University's current research activities in the faculties of Engineering, Built Environment and Information Technology, and Natural and Agricultural Sciences, and the energy focus areas that are prioritised by government, with an initial focus on electrical energy.

- Food, Nutrition and Wellbeing: Established to address the emerging societal challenges related to food insecurity, nutrition deficiencies and hunger, especially in Africa, by coordinating research conducted in the faculties of Health Sciences, Veterinary Science, and Natural and Agricultural Sciences.
- Genomics: Established with a strong core capacity for genomics, bioinformatics and computational biology research that will be recognised as a centre of excellence to make an important contribution to the health sciences, veterinary science and other life sciences in South Africa, Africa and the rest of the world.

#### Faculty Research Themes

- **Cellular and Molecular Medicine**: Established to raise the level of excellence in research in the Faculty of Health Sciences.
- Centre for Sustainable Malaria Control: Established to promote collaborative research in the Faculty of Health Sciences on safer and sustainable malaria control and management.
- Institute for International and Comparative Law: Established to generate knowledge and develop research capacity at the highest level across African territorial, legal and language limits within the parameters of international and comparative law.

It is anticipated that these themes will add to the University's research reputation as they develop, while at the same time engendering a climate that promotes scholarship among academic staff and postdoctoral fellows, with the objective of producing more doctorates.

### Biotechnology and the Management of Animal and Zoonotic Diseases

The Biotechnology and the Management of Animal and Zoonotic Diseases IRT was established to build and expand on the University's current strengths and research capacity in animal and zoonotic diseases in the faculties of Health Sciences, Veterinary Science, and Natural and Agricultural Sciences

The development of a new generation of animal vaccines is a top biotechnology priority in South Africa, and the research aims of this IRT are focused on addressing questions and solving problems in the field of animal diseases and diseases that are transmitted from animals to humans (zoonoses).

These questions and problems are addressed by the development of improved diagnostic tools, vaccines and cutting-edge studies on the pathogen-vector-host interphases and associated epidemiological studies. A number of research programmes are involved in three different faculties.

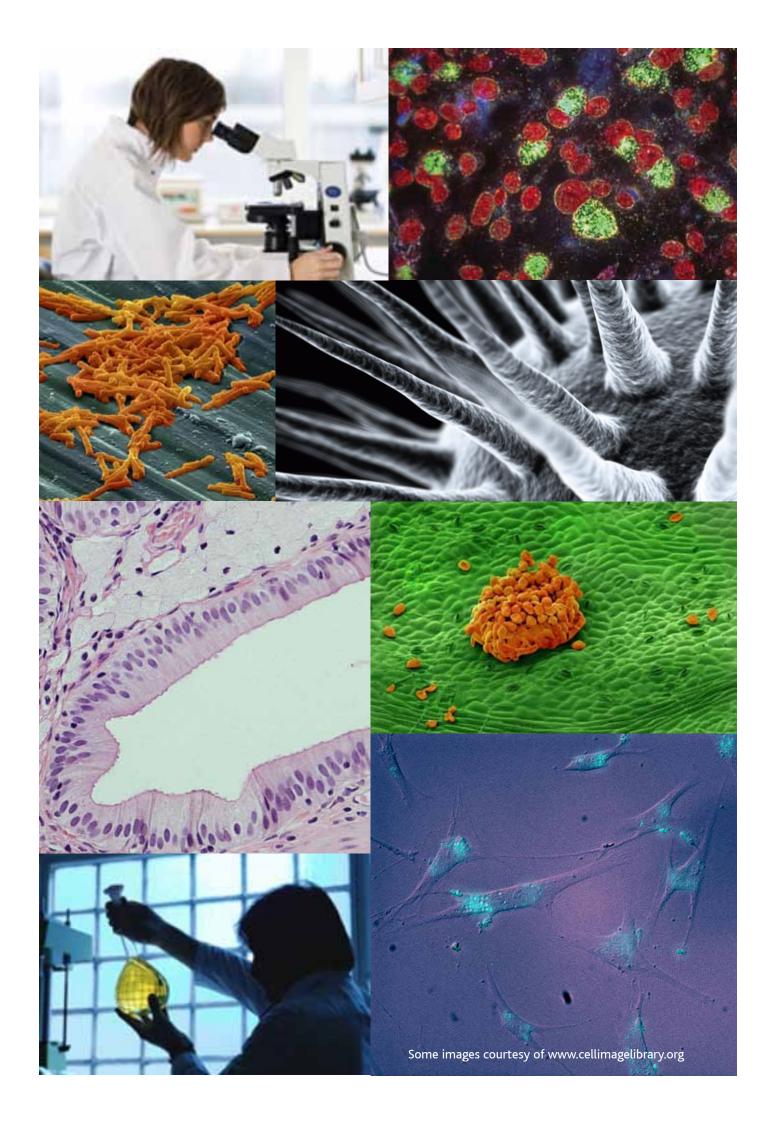
The development of a new generation of animal vaccines is a top biotechnology priority in South Africa. Several recombinant vaccine candidates, either developed locally or produced by overseas collaborators, have been evaluated in animal trials. A topical high-impact programme is aimed at the control of dog rabies in the developing world.

Research strategies include the evaluation of different rabies vaccine candidates and a project using recombinant vaccines as immunocontraceptives in domestic dogs. Other important vaccine initiatives include cattle trials with novel anti-tick vaccine candidates, a recombinant canary pox vaccine against African horse sickness virus, a West Nile virus vaccine and a foot-and-mouth-disease vaccine based on a locally developed chimeric foot-and-mouth disease virus. These vaccine developments are strengthened by the progress made in the development of systems that allow the genetic manipulation of pathogens (reverse genetics). Recent progress made with a project to develop a reverse genetics system for African horse sickness virus is very promising. A rabies virus reverse genetics vaccinology strategy is also in progress.

An important range of new or updated tools for the diagnosis of different animal haemoparasites has been developed. Among these is a single test for identifying different Theileria species, which could have an important impact on the trade of animals. Further diagnostically associated highlights include the approval of the BSL-3 laboratory by the Department of Agriculture, Forestry and Fisheries to expand the range of animal and human zoonotic pathogens that can be dealt with in the Zoonoses Research Unit in the Faculty of Health Sciences.

#### Prof Henk Huismans

Tel: 012 420 3812 Email: henk.huismans@up.ac.za



### Energy

The Energy IRT (E\_IRT) was established to provide the best balance between the University's current research activities in the faculties of Engineering, Built Environment and Information Technology, and Natural and Agricultural Sciences.

The aim of this IRT is to establish energy as a key research theme, focusing on a number of subthemes relevant to South Africa's future energy security. The E\_IRT was established after a study by the University's Institute of Technological Innovation had found that the University of Pretoria was the major publisher of energy research in South Africa over the period 1997–2007.

The University thus embarked on establishing energy as a key research theme, focusing on a number of subthemes relevant to South Africa's future energy security, and government energy policies and strategies.

The main goal of the E\_IRT is to focus on research in the areas of electricity generation, transmission and distribution. The selected research subthemes include the following:

- Energy production, with the emphasis on clean coal, nuclear and renewable (solar and wind) energy
- Energy distribution (smart grids and energy storage)
- Energy optimisation (thermal, process and efficiency)
- Advanced materials, with an interest in unique material attributes
- Energy policy and economics, and the impact of energy technologies on society
- Sustainable environment

The initial portfolio of projects included the following:

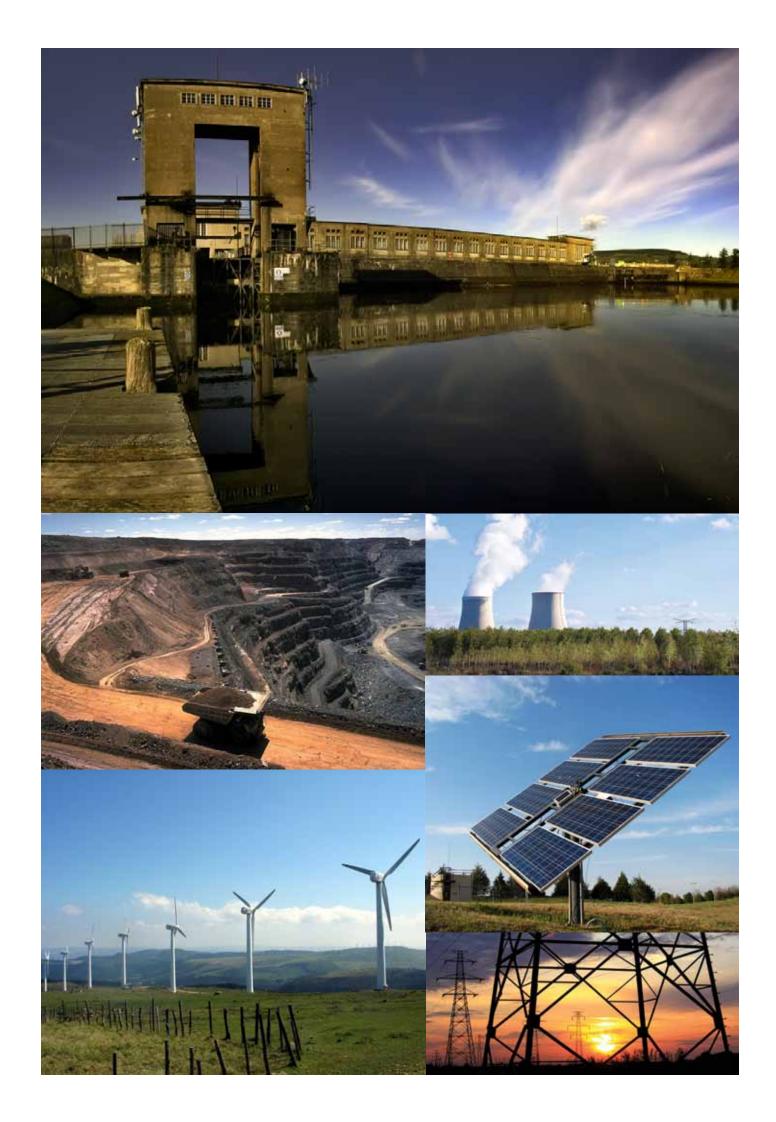
 An assessment of various energy technologies in order to develop an integrated technology scenario model that can assist in the establishment of an integrated database and the selection of future research projects.

- The thermal optimisation of heat exchangers, the efficiency optimisation of various electro-mechanical systems, and chemical process integration for energy and water systems.
- The development of silicon-carbide tubes and tubemanufacturing technology for application in current and future high-temperature environments in light, watercooled nuclear reactors.
- Conducting research on the exact heat and gas-flow dynamics inside gasifiers, with the aim of achieving a better understanding of the chemical transition and formation reactions inside gasifiers. This forms part of multi-product low carbon footprint research.
- Focusing research on the integration of renewable energies into the existing electricity supply network in order to make a contribution to smart grid network stability and reliability.
- Research on renewable and clean energy, including projects in solar energy utilisation, graphene-based materials and biodiesel oxidation stability.
- Research on the use of glassy carbon (vitrious carbon/ polymeric carbon), focusing on the long-term containment of materials for nuclear waste.

Six different academic departments from the faculties of Engineering, Built Environment and Information Technology, and Natural and Agricultural Sciences collaborate on the E\_IRT research effort. Research collaborations with local organisations, as well as international companies and universities in the USA, Sweden, Germany, India, Brazil, Hungary and China, have already been established.

#### **Prof Tinus Pretorius**

Tel: 012 420 5179 Email: tinus.pretorius@up.ac.za



### Food, Nutrition and Wellbeing

The Food, Nutrition and Wellbeing IRT was established to address the emerging societal challenges related to food insecurity, nutrition deficiencies and hunger, especially in Africa, by coordinating research conducted in the faculties of Health Sciences, Veterinary Science, and Natural and Agricultural Sciences.

This IRT is seen as a vehicle to create an Institute of Food, Nutrition and Wellbeing at the University of Pretoria to bring together all the postgraduate teaching and research expertise and activities in this field to ultimately develop a centre of excellence. The Institute will provide strategic leadership in a new area of global interest.

In addressing these challenges, the vision of the Institute will be to become the leading international centre of excellence in the area of transdisciplinary research and postgraduate training, aimed at finding innovative and comprehensive ways of addressing current constraints to attaining the Millennium Development Goals with regard to food, nutrition and wellbeing in sub-Saharan Africa by 2020.

The mission of the new Institute is to strategically position the University of Pretoria as an internationally recognised centre of excellence with a critical mass of researchers focusing on transdisciplinary research and postgraduate training that will respond to the needs of stakeholders. This will ultimately promote the long-term health and wellness of people, support sound policy-making with regard to food, nutrition and wellbeing and, together with strategic national, regional and international partners, significantly scale up capacity in this area. This IRT establishes a unique and innovative programme that has so far not been addressed internationally, continentally or at UP. It explores current and complex research questions of global and African relevance through transdisciplinary enquiry that will generate new knowledge and insights to help reduce hunger and poverty in Africa. It brings together over 70 academic staff members employed in the various related areas, thus providing the largest pool of expertise globally.

The IRT will bring considerable visibility to the University's contribution to African and global research and opportunities for expanded and strengthened networks, partnerships and community engagement.

The key research themes to be investigated as part of this IRT are the following:

- Sustainable animal- and plant-based food production in a resource-constrained environment
- Food safety, biosecurity, public health and regulatory control
- Functional biomolecules and functional foods
- Facilitating behaviour change for health and wellbeing
- The food security and nutrition impacts of policies and programmes

#### **Prof Sheryl Hendriks**

Tel: 012 420 3811 Email: sheryl.hendriks@up.ac.za



### Genomics

The Genomics IRT was established with a strong core capacity for genomics, bioinformatics and computational biology research that will be recognised as a centre of excellence to make an important contribution to the health sciences, veterinary science and other life sciences in South Africa and the rest of the world.

Genomics is a modern and rapidly evolving field of molecular biology. It focuses on research, development and innovation in the field of whole organisms (genomics) or entire communities (metagenomics). Genomics is based on two cutting-edge technologies: next-generation DNA sequencing and bioinformatics.

The IRT in Genomics was formally established in late 2011 under the interim leadership of Prof Henk Huismans. It has now acquired a full-time director. Prof Don Cowan, a former Director of the Institute for Microbial Biotechnology and Metagenomics at the University of the Western Cape, joined the University of Pretoria in May 2012. Prof Cowan is an internationally recognised and highly published researcher in the field of microbial ecology and metagenomics.

The Genomics IRT has a core membership of 22 academic staff members across three faculties: Natural and Agricultural Sciences, Health Sciences and Veterinary Science. It has a total of 52 research staff members. Projects in the IRT are subdivided into five research focus areas: bacterial, plant, fungal, animal and human genomics.

In the short time since its institution, the Genomics IRT has been very active. Seed funding of over R2.2 million has been allocated to projects, principally to support additional genome and transcriptome sequencing. IRT funds have contributed to the purchase of a state-of-the-art ion torrent DNA sequencer (capable of generating 10 million to 1 billion bases of highly accurate DNA sequence in less than two hours). Some student bursaries have already been allocated and a number of key staff appointments are in the process of being made. The first IRT workshops are in the planning stage.

One very strong theme of the IRT projects is the study of pathogenic organisms, including genome sequencing of plant pathogens such as *Pantoea*, *Fusarium*, *Phytophthora* and *Cercospora*, animal pathogens such as *Theileria* and human pathogens such as the malarial parasite *Plasmodium*.

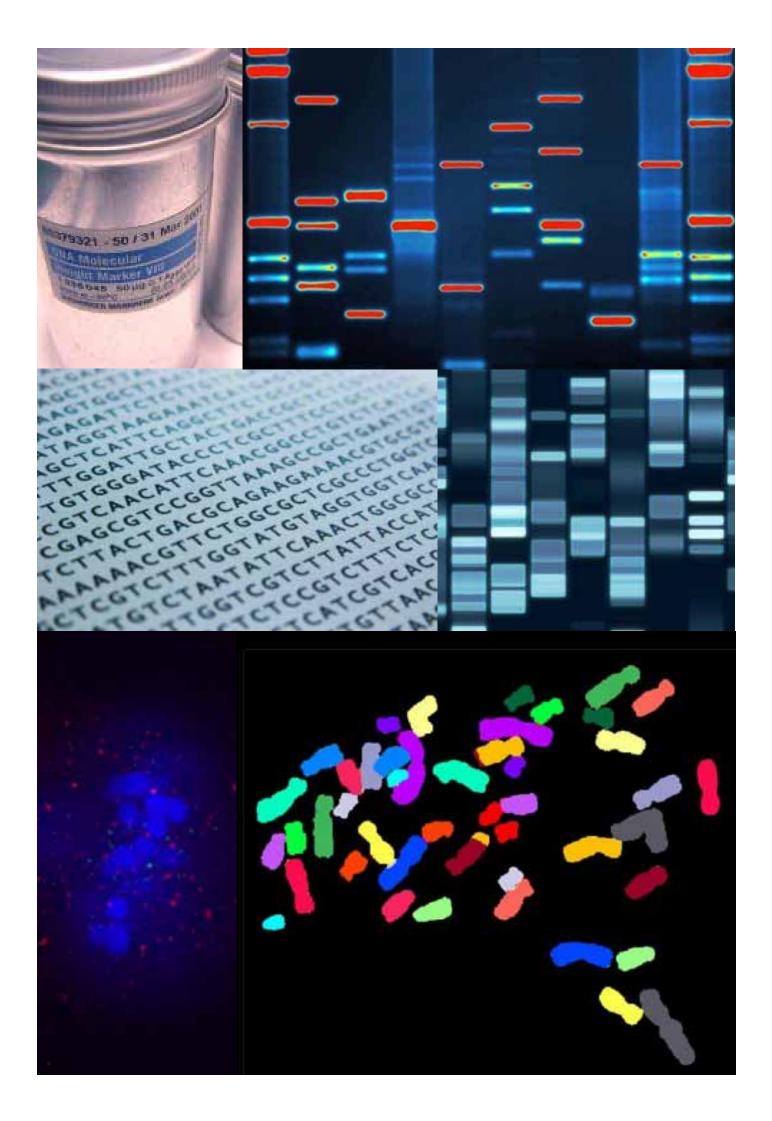
In a closely related project, the genome of the wasp Sirex, a vector for many tree pathogenic fungi, has been sequenced. In all cases, a detailed knowledge of the genome sequence will underpin future studies of pathogenesis and the development of anti-pathogenic strategies.

A second major theme is the genome and transcriptome sequencing of economically important trees such as eucalyptus and avocado to study wood (lignocellulosic biomass) formation, as well as biotic or abiotic stress responses. These studies are important milestones in the development of improved tree cultivars and for a fundamental understanding of growth and development in woody plants.

A third theme is directly relevant to human health. This entails the sequencing of the breast cancer exome (the coding portion of the genomic DNA) from local black African women, which will contribute to an understanding of both the genetic propensity to cancer and the factors that trigger the transformation of healthy cells to cancer cells.

#### Prof Don Cowan

Tel: 012 420 5873 Email: don.cowan@up.ac.za



### Cellular and Molecular Medicine

The Cellular and Molecular Medicine FRT was established to raise the level of excellence of research in the Faculty of Health Sciences at the University of Pretoria.

The Institute for Cellular and Molecular Medicine (ICMM) was initiated at the University of Pretoria in 2008. It was developed into an FRT in 2011. The core component of the Institute is built on three scientific pillars: genomics/genetics, cell-based therapy and the neurosciences. Human tissue legislation and bio-entrepreneurship complete the core component.

In addition to the core component, which has a physical presence on the Prinshof Campus (in close proximity to the Faculty of Health Sciences and the Steve Biko Academic Hospital), the Institute has a virtual component, which includes departments from several other faculties at the University. These include Natural and Agricultural Sciences, Veterinary Science, Engineering, the Built Environment and Information Technology, Economic and Management Sciences, Law, Humanities, and Theology.

The Director of the Institute, Prof Michael Pepper, is a codirector of the Southern African Human Genome Programme, which has secured funding from the Department of Science and Technology (DST) for the sequencing of African genomes. Other highlights in the genomics/genetics field include the use of next-generation sequencing for human leucocyte antigen (HLA) genotyping, the validation of a novel diagnostic tool for leukemia, and the screening of a large cohort of South Africans for mutations in the CCR5 gene, which has been implicated in resistance to HIV. The Cell-based Therapy Project has seen a rapid and highly productive expansion of work on human mesenchymal cells, the objective of which is to enter into clinical trials for a number of diseases in 2013. A multinational and multiinstitutional project is underway to genetically modify human haematopoietic stem cells in order render them resistant to HIV. The ultimate objective is to transplant these cells into HIV-positive individuals in order to generate an HIV-resistant immune system. A study of the feasibility of establishing a public cord blood stem cell bank, funded by the Medical Research Council (MRC), is nearing completion.

The UP Neuroscience Day attracts colleagues from across the country, and has grown into an annual event with wide recognition.

The Institute presents the Certificate in Bio-entrepreneurship, which received funding from the Technology Innovation Agency (TIA) in 2011, resulting in greatly reduced registration fees and the opportunity to accommodate close to 70 participants divided between Pretoria and Cape Town. Sponsorship from the TIA has been renewed for 2012. This will see the inclusion of the Eastern Cape and KwaZulu-Natal in the programme.

#### Prof Michael Pepper

Tel: 012 420 3845 Email: michael.pepper@up.ac.za



### Centre for Sustainable Malaria Control

The Sustainable Malaria Control FRT was established to promote collaborative research in the Faculty of Health Sciences at the University of Pretoria on safer and sustainable malaria control and management.

The University of Pretoria Centre for Sustainable Malaria Control (CSMC) is a collaborative and transdisciplinary initiative that uniquely and innovatively integrates all aspects of malaria control: physical methods of vector control, biological malaria parasite and vector control, bioinformatics and drug discovery, toxicology and community health, integrated vector management, malaria case management, monitoring and evaluation, education, health promotion and policy.

The departments involved all have established research programmes with a focus on the elimination of malaria without causing human health risk. The Centre creates new opportunities for postgraduate students and guides policy-makers on this issue. The Centre is now represented on the Advisory Committee of the National Department of Health: Malaria.

The official launch of the FRT took place on 17 November 2011. The Centre was officially opened by the Vice-Chancellor and Principal, Prof Cheryl de la Rey, and the function was attended by Dr Yogan Pillay, Deputy Director-General of Strategic Health Programmes at the national Department of Health, in addition to other important guests from the World Health Organisation (WHO), government, academic and research institutions, industry and various other organisations. The CSMC application for a South African Research Chairs Initiative (SARChI) Chair was successful in Phase I and received an invitation to submit a Phase II application. The proposed SARChI Chair in Sustainable Malaria Control is very well aligned on several levels with the national government's 10-year strategy. The Chair will function within the CSMC and will focus on blocking the transmission of malaria. A US National Institutes of Health (NIH) grant on indoor residual spraying (IRS) pesticides and neurodevelopment in South Africa was awarded to a team of researchers from UP and the University of California Berkeley.

During 2011, CSMC members and students published seven papers in high-impact journals, one patent, two technical reports and 21 congress presentations. Several master's and doctoral students graduated, growing the numbers of researchers and postgraduate students associated with the centre. Researchers from different departments and faculties have joined the CSMC, creating new opportunities and building research capacity. The University of Pretoria is enjoying wide support for this initiative and has become a key role-player in the fight against malaria.

#### Prof Tiaan de Jager

Tel: 012 354 2072 Email: malaria@up.ac.za



### Institute for International and Comparative Law

The International and Comparative Law FRT was established to generate knowledge and develop research capacity at the highest level across African territorial, legal and language limits within the parameters of international and comparative law.

The Institute for International and Comparative Law in Africa (ICLA) is a gateway to excellence regarding international and comparative law. As a research institute, it is unique to the continent.

Its vision is to develop African legal establishments to a level on a par with and in harmony with those in the rest of the world.

The ICLA is coordinating the African reporting for *Oxford Constitutions Online*. This authoritative database, which provides a constitutional analysis of more than 180 countries around the globe, is published by Oxford University Press in collaboration with the Max Planck Institute for Comparative Public Law and International Law, Heidelberg, Germany. Under the auspices of the ICLA, six African country reports were finalised during 2011.

The ICLA further provided research support to one of its codirectors, Prof Christof Heyns, in relation to his mandate as United Nations Special Rapporteur on extrajudicial, summary or arbitrary executions. In collaboration with the Institute of Air and Space Law, University of Cologne, Germany, the ICLA developed a specialised module in international air, space and telecommunications law. This module, which is the only one of its kind on the continent, is supported financially by the Department of Trade and Industry.

In August 2011, the ICLA was involved in the organisation of two winter schools. The first was a two-week winter school and two-day conference on the interaction between international humanitarian law and human rights law in military operations. It was co-hosted by the ICLA and the International Law Centre of the Swedish National Defence College. It was directed towards (South African) members of the armed forces, the civil service and members of academia. A specialised module in this area is currently being conceptualised in order to introduce this in the master's programme in Public International Law in 2013. The second winter school was an introduction to the Pretoria Winter School for Doctoral Studies in Law and was directed at doctoral students in law and their supervisors.

The ICLA also contributed to the Faculty of Law's doctoral programme by obtaining funding from the Open Society Initiative for Southern Africa over a three-year period for three part-time doctoral positions in the area of comparative constitutional law.

The ICLA is co-directed by Prof Erika de Wet and Prof Christof Heyns.

Prof Erika de Wet Tel: 012 420 6217 Email: erika.dewet@up.ac.za

Prof Christof Heyns Tel: 012 420 6217 Email: christof.heyns@up.ac.za

## The Death Penalty

#### A panel discussion with

- Christof Heyns, United Nations
   Special Rapporteur on extrajudicial, summary or arbitrary executions; University of Pretoria
- Juan Méndez, United Nations Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment; American University, Washington D.C.
- William A. Schabas, Professor of International Law, University of Middlesex, London
- Carol Steiker, Henry J. Friendly Professor of Law, Special Advisor for Public Service, Harvard Law School
- Lloyd Barnett, Member of the Inter-American Institute on Human Rights
- Nigel Rodley, Chair, Human Rights Centre, University of Essex; Member of the United Nations Human **Rights** Committee



hts Program and

## Hanging by a Thread?

Monday, June 25, 2012 5–6:30 p.m. Griswold Hall 110 Harvard Law School

Forty years ago, the US Supreme Court handed down Furman v. Georgia which led to the de facto moratorium on the death penalty for four years. The US is one of the few industrialized democracies which permits the death penalty. Globally, judi-cial execution is prohibited in the vast majority of countries; increasingly the long confinement of prisoners on death row is viewed as a form of torture. This panel discussion will explore these and other dimensions with the world's leading experts on the death penalty.

#### of journalists 12.30-2pm Friday 2 March 2012 Alison Richard Building · 7 West Road · Cambridge

Christof Heyns United Nations Special Rapporteur on extrajudicial, summary or arbitrary executions Frank La Rue UN Special Rapporteur on the promotion & protection of the right to freedom of opinion & expression

**RAPPORTEUR SPECIA** 

Joel Simon

Executive Director, Committee to Protect Journalists Celia Davies

Program Development Manager, Institute for Reporters' Freedom & Safety, Azerbaijan

Pansy Tlakula Special Rapporteur, Freedom of Expression & Access to Information, African Commission on Human & Peoples' Rights

**Expert international** 

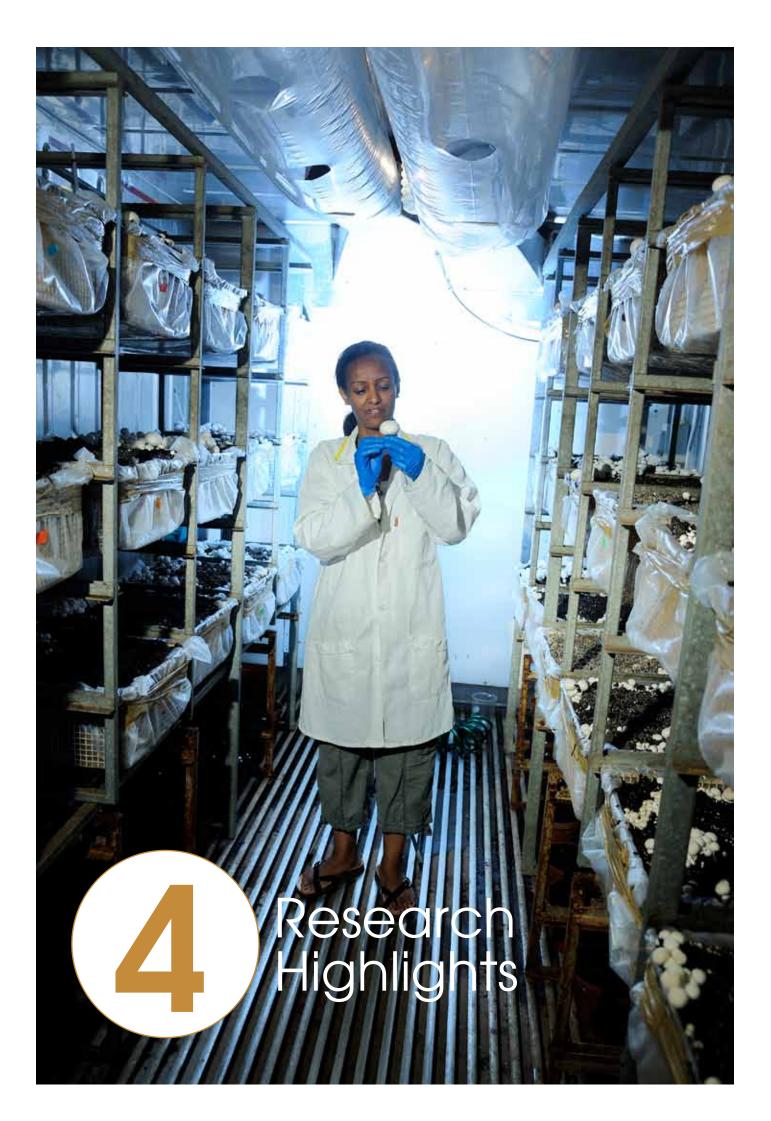
panel on the safet

On

William Horsley Former BBC Corresponde UK Chairman Association of Europe (moderator) an Journalists

Sharath Srinivasan Director, Centre of Governance and Human Rights (chair)

www.polis.cam.ac.uk/cghr





January to December 2011 Prof Jan van Heerden Acting Dean



Prof Elsabe Loots Dean

## **4 Economic and** Management Sciences

Research engagement and publications are integral to the Faculty's vision to be an internationally recognised and locally relevant centre of excellence. The Faculty conducts research primarily of an applied nature, aligned with the needs of business, the public sector and the professions. Academic staff research expertise spans a number of areas, ranging from monetary economics and sustainable environments to industrial psychology and marketing. It also hosts a number of centres and institutes that provide leadership in their respective disciplines. During 2011, the Faculty had a number of noteworthy research achievements that contributed to the realisation of its vision.

Several academic staff members presented papers at international conferences around the globe and the continent. Attendance at these conferences not only showcases the expertise of the Faculty, but also resulted in fruitful collaborative research projects. The Department of Human Resource Management hosted a USA Fulbright research scholar, Prof Jenny Hoobler, of the University of Illinois at Chicago during the academic year. Prof Hoobler is collaborating with Prof Stella Nkomo on a research project on gender equity in South African corporations.

The African Tax Institute, in collaboration with the Lincoln Institute of Land Policy based in the USA, hosted a workshop

#### Research entities

#### Institutes

African Tax Institute

#### Centres

- Centre for Communication and Reputation Management
- Centre for Inclusive Banking
- Albert Luthuli Centre for Responsible Leadership
- Investment and Trade Policy Centre

in South Africa. Ten research fellows from Cameroon, the Democratic Republic of the Congo, Egypt, Eritrea, Ethiopia, Kenya, Mozambique, Sierra Leone and Zambia presented case studies on property taxes in 18 African countries. In 2011, the Albert Luthuli Centre for Responsible Leadership embarked on two major research projects. The Leadership for Africa Research Project, funded by the Uongozi Institute of Tanzania, will investigate change leadership in several African countries. Corporate governance is the focus of a collaborative research project with the Harvard Business School that will examine the drivers and consequences of corporate governance in South Africa over the past 20 years.

Prof Ernie Heath of the Department of Tourism Management, in collaboration with the George Washington University in the USA, conducted research on the tourism potential of South Africa. Prof Yolanda Jordaan of the Department of Marketing Management is collaborating with the University of Angers in France on a study of consumer attitudes and behaviour towards social network advertising. The Investment and Trade Policy Centre has forged a productive collaborative relationship with the University of Applied Sciences in Berlin, Germany.

Academic staff members also continue to receive recognition for outstanding research achievements. Dr Ruthira Naraidoo, an associate professor in the Department of Economics, received the JJI Middleton Award from the Council of the Economic Society of South Africa for the best first article published. Prof Rangan Gupta of the Department of Economics, who is ranked 46th on the list of young economists in the world, became a founding member of the South African Young Academy of Science, launched in 2011.

The Faculty continues to provide leadership for discipline-based conferences and workshops. The School of Public Management and Administration hosted the 4th International Conference on Public Administration, which included over 40 competitive papers on the theme of leadership, governance and policy in the public sector. The Department of Economics and the South African Reserve Bank jointly hosted a workshop on monetary economics and macroeconomic modelling. The development of a South African Personality Inventory was the focus of a research workshop hosted by the Department of Human Resource Management, which brought together scholars and postgraduate students from around South Africa.

One of the strategies for increasing research productivity is obtaining external funding. The Department of Human Resource Management received a grant for its research project on the attraction, development and retention of academic talent for sustainability in South African higher education institutions. This multi-year project, in collaboration with the Vrije University of the Netherlands, is funded by the South African Netherlands Research Programme on Alternatives in Development (SANPAD).

The research output of the academic staff comprised 109 journal articles with an increasing percentage published in international journals. The number of NRF-rated researchers in the Faculty was 15 in 2011. During the year, eight doctoral students and 118 master's degree students graduated in the Faculty. Nineteen members of staff obtained either a master's degree or a doctorate. Several other staff members are currently enrolled for higher degrees.

The Faculty Research Committee initiated a number of interventions to support academic research engagement and productivity throughout the year. These interventions included research skills enhancement workshops and seminars. Plans were finalised for opening an Office for Research Support in 2012. The office will provide academic staff with a range of technical and informational services to support staff research agendas.

#### **Prof Elsabe Loots**

Dean: Economic and Management Sciences Tel: 012 420 2425 Email: emsdean@up.ac.za

## Faculty Research Output

#### Taxation

#### Chapters in books

Nel R, Nienaber SG: 2011. Prospects of South African vehicle tax reducing CO<sub>2</sub> emissions. In **Environmental taxation in China and Asia-Pacific: achieving environmental sustainability through fiscal policy**, Edward Elgar, pp 164–182.

#### Papers published

- Oosthuizen R: 2011. Income tax deductions available to South African taxpayers in respect of payments for intellectual property. In Conference proceedings of the 2011 Biennial Conference of the Southern African Accounting Association – SAAA International Conference, 27–29 June, CIMA, pp 1–29.
- Du Preez H: 2011. Interactive qualitative analysis of taxation students' perceptions of open-book assessment. In Conference proceedings of the 2011 Biennial Conference of the Southern African Accounting Association – SAAA International Conference, 27-29 June, CIMA, pp 1–29.
- Nel PJ: 2011. The allocation of expenses by an entity enjoying partial exemption from SA normal tax for purposes of calculating its taxable income. In **Conference proceedings of the 2011 Biennial Conference of the Southern African Accounting Association – SAAA International Conference**, 27–29 June, CIMA, pp 1–21.
- Hills T, Pienaar SJ: 2011. Facebook as a tool for communication with undergraduate Taxation students. In Conference proceedings of the 2011 Biennial Conference of the Southern African Accounting Association – SAAA International Conference, CIMA.
- Stiglingh M: 2011. A conceptual E-service quality model for the South African tax collection agency. In **The 2nd International Conference on Society and Information Technologies**, International Institute of Informatics and Systemics, pp 112–117.

Oberholzer R, Stack EM: 2011. A customized scale for the measurement of taxpayers' perceptions. In **The proceedings of E-LEADER**, 6–8 June, Chinese American Scholars Association Inc., pp 1–29.

#### Marketing and Communication Management

#### Journal articles

- Shirin A, Puth G: 2011. Customer satisfaction, brand trust and variety seeking as determinants of brand loyalty. In African Journal of Business Management, 5(30), pp 11899–11915.
- Eita JH, Jordaan AC, Jordaan Y: 2011. An econometric analysis of the determinants impacting on businesses in the tourism industry. In **African Journal of Business Management**, 5(3), pp 666–675.
- Jordaan Y, Ehlers L, Grove JM: 2011. Advertising credibility across media channels: perceptions of Generation Y consumers. In Communicare: Journal for Communication Sciences in Southern Africa / Tydskrif vir Kommunikasiewetenskappe in Suider-Afrika, 30(1), pp 1–20.
- Rensburg RS, De Beer E: 2011. Stakeholder engagement: a crucial element in the governance of corporate reputation. In Communitas: Journal for Community Communication/ Joernaal vir Gemeenskapskommunikasie, 16(Nov), pp 151–169.
- Reyneke M, Berthon P, Pitt L: 2011. Luxury wine brand visibility in social media: an exploratory study. In **International Journal of Wine Business Research**, 23(1), pp 21–35.
- Reyneke M, Berthon P, Pitt L, Parent M: 2011. Luxury wine brands as gifts: ontological and aesthetic perspectives. In International Journal of Wine Business Research, 23(1), pp 258–270.

In the list of research outputs, in all cases the heading "Papers published" refers to papers in refereed, published conference proceedings, and the heading "Journal articles" refers to articles published in accredited, peer-reviewed, refereed specialist journals.

- Reyneke M, Sorokácová A, Pitt L: 2011. Managing brands in times of economic downturn: how do luxury brands fare?. In Journal of Brand Management, pp 1–10.
- De Beer E, Rensburg RS: 2011. Towards a theoretical framework for the governing of stakeholder relationships: a perspective from South Africa. In **Journal of Public Affairs**, 11(4), pp 208–225.
- Rensburg RS: 2011. Aspects of public relations, communication management and sustainable development: African reflections. In Journal of Public Affairs, 11(4), Wiley-Blackwell, pp 189–194.
- Maubane P, Van Rheede Van Oudtshoorn GP: 2011. An exploratory survey of professional accountant's perceptions of interpersonal communication in organisations. In Journal of Public Affairs, 11(4), pp 297–302.
- Fourie L, Du Plessis MN: 2011. The function of electoral communication in a developing democracy: the case of South Africa. In Journal of Public Affairs, 11(4), pp 255–264.
- Mersham G, Skinner C, Rensburg RS: 2011. Approaches to African communication management and public relations: a case for theory-building on the continent. In **Journal of Public Affairs**, 11(4), pp 195–207.
- Strasheim A: 2011. Testing the invariance of second-order confirmatory factor analysis models that includes means and intercepts. In Management Dynamics: Contemporary Research Journal of the Southern Africa Institute for Management Scientists, 20(4), pp 38–73.
- Ungerer L, Strasheim A: 2011. The moderating effect of living standards on the relationship between individuallevel culture and life satisfaction: a value segmentation perspective. In Management Dynamics: Contemporary Research Journal of the Southern Africa Institute for Management Scientists, 20(3), pp 25–50.
- Nieman-Struweg I, Grobler AF: 2011. South African marketing and communication agencies' understanding of integrated communication: a true reflection of the concept? In **PRism Online PR Journal**, 8(1).
- Nagel L, Kotzé TG: 2011. Choosing the best from blended and online e-learning. In **Progressio**, 33(2), pp 152–174.
- Van Tonder E, Ehlers L: 2011. Factors threatening the survival of independent financial advisers in their organisational life cycle: an exploratory study. In **South African Journal of Economic and Management Sciences**, 14(2), pp 153-169.

Holtzhausen T, Jordaan Y, North EJ: 2011. The portrayal of women in South African television commercials. In **Southern African Business Review**, 15(3), pp 167–183.

#### Papers published

- Coetzee RL, Wiese M: 2011. Does money really motivate sales representatives?. In 13th International Conference – GBATA: Fulfilling the worldwide sustainability challenge: strategies, innovations, and perspectives for forward momentum in turbulent times; Thirteenth Annual Conference, Global Business and Technology Association & EBSCO Publishing, pp 189–196.
- Van der Merwe MC, Potgieter D, Strasheim A: 2011. Influencers of clothing purchase decisions of young adults. In Fifth International Business Conference, Business School Partners Network, pp 213–226.
- Van der Merwe MC, Amade K: 2011. Irritants in the South African retail environment that influence young adult purchasing behaviour. In **Fifth International Business Conference,** Business School Partners Network, pp 159–168.
- Du Plessis GM, Barnard S, Pretorius M, Jordaan Y: 2011. What motivates consumers to visit the national zoological gardens of South Africa? In **The SAIMS 23rd Annual Conference: Finding a silver lining for business in the global economic and political dark clouds**, University of KwaZulu Natal, pp 720–738.
- Holtzhausen T, Jordaan Y, North EJ: 2011. The depiction of women in South African magazine advertisements. In **The SAIMS 23rd Annual Conference: Finding a silver lining for business in the global economic and political dark clouds**, University of KwaZulu Natal, pp 612–628.
- Kharwa F, Strasheim A: 2011. Online word of mouth advertising on social networking sites: exploring attitudes and behaviours. In The SAIMS 23rd Annual Conference: Finding a silver lining for business in the global economic and political dark clouds, University of KwaZulu Natal, pp 1–30.
- Van der Spuy A, Reyneke M, Strasheim A: 2011. The relationship between personality traits and facebook involvement – Using the TIPI model in a South African context. In **The SAIMS 23rd Annual Conference: Finding a silver lining for business in the global economic and political dark clouds**, University of KwaZulu Natal, pp 1–24.

Barry K, Van der Merwe MC, Kupresan V, Wiese M: 2011. The effect of ambient factors and service quality on customer satisfaction. In **The SAIMS 23rd Annual Conference: Finding** a silver lining for business in the global economic and political dark clouds, University of KwaZulu Natal, pp 1–22.

#### Economics

#### Journal articles

- Monkam N: 2011. Property tax administration in francophone Africa: structures, challenges and progress. In 2001 PLUS: Veille internationale (série A) Synthèse et Recherches (Série B).
- Eita JH, Jordaan AC, Jordaan Y: 2011. An econometric analysis of the determinants impacting on businesses in the tourism industry. In **African Journal of Business Management**, 5(3), pp 666–675.
- Gupta R: 2011. Growth effects of inflation targeting: the role of financial sector development. In **Annals of Economics and Finance**, 12(1), pp 55–77.
- Inglesi-Lotz R, Blignaut JN: 2011. South Africa's electricity consumption: a sectoral decomposition analysis. In **Applied Energy**, 88(12), pp 4779–4784.
- Bittencourt M: 2011. Is Copacabana still the 'little princess of the sea?'. In **CESifo Forum 2**, 2(1), pp 11–16.
- Zimper A: 2011. Do Bayesians learn their way out of ambiguity? In **Decision Analysis**, pp 1–17.
- Le Maitre D, Gaertner M, Marchante E, Ens EJ, Holmes PM, Pauchard A, O Farrell PJ, Rogers AM, Blanchard R, Blignaut JN, Richardson DM: 2011. Impacts of invasive Australian acacias: implications for management and restoration. In **Diversity and Distributions**, 17, pp 1015–1029.
- Naraidoo R, Raputsoane L: 2011. Optimal monetary policy reaction function in a model with target zones and asymmetric preferences for South Afirca. In **Economic Modelling**, 28(1–2), pp 251–258.
- Balcilar M, Gupta R, Shah ZB: 2011. An in-sample and out-of-sample empirical investigation of the nonlinearity in house prices of South Africa. In **Economic Modelling**, 28, pp 891–899.
- Gupta R, Kabundi A: 2011. Forecasting the US real house price index: structural and non-structural models with and without fundamentals. In **Economic Modelling**, 28, pp 2013–2021.

Inglesi-Lotz R: 2011. The evolution of price elasticity of electricity

demand in South Africa: A Kalman filter application. In **Energy Policy**, 39(6), pp 3690–3696.

- Cnossen S: 2011. A proposal to improve the VAT treatment of housing in the European Union. In **Fiscal Studies**, 32(4), pp 455–481.
- Gupta R, Kabundi A, Miller SM: 2011. Forecasting macroeconomic variables using large datasets: dynamic factor model vs large scale BVARs. In Indian Economic Review, 46(1), pp 23–40.
- Dasgupta B, Gupta R: 2011. The macroeconomic reform of demand for money in India. In **International Business and Economics Research Journal**, 10(10), pp 61–70.
- Gupta R: 2011. Currency substitution and financial repression. In International Economic Journal, 25(1), pp 47–61.
- Naraidoo R, Paya I: 2011. Forecasting monetary policy rules in South Africa. In **International Journal of Forecasting**, 28(2), pp 446–455.
- Gupta R, Kabundi A: 2011. A large factor model for forecasting macroeconomic variables in South Africa. International Journal of Forecasting, 27(4), pp 1076–1088.
- Jordaan AC: 2011. Analysing exports in SA's chemical sector: a panel data approach. In Journal for Studies in Economics and Econometrics/Studies in Ekonomie en Ekonometrie, 35(2), pp 95–112.
- Damoense MY, Jordaan AC: 2011. Trade patterns in the automobile industry: some evidence from SA. In **Journal of African Business**, 12(2), pp 154–177.
- Jooste C, Naraidoo R: 2011. Nonlinear tax elasticities and their implications for the structural budget balance. In Journal of Applied Business Research, 27(4), pp 113–125.
- Gupta R: 2011. Production lags of growth dynamics in an overlapping generations endogenous growth model. In Journal of Applied Business Research, 27(2), pp 13–18.
- O' Farrell PJ, De Lange WJ, Le Maitre D, Reyers B, Blignaut JN, Milton SJ, Atkinson D, Egoh B, Maherry A, Colvin C, Cowling RM: 2011. The possibilities and pitfalls presented by a pragmatic approach to ecosystem service valuation in an arid biodiversity hotspot. In **Journal of Arid Environments**, 75, pp 612–623.
- Das S, Gupta R, Kabundi A: 2011. Forecasting regional house price inflation: a comparison between dynamic factor models and vector autoregressive models. In **Journal of Forecasting**, 30(2), pp 288–302.

- Gupta R, Kabundi A, Miller SM: 2011. Using large data sets to forecast home prices: a case study of twenty US states. In **Journal of Housing Research**, 20(2), pp 161–190.
- Boateng A, Naraidoo R, Uddin M: 2011. An analysis of the inward cross-border mergers and acquisitions in the UK: a macroeconomic perspective. In Journal of International Financial Management and Accounting, 22(2), pp 91–113.
- Das S, Gupta R, Kanda P: 2011. Bubbles in South African house prices and their impact on consumption. In **Journal of Real Estate Literature**, 19(1), pp 71–92.
- Inglesi-Lotz R, Pouris A: 2011. Scientometric impact assessment of a research policy instrument: the case of rating researchers on scientific outputs in South Africa. In **Scientometrics**, 88(3), pp 747–760.
- Reyers M, Gouws DG, Blignaut JN: 2011. An exploratory study of motivations driving corporate investment in voluntary climate change mitigation in South Africa. In **South African Journal of Economic and Management Sciences**, 14(1), pp 92–108.
- Inglesi-Lotz R, Blignaut JN: 2011. Estimating the price elasticity of demand for electricity by sector in South Africa. In **South African Journal of Economic and Management Sciences**, 14(4), pp 449–465.
- Rossouw JJ, Padayachee V, Bosch A: 2011. A comparison of inflation expectation and inflation credibility in South Africa. In South African Journal of Economic and Management Sciences, 14(3), pp 263–281.
- Akanbi OA: 2011. The macroeconomic determinants of technological progress in Nigeria. In South African Journal of Economic and Management Sciences, 14(3), pp 282–297.
- Koch SF, Slabbert JD: 2011. An analysis of specialist surgeons and their practices. In **South African Journal of Economic and Management Sciences**, 14(3), pp 245–262.
- Jordaan AC, Kanda P: 2011. Analysing the trade effects of the EU-SA and SADC trading agreements: a panel data approach. In **South African Journal of Economic and Management Sciences**, 14(2), pp 229–244.
- Ngalawa H, Viegi N: 2011. Dynamic effects of monetary policy shocks in Malawi. In South African Journal of Economics/Suid-Afrikaanse Tydskrif vir Ekonomie, 79(3), pp 224–250.



Prof Stella Nkomo is Head of the Department of Human Resource Management. Her work on race and gender, and managing diversity is recognised internationally. Her current research projects include a study of cultural values in leadership in South Africa and how multicultural women become authentic leaders. In 2008 she was selected as one of 100 distinguished global thought leaders from business, education and government to participate in the Society for Human Resource Management's Leadership Summit on Diversity and Inclusion, held in Washington DC.

#### Chapters in books

Franzsen RCD: 2011. The valuation and rating of sectionaltitle property in terms of the municipal property rates act. In Essays in honour of CG Van der Merwe, LexisNexis, pp 331–354.

#### Papers published

Damte A, Koch SF: 2011. Covariates of fuel saving technologies in urban Ethiopia. In World Renewable Energy Congress: 2011, Linköping University Electronic Press, Linköpings University, pp 1046–1053.

#### Financial Management

#### Journal articles

- De Wet JHvH, Erasmus Y: 2011. Indicators of financial success: Similar studies in South Africa and the USA, different results. In Acta Commercii, 11(Nov), pp 147–170.
- Cronje JJL, De Beer JS: 2011. Share pricing of South African banking groups importance of efficiency and earnings per share. In **Corporate Ownership & Control**, 8(1), pp 679–688.
- Musvuto S W, Gouws DG: 2011. Rethinking the going concern assumption as a pre-condition for accounting measurement. In International Business and Economics Research Journal, 10(4), pp 31–44.
- Reyers M, Gouws DG, Blignaut JN: 2011. An exploratory study of motivations driving corporate investment in voluntary climate change mitigation in South Africa. In **South African Journal of Economic and Management Sciences**, 14(1), pp 92–108.
- Khomba J.K, Vermaak FNS, Gouws DG: 2011. Redisigning an innovation section of the Balanced Scorecard model: An African perspective. In Southern African Business Review, 15(3), pp 1–20.
- Cronje CJ, Gouws DG: 2011. Commonality between the preparer and the user of financial information as a prerequisite for conveying meaning. In **Southern African Business Review**, 15(2), pp 43–58.

#### Human Resources Management

- Havenga W, Stanz K J, Visagie J: 2011. Evaluating the difference in employee engagement before and after business and cultural transformation interventions. In African Journal of Business Management, 5(22), pp 8804–8820.
- Du Plessis Y: 2011. Cultural Intelligence as Managerial Competence. In Alternation: International Journal for the Study of Southern African Literature and Languages, 18(1), pp 28–46.
- Valchev VH, Van De Vijver FJR, Nel JA, Rothmann S, Meiring D, De Bruin GP: 2011. Implicit personality conceptions of the Nguni Cultural-Linguistic groups of South Africa. In **Cross-Cultural Research**, 45(3), pp 235–266.

- Du Plessis Y: 2011. Exploring teamwork paradoxes challenging 21st century cross-cultural conflict management in a multicultural organizational context. In **International Journal of Cross Cultural Management**, pp 1–23.
- Nkomo SM, Kriek D: 2011. Leading organizational change in the 'new' South Africa. In Journal of Occupational and Organizational Psychology, 84, pp 453–470.
- Jonker C, Van der Merwe A, Fontaine J, Meiring D: 2011. The Meaning of Emotion in the White Afrikaans Language Group: A Componential Emotion Theory Approach. In **Journal of Psychology in Africa**, 21(4), pp 555–563.
- Smit M, Brand HE: 2011. Managers' perspectives on accommodating deaf individuals within the automotive manufacturing industry: a qualitative study. In **Occupational Health Southern Africa**, 17(5), pp 22–28.
- Nkomo SM: 2011. A postcolonial and anti-colonial reading of 'African' leadership and management in organization studies: tensions, contradictions and possibilities. In Organization: The Interdisciplinary Journal of Organization, Theory and Society, 18(3), pp 365–386.
- Van Rensburg H, Basson JS, Carrim NMH: 2011. The establishment and early history of the South African Board of People Practices (SABPP), 1977-1991. In SA Journal of Human Resource Management, 9(1), pp 1–12.
- Ramsey M, Barkhuizen EN: 2011. Organisational design elements and competencies for optimising the expertise of knowledge workers in a shared services centre. In **SA Journal of Human Resource Management**, 9(1), pp 1–15.
- Derman L, Barkhuizen EN, Stanz K J: 2011. The validation of a measure of organisational energy in the South African context. In **SA Journal of Human Resource Management**, 9(1), pp 308–319.
- Van Rensburg H, Basson JS, Carrim NMH: 2011. Human Resource Management as a profession in South Africa. In SA Journal of Human Resource Management, 9(1), pp 336–350.
- Schaap P: 2011. The differential item functioning and structural equivalence of a nonverbal cognitive ability test for five language groups. In SA Journal of Industrial Psychology/ Tydskrif Vir Bedryfsielkunde, 37(1), pp 1–16.
- Joubert Y.T, De Beer JJ: 2011. Benefits of team sport for organisations. In South African Journal for Research in Sport, Physical Education and Recreation/Suid-Afrikaanse Tydskrif vir Navorsing in Sport, Liggaamlike Opvoedkunde en Ontspaning, 33(3), pp 59–72.

# Ms Estelle de Beer



Ms Estelle de Beer is a member of the Department of Marketing and Communication Management. Her research interests lie in strategic communication management, stakeholder relationship management, corporate strategy, corporate governance and corporate reputation, and she is a founding member of the Centre for Communication and Reputation Management. She was part of the research team for the King III Report on Governance for South Africa, and still serves on the Compliance and Stakeholder Relationships Committee of the King Committee. She is currently working towards a PhD on the role of corporate communication in corporate governance, sustainability and corporate strategy.

- Potgieter I, Basson JS, Coetzee M: 2011. Management competencies for the development of heads of department in the higher education context: a literature overview. In **South African Journal of Labour Relations**, 35(1), pp 81–103.
- Nkomo SM:2011. Moving from the letter of the law to the spirit of the law: the challenges of realising the intent of employment equity and affirmative action. In **Transformation**, 77(Dec), pp 132–145.

#### **Business Management**

- Botha M, Nyanjom M: 2011. Corporate entrepreneurship orientation and the pursuit of innovating opportunities in Botswana. In **Acta Commercii**, 11, pp 30–44.
- Antonites AJ, Haguma JJ: 2011. Assessing the innovative nature of the agricultural based small businesses in Rwanda - The case study of the coffee industry. In **African Journal of Agricultural Research**, 6(3), pp 575–770.
- Antonites AJ, Mungoni EM: 2011. Obstacles to the Entrepreneurial Start-Up Process in Zimbabwe: A Dynamic Market Perspective. In **Business Review, Cambridge**, Dec.
- Maritz R, Pretorius M, Plant K: 2011. Exploring the interface between strategy-making and responsible leadership. In Journal of Business Ethics, 98(Jun), pp 101–113.
- Pretorius M, Maritz R: 2011. Strategy making: the approach matters. In Journal of Business Strategy, 32(4), pp 25–31.
- Groenewald D, Van Vuuren JJ: 2011. Conducting a corporate entrepreneurial health audit in South African short term insurance businesses. In Journal of Contemporary Management, 8, pp 1–33.
- Pretorius M, Le Roux I: 2011. Successive failure, repeat entrepreneurship and no learning: A case study. In **SA Journal** of Human Resource Management, 9(1), pp 236–249.
- Lombard A, Strydom R: 2011. Community development through social entrepreneurship. In **Social Work Practitioner-Researcher/ Maatskaplikewerk Navorser-Praktisyn**, 23(3), pp 327–344.
- Chinomona R, Pretorius M: 2011. SME manufacturers' cooperation and dependence on major dealers' expert power in distribution channels. In **South African Journal of Economic and Management Sciences**, 14(2), pp 170–187.
- Antonites AJ, Kliphuis W: 2011. An exploratory study on the potential value add of social networking to the entrepeneurial process. In **Southern African Journal of Entrepreneurship and Small Business Management**, 4, pp 1–23.
- Dhliwayo S, Van Vuuren JJ, Fletcher L: 2011. The practice of strategic planning and corporate entrepreneurship in South African public companies. In **Southern Journal of Entrepreneurship**, 4(2), pp 46–67.
- Pretorius M, Le Roux I: 2011. A reality check for corporate leaders: when managers don't respect their bosses. In **Strategy and Leadership**, 40(1), pp 40–44.

## Mr Sam Koma



Mr Sam Koma is a member of the School of Public Management and Administration. He is a reputable expert, trainer and management consultant in public management and governance programmes, and has facilitated training to over 5 000 participants drawn from the public and private sectors. He specialises in local economic development, corporate governance, local government and public policy analysis. He has delivered various conference papers at both international and national conferences and his research articles have appeared in scientific journals based in South Africa and abroad. He was recently awarded a merit bursary by the NRF for the completion of his PhD.

#### Papers published

- Le Roux I: 2011. New large class pedagogy: developing student's whole brain thinking skills. In **3rd World Conference on Educational Sciences**, Elsevier, pp 426–435.
- Moos MN, Nieman GH, Wamala S: 2011. The nature of networking by small and medium enterprises: a study of the service sector in Swaziland. In **The SAIMS 23rd Annual Conference: Finding a silver lining for business in the global economic and political dark clouds**, University of KwaZulu Natal, pp 1–34.

#### Accounting

#### Journal articles

- Coetzee CM, Van Staden CJ: 2011. Disclosure responses to mining accidents: South African evidence. In Accounting Forum, 35(4), pp 232–246.
- Schmulian A, Coetzee SA: 2011. Class absenteeism: reasons for non-attendance and the effect on academic performance. Accounting Research Journal, 24(2), pp 178–194.
- Myburgh JE: 2011. Emotional Intelligence: the Role of Accounting Education and Work Experience. In Issues in Accounting Education, 26(2), pp 267–286.
- Ferreira PH, De Villiers CJ: 2011. The association between South African listed companies' BEE scores and market performance An introductory study. In Meditari: Accountancy Research, 19(1/2), pp 22–38.
- Van Zyl JPC, De Villiers CJ: 2011. Why some students choose to become chartered accountants (and others do not). In **Meditari: Accountancy Research**, 19(1/2), pp 56–74.
- Watson SA: 2011. Conflict diamonds, legitimacy and media agenda: an examination of annual report disclosures. **Meditari: Accountancy Research**, 19 (1/2), pp 94-111.

#### Papers published

Gerber MC, Gerber A, Van der Merwe AJ: 2011. Using formal Ontologies for the development of consistent and unambiguous Financial Accounting Standards. In Proceedings of the International Conference on Knowledge Engineering and Ontology Development, 26-29 Oct, SciTePress, pp 419–424.

#### School of Public Management and Administration

- Fourie DJ: 2011. Adjusting good governance architecture to achieve public service excellence. In Administratio Publica, 19(3), pp 154–166.
- Van Dijk HG, Thornhill C: 2011. An undergraduate curriculum analysis of Public Administration in selected higher

education institutions. In Administratio Publica, 19(1), pp 3–18.

- Thornhill C, Madumo OS: 2011. The utilisation of ward committees as an effective tool for improving service delivery: a case study. In Administratio Publica, 19(2), pp 129–144.
- Brynard PA, Netshikhopani AF: 2011. Educator training challenges in implementing the National Curriculum Statement Policy. In African Journal of Public Affair, 4(3), pp 60–72.
- Brynard PA, Musitha ME: 2011. The role of traditional authorities in the implementation of Integrated Development Planning Policy in Vhembe District Municipality, Limpopo Province. In African Journal of Public Affairs, 4(3), pp 113–122.
- Fourie DJ, Whittle CE: 2011. Managerial capacity as a prerequisite for fiscal decentralisation. In African Journal of Public Affairs, 4(3), pp 99–112.
- Thornhill C, Matshego MC: 2011. Effectiveness in policy administration: The case of the LRAD programme in the North West Province of Sout Africa. In African Journal of Public Affairs, 4(3), pp 123–134.
- Kuye JO, Cedras J: 2011. Dialogue between the ANC, COSATU and the SACP: the impact on leadership, governance and public policy in South Africa. In **African Journal of Public Affairs**, 4(3), pp 73–84.
- Brynard PA: 2011. The implementation of unemployment policies in South Africa. In African Journal of Public Affairs, 4(2), pp 67–78.
- Fourie DJ, Kakumba U: 2011. Assessing the role and capacity of civil society organisations in holding local government accountable in Uganda. In African Journal of Public Affairs, 4(2), pp 54–66.
- Tshiyoyo MM, Koma SB: 2011. Local government public service delivery in Africa: a comparative perspective. In African Journal of Public Affairs, 4(2), pp 119–130.
- Kuye JO, Nhlapo V: 2011. Role of civil society in the implementation of poverty alleviation programmes: a case for social development in South Africa. In African Journal of Public Affairs, 4(2), pp 89–104.
- Croucamp P, Malan LP: 2011. Political risk assessment for South Africa with reference to the public discourse on the nationalisation of mines. In African Journal of Public Affair, 4(2), pp 150–165.

Kuye JO, Peet M: 2011. Globalisation and the Napadisation

of standards and protocols: an African perspective to create and maintain a supportive technical infrastructure capacity. In African Journal of Public Affairs, 4(2), pp 131–149.

- Thornhill C: 2011. The role of the Public Protector: case studies in public accountability. In African Journal of **Public Affairs**, 4(2), pp 79–88.
- Brynard PA: 2011. Policies and poverty in Southern Africa. In African Journal of Public Affairs, 4(1), pp 148–159.
- Tshiyoyo MM: 2011. Civil service in the Democratic Republic of the Congo. In African Journal of Public Affairs, 4(1), pp 103–113.
- Omotoye AMT, Malan LP: 2011. Conceptualising labour turnover and retention management in the Senior Management Service. In African Journal of Public Affairs, 4(1), pp 160–169.
- Thornhill C: 2011. Spheres of government: contributions to sustainable service delivery. In African Journal of Public Affairs, 4(1), pp 45–57.
- Van Dijk HG, Moeng JK: 2011. Profiling the Success in Land Reform: Cases of South African women doing it for themselves. In African Journal of Public Affairs, 4(1), pp 114–129.
- Fourie DJ, Schoeman L: 2011. Post-NPM and Governance redefined: instituting a whole-of-government ethos to restore growth in the South African Public Finance. In African Journal of Public Affairs, 4(1), pp 186–198.
- Kuye JO: 2011. Leadership and Governance imperatives in a Developmental State: the debate for a public policy dialogue. In **African Journal of Public Affairs**, 4(1), pp 170–185.

#### Auditing

- Coetzee GP, Lubbe DS: 2011. Internal audit and risk management in South Africa: Adherence to guidance. In Acta Academica, 43(4), pp 29–60.
- Maritz R, Pretorius M, Plant K: 2011. Exploring the interface between strategy-making and responsible leadership. In Journal of Business Ethics, 98(Jun), pp 101–113.
- Odendaal EM, De Jager H: 2011. Registered Auditors' perceptions of independent reviews. In **Southern African**

# Prof Ronél Rensburg



Prof Ronél Rensburg is a member of the Department of Marketing and Communication Management and Director of the Centre for Communication and Reputation Management, an institute for integrated communication in southern Africa. The Centre is devoted to disseminating marketing and communication knowledge, regulation, research, consultation, training and mentoring. She is President of the Public Relations Institute of Southern Africa (PRISA), and has contributed significantly to many public relations organisations and institutes. She coordinates international exchange activities and collaboration initiatives for the Faculty, and is a board member of the Global Alliance for Public Relations and Communication Management.

Journal of Accountability and Auditing Research, 12, pp 13–24.

- Odendaal EM, De Jager H: 2011. Independent reviews: perceptions of Chartered Accountants (South Africa). In Southern African Journal of Accountability and Auditing Research, 12, pp 25–36.
- Odendaal EM, De Jager H: 2011. Registered Government Auditors' perceptions of independent reviews. In **Southern African Journal of Accountability and Auditing Research**, 12, pp 37–47.

- Janse Van Rensburg JO, Coetzee GP: 2011. Elements of the internal audit capability model addressed by South African public sector legislation and guidance. In **Southern African Journal of Accountability and Auditing Research**, 11, pp 47–62.
- Odendaal EM, De Jager H: 2011. Independent review of company financial statements. In **Southern African Journal of Accountability and Auditing Research**, 12, pp 3–12.

#### Papers published

- Coetzee GP, Lubbe DS: 2011. The risk maturity of South African private and public sector organisations. In Conference proceedings of the 2011 Biennial Conference of the Southern African Accounting Association – SAAA International Conference, CIMA.
- Kirstein M, Plant K: 2011. Action research in audit education: South African teachers' perspectives. In Conference proceedings of the 2011 Biennial Conference of the Southern African Accounting Association – SAAA International Conference, CIMA.

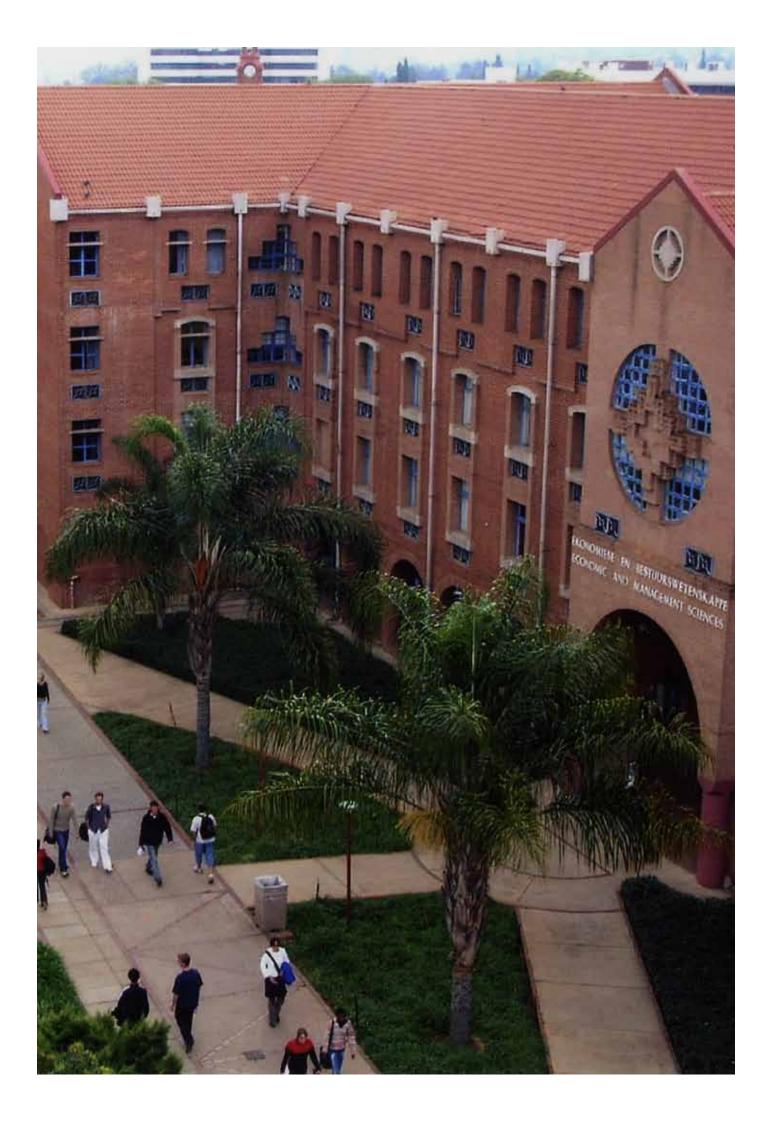
#### **Tourism Management**

#### Journal articles

- Lubbe BA, Douglas A, Zambellis J: 2011. An application of the airport service quality model in South Africa. Journal of Air Transport Management, 17, pp 224-227.
- Heath ET, Ndlovu J: 2011. Destination Branding in Zimbabwe: from Crisis to Recovery. **Tourism Analysis**, 16, pp 87-97.

#### Papers published

Francis CV: 2011. Ubuntu: The Foundation for sustainable tourism development amongst local communities in Southern Africa. In **Ubuntu Conference**, (1), Moses Kotane Institute, pp 43-56.





Prof Irma Eloff Dean



Some of the best educational researchers on the continent of Africa make the Faculty of Education at the University of Pretoria their home. Consequently, this Faculty is where you will find leading studies on effective schools, resilience, positive psychology, school governance, education law, academic writing interventions, mathematics education, early childhood education, life design, the literacy levels of South African children and life sciences education. The footprint of the Faculty's research extends well beyond South African borders, with regional studies in Botswana, Kenya, Zimbabwe and other African countries. During 2011, the Faculty of Education increased its number of NRF-rated researchers, with an additional five researchers receiving NRF ratings. These were Prof Saloshna Vandeyar, Prof Venitha Pillay, Prof Jan Nieuwenhuis, Prof Adelia Carstens and Dr Vanessa Scherman. This was also a year of awards for researchers in the Faculty: Dr Carien Lubbe-De Beer won the award of the Education Association of South Africa (EASA) for Emerging Researcher and Prof Saloshna Vandeyar won the American Education Research Association (AERA), Division K (Teaching and Teacher Education) mid-career award.

#### Research entities

#### Centres

- Joint Centre for Mathematics, Science and Technology Education (JCMSTE)
- Centre for Educational Law and Policy (CELP)
- Centre for Evaluation and Assessment in Education Units
- Unit for Educational Research on Aids

The Faculty launched new book publications and two new reading series in 2011. The *Early Childhood Reading Series* by Dr Ina Joubert, Dr Nkidi Phatudi and Annalie Botha is published by Oxford University Press. The *Spot On Reading Series* by Dr Nkidi Phatudi is written in Setswana and Sepedi and published by Heinemann. The books published by members of the Faculty included *Vuvuzela Afrikaans* by Dr Alta Engelbrecht and Dina Cloete, as well as the scholarly book *Hyphenated selves* by Prof Saloshna Vandeyar. Three instruments for the assessment of Mathematics, namely Study Orientation for Mathematics, the Basic Mathematics Questionnaire and the Mathematics Vocabulary, Primary, have been acquired by universities in Portugal and are being translated into Portuguese. These questionnaires were designed and standardised by Prof Kobus Maree.

The international ties of the Faculty were strengthened even further in 2011. Most prominently, Prof Johan Beckmann was appointed as Adjunct (Honorary) Professor to the National Training Centre for Secondary School Principals of the Chinese National Ministry of Education at East China Normal University. Prof Liesel Ebersöhn was invited as visiting scholar to the Edith Cowan University in Australia. She has also been nominated to a task team for worldwide research problems in education – working with Dr Carol D Lee from Northwestern University in Chicago and Michael Nettles, the Senior Vice-president of the Policy Evaluation and Research Centre. Dr Mia Abrie and Erik Eberlein were invited as visiting scholars to the North Eastern Normal University (NENU) in China. Prof Venitha Pillay was invited to collaborate on an international study on women academics in India, Brazil and South Africa. Prof Kobus Maree worked on a project on the development of a framework for the implementation of psychometric tests in the Ministry of Education in Botswana.

The Faculty of Education has long-term collaborative partnerships with various international institutions: Yale University (USA), the University of Durham (UK), the University of Dortmund (Germany), the University of Hamburg (Germany), the universities of Groningen and Twente (Netherlands), Boston College (USA), the University of Nebraska-Lincoln (USA), Antioch University (USA), Concordia University (Canada), Fordham University (USA), the University of Florence (Italy), Edith Cowan University (Australia), the Open University (UK), North Carolina State University (USA), Newcastle University (Australia), the University of Basel (Switzerland) and the University of Education Mondlane (Mozambique). In 2011, Fulbright scholars from a variety of fields joined the Faculty of Education. Dr David Thomas (Mathematics Education) joined the Faculty for a one-year period. His work includes the improvement of the way in which Mathematics is taught by using technology. Three Fulbright scholars who focus on English and academic writing also joined the Faculty in 2011. Geordie Brackin from Vanderbilt University, Max Cuddy from Temple University and Muriel Bird from Fordham University spent time on the Groenkloof Campus, as well as the Mamelodi Campus, to support undergraduate students with academic writing. They were joined by Cheryl Logan, who worked in the Faculty of Education as a visiting English language fellow.

The Faculty is home to the editorial office of the ISI-listed academic journal, the *South African Journal of Psychology*, led by Prof Kobus Maree as editor in chief. The esteemed accredited journal, the *South African Journal of Education*, with Prof Liesel Ebersöhn as editor, is also housed in the Faculty of Education.

The Faculty of Education at the University of Pretoria is fully committed to growing the exceptional talent of young people and researchers in education. It is embracing the many challenges of educational research with a strong focus on educational effectiveness.

#### Prof Irma Eloff

Dean: Education Tel: 012 420 3513 Email: irma.eloff@up.ac.za

## Faculty Research Output

#### Unit for Distance Education

#### Journal articles

Aluko FR, Hendrikz J, Fraser WJ: 2011. Transactional distance theory and total quality management in open and distance learning. In Africa Education Review, 8(1), pp 115–132.

#### Papers published

Hendrikz J, Aluko FR: 2011. ICT realities in developing context and its impact on social justice. In The Fourteenth Cambridge International Conference on Open, Distance and e-Learning 2011: Internationalisation & Social Justice: The role of Open, Distance & e-Learning, The Open University, pp 47–54.

#### Science, Mathematics and Technology Education

#### Journal articles

- Aluko FR, Hendrikz J, Fraser WJ: 2011. Transactional distance theory and total quality management in open and distance learning. In **Africa Education Review**, 8(1), pp 115–132.
- De Villiers JJR: 2011. Ethical care and use of animals for educational purposes: A challenge for science teachers. In African Journal of Research in Mathematics, Science and Technology Education, 15(1), pp 92–104.
- De Villiers JJR: 2011. South African teachers as mobile knowledge workers in a global labour market. In Anthropologist: International journal of contemporary and applied studies of man, In Globel mobility and migration of teachers, 8(5), pp 53–60.
- Stols GH, Kriek J: 2011. Why don't all maths teachers use dynamic geometry software in their classrooms? In **Australasian** Journal of Educational Technology, 27(1), pp 137–151.

- Long C, Wendt H, Dunne T: 2011. Applying Rasch measuremnet in Mathematics education research: steps towards a triangulated investigation into proficiency in the multiplicative conceptual field. In **Educational Research and Evaluation**, 17(5) pp 387–405.
- Zimmerman L, Howie SJ, Smit B: 2011. Time to go back to the drawing board: organisation of primary school reading development in South Africa. In Educational Research and Evaluation, 17(4), pp 215–232.
- Howie SJ, Kuparri Pekk, Goy M, Wendt H, Bos W: 2011. Rasch measurement in educational context, Special issue1: Rasch modelling in educational testing. In Educational Research and Evaluation, 17(5), pp 301–306.
- Scherman V, Howie SJ, Bosker RJ: 2011. Constructing benchmarks for monitoring purposes: evidence from South Africa. In Educational Research and Evaluation, 17(6), pp 511–525.
- Vandeyar S, Vandeyar T: 2011. Articulating cultures: Sociocultural experiences of black female immigrant students in South African schools. In **Gender & Behaviour**, 9(2), pp 4161–4188.
- Bernitz H, Bernitz Z, Steenkamp G, Blumenthal R, Stols GH: 2011. The individualisation of a dog bite mark: a case study highlighting the bite mark analysis, with emphasis on differences between dog and human bite marks. In International Journal of Legal Medicine, May, Online.
- Rauscher WJ: 2011. The technological knowledge used by technology education students in capability tasks. In International Journal of Technology and Design Education, 21(3), pp 291–303.
- Summers CA, Maseko RB, Beebeejaun BMP, Summers G J: 2011. Synthesis of aromatic Oxazolyl- and Carboxyl-functionalized polymers: atom transfer radical polymerization of styrene initiated by 2-[(4-Bromomethyl)phenyl]-4,5dihydro-4,4-dimethyloxazole. In Journal of Polymer Science Part A-Polymer Chemistry, 49, pp 2601–2614.
- Mogari D, Kriek J, Stols GH, Iheanachor OU: 2011. Lesotho's Students' Achievement in Mathematics and their Teachers' Background and Professional Development. In **Pythagoras:** Journal of the Association for Mathematics Education of South Africa, 70, pp 3–15.

In the list of research outputs, in all cases the heading "Papers published" refers to papers in refereed, published conference proceedings, and the heading "Journal articles" refers to articles published in accredited, peer-reviewed, refereed specialist journals.

- De Villiers JJR: 2011. Student teachers' views: what is an interesting Life Sciences curriculum? In South African Journal of Education/Suid-Afrikaanse Tydskrif vir Opvoedkunde, 31(4), pp 535–545.
- Books S, De Villiers JJR: 2011. Teachers shortages in the U.S. and the politics of recruiting abroad. In **Teachers College Record**, Sep, pp 1–3.

#### Chapters in books

Vandeyar S, Vandeyar T: 2011. The constitution, negotiation and representation of immigrant student identities in South African schools. In Hyphenated Selves: Immigrant identities within Education Contexts, Rozenberg Publishers/Unisa Press, pp 9–30.

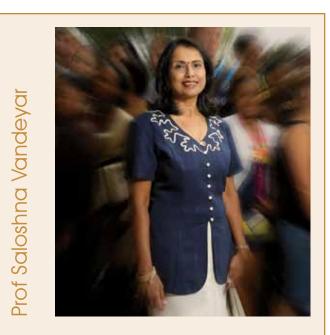
#### Papers published

- De Villiers JJR: 2011. First year students' experiences of the Grade 12 Life Sciences curriculum - trend setters or guinea-pigs? In Proceedings of the Nineteenth Annual Meeting of the South African Association for Research in Mathematics, Science and Technology Education, pp 343–354.
- Long C, Dunne T: 2011. The multiplicative conceptual field: What have we learnt in 30 years? In Proceedings of the Nineteenth Annual Meeting of the South African Association for Research in Mathematics, Science and Technology Education, pp 163–172.
- Stols GH: 2011. The gap between the implemented and intended Grade 10 to 12 mathematics curriculum. In **Proceedings of the Seventeenth National Congress of the Association for Mathematics Education of South Africa**, pp 93–109.

#### Education Management and Policy Studies

#### Journal articles

- Nieuwenhuis FJ: 2011. Social justice in education today. In Acta Academica, 43(1), pp 189–210.
- Herman C: 2011. Expanding doctoral education in South Africa: pipeline or pipedream? In **Higher Education Research & Development**, 30(4), pp 505–517.
- Akoojee S, Nkomo M: 2011. Widening equity and retaining efficiency: Considerations from the IBSA southern coalface.



Prof Saloshna Vandeyar is a member of the Department of Humanities Education. Her specialist areas encompass education and diversity, teacher professionalism and assessment practices. She is particularly interested in the implications of teacher and student identities in constructing classrooms inclusive of racial, linguistic and ethnic identities and in promoting intercultural and social justice education. She received the Education Association of South Africa Research Medal 2011, and the National Science and Technology Forum Award in 2007 in the category Senior Black Researcher. One of her papers, published in an international journal, was nominated for the Joyce Cain Award in 2009.

In International Journal of Educational Development, 31, pp 118–125.

- Pillay V: 2011. White women speak, black women write: the politics of locution and location in the other researching the not other. In International Journal of Qualitative Studies in Education, 24(6), pp 657–672.
- Mahlangu VP: 2011. Power struggle between Government and the Teacher Unions in South Africa. In Journal of Emerging Trends in Educational Research and Policy Studies, 2(5), pp 365–371.

- Mahlangu VP: 2011. Dilemma of School Districts in Managing Career Counseling in South Africa. In Journal of Emerging Trends in Educational Research and Policy Studies, 2(4), pp 239–245.
- Beckmann JL: 2011. Parent Participation in School Governance: A Legal Analysis of Experiences in South Africa and Kentucky. In **Journal of School Public Relations**, 32(4), pp 349–378.
- Joubert HJ, Van Rooyen JW: 2011. Educational Reform in South Africa: Decentralization and Parent Engagement. In Journal of School Public Relations, 32(Dec), pp 300–324.
- Herman C: 2011. Obstacles to success doctoral students attrition in South Africa. In **Perspectives in Education**, 29(3), pp 40–52.
- Omidire MF, Bouwer AC, Jordaan JC: 2011. Addressing the assessment dilemma of additional language learners through dynamic assessment. In **Perspectives in Education**, 29(2), pp 48–60.
- Tjabane M, Pillay V: 2011. Doing justice to social justice in South African higher education. In **Perspectives in Education**, 29(2), pp 10–18.
- Sehoole MT: 2011. Student mobility and doctoral education in South Africa. In **Perspectives in Education**, 29(3), pp 53–63.
- Bipath K: 2011. From a dysfunctional to a functional school. In Principal Matters: Journal for Secondary School Leaders in Australia, 89, pp 47–48.
- Yu K, Pillay V: 2011. Tracking enrolments and graduations in humanities education in South Africa : are we in crisis? In South African Journal of Higher Education, 25(6), pp 1219–1232.
- Beckmann JL: 2011. Onderwys in Suid-Afrika Van 1961-2011: Tussen twee paradigmas en ontwykende ideale. In **Tydskrif vir Geesteswetenskappe**, 51(4), pp 507–532.

#### Papers published

- Nieuwenhuis FJ: 2011. Exploring Students' understanding of values and moral reasoning. In **Distance Education and Teachers' Training in Africa 2009 Conference Proceedings**, Unit for Distance Education, University of Pretoria: University of Cape Coast Ghana & University of Education, Winneba, Ghana, pp 117–136.
- Joubert HJ: 2011. Principals as the professional managers of teaching and learning in their schools: Policy and Practice. In Proceedings of the 6th Annual ISER Conference South Africa 2010: Effective Schools in Effective Systems, ISER, pp 33–46.

Mahlangu VP: 2011. What kind of professional development

do teachers need in their training? In **Proceedings of the 6th Annual ISER Conference South Africa 2010: Effective Schools in Effective Systems**, ISER, pp 47–56.

- Mampane ST: 2011. Effective appointment of teachers in South African Public Schools: do equity and representivity matter? In **Proceedings of the 6th Annual ISER Conference South Africa 2010: Effective Schools in Effective Systems**, ISER, pp 57–71.
- Ogina TA: 2011. Teachers as care-givers: Managing the needs of orphaned children. In **Proceedings of the 6th Annual ISER Conference South Africa 2010: Effective Schools in Effective Systems**, ISER, pp 72–87.
- Nieuwenhuis FJ: 2011. The use of reflective journalling to determine the training needs of school principals. In Proceedings of the 6th Annual ISER Conference South Africa 2010: Effective Schools in Effective Systems, ISER, pp 135–153.
- Bipath K: 2011. Cross Racial Principal Mentorship at the University of Pretoria. In Proceedings of the 6th Annual ISER Conference South Africa 2010: Effective Schools in Effective Systems, ISER, pp 154–170.
- Mashele E, Sehoole MT: 2011. Districts as Nodes of Service Delivery in Mpumalanga Department of Education. In Proceedings of the 6th Annual ISER Conference South Africa 2010: Effective Schools in Effective Systems, ISER, pp 171–181.
- Sebidi SD, Sehoole MT: 2011. Analysis of Service Delivery under Decentralised and Recentralised Models of Education Administration. In **Proceedings of the 6th Annual ISER Conference South Africa 2010: Effective Schools in Effective Systems**, ISER, pp 211–228.

#### Educational Psychology

- Human-Vogel S, Coetzee S: 2011. Challenges associated with ethics review of educational research at a South African university. In Acta Academica, 43(2), pp 165–192.
- Ferreira R, Ebersöhn L: 2011. Formative evaluation of the STAR intervention: improving teachers' ability to provide psychosocial support for vulnerable individuals in the school community. In African Journal of AIDS Research, 10(1), pp 63–72.
- Scherman V, Howie SJ, Bosker RJ: 2011. Constructing benchmarks for monitoring purposes: evidence from South

Africa. In **Educational Research and Evaluation**, 17(6), pp 511–525.

- Van Schalkwyk (Oosthuizen) L, Bouwer AC: 2011. Homeschooling: heeding the voices of leaners. In **Education as Change**, 15(2), pp 179–190.
- Ebersöhn L, Ferreira R: 2011. Coping in an HIV/AIDS-dominated context: teachers promoting resilience in schools. In **Health** Education Research, 26(4), pp 596–613.
- Maree JG, Van der Westhuizen CN: 2011. Profession of Counseling in South Africa: A Landscape under Construction. In **Journal** of Counseling and Development, 89(1), pp 105–112.
- Maree JG, Mutshaeni HN, Engelbrecht JC, Sommerville JEM: 2011. An analysis of factors influencing Grade 12 results. In **Journal of Educational Studies**, 10(1), pp 122–143.
- Mohangi K, Ebersöhn L, Eloff I: 2011. 'I am doing okay': Intrapersonal coping strategies of children living in an institution. In Journal of Psychology in Africa, 21(3), pp 397–404.
- Maree JG, Hancke Y: 2011. The Value of Life Design Counselling for an Adolescent who Stutters. In **Journal of Psychology in Africa**, 21(3), pp 479–486.
- Maree JG, Hansen E: 2011. Identifying and Dealing with the Adaptability Needs of an Unwed Pregnant Teenager. In Journal of Psychology in Africa, 21(2), pp 211–228.
- Kitching A, Roos V, Ferreira R: 2011. Ways of Relating and Interacting in School Communities: Lived Experiences of Learners, Educators and Parents. In Journal of Psychology in Africa, 21(2), pp 245–256.
- Omidire MF, Bouwer AC, Jordaan JC: 2011. Addressing the assessment dilemma of additional language learners through dynamic assessment. In **Perspectives in Education**, 29(2), pp 48–60.
- Wium AM, Louw B, Eloff I: 2011. Evaluation of a programme to support foundation-phase teachers to facilitate literacy. South African Journal of Communication Disorders, 58(2), pp 72–78.
- Mampane MR, Bouwer AC: 2011. The influence of township schools on the resilience of their learners. South African Journal of Education/Suid-Afrikaanse Tydskrif vir Opvoedkunde, 31(1), pp 114–126.
- Maree JG, Fletcher L, Sommerville JEM: 2011. Predicting success among prospective disadvantaged students in natural scientific fields. In **South African Journal of Higher Education**, 25(6), pp 1125–1139.
- Eloff I, Forsyth BWC, Finestone M, Ebersöhn L, Visser MJ, Ferreira R, Boeving A, Sikkema KJ: 2011. Intervention groups



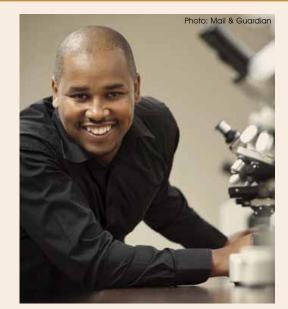
Prof Liesel Ebersöhn is Director of the Unit for Education Research in Aids. Her research focuses on the psychosocial coping of vulnerable children from a positive psychology resilience stance, the asset-based approach, life skills and career psychology. She has published more than 50 peer-reviewed articles, supervised approximately 50 postgraduate students, and has delivered several invited presentations at international conferences. She is the South African representative and a Council member of the World Education Research Association, and is an NRF-rated researcher.

for HIV-infected women: the need for additional services. In **South African Journal of Psychology**, 41(1), pp 38–51.

Eloff I: 2011. Begrip, vertroue en gesag in Opvoedkunde. In **Tydskrif vir Geesteswetenskappe**, 51(2), pp 202–213.

#### Chapters in books

- Maree JG, Du Toit CM: 2011. The Role of the Oral Tradition in Counseling People of African Ancestry. In **Counseling People of African Ancestry**, Cambridge University Press, pp 22–40.
- Mpofu E, Maree JG, Kasayira JM, Van der Westhuizen CN: 2011. School Counseling. In **Counseling People of African**



Dr Lindelani Mnguni is a member of the Department of Science, Mathematics and Technology Education. His research interests include curriculum design and development related to HIV and Aids education, biology education, as well as visualisation and multimedia learning in biology. In his doctoral thesis, he explored the relationship between the Grade 11 Biology curriculum, HIV/Aids knowledge and behavioural preferences of students. He has presented papers at various international conferences. As a member of the European Research in Didactics of Biology, he has co-authored articles in three books published in Europe. He has also reviewed research papers for various accredited journals.

#### Ancestry, Cambridge University Press, pp 111–125.

- Lopez-Levers L, Mpofu E, Ferreira R, Kasayira JM: 2011. HIV and AIDS Counseling. In **Counseling People of African Ancestry**, Cambridge University Press, pp 249–264.
- Ebersöhn L, Ferreira R, Mbongwe B: 2011. How teacherresearcher teams see their role in participatory research. In **Picturing Research**, SensePublishers, pp 163–176.
- Lubbe-De Beer C: 2011. Mothers, Fathers, or Parents: Same-Gendered Families in South Africa. In Women Worldwide transnational feminist perspectives on women, McGraw-Hill, pp 326–333.

#### Papers published

Lubbe-De Beer C: 2011. The possibility of using narrative research in educational leadership. In **Proceedings of the 6th Annual ISER Conference South Africa 2010: Effective Schools in Effective Systems**, ISER, pp 118–134.

#### **Humanities Education**

- Human-Vogel S, Coetzee S: 2011. Challenges associated with ethics review of educational research at a South African university. In Acta Academica, 43(2), pp 165–192.
- Runhare T, Vandeyar S: 2011. Loss of learning space within a legally inclusive education system: Institutional responsiveness to mainstreaming of pregnant learners in formal education. In **Gender & Behaviour**, 9(2), pp 4100–4124.
- Vandeyar S, Vandeyar T: 2011. Articulating cultures: Sociocultural experiences of black female immigrant students in South African schools. In Gender & Behaviour, 9(2), pp 4161–4188.
- Maree JG, Van der Westhuizen CN: 2011. Profession of Counseling in South Africa: a landscape under construction.
  In Journal of Counseling and Development, 89(1), pp 105– 112.
- Engelbrecht A: 2011. *Many a true word spoken in jest:* Visuele voorstellingspraktyke in Vlaamse moedertaaltaalhandboeke. In Journal of Language Teaching/Tydskrif vir Taalonderrig, 44(1), pp 127–140.
- Engelbrecht A: 2011. Vinkel en koljander? 'n Diversiteitsperspektief op Afrikaanse en Nederlandse moedertaal-taalhandboeke. In Journal of Language Teaching/Tydskrif vir Taalonderrig, 44(2), pp 88–104.
- Evans R: 2011. Preparing pre-service teachers for multilingual classrooms – designing a multiple African language module. In Journal of Language Teaching/Tydskrif vir Taalonderrig, 45(2), pp 69–82.
- Van Aswegen HJ, Potgieter HC: 2011. Folk music for children's choirs: The challenges and benefits of cultural diversity. In **Journal of the Musical Arts in Africa**, 7, pp 51–78.
- Carstens A: 2011. Meaning-making in academic writing: a comparative analysis of pre- and post-intervention essays. In Language Matters: studies in the languages of Southern Africa, 42(1), pp 3–21.
- De Boer AL, Bothma TJD, Du Toit PH: 2011. Enhancing information literacy through the application of whole brain strategies. In Libri, 61(1), pp 67–75.

- Du Toit CM: 2011. Raising resilience by tackling texts. In Mousaion: South African Journal of Information Studies, 28(2), pp 101–116.
- Van Aswegen HJ: 2011. Children's choral repertoire: hearing the voice of South African composers. In **Musicus**, 39(1), pp 6–9.
- Gatsha G, Evans R: 2011. Learning support: Perceptions and experiences of distance learners in Botswana. In **Progressio**, 32(1), pp 155–169.
- Brandt M, Carstens A: 2011. Visuele stereotipering van sportvroue in die sportmedia. South African Journal for Research in Sport, Physical Education and Recreation/Suid-Afrikaanse Tydskrif vir Navorsing in Sport, Liggaamlike Opvoedkunde en Ontspanning, 33(2), pp 1–15.
- Scheepers MD, De Boer AL, Bothma TJD, Du Toit PH: 2011. A mental model for successful inter-disciplinary collaboration in curriculum innovation for information literacy. In **South African Journal of Libraries and Information Science**, 77(1), pp 75–84.
- Carstens A: 2011. Generic versus discipline-specific writing interventions: Report on a quasi-experiment. In **Southern African Linguistics and Applied Language Studies**, 29(2), pp 149–165.
- Engelbrecht A, Sercu L, Van der Westhuizen CN, Van Praag ET: 2011. Kultuurstereotipering in Nederlandse moedertaaltaalhandboeke. In **Tydskrif vir Nederlands en Afrikaans**, 17(1), pp 3–19.

#### Chapters in books

- Mpofu E, Maree JG, Kasayira JM, Van der Westhuizen CN: 2011. School Counseling. In **Counseling People of African Ancestry**, Cambridge University Press, pp 111–125.
- Vandeyar S, Vandeyar T: 2011. The constitution, negotiation and representation of immigrant student identities in South African schools. In **Hyphenated Selves: Immigrant identities within Education Contexts**, Rozenberg Publishers/Unisa Press, pp 9–30.

#### Early Childhood Education

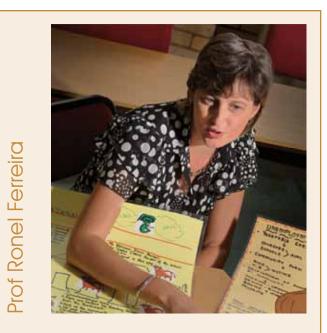
#### Journal articles

- Kamper G, Steyn MG: 2011. Black Students' Perspectives on Learning Assets at a Former White University. In Journal of Asian and African Studies, 46(3), pp 278–292.
- Steyn MG, Harris T, Hartell CG: 2011. Where are the foundation

phase teachers for our children? Black students' perceptions. In **South African Journal of Higher Education**, 25(3), pp 583–597.

#### Papers published

Rajah KK, Botha AC: 2011. The use of adaption – innovation theory as a measure of change in personal style following short sharp interventions: A case study. In Fifth international Business Conference: Strategic, Innovation and Knowledge Management, IBC, pp 59–73.



Prof Ronel Ferreira is Head of the Department of Educational Psychology. Her current research focus area is psychosocial coping by vulnerable individuals and communities. She is involved in various research projects focusing on this area of interest, including a joint research project on the promotion of resilience among the children of mothers who are infected with HIV. She has authored and co-authored four books over the past four years, and is a member of the South African Academy for Science and Arts, the Psychological Society of South Africa and the Education Association of South Africa.



Prof Roelf Sandenbergh Dean

## **4.3** Engineering, Built Environment and Information Technology

Research is regarded as a primary driver of excellence and is an essential part of the activities of the Faculty of Engineering, Built Environment and Information Technology. It not only covers the spectrum of disciplines in which formal programmes are offered in its schools of Engineering, the Built Environment, Information Technology and the Graduate School of Technology Management, but is closely aligned with the strategic imperatives of government and industry. The seven departments in the School of Engineering have active research groups that conduct research in a number of research focus areas that address issues of local and international relevance. In addition, there are a number of research centres and research chairs that are supported by industry, as well as the Carl and Emily Fuchs Institute for Microelectronics, which support the Faculty's research agenda.

The research focus areas of the Department of Chemical Engineering include process modelling and control, applied materials, environmental engineering, water utilisation, reaction engineering, biochemical engineering, sustainable process systems engineering and tribology. In the field of simulating chemical engineering processes, contributions were made on the optimisation of autogenous milling by optimising a set of operational parameters to yield significant savings. Lead and toxic metal-free detonators were developed for the mining industry, and research was conducted on the use of layered materials as benign functional additives as controlled release vehicles for insecticides.

The research focus areas of the Department of Civil Engineering include geotechnical engineering, water resources engineering, structural engineering and transportation engineering. The Chair in Railway Engineering is associated with the Department.

#### Research entities

#### Institutes

- Institute of Applied Materials (IAM)
- Carl and Emily Fuchs Institute for Microelectronics
- Industrial Metals and Minerals Research Institute, sponsored by ArcelorMittal

#### Centres

- Advanced Computing Centre
- African Centre of Excellence in Information Ethics Society
- Centre for Electromagnetism
- Centre for Telecommunications Engineering for the Information Society (CeTEIS)
- Centre for New Energy Systems (CNES)
- SAIW Centre for Welding Engineering
- Centre for Advanced Sensor Networks (CASN)
- Northern Transportation Centre of Development

#### **Partnerships**

- INSiAVA partnership between UP and the SAIP Fund
- Energy Efficiency and Demand-side Management Commercialisation

The Department recently acquired a geotechnical centrifuge that will greatly enhance its geotechnical modelling capabilities. Contributions were made in research on collapsible soils, track deflection on heavy-haul railway lines, ground movements below certain railway lines, the quality of concrete slabs, heat evolution in foamed concrete, and a sensitivity analysis in earthquake engineering.

The Department of Electrical, Electronic and Computer Engineering has research focus areas in advanced sensor networks, bioengineering, control systems, electromagnetism, electronics and microelectronics, energy systems, industrial electronics and electric drives, intelligent systems, lighting and vision, power systems, broadband wireless multimedia communication, and signals and digital communications. In this Department, the Bioengineering Group conducted research on acoustic models of cochlear implants. The Broadband Wireless Multimedia Communication Group worked on transmission scheduling for wireless mesh networks. The Control Systems Group continued its work on the modelling, validation and control of an industrial fuel gas blending system. The Advanced Sensor Networks Group conducted research on wireless sensor and actor networks, dynamic connectivity in wireless underground sensor networks, and cooperative communication systems in underground tunnels. The Electromagnetism Group analysed and designed various types of antennae for high-technology applications. The Electronics and Microelectronics Group developed a variety of designs, including a switch-mode power amplifier and a wideband low-noise amplifier. The Energy Systems, and Efficiency and Demand-side Management Group conducted research on models and applications in viral dynamics, predictive control in power generation, and the energy-efficiency optimisation of belt conveyors. The Intelligent Systems Group developed statistical gear health analysis and conducted research on the detection of land-cover change, and developed systems for detecting new human settlements.

The Department of Industrial and Systems Engineering has research focus areas in resource optimisation, industry and functional area application, business engineering and enterprise architecture. Contributions were made on optimisation problems in transport, stochastic modelling towards inventory management and reliability modelling, and the optimisation of humanitarian logistics.

Research in the Department of Materials Science and Metallurgical Engineering was focused on physical metallurgy, welding and corrosion, minerals processing and hydrometallurgy, and pyrometallurgy and refractory materials. The establishment of a Chair in Pyrometallurgy promoted growth in the research activities related to high-temperature furnace technology, with a strong focus on sintering technology, refractory materials, waste material treatment and process optimisation. Minerals processing research

remains directed towards iron ore processing and waste treatment, with a developing focus area in coal processing. Research activities in physical metallurgy focused on microstructure development during processing, hot and cold working, and welding metallurgy.

The research focus areas in the Department of Mechanical and Aeronautical Engineering are centred around vibration monitoring and diagnostics, vibration measurement and analysis, structural dynamic design and analysis, computational solid mechanics, enhanced heat transfer, electronics cooling, micro-channel condensation, optimisation with constructal theory, off-road vehicle dynamics, tyres and modelling. In this Department, the Dynamic Systems Group consolidated its research thrust in vibration-based condition monitoring, and maintenance engineering and asset integrity management. New developments were focused on the use of discrepancy analysis and waveform reconstruction for applications such as these. The Thermofluids Research Group made contributions in the areas of convective heat transfer, design of heat exchangers using computational fluid dynamics and the principles of constructal theory. The Vehicle Dynamics Group contributed to improving the dynamics of off-road vehicles by using simulation and experimental validation.

The Department of Mining Engineering has research focus areas in rock engineering, safety, environmental engineering and explosives engineering. Contributions were made in rock engineering with the development of a new approach to simulate crush pillar behaviour in a tabular layout as typically used as support in gold, and more extensively, in platinum stopes. Safety-related research included a contribution on the potential of the use of incident reconstruction simulations to avoid mine incidents, since virtual reality education and training offers the advantage of exposing employees to different hazards in a safe environment, and to safely simulate the potential outcome of unsafe acts when exposed to these hazards and risks on a daily basis. Research in environmental engineering included a project on the utilisation (rather than release) of mining-induced methane gas into the atmosphere. To reduce its inherent danger and to mitigate its global warming impact, a carbon credit project under the clean development mechanism (CDM) of the Kyoto Protocol was also developed and implemented to capture and destroy methane in underground mines.

In the School for the Built Environment, research was conducted in three departments: Architecture, Construction Economics (including the Real Estate programme) and Town and Regional Planning.

The Department of Architecture has research focus areas in environmental potential, housing and urban environments, and heritage and cultural studies. Contributions were made on the origins of the southern African building regulations, recycling of the Thesen Island Boiler House as a hotel, the life and homes of Catharina of Paliacatte, stone cladding as artificial ruin for triggering nostalgia, the dialectic of ruin, the emergence of a Lowveld architectural style, and the importance of heritage plants and plant relics for historical places, and old gardens as a source of new ornamental plants.

The Department of Construction Economics conducts research in the following areas: procurement methods, social housing, land rights, facilities management, quantity surveying practice, resilient cities, real estate curricula, finance and maintenance, construction information, classification, specification, and project management, and building cost analysis. Contributions were made to the development of sustainable human settlements with an extensive interdisciplinary review of literature on the attributes of ecology, sustainability and implications for built environment research.

In real estate, a model was developed to determine the relationship between property share prices and underlying asset values, compare short-term fluctuations with company value, obtain driving forces of company growth and identify information that could be used to assist in property valuation. The variables that drive property demand were investigated using statistical fits of historical macroeconomic variables applied to a South African context to explain recent residential property activity. A risk management framework was developed and the importance of everyone in an organisation being involved in the management of risks was highlighted.

The Department of Town and Regional Planning has the following research focus areas: strategic development planning, sustainable settlement planning, design and maintenance, mining, planning law and sustainable human settlement, the creation of safe, responsive and enabling urban spaces, and planning methods and techniques. Contributions were made on the need for a balance between transformation and service provision in state infrastructure investment and development spending.

The School of Information Technology made research contributions in its departments of Computer Science, Information Science (including publishing and book history) and Informatics.

The research focus areas in the Department of Computer Science are computational intelligence, computer and information security, theoretical computer science, software engineering and computer science education. The Computational Intelligence Research Group developed new, biologically inspired optimisation algorithms. Models of the foraging behaviour of ants were used to develop a self-adapting behavioural particle swarm optimiser, where individual search behaviours self-adapt based on the local search environment. Models of the cemetery organisation behaviour and the division of labour behaviour observed in ant colonies have been used to develop new algorithms for distributed load balancing in computer clusters. A number of strategies have been developed to self-adapt control parameter values used in particle swarm optimisation, eliminating the need to manually tune problem-dependent parameters.

The research focus areas in the Department of Information Science are knowledge management, information processes, metacontext of information, and book and publishing studies. The Department is coordinating an ongoing interdisciplinary research project to innovate the curriculum for information literacy. This project has created a stimulus for research because of the new possibilities in the different fields of research, enhancing creativity, and developing a positive staff morale and intrinsic motivation.

Book history focused on the ability of adolescents with hearing loss in special schools to access and use academic material. The annual book publishing industry survey reports for 2009 and 2010, as well as the *Book Publishing Industry Annual Survey Broad Trends Report, 2008–2010,* were completed. Research on information behaviour in various contexts was continued, including librarian management.

The research focus areas in the Department of Informatics are information systems and organisation, information systems and education, and information and communication technology for sustainable development. Each focus area is associated with one or more International Federation for Information Processing (IFIP) working groups. A highlight in the information systems and organisation focus area was a project that focused on the development of a framework to be used in the design of financial trading applications in the South African investment banking environment.

Research in the Graduate School of Technology Management (GSTM) is focused on technology and innovation management, project management, maintenance and physical asset management, and systems and lifecycle management. In project management, contributions were made with the investigation of the state-of-the-art status of current project management approaches followed in South Africa with the aim of aiding in positioning South Africa to ensure that all possible revenue streams are obtained during the transition to a green economy. In technology and innovation, studies were done on human language technology, the performance of science parks and how they contribute to innovation outcomes in South Africa, and on technology roadmaps in the mining industry. In energy research, an assessment was done of the technological sustainability of biodiesel development in South Africa.

#### Prof Roelf Sandenbergh

Dean:Engineering, Built Environment and Information TechnologyTel:012 420 2005Email:dean@eng.up.ac.za

## Faculty Research Output

#### Architecture

#### Journal articles

- Laubscher J: 2011. Tracing the origins of the Southern African building regulations, with specific reference to the period between 1650 and *circa* 1740. In Acta Structilia: Journal for the Physical and Development Sciences/Tydskrif vir die Fisiese en Ontwikkelingswetenskappe, 18(2), pp 81–97.
- Louw M, Fisher RC: 2011. The recycling of the Thesen Island Boiler House as Hotel. In Architecture South Africa: Journal of the South African Institute of Architects, 1/2, pp 16–19.
- Fisher RC, Clarke NJ: 2011. RED in architecture an ecotropic approach. In Architecture South Africa: Journal of the South African Institute of Architects, 9/10, pp 19–22.
- Fisher RC: 2011. Lowveld Style an emergence. In Architecture South Africa: Journal of the South African Institute of Architects, 3/4, pp 33–40.
- Bakker KA: 2011. Heritage as transmission: Towards achieving a more dominant narrative of inclusion. In Heritage & Society (formerly Heritage Management), 4(2), pp 239–252.
- De Bruyn TF: 2011. Stone cladding as artifical ruin for triggering nostalgia. **South African Journal of Art History**, 26(2), pp 45–54.
- Viljoen M: 2011. The dialectic of ruin. In **South African Journal** of Art History, 26(2), pp 157–162.
- Middleton LT, Vosloo PT: 2011. Sources of new ornamental plants : the importance of heritage plants and plant relicts from historic places and old gardens. In **South African Journal of Art History**, 26(2), pp 55–67.
- Le Roux SW: 2011. Vele wonings: die lewe en tuistes van Catharina Van Paliacatte. In **South African Journal of Cultural History/Suid- Afrikaanse Tydskrif vir Kultuurgeskiedenis**, 25(1), pp 69–101.
- Botes N, Le Roux SW: 2011. Konteks en kultuurhistoriese betekenis van die melkstoeltjie, soos uitgebeeld in kinderlektuur en politieke spotprente. In South African Journal of Cultural History/Suid- Afrikaanse Tydskrif vir Kultuurgeskiedenis, 25(2), pp 1–20.

#### Chapters in books

Jekot BP: 2011. The multiple faces of inspiration, domination and identity – African bites of modernism (Afrykanskie oblicza modernizmu. Inspiracje, dominacja i tozsamosc). In Modernism in Europe – Modernism in Gdynia. First Half of the 20th Century Architecture and Its Preservation (Modernizm w Europie – Modernizm w Gdyni. Architektura Pierwszej Polowy XX wieku i jej Ochrona w Gdyni i w Europie), Urzad Miasta Gdyni, pp 71–77.

#### Papers published

- Königk R: 2011. The embarrassment over decoration. Arguing against title change – the case of 'Interior Design': 'Interior Architecture'. In Proceedings of 2011 IDA Congress Taipei. Education Conference: Design at the Edges, Taiwan Design Center, pp 277–288.
- Combrinck C: 2011. Slovo Park, Soweto: Community Participation in Urban "Acupuncture". In Proceedings of the Joint Conference of CIB W104 AND W110. Architecture in the Fourth Dimension: Methods and Practices for a Sustainable Building Stock, Ball State University, pp 430–437.
- Jekot BP: 2011. Conservation of Modernism in Africa assessing cultural resources and benefits when nogotiating criteria. In The Second International Conference on Conservation of Architecture, Urban Areas & Landscape: Heritage 2011. Conservation of Architecture, Urban Areas, Nature & Landscape: Towards a Sustainable Survival of Cultural Landscape, CSAAR Press, pp 357–368.

#### Industrial and Systems Engineering

#### Journal articles

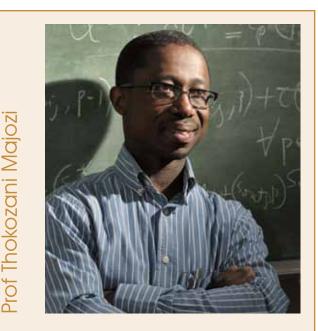
Yadavalli VSS, Sivakumar B, Arivarignan G, Adetunji O: 2011. A multi-server perishable inventory system with negative customer. In Computers & Industrial Engineering, 61, pp 254–273.

In the list of research outputs, in all cases the heading "Papers published" refers to papers in refereed, published conference proceedings, and the heading "Journal articles" refers to articles published in accredited, peer-reviewed, refereed specialist journals.

- Kapur PK, Yadavalli VSS, Khatri SK, Basirzadeh M: 2011. Enhancing software reliability of a complex software system architecture using artificial neural-networks ensemble. In International Journal of Reliability, Quality and Safety Engineering, 18(3), pp 271–284.
- Joubert JW, Axhausen KW: 2011. Inferring commercial vehicle activities in Gauteng, South Africa. In Journal of Transport Geography, 19, pp 115–124.
- Van Wyk E, Yadavalli VSS, Bean W: 2011. Strategic inventory management for disaster relief. In Management Dynamics: Contemporary Research Journal of the Southern Africa Institute for Management Scientists, 20(1), pp 32–41.
- Charles V, Yadavalli VSS, Rao MCL, Reddy PRS: 2011. Stochastic fractional programming approach to a mean and variance model of a transportation problem. In **Mathematical Problems in Engineering**, pp 1–12.
- Van Wyk E, Bean W, Yadavalli VSS: 2011. Modelling of uncertainty in minimising the cost of inventory for disaster relief. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(1), pp 1–11.
- Sankaraiah G, Sarma BD, Umasankar C, Yadavalli VSS: 2011. Designing, modelling and optimising of an integrated reliability redundant system. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(2), pp 100–106.
- Yadavalli VSS, Labeodan MMO, Udayabaskaran S: 2011. A stochastic point process model of incubation period of a HIV infected individual. In South African Statistical Journal, 45(2), pp 293–314.

#### Papers published

- Van Wyk E, Yadavalli VSS: 2011. A stochastic model towards managing the aftermath of a tsunami disaster in Japan a case study. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 104-1 104-11.
- De Vries M, Van der Merwe A, Kotze P, Gerber A: 2011. Using the interaction model to identify replication potential between business units. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 134-1 – 134-15.



Prof Thokozani Majozi is a member of the Department of Chemical Engineering. He is the Vice-President of the Engineering Council of South Africa (ECSA). In 2011 he received the National Science and Technology Forum (NSTF) Category B Award for individual contribution to research over the last five to ten years. His research currently focuses on the heat integration of multipurpose batch chemical processes, wastewater minimisation in batch plants, water conservation through energy conservation, the development of a unified mass and heat integration framework for sustainable design, effective techniques for the scheduling of complex batch facilities and process integration as an optimisation tool in clean coal technology.

- Janse Van Rensburg AC: 2011. Complexity management, a crystal ball for executives. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 19-1 – 20.
- Grobler J, Engelbrecht AP, Kendall G, Yadavalli VSS: 2011. Investigating the impact of alternative evolutionary selection strategies on multi-method global optimization. In **2011 IEEE Congress on Evolutionary Computation**, IEEE, pp 1–8.

- Chandrasekhar P, Vaidyanathan VS, Yadavalli VSS: 2011. Inference procedures for bivariate exponential model of gumbel in queueing theory. In **Proceedings of the International Statistics Conference 2011**, Institute of Applied Statistics Sri Lanka, pp 14–26.
- Adetunji O, Yadavalli VSS: 2011. A lot-sizing for pull production environments. In **The 2nd International Conference on Industrial and Operations Management**, IEOM Forum, pp 15–20.
- Adetunji O, Adendorff K, Yadavalli VSS: 2011. Dynamic buffering of a capacity constrained resource via the theory of constraints. In The 2nd International Conference on Industrial and Operations Management, IEOM Forum, pp 13–20.
- De Vries M, Van der Merwe A, Kotze P, Gerber A: 2011. A method for identifying process reuse opportunities to enhance the operating model. In **The IEEE International conference on Industrial engineering and engineering management**, IEEE, p. 1005.
- Janse Van Rensburg AC: 2011. Principles for modelling business processes. In The IEEE International conference on Industrial engineering and engineering management, IEEE, p. 1710.

#### **Construction Economics**

#### Journal articles

- Maritz MJ: 2011. Doubts raised on the validity of construction and payment guarantees. In Acta Structilia: Journal for the Physical and Development Sciences/Tydskrif vir die Fisiese en Ontwikkelingswetenskappe, 18(1), pp 1–26.
- Joubert JCN, Cloete CE: 2011. Methodology to determine the value of a poultry farm. In **Agrekon**, 50(4), pp 45–74.
- Du Plessis C, Cole RJ: 2011. Motivating change: shifting the paradigm. In **Building Research and Information**, 39(5), pp 436–449.
- Maritz MJ, Du Rand R: 2011. Standard method of measurement for underground development works. In **Journal of Construction**, 4(1), pp 4–11.
- Cloete CE: 2011. The principles and practice of facilities maintenance in Botswana. In Journal of Corporate Real Estate, 29, pp 1–2.

#### Papers published

- Makombo H, Maritz MJ: 2011. A risk management framework for construction project management organisations.
   In 15th Pacific Association of Quantity Surveyors Congress, PAQS, pp 503–515.
- Moje EK, Cloete CE, Hoffman DJ: 2011. Implementation of facilities management in shopping centres in Gaberone,Botswana. In 15th Pacific Association of Quantity Surveyors Congress, PAQS, pp 238–246.
- Du Plessis C: 2011. Complexity, Resilience, Regeneration: new directions for sustainable human settlements. In 4th SACQSP Conference: South African Council for the Quantity Surveying Profession, SACQSP, pp 27–29.
- Bekker MJ, Prinsloo HF: 2011. The influence of prescriptive clients on projects in the mining construction industry.
  In 7th cidb Post Graduate Conference on Construction Industry Development, cidb and Department of Construction Economics, pp 48–59.
- Jansen JJA, Callaghan P: 2011. Teaching in construction management: Learning by doing. In **7th cidb Post Graduate Conference on Construction Industry Development**, cidb and Department of Construction Economics, pp 191–202.
- Jansen JJA, Cruywagen JHH: 2011. Decision-making criteria for the implementation of innovative building systems. In **7th cidb Post Graduate Conference on Construction Industry Development**, cidb and Department of Construction Economics, pp 214–223.
- Boshoff DGB: 2011. The development approach to valuation: an acceptable method. In **7th cidb Post Graduate Conference on Construction Industry Development**, cidb and Department of Construction Economics, pp 232–240.
- Inglesby MRC, Cloete CE: 2011. Guidelines for private property development in Mozambique. In **7th cidb Post Graduate Conference on Construction Industry Development**, cidb and Department of Construction Economics, pp 241–250.
- Tshikila S, Maritz MJ: 2011. The Extent of Enforcement of The Penalty Clause on Public Sector Construction Contracts in South Africa. In COBRA 2011: Proceedings of RICS Construction and Property Conference, RICS, pp 555–573.
- Nkosi SJ, Prinsloo HF: 2011. The impact of contract administration on the development of small to medium contractors in Gauteng Province. In COBRA 2011:
   Proceedings of RICS Construction and Property Conference, RICS, pp 670–682.

- Kemm K, Cloete CE: 2011. Rapid integration of Chess as an educational intervention for mathematics and science performance enhancement in schools in South Africa. In INTED2011 Conference Proceedings, International Association of Technology, Education and Development, pp 5770–5778.
- Kasese AM, Prinsloo HF, Hoffman DJ: 2011. Analysis of time and cost overruns on construction projects for Botswana Local Authorities. In Proceedings of the CASLE 2011 International Conference: Addressing Global Issues, The European Council of Construction Economists, Paper 12.
- Du Plessis C: 2011. Shifting paradigms to study urban sustainability. In SB11 Helsinki: Proceedings of the World Sustainable Building Conference, SB11 Helsinki, pp 40–41.
- Chikafalimani SHP, Thwala WD, Cloete CE: 2011. Comments from the property industry on Masters Real Estate Curricula in South Africa. In **The 6th Built Environment Conference**, ASOCSA, pp 626–634.

#### **Chemical Engineering**

#### Journal articles

- Van Houwelingen A J, Nicol W: 2011. Parallel Hydrogenation for the Quantification of Wetting Efficiency and Liquid-Solid Mass Transfer in a Trickle-Bed Reactor. In AICHE Journal, 57(5), pp 1310–1319.
- Saayman J, Nicol W: 2011. Demonstrating the effect of interphase Mass Transfer in a transparent fluidization Bed Reactor. In Chemical Engineering Education, 45(3), pp 178–183.
- Brink HG, Saayman J, Nicol W: 2011. Two dimensional fluidised bed reactor: performance of a novel multi-vortex distributor. In **Chemical Engineering Journal**, 175 (1), pp 484-493.
- Gololo V, Majozi T, Zhelev T, Semkov K: 2011. Guided design of heating and cooling mains for lower water and energy consumption and increased efficiency. In **Chemical Engineering Transactions**, 25, pp 755–760.
- Adekola O, Majozi T: 2011. Wastewater minimization in multipurpose batch plants with a regeneration unit: Multiple contaminants. In Computers & Chemical Engineering, 35, pp 2824–2836.
- Oberholster PJ, Musee N, Botha A-M, Chelule PK, Focke WW, Ashton PJ: 2011. Assessment of the effect of nanomaterials

on sediment-dwelling invertebrate *chironomus tentans* larvae. In **Ecotoxicology and Environmental Safety**, 74(3), pp 416–423.

- Stamp J, Majozi T: 2011. Optimum heat dtorage fesign for heat integrated multipurpose batch plants. In Energy, 36, pp 5119–5131.
- Madzivhandila V, Majozi T, Zhelev TK: 2011. Recovery of Flue Gas Energy in heat-integrated gasification combined cycle power plants using the contat economizer system. In Energy & Fuels, 25, pp 1529–1536.
- Coetzee B, Schols HA, Wolfaardt F: 2011. Determination of pectin content of eucalyptus wood. In **Holzforschung**, 65, pp 327–331.
- Manhique AJ, Focke WW, Madivate C: 2011. Titania recovery from Low-Grade Titanoferous Minerals. In **Hydrometallurgy**, 109(3-4), pp 230–236.
- Reynders F, Nicol W: 2011. Gas-Limited Hydrogenation of 1-Octene in a Fixed-Bed: Upflow versus Downflow. In Industrial & Engineering Chemistry Research, 50, pp 10476–10479.
- Gololo V, Majozi T: 2011. On synthesis and optimization of cooling water systems with multiple cooling towers. In **Industrial & Engineering Chemistry Research**, 50, pp 3775–3787.
- Tichapondwa SM, Focke WW, Del Fabbro O, Mkhize SM, Muller E: 2011. Suppressing H<sub>2</sub> Evolution by Silicon Powder Dispersions. In Journal of Energetic Materials, 29(4), pp 326–343.
- Nel J T, Du Plessis W, Nhlabathi TN, Pretorius CJ, Jansen AA, Crouse PL: 2011. Reaction kinetics of the microwave enhaced digestion of zircon with ammonium acid fluoride. In Journal of Fluorine Chemistry, 132(Jan), pp 258–262.
- Tikilili P V, Chirwa EMN: 2011. Characterization and biodegradation of polycyclic aromatic hydrocarbons in radioactive wastewater. In Journal of Hazardous Materials, 192(3), pp 1589–1596.
- Van der Walt I J, Nel J T, Crouse PL, Jansen AA, Kekana SJ: 2011. The treatment of TRISO coated particles with CF<sub>4</sub> in a low temperature plasma. In **Journal of Nuclear Materials**, 413(Apr), pp 156–161.
- Focke WW, Van Pareen W: 2011. Polypropylene-based longlife insecticide-treated mosquito netting. In **Journal of Polymer Engineering**, 31, pp 521–529.
- Swanepoel JJ, Van Vuuren D, Heydenrych MD: 2011. Leachability of nitride ilmenite in hydrochloric acid. In

Journal of the Southern African Institute of Mining and Metallurgy, 111(Mar), pp 1–4.

- Van Vuuren DS, Oosthuizen SJ, Heydenrych MD: 2011. Titanium production via metallothermic teduction of TiCL<sub>4</sub> in molten salt: problems and Products. In Journal of the Southern African Institute of Mining and Metallurgy, 111(Mar), pp 1–8.
- Focke WW, Mashele RP, Nhlapo NS: 2011. Stabilization of LDPE films containing metal stearates as photodegradants. In Journal of Vinyl & Additive Technology, 17(1), pp 21–27.
- Sibanda MM, Focke WW, Labuschagne FJW, Moyo L, Nhlapo NS, Maity A, Muiambo HF, Masinga Junior PH, Crowther NAS, Coetzee M, Brindley GAW: 2011. Degradation of insecticides used for indoor spraying in malaria control and possible solutions. In **Malaria Journal**, 10(307), pp 1–12.
- Ilunga K, Del Fabbro O, Yapi L, Focke WW: 2011. The effect of Si-Bi203 on the ignition of the Al-CuO thermite. In Powder Technology, 205, pp 97–102.
- Slippers B, Majozi T, Nelwamondo FV, Steenkamp CM, Van Heerden E, Wright CY: 2011. Internet access constrains science development and training at South African universities. In South African Journal of Science, 107(7/8), p. 1.
- Ngwenya N, Chirwa EMN: 2011. Biological removal of cationic fission products from nuclear wastewater. In **Water Science and Technology**, 63(1), pp 124–128.

#### Chapters in books

- Chirwa EMN: 2011. Developments in Bioremediation for Separation and Recovery of Nuclear Waste. In Advanced Separation Techniques for Nuclear Fuel Reprocessing and Radioactive Waste Treatment, Woodhead Publishing, Ltd, Campbridge, United Kingdom, pp 436–472.
- Chirwa EMN, Molokwane P E: 2011. Biological Cr(VI) Reduction: microbial diversity, kinetics and biotechnological solutions to pollution. In **Biodiverstiy**, InTech Online Publishers, United Kingdom, pp 75–100.

#### Papers published

Sandrock C, De Vaal PL: 2011. A generic framework for stochastic dynamic simulation of chemical engineering systems using Free/Open source software. In **21st** 



Prof Elsabé Kearsley is Head of the Department of Civil Engineering. She is a registered professional engineer and is serving in her second term (2009–2012) as a Council member of the Engineering Council of South Africa (ECSA). Prof Kearsley is a fellow of both the South African Academy of Engineering (SAAE) and the South African Institute of Civil Engineering (SAICE). She was also elected as President of SAICE for 2009. For the last 18 years she has been involved in research on cement and concrete materials, aiming to reduce these materials' impact on the environment.

**European Symposium on Computer Aided Process Engineering**, Elsevier, pp 146–150.

- Van Biljon C, Du Toit EL, Nicol W: 2011. Effect of Fines Content on bubble properties in a two-dimensional fluidized bed by Digital Image Analysis. In IFSA 2011 Industrial Fluidization South Africa: Supporting Sustainable Strategies, South African Institute of Mining and Metallurgy, pp 267–275.
- Saayman J, Brink HG, Nicol W: 2011. Effect of distributor type on interphase mass transfer and gas axial dispersion in bubbling and turbulent fluidezed-bed reactors. In IFSA 2011 Industrial Fluidization South Africa: Supporting Sustainable Strategies, South African Institute of Mining and Metallurgy, pp 361–375.

- Swart SD, Heydenrych MD, Boateng A: 2011. Dual fluidizedbed design for the fast pyrolysis of biomass. In IFSA 2011 Industrial Fluidization South Africa: Supporting Sustainable Strategies, South African Institute of Mining and Metallurgy, pp 231–243.
- Marais G, De Vaal PL: 2011. The role of temperature in an oscillatory contact with reerence to the HFRR. In **Tribology** 2011: Tenth International Tribology Conference of the South African Institute of Tribology, South African Institute of Tribology, pp 80–88.
- Marais G, De Vaal PL: 2011. Mechanisms of lubricated and unlubricated friction and wear. In **Tribology 2011: Tenth International Tribology Conference of the South African Institute of Tribology**, South African Institute of Tribology, pp 70–79.

#### Patents

Focke WW: 2011. Insecticidal Netting. (P43480ZACO).

#### Electrical, Electronic and Computer Engineering

- Van der Linde E, Hancke GP: 2011. An investigation of Bluetooth mergence with Ultra Wideband. In Ad Hoc Networks, 9, pp 852–863.
- Van Staden AJ, Zhang J, Xia X: 2011. A model predictive control strategy for load shifting in a water pumping scheme with maximum demand charges. In **Applied Energy**, 88, pp 4785–4794.
- Zhang S, Xia X: 2011. Modelling and energy efficiency optimization of belt conveyors. In **Applied Energy**, 88, pp 3061–3071.
- Zhang J, Xia X: 2011. A model predictive control approach to the periodic implementation of the solutions of the optimal dynamic resource allocation problem. In **Automatica**, 47, pp 358–362.
- Xia X, Zhang J, Elaiw AMA: 2011. An application of model predictive control to the dynamic economic dispatch of power generation. In **Control Engineering Practice**, 19, pp 638–648.
- Badenhorst W, Zhang J, Xia X: 2011. Optimal hoist scheduling of a deep level mine twin rock winder system for demand side management. In Electric Power Systems Research, 81, pp 1088–1095.

- Malherbe JAG: 2011. Pseudo-elliptic bandpass filter with subharmonic stubs. In **Electronics Letters**, 47(3), pp 196–198.
- Malherbe JAG: 2011. Wideband bandstop filter with sub-harmonic stubs. In **Electronics Letters**, 47(10), pp 604–605.
- Olivier K, Cilliers JE, Du Plessis M: 2011. Design and performance of wideband DRFM for radar test and evaluation. In Electronics Letters, 47(14), pp 824–825.
- Luus FPS, Maharaj BTJ: 2011. Transmission scheduling for wireless mesch networks with temporal re-use. In Eurasip Journal On Wireless Communications And Networking, 84(Sep), pp 1–16.
- Jacobs OB, Odendaal JW, Joubert J: 2011. Elliptically shaped quad-ridge horn antennas as feed for a reflector. In IEEE Antennas and Wireless Propagation Letters, 10, pp 756–759.
- Xia X, Zhang J: 2011. Modelling and control of heavy-haul trains. In IEEE Control Systems Magazine, Aug, pp 18–31.
- Du Plessis WP, Odendaal JW, Joubert J: 2011. Experimental simulation of retrodirective cross-eye jamming. In IEEE Transactions on Aerospace and Electronic Systems, 47(1), pp 734–740.
- Du Plessis WP, Odendaal JW, Joubert J: 2011. Tolerance analysis of cross-eye jamming system. In IEEE Transactions on Aerospace and Electronic Systems, 47(1), pp 740–745.
- Kleynhans W, Olivier JC, Wessels KJ, Salmon BP, Van den Bergh F, Steenkamp KC: 2011. Detecting land cover change using an extended kalman filter on MODIS NDVI time series data. In IEEE Transactions on Geoscience and Remote Sensing, 8(3), pp 507–511.
- Gungor VC, Sahin D, Kocak T, Ergut S, Bucella C, Cecati C, Hancke GP: 2011. Smart Grid Technologies: communication technologies and standards. In IEEE Transactions on Industrial Informatics, 7(4), pp 529–539.
- Sun Z, Akyildiz IF, Hancke GP: 2011. Capacity and outage analysis of MIMO and cooperative communication systems in underground tunnels. In IEEE Transactions on Wireless Communications, 10(11), pp 2793–3803.
- Sun Z, Akyildiz IF, Hancke GP: 2011. Dynamic connectivity in wireless underground sensor networks. In **IEEE Transactions on Wireless Communications**, 10(12), pp 4334–4344.
- Salmon BP, Olivier JC, Kleynhans W, Wessels KJ, Van den Bergh F, Steenkamp KC: 2011. The use of a Multilayer Perceptron

for detecting new human settlements from a time series of MODIS images. In International Journal of Applied Earth Observation and Geoinformation, 13(2), pp 873–883.

- Chinnappen-Rimer S, Hancke GP: 2011. Actor coordination using info-gap decision theory in wireless sensor and actor networks. In **International Journal of Sensor Networks**, 10(4), pp 177–191.
- Ackermann ER, De Villiers JP, Cilliers PJ: 2011. Nonlinear dynamic systems modeling using Gaussian processes: Predicting ionospheric total electron content over South Africa. In Journal of Geophysics and Engineering, 116, pp 1–13.
- Hanekom JJ, Van Zyl M: 2011. Speech perception in noise: a comparison between sentence and prosody recognition. In **Journal of Hearing Science**, 1(2), pp 54–56.
- Muller CJ, Craig IK, Ricker NL: 2011. Modelling, validation, and control of an industrial fuel gas blending system. In **Journal** of Process Control, 21, pp 852–860.
- De Villiers JP, Godsill SJ, Singh SS: 2011. Particle predictive control. In Journal of Statistical Planning and inference, 141(5), pp 1753–1763.
- Strydom T, Hanekom JJ: 2011. The performance of different synthesis signals in acoustic models of cochlear implants. In Journal of the Acoustical Society of America, 129(2), pp 920–933.
- Strydom T, Hanekom JJ: 2011. An analysis of the effects of electrical field interaction with an acoustic model of cochlear implants. In Journal of the Acoustical Society of America, 129(4), pp 2213–2226.
- Goosen M, Sinha S: 2011. Reducing data dependent jitter utilising adaptive FIR pre-emphasis in 0.18 um CMOS. In **Microelectronics Journal**, 42, pp 1216–1224.
- Jacobs OB, Odendaal JW, Joubert J: 2011. Analysis and design of a wide band omnidirectional antenna. In Microwave and Optical Technology, 53(6), pp 1352–1356.
- Weststrate M, Sinha S: 2011. Wideband low-noise amplifier design using the LC-Ladder and capacitive Shunt-Shunt feedback topology. In **Microwave and Optical Technology**, 53(12), pp 2922–2931.
- Bozanic M, Sinha S: 2011. Switch-mode power amplifier design method. In **Microwave and Optical Technology**, 53(12), pp 2724–2728.
- Malherbe JAG: 2011. Hybrid superelliptic horn. In Microwave and Optical Technology, 53(11), pp 2713–2716.

Geldenhuys R, Van der Merwe JS, Thakulsukanant K, Wang Z-W,

Chi N, Yu S: 2011. Contention resolution and variable length optical packet switching using the active vertical-couplerbased optical Crosspoint switch. In **Optical Switching And Networking**, 8, pp 86–92.

- Goosen M, Sinha S, Muller A: 2011. A low switching time BiCMOS CML transmitter for high speed adaptive reemphasis serial links. In **Romanian Journal of Information Science and Technology**, 14(2), pp 101–111.
- Du Plessis M, Schoeman J, Maclean W, Schutte C: 2011. The electro-thermal properties of integrated circuit microbolometers. In SAIEE Africa Research Journal, 102(2), pp 40–48.
- Miao H, Xia X, Perelson AS, Wu H: 2011. On identifiability of nonlinear ODE models and applications in viral dynamics. In Siam Review, 53(1), pp 3–39.

#### Papers published

- Focke RW, Wabeke LO, De Villiers JP, Inggs MR: 2011. Implementing interval algebra to schedule mechanically scanned multistatic radars. In 14th International Conference on Information Fusion, IEEE, pp 1–7.
- Ackermann ER, Grobler TL, Van Zyl AJ, Steenkamp KC, Olivier JC: 2011. Minimum error land cover separability analysis and classification of MODIS time series data. In 2011 IEEE International Geoscience & Remote Sensing Symposium, IEEE, pp 2999–3002.
- Kleynhans W, Salmon BP, Olivier JC, Wessels KJ, Van den Bergh
  F: 2011. A comparison of feature extraction methods within a spatio-temporal land cover change detection framework.
  In 2011 IEEE International Geoscience & Remote Sensing Symposium, pp 688–691.
- Myburgh HC, Olivier JC, Mathieu R, Wessels K, Leblon B, Asner G, Buckley J: 2011. SAR-To-LIDAR Mapping for tree volume prediction in the Kruger National Park. In 2011 IEEE International Geoscience & Remote Sensing Symposium, IEEE, pp 1934–1937.
- Salmon BP, Kleynhans W, Van den Bergh F, Olivier JC, Marais WJ, Wessels KJ: 2011. Meta-Optimization of the Extended Kalman Filter's Parameters for Improved Feature Extraction on Hyper-Temporal Images. In 2011 IEEE International Geoscience & Remote Sensing Symposium, IEEE, pp 2543–2546.
- Kleynhans W, Salmon BP, Olivier JC, Wessels KJ, Van den Bergh F: 2011. An autocorrelation analysis approach to detecting land cover change using hyper-temporal time-series data.

In 2011 IEEE International Geoscience & Remote Sensing Symposium, IEEE, pp 94–97.

- Venter CJ, Grobler H, AlMalki KA: 2011. Implementation of the CA-CFAR algorithm for pulsed-doppler radar on a GPU architecture. In 2011 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies, IEEE, pp 1–6.
- Beyers HQ, Olivier MS, Hancke GP: 2011. Assembling metadata for database forensics. In Advances in Digital Forensics VII, Springer, pp 89–99.
- Bhana VB, Lambrechts JW, Sinha S: 2011. The design of a 5 GHz VCO with phase noise performance analysis using MOSFET-based current sources. In CAS 2011 Proceedings: Inernational Semiconductor Conference, IEEE, pp 335–338.
- Ekpenyong UE, Zhang J, Xia X: 2011. A model predictive control approach to generator maintenance scheduling. In ICAE 2011 International Conference on Applied Energy, ICAE, pp 2437–2448.
- Gitau MN: 2011. High efficiency multilevel switched-capacitor DC-DC converters for interfacing DC-buses with separate ground. In IECON - ICELIE 2011 37th Annual Conference of the IEEE Industrial Electronics Society, IEEE, pp 4268–4273.
- Grobler TL, Ackermann ER, Olivier JC, Van Zyl AJ: 2011. Systematic luby transform codes as incremental redundancy scheme. In **IEEE Africon 2011**, IEEE, pp 1–5.
- Ackermann ER, Grobler TL, Van Zyl AJ, Olivier JC: 2011. Belief propagation for nonlinear block codes. In **IEEE Africon 2011**, IEEE, pp 1–6.
- Barnes SD, Maharaj BTJ: 2011. Performance of a hidden Markov channel occupancy model for cognitive radio. In **IEEE Africon 2011**, IEEE, pp 1–6.
- Yu H, Xia X, Zhang T: 2011. A less conservative method for average consensus with multiple time-varying delays. In IEEE Africon 2011, IEEE, pp 1–6.
- Zhang S, Yang F, Maharaj BTJ: 2011. On joint iterative decoding for LDPC-coded relay cooperative system. In **IEEE Africon 2011**, IEEE, pp 1–5.
- Botha PR, Maharaj BTJ: 2011. Turbo STFC decoding with the Zero Forcing Decoder. In **IEEE Africon 2011**, IEEE, pp 1–5.
- Steyn LP, Hancke GP: 2011. A survey of wireless sensor network testbeds. In IEEE Africon 2011, IEEE, pp 1–6.
- Le Roux JD, Craig IK: 2011. Identifiability of run-of-mine ore grinding mill circuit parameters. In **IEEE Africon 2011**, IEEE, pp 1–6.

- Laurent E, Olivier LE, Craig IK, Chen YQ: 2011. Fractional order disturbance observer for a run-of-mine Ore Milling Circuit. In IEEE Africon 2011, IEEE, pp 1–6.
- Dlamini V, Naidoo RM, Manyage M: 2011. A non-intrusive compensated slip method for motor efficiency estimation using vibration signature analysis. In **IEEE Africon 2011**, IEEE, pp 1–6.
- Ye X, Xia X, Zhang J, Chen YQ: 2011. Characterising long memories in electric water heater power consumption time series. In **IEEE Africon 2011**, IEEE, pp 1–6.
- Dhuness K, Maharaj BTJ: 2011. A cognitive radio application of OM-OFDM for implementation in DVB-T2. In IEEE Africon 2011, IEEE, pp 1–6.
- Oppermann CA, Hancke GP: 2011. Using NFC-enabled phones for remote data acquisition and digital control. In IEEE Africon 2011, IEEE, pp 1–6.
- Xia X, Zhang J: 2011. Mathematical description of the performance measurement and verification. In IEEE Africon 2011, IEEE, pp 1–6.
- Wang N, Zhang J, Xia X: 2011. Energy consumption of air conditioners at different temperature set points. In IEEE Africon 2011, IEEE, pp 1–6.
- Isaac SJ, Hancke GP, Madhoo H, Khatri A: 2011. A survey of wireless sensor network applications from a power utility's distribution perspective. In IEEE Africon 2011, IEEE, pp 1–5.
- Abu-Mahfouz AMI, Hancke GP: 2011. ns-2 Extension to Simulate localization systems in wireless sensor networks. In **IEEE Africon 2011**, IEEE, pp 1–6.
- Dandekar K, Sinha S, Ampofo-Anti N-A: 2011. IEEE-based implementation of engineering projects in community service. In IEEE Global Humanitarian Technology Conference, IEEE Computer Society, pp 481–486.
- Oyedokun D, Ampofo-Anti N-A, Sinha S: 2011. Hybrid renewable energy used to power computer laboratory: a project by University of Cape Town IEEE student branch. In **IEEE Global Humanitarian Technology Conference**, IEEE Computer Society, pp 131–136.
- Luus FPS, Maharaj BTJ: 2011. Joint source channel network coding for Bidrectional Wireless Relays. In IEEE ICASSP International Conference on Acoustics, Speech and Signal Processing, IEEE, pp 3156–3159.
- Venter PJ, Bogalecki AW, Du Plessis M, Goosen M, Nell IJ, Rademeyer P: 2011. CMOS dot matrix microdisplay. In Proceedings of SPIE: Advances in Display Technologies, and E-papers and Flexible Displays, SPIE, pp 7956B–33.

- Goosen M, Venter PJ, Du Plessis M, Nell IJ, Bogalecki AW, Rademeyer P: 2011. High speed CMOS optical communication using silicon light emitters. In Proceedings of SPIE: Optoelectronic Interconnects and Component Integration X1, SPIE, pp 1–8.
- Foty D, Smith B, Sinha S, Schroter M: 2011. The wireless bandwidth crisis and the need for power-efficient bandwith. In **Proceedings of the 10th International Symposium on Signals, Circuits, and Systems**, IEEE, pp 275–279.
- Bogalecki AW, Du Plessis M, Venter PJ, Janse Van Rensburg C: 2011. Spectral measurement and analysis of silicon CMOS light sources. In SMEOS 2011: Sensors, MEMS and Electro-optic Systems, IEEE, pp 31–36.
- Schoeman J, Du Plessis M: 2011. Characterisation of the electrical response of a novel dual element thermistor for low frequency applications. In SMEOS 2011: Sensors, MEMS and Electro-optic Systems, IEEE, pp 58–62.
- Goosen M, Du Plessis M, Venter PJ, Bogalecki AW, Alberts AC, Rademeyer P: 2011. CMOS Avalanche electroluminescene applications – microdisplay and high speed data communication. In SMEOS 2011: Sensors, MEMS and Electro-optic Systems, IEEE, pp 63–67.
- Maclean W, Du Plessis M, Schoeman J: 2011. Optimisation of CMOS compatible microbolometer device performance.
   In SMEOS 2011: Sensors, MEMS and Electro-optic Systems, IEEE, pp 68–71.
- Botha PR, Maharaj BTJ: 2011. Log domain Turbo STFC decoding with zero forcing and MMSE decoders. In **Southern Africa Telecommunication Networks and Applications Conference 2011**, Telkom, pp 1–5.
- Chiwewe TM, Hancke GP: 2011. SBYaoGG: Distributed energy efficient topology control with low interference. In **Southern Africa Telecommunication Networks and Applications Conference 2011**, Telkom, pp 1–4.
- Botha MI, Grobler H: 2011. A Simulation framework for evaluating the behaviour of a modular automated main distribution frame using OMNET++. In Southern Africa Telecommunication Networks and Applications Conference 2011, Telkom, pp 1–6.
- Merensky AM, Van Wyk JH, Linde LP: 2011. A Multi-levelled OFDM-CDMA modem using complete complementary codes. In Southern Africa Telecommunication Networks and Applications Conference 2011, Telkom, pp 1–5.

Venter J, Sinha S: 2011. Pixel circuit optimization for imaging

applications using integrated circuit technologies. In The International IEEE Conference on Microwaves, Communications, Antennas and Electronic Systems 2011, IEEE, pp 1–5.

Oppermann CA, Hancke GP: 2011. A generic NFC-enabled measurement system for remote monitoring and control of client-side equipment. In **Third International Workshop on Near Field Communication 2011**, IEEE, pp 44–49.

#### Informatics

- Naidoo R, Palk W: 2011. Exploring formal information technology evaluation practices in African firms. In **African Journal of Business Management**, 5(29), pp 1169–11704.
- Lotriet HH, Matthee MC, Alexander PM: 2011. Internet access as a structural factor in career choice: a comparison between computing and non-computing major students. In African Journal of Research in Mathematics, Science and Technology Education, 15(2), pp 30–45.
- Roodt S, Viola R: 2011. Web 2.0: How this is shaping and changing the traditional business model. In **International Journal of Innovation in the Digital Economy**, 2(4), pp 17–32.
- Matthee MC, Liebenberg J: 2011. The ties that bind: a case of establishing a mobile post-training support network. In International Journal of Mobile Learning and Organisation, 5(2), pp 175–191.
- Hall L, Johnson RD: 2011. Preparing IS students for realworld interaction with end users through service learning: a proposed organizational model. In Journal of Organizational and End User Computing, 23(3), pp 67–80.
- Kroeze JH, Bothma TJD, Matthee MC: 2011. Manoeuvring multi-dimensional language data: a code shuttle with XML and database-operation functions. In Journal of Semantics, 20(2), pp 497–530.
- Weilbach EH, Byrne E: 2011. Implementing open source software to conform to national policy. In Journal of Systems and Information Technology, 13(3), pp 286–302.
- Fourie I, Krauss KEM: 2011. Information literacy for teachers in rural South Africa. In Journal of Systems and Information Technology, 13(3), pp 303–321.



Prof Sunil Maharaj is Head of the Department of Electrical, Electronic and Computer Engineering. He currently holds the position of Director of the Sentech Chair in Broadband Wireless Multimedia Communications (BWMC), which participates in state-of-the-art research activities in the field of wireless broadband multimedia communications. In 2010, he was the winner of the Department of Trade and Industry's THRIP Technology Award in the Advanced Hi-tech Category.

- Van Schalkwyk PG, Lotriet HH: 2011. Web 2.0 support for change management during BPMS implementation using an open source approach. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(2), pp 161–174.
- Vos W, Matthee MC: 2011. Towards a Service-oriented architecture : a framework for the design of financial trading applications in the South African investment banking environment. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(1), pp 109–122.
- Kruger CJ, Johnson RD: 2011. Is there a correlation between knowledge management maturity and organizational performance? In **The journal of information and knowledge management systems**, 41(3), pp 265–295.

### Papers published

- Matthee MC, Viktor HL, Valencia S: 2011. Views on the role of mobile phones in post-training support in South Africa.
  In 10th World Conference on Mobile and Contextual Learning mLearn 2011, mLearn 2011, pp 286–293.
- Alexander PM, Pieterse V, Lotriet HH: 2011. A comparison of computing and non-computing students' personalities based on the five-factor model. In ECIS 2011: The 19th European conference on Information Systems, ECIS 2011, pp 1–14.
- Hattingh M, Matthee MC, Lotriet HH: 2011. Towards understanding how expatriates use the Internet in the Kingdom of Saudi Arabia. In ICPSA/SWS 2011: The Joint conference of Pervasive Computing and Applications and Web Society, IEEE Press, pp 1–7.
- Muganda Ochara N: 2011. E-Government evolution towards a technolcracy: a quest for bureaucratic control. In Joint Proceedings of Ongoing Research and Projects of IFIP EGOV and ePart 2011, Trauner Verlag Universitat, pp 159–166.
- Leonard AC, Strydom I: 2011. A conceptual framework for managing service desks: a South African perspective. In **Proceedings of PICMET '11Technology Management in the Energy-Smart World**, Omnipress & PICMET, pp 1–8.
- Twinomurinzi H, Ghartey-Tagoe KB: 2011. Corruption in African democratic developing countries and ICT: apathy, anxiety and patriotism. In **Proceedings of SIG GlobDev Fourth Annual Workshop**, aisnet, pp 1–21.
- Alexander PM, Schoeman M, De Kock E, Bennett A: 2011. The influence of gender and age on choosing computing courses at South African universities. In **Proceedings of the 2011 Annual Conference of the South African Institute of Computer Science and Information Technologists**, University of Cape Town, pp 1–10.
- Leonard AC: 2011. A grounded theory research investigation into the importance of social relationships and networks within corporate information systems projects. In Proceedings of the 2011 Annual Conference of the South African Institute of Computer Science and Information Technologists, University of Cape Town, pp 290–293.
- Roodt S, De Villiers C: 2011. Using youtube© as an innovative tool for collaborative learning at undergraduate level in tertiary education. In **Proceedings of the 2011 International SIGED: IAIM Conference**, SIGed IAIM, pp 1–13.

- Steyn AA: 2011. Alice in a student wonderland: sparking creativity and solving problems. In Proceedings of the 2011 International SIGED: IAIM Conference, SIGed IAIM, pp 1–12.
- Steyn AA, Matthee MC: 2011. Teaching 21st century information systems students in a developing context.
  In Proceedings of the 2011 International SIGED: IAIM Conference, SIGed IAIM, pp 1–11.
- Asmelash D: 2011. The uses of business outcomes for IT benefit identification at the Ex-Ante Justification stage. In **Proceedings of the 5th European Conference on Information Management and Evaluation**, ACI Academic conferences International, pp 65–74.
- Jordaan M: 2011. Community-Based outreach as a component for engineering education. In **Proceedings of the First Biennial Conference of the South African Society for Engineering Education**, SASEE, pp 104–116.
- Muganda Ochara N: 2011. Towards a critical realist epistemology for research into e-government systems. In **Proceedings of the IADIS International Conference Information Systems**, IADIS Press, pp 316–321.
- Matthee MC, Pretorius HW, Maree D, Weilbach EH, Steyn AA, Reynecke J: 2011. IT and social responsibility: creating awareness amongst First Year Information System Students. In **ReSNES' 2011: E-Skilling for Equitable Prosperity and Global Competitiveness**, RESNES 2011, pp 1–7.
- Steyn AA: 2011. E-skills for entrepreneurs : a preliminary study. In **ReSNES' 2011: E-Skilling for Equitable Prosperity and Global Competitiveness**, RESNES 2011, pp 1–11.
- Naidoo R, Twinomurinzi H: 2011. An exploratory survey of e-skills training supplied by small private training institutions in Gauteng. In **ReSNES' 2011: E-Skilling for Equitable Prosperity and Global Competitiveness**, RESNES 2011, pp 1–9.
- Muganda Ochara N, Joubert P, Du Toit J, Roodt S: 2011. A critical analysis of the discourse on engagement in teaching business programming using games : an action research perspective. In SACLA 2011 Conference Proceedings of the South African Computer Lecturers' Association, SACLA 2011, pp 1–9.
- Pretorius HW, Steyn AA: 2011. The Good, Bad and Ugly of pair teaching in ICT Higher Education: a multi-perspective reflection. In SACLA 2011 Conference Proceedings of the South African Computer Lecturers' Association, SACLA 2011, pp 182–188.

- Mentz J, Kotze P, Van der Merwe A: 2011. A comparison of practitioner and researcher definitions of enterprise architecture using an interpretation method. In **The Fifth International Conference on Research and Practical Issues of Enterprise Information Systems**, Center for Industrial Production Aalborg University Denmark, pp 1–19.
- Kruger CJ, Roodt S: 2011. The use of Trends in ICT to enhance Undergraduate Teaching: a South African case study. In The First Pre-AMCIS Workshop of the AIS Special Interest Group for ICT in Global Development (SIG GlobDev Workshop), SIG GLOBDEV, pp 1–15.

# Centre for Academic Development

### Papers published

- Grayson D, Madisha KM, Ngcobo BL: 2011. Extended Degree Programme students' experiences with the skyscraper activity. In 7th International CDIO Conference 2011, 20-23 June, Technical University of Denmark.
- Grayson D: 2011. Results of the First Year of the Engineering Augmented Degree Programme at the University of Pretoria. In **Proceedings of the First Biennial Conference of the South African Society for Engineering Education**, 10-12 August, SASEE, pp 69–79.

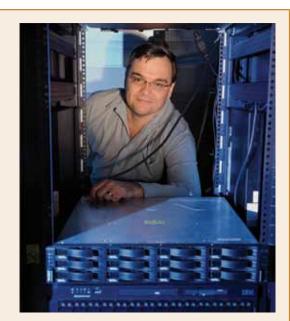
# Engineering and Technology Management

- Weeks RV: 2011. Nurturing a service orientated paradigm of management within a traditional manufacturing enterprise: A South African case study. In Acta Commercii, 11, pp 181–199.
- Baloyi L, Bekker MC: 2011. Causes of construction cost and time overruns: The 2010 FIFA World Cup stadia in South Africa. In Acta Structilia: Journal for the Physical and Development Sciences/Tydskrif vir die Fisiese en Ontwikkelingswetenskappe, 18(1), pp 51–67.
- Musango J, Brent AC, Amigun B, Pretorius L, Muller H: 2011. Technology sustainability assessment of biodiesel

development in South Africa: A system dynamic approach. In **Energy**, 36(12), pp 6922–6940.

- Pretorius L, Benade S, Kruger S: 2011. Technology diffusion and forecasting: the case of computational fluid dynamics for simulation of greenhouse internal environments. In International journal of innovation and technology Management, 8(1), pp 27–39.
- Bakker R, Knoben J, De Vries N, Oerlemans LAG: 2011. The nature and prevalence of inter-organizational project ventures: evidence from a large scale field study in the Netherlands 2006-2009. In International Journal of Project Management, 29(6), pp 781–794.
- Weeks FH, Weeks RV: 2011. A contemporary management perspective of the concept 'a culture of learning'. In Journal of Contemporary Management, 8, pp 498–516.
- Brent AC, Pretorius MW: 2011. Industrial and commercial opportunities to utilise concentrating solar thermal systems in South Africa. In **Journal of Energy in Southern Africa**, 22(4), pp 15–30.
- Amadi-EchenDu JE, Lephauphau O, Maswanganyi M, Mkhize M: 2011. Case studies of technology roadmapping in mining. In Journal of Engineering and Technology Management, 28(1/2), pp 23–32.
- Grover AS, Van Huyssteen GB, Pretorius MW: 2011. The South African human language technology audit. In Language Resources And Evaluation, 45(3), pp 271–288.
- Barry ML, Steyn H, Brent AC: 2011. Selection of renewable energy technologies for Africa: eight case studies in Rwanda, Tanzania and Malawi. In Renewable Energy, 36(11), pp 2845–2852.
- Chan KY, Oerlemans LAG, Pretorius MW: 2011. Innovation outcomes of South African new technology-based firms: a contribution to the debate on the performance of science park firms. In **South African Journal of Economic and Management Sciences**, 14(4), pp 361–378.
- Steyn JL, Buys AJ: 2011. Creativity and 'eureka' in science and engineering. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(2), pp 1–17.
- Jiang DD, Pretorius L: 2011. Cross-cultural communication behaviour in international engineering projects: Chinese and South African perspectives. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(2), pp 54–67.

- Beukman EA, Steyn HdeV: 2011. Phasing technology transfer projects for sustainable socio-economic development. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(2), pp 40–53.
- Nethathe JM, Van Waveren CC, Chan KY: 2011. Extended critical success factor model for management of multiple projects: An emperical view from Transnet in South Africa. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(2), pp 189–203.
- Pretorius L, Benade SJ: 2011. A systems dynamics approach to competing technologies: exploring uncertainty of interaction and market parameters. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(2), pp 27–39.
- Dodoo END, Van Waveren CC, Chan KY: 2011. An empirical study of factors and cognisant measures for project quality in the design phase: a case of building projects in the Department of Building and Engineering Services of Botswana. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(1), pp 137–153.
- Ramdass K, Pretorius L: 2011. Implementation of modular manufacturing in the clothing industry in KwaZulu-Natal: a case study. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(1), pp 167–181.
- Van Niekerk SI, Steyn HdeV: 2011. Defining 'project success' for a complex project – The case of a nuclear engineering development. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(1), pp 123–136.
- Barry ML, Uys L: 2011. An investigation into the status of project management in South Africa. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(1), pp 29–44.
- Pouris A, Pouris A: 2011. Patents and economic development in South Africa: managing intellectual property rights. In South African Journal of Science, 107(11–12), pp 24–33.



Prof Andries Engelbrecht is Head of the Department of Computer Science and holds the South African Research Chairs Initiative (SARChI) Chair in Artificial Intelligence. His main research focus is computational intelligence, with a particular interest in computational swarm intelligence, learning from zero knowledge using competitive coevolution, and evolutionary algorithms. His research team developed an open source library of computational intelligence algorithms, which is increasingly being used internationally. He has published three books and 157 peer-reviewed articles, and is a member of the Institute of Electrical and Electronic Engineers (IEEE) Computational Intelligence Society (CIS).

# Papers published

Baloyi L, Bekker MC: 2011. Project construction delays and cost overruns: a comparative review of the construction of 2010 FIFA World Cup Stadia in South Africa. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 23-1 – 23-12.

Benade SJ, Pretorius L: 2011. Systems architecture and

enterprise architecture: Competing concepts? In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 3-1 – 3-13.

- Weeks RV, Benade SJ: 2011. Service science: A servitization systems perspective. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 18-1 – 18-11.
- Gouws PA, Brent AC, Pierce WT: 2011. The contribution of energy efficiency towards the success of industrial organisations in South Africa. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development) – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 105-1 – 105-9.
- Manana MM, Van Waveren CC, Chan KY: 2011. The relationship between CIDB grading and project performance in South Africa. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 76-1 – 76-12.
- Erasmus LD, Doeben-Henisch G: 2011. A theory for system engineering management. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 124-1 – 124-12.
- Oerlemans LAG, Knoben J, Pretorius MW: 2011. Alliance portfolio diversity and innovation outcomes: does technology management matter? In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 9-1 – 9-24.
- Pretorius S, Steyn H de V, Jordaan JC: 2011. Project management success versus project management maturity in engineering and the built environment: An

African perspective. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 52-1 – 52-14.

- Maluleke GT, Pretorius L: 2011. Creating a business case framework for post mine closure opportunities systems thinking approach. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 4-1 – 4-12.
- Platzek BP, Pretorius L, Winzker DH: 2011. Identifying and pursuing business opportunities in a vital entrepreneurial learning organisation. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 13-1 – 13-23.
- Barkhuizen WF, Pretorius JHC, Pretorius L: 2011. An approach to innovation in risk systems. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 32-1 – 32-13.
- Wessels A, Pretorius L: 2011. Impact of design changes in a concurrent engineering development environment. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 33-1 33-17.
- Malan C, Pretorius L: 2011. Methods and metrics for design of value robust systems. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 63-1 – 63-12.
- Coetzee J, Pretorius JHC, Pretorius L: 2011. Investigating the effect of team grouping principles on project success: a case study. In **1st International Conference on Industrial**

**Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings**, Southern African Institute for Industrial Engineering, pp 87-1 – 87-6.

- Coetzee GL, Pretorius MW: 2011. Technology readiness assessment in the process industry: The case of the gas to liquids industry. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 53-1 – 53-17.
- Nabbie A, Steyn JL: 2011. Technology familiarity and its influence on customer resistance to new products: the De Beers Debtech case study. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 109-1 – 109-13.
- Ndamase AM, Steyn JL: 2011. Technology transfer competiveness in the automotive industry: a case study of parts suppliers for Toyota SA Motors. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 119-1 119-13.
- Visser JK, Mokhobo MW: 2011. An analysis of the project risk management process applied for demand side management projects. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 89-1 – 89-13.
- Sparrius AD: 2011. How the law of contract impacts engineering practise. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 88-1 – 88-13.
- Oosthuizen R, Roodt JH, Pretorius L: 2011. Framework to investigate emergence in system engineering. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management

for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 46-1 – 46-9.

- Pouris A, Pouris A: 2011. Mapping internet security reseach. In 2011 First IRAST International Conference on Data Engineering and Internet Technology, IEEE, pp 248–250.
- Kruger S, Pretorius L: 2011. The effect of bench arrangements on the indoor climate of naturally ventilated greenhouses.
  In 8th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT, pp 373–382.
- Amadi-EchenDu JE, Rasetlola RT: 2011. Technology commercialisation factors, frameworks and models.
   In First IEEE International Technology Management Conference (ITMC 2011), IEEE, pp 144–148.
- Kachieng'a MO: 2011. Challenges in managing diffusion of telemedicine technology in South Africa. In First IEEE International Technology Management Conference (ITMC 2011), IEEE, pp 121–125.
- Brink B, Pretorius JHC, Pretorius L: 2011. Technology management of transportation properties: problems and prospects. In IAMOT2011 20th International Conference for the International Association of Management of Technology, International Association for Management of Technology.
- Pretorius L, Benade SJ: 2011. Systems dynamics simulation of competing technologies under market uncertainty: a case study. In IAMOT 2011 20th International Conference for the International Association of Management of Technology, International Association for Management of Technology.
- Musango J, Brent AC, Amigun B, Pretorius L, Muller H: 2011. Technology sustainability assessment of biodiesel development in South Africa: a systems dynamics approach. In IAMOT 2011 20th International Conference for the International Association of Management of Technology. International Association for Management of Technology.
- Gopaul KG, Buys AJ: 2011. An analysis of the integrated logistics support concept employed by the SA Air Force on new aircraft acquisitions. In IAMOT 2011 20th International Conference for the International Association of Management of Technology, International Association for Management of Technology.
- Makula TJ, Buys AJ: 2011. Management of information and the communication technology acquisition in an under-

developed country: The Econet Telecom Lesotho case study. In IAMOT 2011 20th International Conference for the International Association of Management of Technology, International Association for Management of Technology.

- Amadi-EchenDu JE, Boglo A: 2011. Managed ICT services from a developing country perspective. In IAMOT 2011
   20th International Conference for the International Association of Management of Technology, International Association for Management of Technology.
- Pretorius MW, Brent AC: 2011. A research agenda for emerging solar technologies in developing countries: a roadmap for South Africa. In IAMOT 2011 20th International Conference for the International Association of Management of Technology, International Association for Management of Technology.
- Weeks RV, Benade SJ: 2011. Technology and the global challenges confronting South African institutions: the resiliency imperative. In IAMOT 2011 20th International Conference for the International Association of Management of Technology, International Association for Management of Technology.
- Erasmus LD, Doeben-Henisch G: 2011. A theory for the systems engineering process. In IEEE Africon 2011, IEEE.
- Marnewick A, Pretorius JH, Pretorius L: 2011. A perspective on human factors contributing to quality requirements: a cross-case analysis. In IEEM 2011 The IEEE International Conference on Industrial Engineering and Engineering Management, IEEE, pp 389–393.
- Van Wyngaard CJ, Pretorius HC, Pretorius L: 2011. Strategic management of the triple constraint trade-off dynamics – a polarity management approach. In IEEM 2011 The IEEE International Conference on Industrial Engineering and Engineering Management, IEEE, pp 824–828.
- Weeks RV, Benade SJ: 2011. Resiliency the elusive piece in the service management puzzle. In International Joint Conference on Service Sciences 2011, IEEE CPS, pp 59–63.
- Chan KY, Oerlemans LAG, Volschenk J, Oliver H: 2011. Objective and subjective measures of willingness to pay for green electricity: do they measure the same? Evidence from a South African case. In Proceedings of PICMET '11Technology Management in the Energy-Smart World, Omnipress & PICMET, pp 2528–2536.

Steyn JL, Liebenberg GA, Chan KY: 2011. Automotive

component manufacturing innovation in developing countries' association with education. In **Proceedings** of **PICMET '11Technology Management in the Energy-Smart World**, Omnipress & PICMET, pp 1577–1584.

- Busi F, Barry ML, Chan KY: 2011. Critical success factors for instrumentation and control engineering projects in the South African petrochemical industry. In Proceedings of PICMET '11Technology Management in the Energy-Smart World, Omnipress & PICMET, pp 2001–2008.
- Keeley AL, Van Waveren CC, Chan KY: 2011. An empirical study on the indicators and factors for successful Six Sigma deployment in the mining industry: a South African case. In Proceedings of PICMET '11Technology Management in the Energy-Smart World, Omnipress & PICMET, pp 2009–2019.
- Jiang DD, Pretorius L: 2011. Image behaviour in international engineering projects: a comparison between South African and Chinese groups. In **Proceedings of PICMET '11Technology Management in the Energy-Smart World**, Omnipress & PICMET, pp 2499–2507.
- Winzker DH, Pretorius L: 2011. ISEE energy technology management. In Proceedings of PICMET '11Technology Management in the Energy-Smart World, Omnipress & PICMET, pp 2572–2579.
- Grootboom FA, Pretorius JHC, Pretorius L: 2011. A case study of leadership in consulting engineering. In **Proceedings** of **PICMET '11Technology Management in the Energy-Smart World**, Omnipress & PICMET, pp 20–25.
- Weeks RV, Benade SJ: 2011. Organisational culture: the elusive piece in the technology management puzzle. In **Proceedings of PICMET '11Technology Management in the Energy-Smart World**, Omnipress & PICMET, pp 2447–2453.
- Rauch M, Weeks RV: 2011. Utilisation of wireless versus wired access technologies in the South African foodrelated manufacturing industry. In Proceedings of PICMET '11Technology Management in the Energy-Smart World, Omnipress & PICMET, pp 662–668.
- Weeks RV, Du Plessis WJ: 2011. Servitization: Developing a business model to translate corporate strategy into strategic projects. In Proceedings of PICMET '11Technology Management in the Energy-Smart World, Omnipress & PICMET, pp 114–123.

Scheffer F, Barry ML: 2011. Managing software changes in a

web based multistage environment in a small enterprise. In **Proceedings of PICMET '11Technology Management in the Energy-Smart World**, Omnipress & PICMET, pp 2046–2053.

- Van der Linde E, Barry ML: 2011. The expanded public works infrastructure programme: lessons learned in transferring technical skills to unskilled workers within the South African construction industry. In **Proceedings of PICMET** '11Technology Management in the Energy-Smart World, Omnipress & PICMET, pp 1215–1222.
- Buys AJ, Matlhane S: 2011. R&D and innovation in services companies: the air traffic and navigation services case study. In Proceedings of PICMET '11Technology Management in the Energy-Smart World, Omnipress & PICMET, pp 3003–3009.
- Buys AJ, Sampson P: 2011. Innovation criteria for radical nuclear technology. In Proceedings of PICMET '11Technology Management in the Energy-Smart World, Omnipress & PICMET, pp 1675–1680.
- Kachieng'a MO, Dhlamini S: 2011. A competitive engergy market management model for South Africa. In Proceedings of PICMET '11Technology Management in the Energy-Smart World, Omnipress & PICMET, pp 986–993.
- Mayindi D, Kachieng'a MO: 2011. Technological competence and capacity building for rural infrastructure development: Lessons from South Africa's civil aircraft industry. In Proceedings of PICMET '11Technology Management in the Energy-Smart World, Omnipress & PICMET, pp 151–161.
- Grover AS, Van Huyssteen GB, Pretorius MW: 2011. A technology audit: the state of Human Language Technologies R&D in South Africa. In **Proceedings of PICMET '11Technology Management in the Energy-Smart World**, Omnipress & PICMET, pp 1693–1706.
- Thopil GA, Pouris A: 2011. Externality valuation in South Africa's coal based electricity generation sector. In **Proceedings of PICMET '11Technology Management in the Energy-Smart World**, Ominpress & PICMET, pp 2798–2803.
- Duif J, Barry ML: 2011. Towards a framework for human resource management processes in the mature project orientated organisation: The case for an ICT Organisation in South Africa. In **Proceedings of PICMET '11Technology Management in the Energy-Smart World**, Ominpress & PICMET, pp 2020–2024.

Sarjoo A, Barry ML: 2011. Towards a career management

framework for civil engineers in the South African public sector. In **Proceedings of PICMET '11Technology Management in the Energy-Smart World**, Ominpress & PICMET, pp 3178–3186.

- Marais HC, Pienaar-Marais M, Gathua S: 2011. On the promotion of the utilisation of research findings by graduate students in management studies: a South African perspective. In **Proceedings of the 10th European Conference on Research Methods in Business and Management**, Academic Publishing Limited, pp 328–338.
- Mthembu NS, Biseswar S, Kachieng'a MO: 2011. Investing in technological innovations in South Africa: the case study of SPII programme. In Winds of Change, Staking Paths to Explore New Horizons, 2011 International Annual Conference, Omnipress.
- Barry ML, Steyn HdeV, Brent AC: 2011. Proposal of a framework for the selection of renewable energy technology systems in Africa. In World Renewable Energy Congress: 2011, Linkoping University Electronic Press.

# Information Science

### Journal articles

- Mogotsi IC, Boon JA, Fletcher L: 2011. Modelling the relationships between knowledge sharing, organizational citizenship, job satisfaction and organizational commitment among school teachers in Botswana. In African Journal of Library Archives And Information Science, 21(1), pp 41–58.
- Fourie I, Claasen-Veldsman MM: 2011. Exploration of the needs of South African oncology nurses for current awareness services available through the Internet. In Information Research-An International Electronic Journal, 16(3), pp 1–33.
- Burclaff N, Britz JJ: 2011. Alumni access policies in public university libraries. In Inkanyiso: Journal of Humanities and Social Science, 3(1), pp 1–12.
- Matthee MC, Liebenberg J: 2011. The ties that bind: a case of establishing a mobile post-training support network. In International Journal of Mobile Learning and Organisation, 5(2), pp 175–191.
- Nyalungu I: 2011. The application of a Business Intelligence tool for strategic planning in a higher education institution: a case study of the University of Witwatersrand. In

Journal for Transdisciplinary Research in Southern Africa, 7(1), pp 53–72.

- Weeks RV: 2011. Service Science: A South African Institutional Management Perspective. In Journal of Contemporary Management, 8, pp 363–383.
- Kroeze JH, Bothma TJD, Matthee MC: 2011. Manoeuvring multi-dimensional language data: a coDe shuttle with XML and database-operation functions. In Journal of Semantics, 20(2), pp 497–530.
- Fourie I, Krauss KEM: 2011. Information literacy for teachers in rural South Africa. In Journal of Systems and Information Technology, 13(3), pp 303–321.
- Bergenholtz H, Bothma TJD: 2011. Needs adapted data presentation in e-information tools. In Lexikos, 21, pp 53–77.
- Fourie I: 2011. Personal information management, reference management and mind maps: the way to creative librarian? In **Library Hi Tech**, 29(4), pp 764–771.
- Fourie I: 2011. Personal information and reference management: librarians' increasing creativity. In **Library Hi Tech**, 29(2), pp 387–393.
- Fourie I: 2011. Librarians alert: how can we exploit what is happening with personal information management, reference management and related issues? In Library Hi Tech, 29(3), pp 550–556.
- De Boer A-L, Bothma TJD, Du Toit PH: 2011. Enhancing information literacy through the application of whole brain strategies. In **Libri**, 61(1), pp 67–75.
- Lor PJ, Britz JJ: 2011. New trends in content creation: changing responsibilities for librarians. In Libri, 61, pp 12–22.
- Roux APJ, De Beer CS: 2011. Onderweg na goeie wetenskap 3: voorwaardes vir die beste moontlike wetenskap. In LitNet Akademies, 8(3), pp 1–30.
- Holmner MA, Britz JJ: 2011. The road less travelled: a critical reflection on infrastructure development in Africa from a perspective of the new economics of information. In Mousaion: South African Journal of Information Studies, 29(1), pp 139–157.
- Bitso C, Fourie I: 2011. Information seeking behaviour of secondary level geography teachers in Lesotho.
  In Mousaion: South African Journal of Information Studies, 29(2), pp 173–194.
- Holmner MA: 2011. The road to the Information and

Knowledge society: indigenous knowledge and the Millennium Development Goals. In **Mousaion: South African Journal of Information Studies**, 29(2), pp 137–155.

- Marx EMM, Soer ME, Dick AL: 2011. The ability of adolescents with hearing loss in special schools to access and use academic material in three provinces in South Africa. In Mousaion: South African Journal of Information Studies, 29(1), pp 37–55.
- Kleyn AJT, Snyman ME: 2011. "Haai, Jaco Jacobs! Wanneer skryf jy 'n regte boek?" 'n bestekopname van Afrikaanse kinder- en jeugboeke (1999-2009). In Mousaion: South African Journal of Information Studies, 28(2), pp 26–49.
- Mogotsi IC, Boon JA, Fletcher L: 2011. Knowledge sharing behaviour and demographic variables amongst secondary school teachers in and around Gaborone, Botswana. In **South African Journal of Information Management**, 13(1), pp 1–6.
- De Beer CS: 2011. Methodology and noology: amazing prospects for library and information science. In **South** African Journal of Libraries and Information Science, 77(1), pp 85–93.
- Scheepers MD, De Boer A-L, Bothma TJD, Du Toit PH: 2011. A mental model for successful inter-disciplinary collaboration in curriculum innovation for information literacy. In South African Journal of Libraries and Information Science, 77(1), pp 75–84.
- Snyman ME, Penzhorn C: 2011. Leser en konteks: 'n resepsiestudie oor Afrikaanse romanselesers. In **Tydskrif** vir Geesteswetenskappe, 51(2), pp 238–250.
- De Beer CS: 2011. Die idee van die gees. In **Tydskrif vir Geesteswetenskappe**, 51(4), pp 472–489.

### Chapters in books

- Bothma TJD: 2011. Filtering and adapting data and information in the online environment in response to user needs. In e- Lexicography: The Internet, Digital Initiatives and Lexicography, Continuum, pp 71–102.
- Dick AL: 2011. Remembering reading: memory, books and reading in South Africa's apartheid prisons, 1956-1990. In **The History of Reading**, Pulgrave Macmillan, pp 192–207.

### Papers published

Prinsloo DJ, Heid U, Bothma TJD, Faasz G: 2011. Interactive, dynamic electronic dictionaries for text production. In



Prof Andrie Garbers-Craig leads the Anglo American Chair in Pyrometallurgy in the Department of Materials Science and Metallurgical Engineering, and forms part of the Pyrometallurgy Research Group. She specialises in refractory materials and thermodynamics. Her research interests include studies on the relationship between the phase chemistry of iron sinters and their chemical and physical properties; Cr(VI) formation in the pyrometallurgical industry, as well as the stabilisation of Cr(VI) in waste materials that are produced in this industry; and various topics related to refractory materials.

In Electronic lexicography in the 21st century: New applications for new users Proceedings of eLex 2011, 10-12 Nov, Trojina, Institute for Applied Slovene Studies, pp 215–220.

- Pieterse V, Van Rooyen IJ: 2011. Student discussion forms: What is in it for them? In Proceedings CSERC '11 Computer Science Education Research Conference, Open University, pp 59–70.
- Nyalungu IV, Sewdass N: 2011. The application of a business intelligence tool at a higher education institution. In Proceedings of the 10th Annual Information and Knowledge Management Conference: Managing Information and

**Knowledge in a New Decade: An Interdisciplinary Approach**, University of Johannesburg, pp 136–152.

- Sewdass N: 2011. A competitive intelligence framework for gathering and analysing information in public service departments to enhance service delivery. In Proceedings of the 10th Annual Information and Knowledge Management Conference: Managing Information and Knowledge in a New Decade: An Interdisciplinary Approach, University of Johannesburg, pp 171–192.
- Pieterse V, Thompson JE, Marshall L: 2011. Rocking the boat: an approach to facilitate formation of effective student teams. In SACLA 2011 Conference Proceedings of the South African Computer Lecturers' Association, SACLA 2011, pp 115–123.

### Research and technical/policy output

- Le Roux EH, Struik W: Technical Report: 2011. Annual Book Publishing Industry Survey Report 2009. For: **Publishers'** Association of South Africa.
- Le Roux EH, Struik W: Technical Report: 2011. Annual Book Publishing Industry Survey Report 2010. For: **Publishers'** Association of South Africa.
- Le Roux EH, Struik W: Technical Report: 2011. Book Publishing Industry Annual Survey Broad Trends Report, 2008–2010. For: **Publishers' Association of South Africa**.

# Institute for Technological Innovation (ITI)

### Journal articles

- Inglesi-Lotz R, Pouris A: 2011. Scientometric impact assessment of a research policy instrument: the case of rating researchers on scientific outputs in South Africa. In Scientometrics, 88(3), pp 747–760.
- Pouris A: 2011. Scientometric research in South Africa and successful policy instruments. In **Scientometrics**, Dec, Online.
- Pouris A, Pouris A: 2011. Patents and economic development in South Africa: Managing intellectual property rights. In South African Journal of Science, 107(11-12), pp 24–33.

### Papers published

Pouris A, Pouris A: 2011. Mapping Internet Security Reseach.

In 2011 First IRAST International Conference on Data Engineering and Internet Technology, IEEE, pp 248–250.

- Thopil GA, Pouris A: 2011. Externality valuation in South Africa's coal based electricity generation sector. In **Proceedings of PICMET '11Technology Management in the Energy-Smart World**, Omnipress & PICMET, pp 2798–2803.
- Pouris A: 2011. Scientometric research in South Africa and successful policy instruments. In Proceedings of the ISSI 2011 Conference – 13th International Conference of the International Society for Scientometrics & Informetrics, ISSI, Leiden University and University of Zululand, pp 685–692.

# Materials Science and Metallurgical Engineering

- Sha G, Moller H, Stumpf WE, Xia JH, Govender G, Ringer SP: 2011. Solute nanostructures and their strengthening effects in Al-&Si-0.6Mg alloy F357. In Acta Materialia, 60, pp 692–701.
- Moller H, Govender G, Rossouw P, Stumpf WE: 2011. The influence of proior natural aging on the subsequent artificial aging response of aluminium alloy A356 with respective globular and gendritic microstructures. In Advances in Materials Science and Engineering, pp 1–6.
- Becker JH, Bradshaw D, De Villiers JPR: 2011. The mineralogy of pyrrhotite from Sudbury CCN and Phoenix nickel ores and iets effect on flotation performane. In Canadian Metallurgical Quarterly, 50(1), pp 10–19.
- Orsmond CPM, Pistorius PC: 2011. Filler selection for weldments in type 316L stainless steel, for hot organic acid service. In **Corrosion Engineering Science and Technology**, 46(1), pp 24–31.
- Thethwayo BM, Garbers-Craig AM: 2011. Laboratory scale investigation into the corrosion of copper in a sulphurcontaining environment. In **Corrosion Science**, 53(10), pp 3068–3074.
- Mutombo K, Du Toit M: 2011. Corrosion fatigue behaviour of aluminium alloy 6061-T651 welded using fully automatic gas metal arc welding and ER5183 filler alloy. In International Journal of Fatigue, 33(12), pp 1539–1547.

- Banks K, Tuling A, Mintz B: 2011. Influence of chemistry and runout table parameters on hot coil collapse in C-Mn steels. In **Ironmaking & Steelmaking**, 38(3), pp 204–210.
- Du Plessis HE, De Villiers JPR, Kruger GJ, Steuwer A, Brunelli M: 2011. Rietveld and pair distribution study of Hagg carbiDe using synchrotron X-ray diffraction. In Journal of Synchrotron Radiation, 18, pp 266–271.
- Van Nierkerk CJ, Du Toit M: 2011. Sensitization behaviour of 11–12% Cr AISI 409 stainless steel during low heat input welding. In Journal of the Southern African Institute of Mining and Metallurgy, 111(Apr), pp 243–255.
- Grobler JD, Bosman J: 2011. Gravity separator performance evaluation using Qemscan particle mineral analysis. In Journal of the Southern African Institute of Mining and Metallurgy, 111(Jun), pp 401–408.
- Muhlare TA, Groot DR: 2011. The effect of electrolyte additives on cathode surface quality during copper electrorefining. In Journal of the Southern African Institute of Mining and Metallurgy, 111(May), pp 371–378.
- Heukelman S, Groot DR: 2011. Fluidized bed roasting of micropelletized zinc concentrate: Part II-Particle entrainment and residence time. In Journal of the Southern African Institute of Mining and Metallurgy, 111, pp 767–772.
- Heukelman S, Groot DR: 2011. Fluidized bed roasting of micropelletized zinc concentrate: Part I-Pellet strength and roasting kinetics. In Journal of the Southern African Institute of Mining and Metallurgy, 111, pp 759–765.
- Banks K, Tuling A, Mintz B: 2011. The influence of N on hot ductility of V-, Nb-, and Nb-Ti- containing steels using improved thermal simulation of continuous casting. In Journal of the Southern African Institute of Mining and Metallurgy, pp 371–378.
- Steenkamp JD, Kotze H, Meyer JB, Barnard J: 2011. Magnesia refractory dryout-managing the risk of hydration. In Journal of the Southern African Institute of Mining and Metallurgy, 111(Jun), pp 423–428.
- Moller H, Govender G, Stumpf WE: 2011. Comparison of the heat treatment response of SSM-HPDC 6082 and 6004 wrought alloys with A356 and F357 casting alloys. In **Materials Science**, 690, pp 53–56.
- Moller H, Govender G, Stumpf WE: 2011. Comparison of the heat treatment response of wrought and SSM-HPCC alloy 6082. In **Materials Science**, 690, pp 242–245.
- Sello MP, Stumpf WE: 2011. Laves phase precipitation and lets transformation kinetics in the ferritic stainless steel

type AISI 441. In Materials Science and Engineering A-Structural Materials Properties Microstructure and Processing, 528, pp 1840–1847.

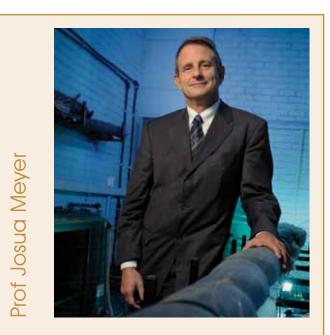
- Kang SE, Tuling A, Banerjee JR, Gunawardana WD, Mintz B: 2011. Hot ductility of TWIP steels. In Materials Science and Technology, 27(1), pp 95–100.
- Tuling A, Banerjee JR, Mintz B: 2011. Influence of peritectic phase transformation on hot ductility of high aluminium TRIP steels containing Nb. In **Materials Science and Technology**, 27(11), pp 1724–1731.
- Banks K, Tuling A, Klinkenberg C, Mintz B: 2011. Influence of Ti on the hot ductility of Nb containing steels. In **Materials Science and Technology**, 27(2), pp 537–545.
- Banks K, Tuling A, Mintz B: 2011. Influence of V and Ti on hot ductility of Nb containing steels of peritectic C contents. In Materials Science and Technology, 27(8), pp 1309–1314.
- Kang SE, Tuling A, Lau I, Bannerjee JR, Mintz B: 2011. The hot ductility of Nb/V containing high Al, TWIP steels. In Materials Science and Technology, 27(5), pp 909–915.
- Pistorius PC, De Villiers JPR, Gräser PPH, Venter A: 2011. Partial slag solidification within ilmenite smelter. In Mineral Processing and Extractive Metallurgy Review, 120(4), pp 211–217.
- Bordage A, Balan E, De Villiers JPR, Cromerty RD, Juhin A, Carvallo C, Calas G, Raju PVS, Glatzel P: 2011. V oxidation state in Fe-Ti oxides by high-energy resolution fluorescenedetected X-ray absorption spectroscopy. In **Physics and Chemistry of Minerals**, 38, pp 449–458.
- Du Toit M, Naude J: 2011. The influence of stabilization with titanium on the heat-affected zone sensitization of 11 to 12 % chromium ferritic stainless steels under low heat input welding conditions. In **Welding In the World**, 55(3-4), pp 38–47.
- Du Toit M: 2011. Features Welding's future in South Africa. In Welding Journal, 90(10), pp 31–34.

# Mechanical and Aeronautical Engineering

### Journal articles

Mohandes M, Rehman S, Rahman SM: 2011. Estimation of wind speed profile using adaptive neuro-fuzzy inference system. In **Applied Energy**, 88, pp 4024–4032.

- Wang KS, Heyns PS: 2011. An empirical re-sampling method on intrinsic mode function to deal with speed variation in machine fault diagnostics. In **Applied Soft Computing**, 11, pp 5015–5027.
- Le Roux WG, Bello-Ochende T, Meyer JP: 2011. Operating conditions of an open and direct solar thermal Brayton cycle with optimised cavity receiver and recuperator. In Energy, 36, pp 6027–6036.
- Page LG, Bello-Ochende T, Meyer JP: 2011. Maximum heat transfer density rate enhancement from cylinders rotating in natural convection. In International Communications in Heat and Mass Transfer, 38, pp 1354–1359.
- Bogaerts AEJ, Kok S, Malan AG: 2011. Highly efficient optimization mesh movement method based on proper orthogonal decomposition. In International Journal for Numerical Methods in Engineering, 86, pp 935–952.
- Zhou Y, Alam MM, Yang X, Guo YH, Wood D: 2011. Fluid forces on a very low Reynolds number airfoil and their prediction.
  In International Journal of Heat and Fluid Flow, 32, pp 329–339.
- Meyer JP, Olivier JA: 2011. Transitional flow inside enhanced tubes for fully developed and developing flow with different types of inlet disturbances: Part 1 – Adiabatic pressure drops. In **International Journal of Heat and Mass Transfer**, 54, pp 1587–1597.
- Meyer JP, Olivier JA: 2011. Transitional flow inside enhanced tubes for fully developed and developing flow with different types of inlet disturbances: Part 2 – Heat transfer. In **International Journal of Heat and Mass Transfer**, 54, pp 1598–1607.
- Bello-Ochende T, Meyer JP, Ogunronbi OI: 2011. Constructal multiscale cylinders rotating in cross-flow. In International Journal of Heat and Mass Transfer, 54, pp 2568–2577.
- Kaul S: 2011. Resursive modeling of a magneto-rheological damper. In International Journal of Mechanical and Materials Engineering, 6(1), pp 31–40.
- Lips S, Meyer JP: 2011. Two-phase flow in inclined tubes with specific reference to condensation: a review. In International Journal of Multiphase Flow, 37, pp 845–859.
- Alam MM, Zhou Y, Wang XW: 2011. The wake of two side-byside square cylinders. In **Journal of Fluid Mechanics**, 669, pp 432–471.
- Pal S, Heyns PS, Freyer BH, Theron NJ, Pal SK: 2011. Tool wear monitoring and selection of optimum cutting conditions



Prof Josua Meyer is Head of the Department of Mechanical and Aeronautical Engineering and Chair of the School of Engineering. His research focuses on heat transfer, fluid mechanics and thermodynamic aspects of heating, ventilation and air-conditioning. He is the author and co-author of more than 350 research articles, conference papers and patents and has received a number of awards for his research. He is a fellow or member of various professional institutes and societies, including the South African Institute for Mechanical Engineers and the American Institute for Aeronautics and Astronautics.

with progressive tool wear effect and input uncertainties. In **Journal of Intelligent Manufacturing**, 22, pp 491–504.

- Breytenbach B, Els PS: 2011. Optimal vehicle suspension characteristics for increased structural fatigue life. In Journal of Terramechanics, 48, pp 397–408.
- Aye SA, Heyns PS: 2011. The evaluation of whole-body vibration in a South African opencast mine. In Journal of the Southern African Institute of Mining and Metallurgy, 111, pp 751–757.
- Kaul S: 2011. Multi-degree-of-freedom modeling of mechanical snubbing systems. In Journal of Vibroengineering, 13(2), pp 195–211.

- Wang KS, Heyns PS: 2011. The combined use of order tracking techniques for enhanced Fourier analysis of order components. In Mechanical Systems and Signal Processing, 25, pp 803–811.
- Wang KS, Heyns PS: 2011. Application of computed order tracking, Vold-Kalman filtering and EMD in rotating machine vibration. In Mechanical Systems and Signal Processing, 25, pp 416–430.
- Oberholster AJ, Heyns PS: 2011. Eulerian laser Doppler vibrometry: Online blade damage identification on a multi-blade test rotor. In **Mechanical Systems and Signal Processing**, 25, pp 344–359.
- Alam MM, Meyer JP: 2011. Two interacting cylinders in cross flow. In **Physical Review E**, 84, pp 1–16.
- Meyer JP: 2011. Constructal law in technology, thermofluid and energy systems, and in design education Comment on 'The constructal law and the evolution of design in nature' by A. Bejan and S. Lorente. In **Physics Of Life Reviews**, 8, pp 247–248.
- Alam MM, Rehman S, Meyer JP, Al-Hadhrami LM: 2011. Review of 600-2500kW sized wind turbines and optimization of hub height for maximum wind energy yield realization.
  In Renewable & Sustainable Energy Reviews, 15, pp 3839–3849.
- Oke AO, Abou-El-Hossein K, Theron NJ: 2011. The design and development of a reconfigurable manufacturing system. In South African Journal of Industrial Engineering/Suid-Afrikaanse Tydskrif vir Bedryfsingenieurswese, 22(2), pp 121–132.
- Nolte K, Krüger PE, Els PS: 2011. Three dimensional musculoskeletal modelling of the seated biceps curl resistance training exercise. In **Sports Biomechanics**, 10(2), pp 146–160.
- Kaul S: 2011. Feed-forward control of a pre-cracked cantilever beam. In **UPB Science Bulletin**, 73(4), pp 27–44.

### Chapters in books

Meyer JP, Olivier JA: 2011. Heat transfer in the transitional flow regime. In **Evaporation, condensation and heat transfer**, Intech, pp 245–260.

### Papers published

Dymond ASD, Engelbrecht AP, Heyns PS: 2011. The sensitivity of single objective optimization algorithm

control parameter values under different computational constraints. In **2011 IEEE Congress on Evolutionary Computation**, IEEE, pp 1–8.

- Kruger S, Pretorius L: 2011. The effect of bench arrangements on the indoor climate of naturally ventilated greenhouses.
   In 8th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT, pp 373–382.
- Rehman S, Alam MM, Meyer JP, Al-Hadhrami LM: 2011. Analysis of a multi-megawatt grid connected wind farm. In 8th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT, pp 125–129.
- Lips S, Meyer JP: 2011. Experimental study of convective condensation of R134A in an inclined tube. In 8th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT, pp 38–43.
- Alam MM, Meyer JP: 2011. Fluid dynamics around twin cylinders and interactions. In 8th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT, pp 635–649.
- Olakoyejo OT, Bello-Ochende T, Meyer JP: 2011. Geometric optimisation of forced convection in a vascularised material. In **8th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics**, HEFAT, pp 666–674.
- Meyer JP, Hallquist M: 2011. Heat transfer coefficients for laminar to turbulent flow in tubes at constant heat flux.
   In 8th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT, pp 675–680.
- Obayopo SO, Bello-Ochende T, Meyer JP: 2011. Numerical study of effect of design and physical parameters on a pem fuel cell performance. In 8th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT, pp 567–574.
- Le Roux WG, Bello-Ochende T, Meyer JP: 2011. Optimum operating conditions of the small-scale open and direct solar thermal brayton cycle at various steady-state conditions. In 8th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, HEFAT, pp 110–119.
- Mbawala SJ, Heymann G, Roth CP, Heyns PS: 2011. Numerical modelling of wave propogation in ground using nonreflecting boundaries. In **Proceedings of the 15th African regional conference on soil mechanics and geotechnical engineering**, IOS press, pp 644–652.

# Mining Engineering

# Journal articles

- Du Plessis JJL, Van Greuning DC: 2011. Destruction of underground methane at Beatrix Gold Mine. In Journal of the Southern African Institute of Mining and Metallurgy, 111(12), pp 887–894.
- Malan DF, Napier JAL: 2011. The design of stable pillars in the Bushveld Complex mines: a problem solved? In Journal of the Southern African Institute of Mining and Metallurgy, 111(12), pp 821–836.
- Napier JAL, Malan DF: 2011. Numerical computation of average pillar stress and implications for pillar design. In **Journal of the Southern African Institute of Mining and Metallurgy**, 111(12), pp 837–846.
- Osae WK, Fauconnier CJ, Webber-Youngman RCW: 2011. A value assessment of mergers and acquisitions in the South African mining industry the Harmony ARMgold example. In Journal of the Southern African Institute of Mining and Metallurgy, 111(12), pp 857–870.
- Boshoff D, Webber-Youngman RCW: 2011. Testing stemming performance, possible or not? In Journal of the Southern African Institute of Mining and Metallurgy, 111(12), pp 871–874.
- Du Plessis M, Malan DF, Napier JAL: 2011. Evaluation of a limit equilibrium model to simulate crush pillar behaviour. In Journal of the Southern African Institute of Mining and Metallurgy, 111(12), pp 875–886.
- Webber-Youngman RCW, Callaghan R: 2011. Educating the future mining engineering practitioner. In Journal of the Southern African Institute of Mining and Metallurgy, 111(12), pp 815–820.
- Kluge P, Malan DF: 2011. The application of the analytical hierarchical process in complex mining engineering design problems. In Journal of the Southern African Institute of Mining and Metallurgy, 111(12), pp 847–856.

### Papers published

 Webber-Youngman RCW, Van Wyk E: 2011. Incident Reconstruction Simulations – Its potential impact on the prevention of ture mine incidents. In MineSAFE 2011 Technical Conference and Industry day, The Southern African Insitute of Mining and Metallurgy, pp 77–101.

# Computer Science

- Graaff AJ, Engelbrecht AP: 2011. Using sequential deviation to dynamically determine the number of clusters found by a local network neighbourhood artificial immune system. **Applied Soft Computing**, 11(Oct), pp 2698–2713.
- Matthysen W, Engelbrecht AP: 2011. A polar coordinate particle swarm optimiser. In **Applied Soft Computing**, 11, pp 1322–1339.
- Duvenhage B, Bouatouch K, Kourie DG: 2011. Extending Backward Polygon Beam Tracing to Glossy Scattering Surfaces. In Computer Graphics Forum, 30(6), pp 1825–1836.
- Coetzee SM: 2011. Results from a normative dependency analysis of geographic information standards. In **Computer Standards & interfaces**, 33, pp 485–493.
- Reddy K, Venter HS, Olivier MS: 2011. Using time-driven activity-based costing to manage digital forensic readiness in large organisations. In **Information Systems Frontiers**, Oct, Online.
- Van Staden W, Olivier MS: 2011. On Compound Purposes and Compound Reasons for Enabling Privacy. In **Journal of Universal Computer Science**, 17(3), pp 426–450.
- Gruner S: 2011. Problems for a Philosophy of Software Engineering. In **Minds and Machines**, 21, pp 275–299.
- Mphahlele MI, Olugbara OO, Ojo SO, Kourie DG: 2011. Crossimpact analysis experimentation using two techniques to revise marginal probabilities of interdependent events. In **Orion: Operations Research in South Africa**, 27(1), pp 1–15.
- Graaff AJ, Engelbrecht AP: 2011. Clustering data in an uncertain environment using an artificial immune system. In **Pattern Recognition Letters**, 32, pp 342–351.
- Gruner S, Van Zyl J: 2011. Software Testing in Small IT Companies: A (not only) South African Problem. In **South African Computer Journal**, 47(Jul), pp 7–32.
- Olivier MS, Eloff JHP, Venter HS, Botes ME: 2011. Using e-coins to ensure fair sharing of donor funds amongst HIV healthcare facilities. In **South African Computer Journal**, 47, pp 47–57.
- Croft NJ, Olivier MS: 2011. Location Privacy: privacy, efficiency and resource through a prohibitive contract. In **Transactions on Data Privacy**, 4, pp 19–30.



Prof Tania Hanekom is a member of the Bioengineering Research Group in the Department of Electrical, Electronic and Computer Engineering. Her research focuses on auditory perception, and specifically on cochlear implants for the deaf. The Group's research aims to improve the understanding of the relationship between the design of the cochlear implant and the perceived sound. Prof Hanekom regards her participation in building an internationally competitive and recognised research group as a career highlight. She is a registered professional engineer, a senior member of the South African Institute of Electrical Engineers and a full member of the Institute of Electrical and Electronic Engineers (IEEE).

# Papers published

- Lutu PEN: 2011. Using confusion matrices and confusion graphs to design ensemble classification models from large datasets. In **13th International Conference, DaWaK 2011 Proceedings**, Springer, pp 301–315.
- Helbig M, Engelbrecht AP: 2011. Archive management for dynamic multi-objective optimisation problems using vector evaluated particle swarm optimization. In 2011
   IEEE Congress on Evolutionary Computation, IEEE, pp 1–8.

- Dymond ASD, Engelbrecht AP, Heyns PS: 2011. The sensitivity of single objective optimization algorithm control parameter values under different computational constraints. In **2011 IEEE Congress on Evolutionary Computation**, IEEE, pp 1–8.
- Grobler J, Engelbrecht AP, Kendall G, Yadavalli VSS: 2011. Investigating the Impact of Alternative evolutionary selection strategies on multi-method global optimization. In **2011 IEEE Congress on Evolutionary Computation**, IEEE, pp 1–8.
- Viljoen CM, Nitschke G, Van Heerden WS: 2011. Evolution of a fictional dialogue. In **2011 IEEE Congress on Evolutionary Computation**, IEEE, pp 1100–1107.
- De Bruyn C, Nitschke G, Van Heerden WS: 2011. Evolutionary algorithms and particle swarm optimization for artificial language evolution. In **2011 IEEE Congress on Evolutionary Computation**, IEEE, pp 2701–2708.
- Khan SA, Engelbrecht AP: 2011. Assessment of the "Evaluation" function in the simulated evolution algorithm.
  In 2011 Seventh International Conference on Natural Computation, IEEE, pp 1079–1083.
- Paar A, Vrandecic D: 2011. Zhi# OWL Aware Compilation. In 8th Extended Semantic Web Conference, ESWC 2011 Proceedings, Part II: The Semantic Web: Research and Applications, Springer, pp 315–329.
- Beyers HQ, Olivier MS, Hancke GP: 2011. Assembling metadata for database forensics. In Advances in Digital Forensics VII, Springer, pp 89–99.
- Fouche MA, Olivier MS: 2011. Steganographic techniques for hiding data in SWF files. In Advances in Digital Forensics VII, Springer, pp 245–255.
- Vural I, Venter HS: 2011. Detecting Mobile spam botnets using artificial immune systems. In Advances in Digital Forensics VII, Springer, pp 183–192.
- Ditsela J, Coetzee SM, Cooper A: 2011. Proposed criteria for the evaluation of an address assignment scheme in Botswana. In AfricaGEO Developing Geomatics for Africa, AfricaGeo, pp 1–9.
- Van den Berg H, Cooper A: 2011. Analysing commons to improve the design of volunteered geographic information repositories. In AfricaGEO Developing Geomatics for Africa, AfricaGeo, pp 1–12.
- Cooper A, Coetzee SM, Kaczmarek I, Kourie DG, Iwaniak A, Kubik T: 2011. Challenges for quality in volunteered geographical information. In **AfricaGEO Developing**

### Geomatics for Africa, AfricaGeo, pp 1–13.

- Sebake MD, Coetzee SM: 2011. On motivators and barriers of interorganizational GIS data sharing for address organizations in a South African SDI. In AfricaGEO Developing Geomatics for Africa, AfricaGeo, pp 1–11.
- Coetzee SM, Cooper A, Ditsela J: 2011. Towards good principles for the design of a national addressing scheme. In **AfricaGEO Developing Geomatics for Africa**, AfricaGeo, pp 1–9.
- Stallmann C, Meyer J, Pretorius L, Maass F, Coetzee SM: 2011. An open source implementation of automated orthorectification using a rational polynomial coeffecients model. In AfricaGEO Developing Geomatics for Africa, AfricaGeo, pp 1–12.
- Adam R, Herselman M, Chuang CH, Smit D, Eloff JHP, Zielinski MP: 2011. Challenges of evaluating a living lab in South Africa. In **CIRN Prato Community Informatics Conference 2011**, pp 1–10.
- Alexander PM, Pieterse V, Lotriet HH: 2011. A comparison of computing and non-computing students' personalities based on the five-factor model. In ECIS 2011: The 19th European conference on Information Systems, ECIS 2011, pp 1–14.
- Mouton F, Venter HS: 2011. A prototype for achieving digital forensic readiness on wireless sensor networks. In IEEE Africon 2011, IEEE, pp 1–6.
- Du Plessis MC, Engelbrecht AP: 2011. Self-Adaptive competitive differential evolution for dynamic environments. In IEEE SSCI 2011 Symposium Series on Computational Intelligence: Differential Evolution, IEEE, pp 41–48.
- Nicholls JF, Malan KM, Engelbrecht AP: 2011. Comparison of trade decision strategies in an equity market GA trader. In IEEE SSCI 2011 Symposium Series on Computational Intelligence for Financial Engineering & Economics, IEEE, pp 51–58.
- Papacostantis E, Engelbrecht AP: 2011. Coevolutionary particle swarm optimization for evolving trend reversal indicators. In IEEE SSCI 2011 Symposium Series on Computational Intelligence for Financial Engineering & Economics, IEEE, pp 27–34.
- Engelbrecht AP: 2011. Scalability of a heterogeneous particle swarm optimizer. In IEEE SSCI 2011 Symposium Series on Computational Intelligence: Swarm Intelligence, IEEE, pp 1–8.

- Pampara G, Engelbrecht AP: 2011. Binary artificial bee colony optimization. In IEEE SSCI 2011 Symposium Series on Computational Intelligence: Swarm Intelligence, IEEE, pp 170–177.
- Leonard B, Engelbrecht AP, Van Wyk AB: 2011. Heterogeneous particle swarms in dynamic environments. In IEEE SSCI 2011 Symposium Series on Computational Intelligence: Swarm Intelligence, IEEE, pp 9–16.
- Van Wyk AB, Engelbrecht AP: 2011. Lambda-gamma learning with feedforward neural networks using particle swarm optimization. In IEEE SSCI 2011 Symposium Series on Computational Intelligence: Swarm Intelligence, IEEE, pp 52–59.
- Klazar RDA, Engelbrecht AP: 2011. Dynamic load balancing inspired by division of labour in ant colonies. In IEEE SSCI 2011 Symposium Series on Computational Intelligence: Swarm Intelligence, IEEE, pp 184–191.
- Pieterse V, Van Rooyen IJ: 2011. Student discussion forms: what is in it for them? In Proceedings CSERC '11 Computer Science Education Research Conference, Open University, pp 59–70.
- Marshall L: 2011. Developing a Computer Science curriculum in the South African context. In **Proceedings CSERC '11 Computer Science Education Research Conference**, Open University, pp 9–19.
- Dlamini MT, Eloff JHP, Zielinski MP, Chuang CH, Smit D: 2011. User-centric Information Security Systems – A Living Lab Approach. In **Proceedings of the 10th European Conference on Information Warefare and Security**, Academic Publishers, UK, pp 73–80.
- Paar A, Gruner S: 2011. Static Typing with Value Spacebased Subtyping. In Proceedings of the 2011 Annual Conference of the South African Institute of Computer Science and Information Technologists (SAICSIT 2011), ACM, pp 177–186.
- Solms F, Edwards C, Paar A, Gruner S: 2011. A domain-specific language for URDAD based requirements elicitation. In Proceedings of the 2011 Annual Conference of the South African Institute of Computer Science and Information Technologists (SAICSIT 2011), ACM, pp 224–230.
- Ahmad M, Rahman N, Gruner S: 2011. A phonetic approach to handling spelling variations in medieval documents. In Proceedings of the 2011 Annual Conference of the South African Institute of Computer Science and Information Technologists (SAICSIT 2011), ACM, pp 263–266.

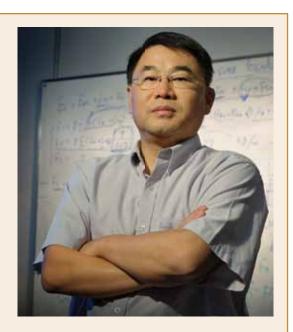
- Lutu PEN: 2011. Empirical comparison of four classifier fusion strategies for positive-versus-negative ensembles. In Proceedings of the 2011 Annual Conference of the South African Institute of Computer Science and Information Technologists (SAICSIT 2011), ACM, pp 302–305.
- Van Staden FR, Venter HS: 2011. Adding digital forensic readiness to electronic communication using a security monitoring tool. In Proceedings of the 2011 Information Security for South Africa Conference, IEEE, pp 170–174.
- Valjarevic A, Venter HS: 2011. Towards a digital forensic readiness framework for public key infrastructure systems.
   In Proceedings of the 2011 Information Security for South Africa Conference, IEEE, pp 160–169.
- Serra SM, Venter HS: 2011. Mobile cyber-bullying: a proposal for a pre-emptive approach to risk mitigation by employing digital forensic readiness. In Proceedings of the 2011 Information Security for South Africa Conference, IEEE, pp 204–209.
- Burke I, Van Heerden R, Olivier MS: 2011. Analysing the fairness of trust-based Mobile Ad Hoc Network protocols.
  In Proceedings of the 2011 Information Security for South Africa Conference, IEEE, pp 103–110.
- Strauss MD, Olivier MS: 2011. Network forensics in a cleanslate internet architecture. In Proceedings of the 2011 Information Security for South Africa Conference, IEEE, pp 199–203.
- Bihina Bella MA, Olivier MS, Eloff JHP: 2011. Proposing a digital operational forensic investigation process. In Proceedings of the 6th International Workshop on Digital Forensics & Incident Analysis WDFIA 2011, University of Plymouth, pp 17–32.
- Mouton F, Venter HS: 2011. Requirements for wireless sensor networks in order to achieve digital forensic readiness.
   In Proceedings of the 6th International Workshop on Digital Forensics & Incident Analysis, University of Plymouth, pp 108–121.
- Dlamini MT, Eloff MM, Eloff JHP, Venter HS: 2011. A budget model for information security. In **Proceedings of the Fifth International Symposium on Human Aspects of Information Security & Assurance**, University of Plymouth, pp 47–57.
- Grobler M, Flowerday S, Von Solms R, Venter HS: 2011. Cyber awareness initiatives in South Africa: a national perspective. In **Proceedings of the First IFIP TC9/TC11**

Southern African Cyber Security Awareness Workshopp 2011, Defence, Peace, Safety and Security, pp 32–41.

- Kourie J, Watson BW, Cleophas LGWA: 2011. On compile time Knuth-Morris-Pratt precomputation. In Proceedings of the Prague Stringology Conference 2011, Prague Stringology Club/Czech Technical University in Prague, pp 15–29.
- Solms F, Gruner S, Edwards C: 2011. URDAD as a quality-driven analysis and design process. In **Proceedings of the Tenth SoMeT\_11: New Trends in Software Methodologies, Tools and Techniques**, The authors and IOS Press, pp 141–157.
- Pieterse V, Thompson JE, Marshall L: 2011. Rocking the boat: an approach to facilitate formation of effective student teams. In SACLA 2011 Conference Proceedings of the South African Computer Lecturers' Association, SACLA 2011, pp 115–123.
- Marshall L: 2011. A first attempt at developing a puzzle-based test towards predicting student success in Computer Science. In SACLA 2011 Conference Proceedings of the South African Computer Lecturers' Association, SACLA 2011, pp 11–20.
- Naidoo S, Marshall L: 2011. Designing an opportunity for underprepared students to study in the School of IT. In SACLA 2011 Conference Proceedings of the South African Computer Lecturers' Association, SACLA 2011, pp 52–60.
- Dlamini MT, Venter HS, Eloff JHP, Eloff MM: 2011. Security of Cloud Computing: seeing through the fog. In **Southern Africa Telecommunication Networks and Applications Conference 2011**, Telkom, pp 1–6.
- Cappiello C, Daniel F, Koschmider A, Matera M: 2011. A quality model for mashups. In Web Engineering 11th International Conference, ICWE 2011 Proceedings, Springer, pp 137–151.

# **Civil Engineering**

- Jacobsz SW: 2011. A geotechnical centrifuge for TUKS. In Civil Engineering, 19(3), pp 46–48.
- Venter CJ: 2011. Transport expenditure and affordability: The cost of being mobile. In **Development Southern Africa**, 28(1), pp 121–140.



Prof Xiaohua Xia is Director of the Centre of New Energy Systems and the National Hub for Energy Efficiency and Demand-side Management. He is a fellow of the Institute for Electronic and Electrical Engineers, a member of the Academy of Science of South Africa, a fellow of the South African Academy of Engineering, and has an A-rating from the NRF. His research interests include non-linear feedback control, observer design, time-delay systems, hybrid systems, modelling and control of HIV/Aids, control and handling of heavy-haul trains and energy optimisation systems. He serves as the chair of the Technical Committee of Non-linear Systems of the International Federation of Automatic Control.

- Denneman E, Wu R, Kearsley EP, Visser AT: 2011. Discrete fracture in high performance fibre reinforced concrete materials. In **Engineering Fracture Mechanics**, 78(10), pp 2235–2245.
- Mahlaba JS, Kearsley EP, Kruger RA: 2011. Physical, chemical and mineralogical characterisation of hydraulically disposed fine coal ash from SASOL synfuels. In **Fuel**, 90(7), pp 2491–2500.
- Chang HPN, Heymann G, Clayton C: 2011. The effect of fabric on the behaviour of gold tailings. In **Geotechnique**, 61(3), pp 187–197.

- Elsaigh W, Robberts JM, Kearsley EP: 2011. 1. Modeling the behavior of steel-fiber reinforced concrete ground slabs. I: Development of material model. In Journal of Transportation Engineering-Asce, 137(12), pp 882–888.
- Elsaigh W, Kearsley EP, Robberts JM: 2011. 2. Modeling the behavior of steel-fiber reinforced concrete ground slabs. II: Development of slab model. In Journal of Transportation Engineering-Asce, 137(12), pp 889–896.
- Denneman E, Kearsley EP, Visser AT: 2011. Splitting tensile test for fibre reinforced concrete. In **Materials and Structures**, 44(8), pp 1441–1449.
- Mahlaba JS, Kearsley EP, Kruger RA: 2011. Effect of fly ash characteristics on the behaviour of pastes prepared under varied brine conditions. In **Minerals Engineering**, 24(8), pp 923–929.
- Mahlaba JS, Kearsley EP, Kruger RA, Pretorius PC: 2011. Evaluation of workability and strength development of fly ash pastes prepared with industrial brines rich in  $SO_4$  and C1- to expand brine utilisation. In **Minerals Engineering**, 24(10), pp 1077–1081.
- Steyn WJVD, Visser AT: 2011. Evaluation of sustainability of low-volume roads treated with non-traditional stabilizers. In Transportation Research Record, 2, pp 186–193.
- Steyn WJVD, Bean W, King D, Komba J: 2011. Evaluation of selected effects of pavement riding quality on logistics costs in South Africa. In Transportation Research Record, 3, pp 138–145.
- Van Vuuren SJ, Blersch CL, Van Dijk M: 2011. Modelling the feasibility of retrofitting hydropower to existing South African dams. In **Water SA**, 37(5), pp 679–692.

# Chapters in books

Steyn WJVD: 2011. Applications of Nanotechnology in road pavement engineering. In Nanotechnology in Civil Infrastructure, Springer, pp 49–83.

# Papers published

- Kleyn EG, Steyn WJVD: 2011. Optimal utilization of existing pavement structure during rehabilitation. In 5th International conference Bituminous mixtures and pavements, TRB, pp 680–689.
- Visser AT, Van Zyl GD, Tekie S, Rittmann R: 2011. Long-term riding quality monitoring strategy for the Namibian road management systems. In **8th International conference on managing pavement assets**, TRB, p. 218.

- Jacobsz SW, Phalanndwa TS: 2011. Observed axial loads in soil nails. In Proceedings of the 15th African regional conference on soil mechanics and geotechnical engineering, IOS Press, pp 221–227.
- Barnard H, Heymann G: 2011. Using a modified plate load test to eliminate the effect of bedding errors. In **Proceedings of the 15th African regional conference on soil mechanics and geotechnical engineering**, IOS, pp 587–592.
- De Deus K, Steyn WJVD: 2011. Pavement rehabilitation options for developing countries with marginal roadbuilding materials. In Proceedings of the 15th African regional conference on soil mechanics and geotechnical engineering, IOS Press, pp 468–475.
- Mbawala SJ, Heymann G, Roth CP, Heyns PS: 2011. Numerical modelling of wave propogation in ground using nonreflecting boundaries. In **Proceedings of the 15th African regional conference on soil mechanics and geotechnical engineering**, IOS press, pp 644–652.
- Jordaan GJ: 2011. Behaviour of an emulsion treated base layer as determined from heavy vehicle simulator testing. In **The 10th conference on Asphalt pavements for Southern Africa**, CAPSA, pp 1–18.
- Jordaan GJ, Van Heerden JL, Du Toit DG: 2011. The effect of law enforcement and tolling of national roads on the South African rural road network: a case study. In **The 10th conference on Asphalt pavements for Southern Africa**, CAPSA, pp 1–15.
- Steyn WJVD: 2011. Evaluation of effects of road maintenance actions on applied tyre loads. In **The 10th conference on Asphalt pavements for Southern Africa**, CAPSA, pp 1–11.
- Jordaan GJ: 2011. Life cycle cost analysis an integral part of pavement rehabilitation design. In **The 10th conference on Asphalt pavements for Southern Africa**, CAPSA, pp 1–16.
- Kleyn E, Steyn WJVD: 2011. Pavement strength balance and its practical implications. In **The 10th conference on Asphalt pavements for Southern Africa**, CAPSA, pp 1–14.
- Venter CJ, Cross C: 2011. Location, mobility and access toork: Aqualitative exploration in low-income settlements. In **The 30th Annual Southern African Transport Conference**, Document Transformation Technologies, pp 97–108.
- Milne TI, Visser AT: 2011. Bitumen rubber seal behaviour assessment. In **The 30th Annual Southern African Transport Conference**, Document Transformation Technologies, pp 613–523.

- Steyn WJVD, Treurnich JK: 2011. Effect of construction moisture content on short-term stiffness of inerted manganese product in pavement base layer. In Transportation Research Board 90th Annual Meeting, TRB, pp 1–11.
- Steyn WJVD, Louw SJH, Du Plessis L: 2011. Time-series analysis of accelerated pavement testing data to evaluate load transfer efficiency. In Transportation Research Board 90th Annual Meeting, TRB, pp 1–12.

# Town and Regional Planning

### Journal articles

Oranje MC, Van Huyssteen E: 2011. Nestling national 'transformation' imperatives in local 'servicing' space: critical reflections on an intergovernmental planning and implementation project. Town and Regional Planning, 58(Dec), pp 6–16.

### Research and technical/policy output

- Du Toit JL: Technical Report: 2011. Student's perceptions of alternative modes of transport on and around the University of Pretoria's Hatfield Campus. For: **Departement Fasiliteitebestuur**, **Universiteit van Pretoria**.
- Badenhorst WJ, Landman K: Technical Report: 2011. The impact of gated communities on spatial transformation in the greater Johannesburg. For: **WITS**.



Prof Eric Buch Dean

# 4 Health Sciences

The Faculty of Health Sciences continues to strive towards merging clinical service delivery, health professions education and world-class research. The hallmark of the Faculty's research remains its focus on health, and the health care challenges facing South Africa and Africa, from laboratory-based, cutting-edge science to finding solutions to healthcare burdens. The Faculty's research is supported by a range of expert laboratories and has achieved a number of global discoveries, led by its Medical Research Council (MRC) research units, its research centres and its active participation in University-accredited research themes.

The Faculty is a partner in three institutional research themes, as well as two faculty research themes. The number of NRF-rated scientists in the Faculty has grown to 19.

The MRC Maternal and Infant Health Care Strategies Research Unit develops health care strategies at primary and secondary care levels to reduce mortality and morbidity in mothers and infants. The Unit is involved in the upscaling of emergency obstetric care to 25 health districts in South Africa. The Essential Steps in Managing Obstetric Emergencies Programme, that is being used in the Unit, was developed and tested in collaboration with the Liverpool School of Tropical Medicine, the national Department of Health, as well as the medical schools and professional bodies representing stakeholders such as obstetricians, midwives, paediatricians and anaesthetists. A

# **Research entities**

### Institutes

Institute for Cellular and Molecular Medicine

### Centres

- Forensic Anthropology Research Centre (FARC)
- Comprehensive Physical Rehabilitation Centre
- UP Centre for Sustainable Malaria Control
- Applied Morphology Research Centre

### Units

- Maternal and Infant Health Care Strategies Research
   Unit
- · Unit for Inflammation and Immunity

major upscaling programme is being funded by the United Kingdom Department for International Development and the national Department of Health. The MRC Unit for Inflammation and Immunity undertakes research with clear clinical or translational objectives into acute and chronic inflammatory disorders of both infective (HIV/Aids, tuberculosis, severe pneumococcal diseases) and non-infective (bronchial asthma, rheumatoid arthritis, toxicity of heavy metals in both the environmental and occupational settings) origin, as well as cigarette smoking as a major risk factor for the development of respiratory infection and resistance to antibiotics, with several PhD candidates in the programme.

The UP Centre for Sustainable Malaria Control is pioneering research on a range of sustainable malaria control methods from the chemical to the biological at a transdisciplinary level. The Faculty, in collaboration with the University of California Berkeley, received a US National Institutes of Health (NIH) grant for five years to study the effect of pesticides for malaria control on the neurodevelopment of children. The Forensic Anthropology Research Centre is involved in the recovery and analysis of human remains from both forensic and archaeological contexts. Recent developments include research to better estimate time since death in human remains discovered in an advanced stage of decomposition, and detailed assessments of skeletal blunt and sharp force trauma. The Applied Morphology Research Centre focuses on the ultrastructure of platelets and fibrin networks in conditions related to inflammation, including cerebrovascular incidents, diabetes and smoking. Research collaborations include research with Harvard Medical School, the University of Queensland and the University of Manchester. The Comprehensive Physical Rehabilitation Centre undertakes multidisciplinary research involving physiotherapists, occupational therapists, sports medicine scientists, dieticians and others to understand and devise treatments for complex cases of disability. The Institute for Cellular and Molecular Medicine is working on cell-based therapies to achieve an HIV-resistant immune system, exploring the therapeutic potential of mesenchymal stem cells and building tissue engineering scaffolds. Funding has been awarded to the Southern African Human Genome Programme (of which the Institute is part) by the Department of Science and Technology (DST) for the sequencing of more than 20 full southern African human genomes. Substantial funding has also been obtained from the Technology Innovation Agency (TIA). The Faculty's other research interest groups reflect the diversity of its contribution to health knowledge and interventions. These include the novel use of nuclear medicine methodologies in Aids and tuberculosis, exploring fibrin network morphology in strokes and burn wounds, drug discovery research (including traditional African medicines) and the performance of an array of clinical trials (including affordable new cancer treatments).

The unique genetic characteristics of schizophrenia and mitochondrial diseases in South Africans have been recorded, and unique viral types of the human papillomavirus have been found in cervical cancer. The role of the mouth as a cellular reservoir for HIV persistence has been described, as has the immuno-histochemical profile of oral plasmablastic lymphoma and the identification of early molecular markers of malignancy in the mouth. A national dataset has been established to explore exposure and risk to oral health.

### **Prof Eric Buch**

Dean: Health Sciences Tel: 012 354 2386 Email: eric.buch@up.ac.za

# Faculty Research Output

# Anatomy

# Journal articles

- Pretorius E, Oberholzer HM, Van der Spuy WJ, Swanepoel E, Soma P: 2011. Qualitative scanning electron microscopy analysis of fibrin networks and platelet abnormalities in diabetes. In **Blood Coagulation & Fibrinolysis**, 22(6), pp 463–467.
- Pretorius E, Taute H, Engelbrecht M, Swanepoel AC, Oberholzer HM: 2011. Differences in fibrin fiber diameters in healthy individuals and thromboembolic ischemic stroke patients. In Blood Coagulation & Fibrinolysis, 22, pp 696–700.
- Steyn M: 2011. Case report: Forensic anthropological assessment in a suspected case of child abuse from South Africa. In Forensic Science International, 208, pp e6–e9.
- Cavanagh D, Steyn M: 2011. Facial reconstruction: soft tissue thickness values for South African black females. In **Forensic Science International**, 206, pp 215.e1–215.e7.
- L'Abbe EN, Van Rooyen C, Nawrocki SP, Becker PJ: 2011. An evaluation of non-metric cranial traits used to estimate ancestry in a South African sample. In Forensic Science International, 209, pp 195.e1–195.e7.
- Pretorius E, Oberholzer HM, Van der Spuy WJ, Franz RC: 2011. Comparing techniques: the use of recalcified plasma in comparison with citrated plasma alone and in combination with thrombin in ultrastructural studies. In **Hematology**, 16(6), pp 337–340.
- Vieira WA, Oberholzer HM, Pretorius E: 2011. The morphological effects of asthma, as well as conventional and alternative asthma therapies on parietal and chief cells in the stomach of BALB/c mice. In **International Journal of Morphology**, 29(4), pp 1341–1350.
- Van der Spuy WJ, Pretorius E: 2011. The qualitative effects of resveratrol and coenzyme Q10 administration on the gluteus complex muscle morphology of SJL/J mice with dysferlinopathy. In **International Journal of Morphology**, 29(3), pp 876–884.
- Meyer A, Keough N, Nienaber WC, Steyn M: 2011. A bioarchaeological investigation into the human remains

discovered in the Chloorkop area, South Africa. In International Journal of Osteoarchaeology, Online.

- Vance VL, Steyn M, L'Abbe EN: 2011. Nonmetric sex determination from the distal and posterior humerus in black and white South Africans. In Journal of Forensic Sciences, 56(3), pp 710–714.
- Pretorius E: 2011. The forgotten science: reviving morphology. In **Journal of Microscopy-Oxford**, 241(2), pp 219–220.
- Pretorius E, Swanepoel AC, Oberholzer HM, Van der Spuy WJ, Duim W, Wessels QB: 2011. A descriptive investigation of the ultrastructure of fibrin networks in thromboembolic ischemic stroke. In Journal of Thrombosis and Thrombolysis, 31, pp 507–513.
- Potgieter M, Pretorius E, Van der Merwe CF, Beukes M, Vieira WA, Auer REJ, Auer M, Meyer S: 2011. Histological assessment of SJL/J mice treated with the antioxidants coenzyme Q10 and reveratrol. In **Micron**, 42, pp 275–282.
- Pretorius E, Olivier J, Oberholzer HM, Van der Spuy WJ: 2011. Scanning electron microscopy investigation of fibrin networks after thermal injury. In **Onderstepoort Journal of Veterinary Research**, 78(1), Online.
- Pretorius E, Oberholzer HM, Van der Spuy WJ, Swanepoel AC, Soma P: 2011. Scanning electron microscopy of fibrin networks in rheumatoid arthritis: a qualitative analysis. In **Rheumatology International**, Online.
- Mosothwane MN: 2011. The Tuli mummy: a preliminary report from northeastern Botswana. In **South African Archaeological Bulletin**, 66(194), pp 157–160.
- Pretorius E: 2011. Quantifying changes in fibrin fiber network morphology. In **Ultrastructural Pathology**, Online.

# Research and technical/policy output

Meyer A: Technical Report: 2011. Report on physical anthropological analysis of eight Toutswe skeletons recovered from Kudumatse, Botswana. For: **Botswana Museum**.

Meyer A: Technical Report: 2011. Physical anthropological analysis of the Grassridge remains, Cradock. For: **Department** of Water Affairs and South African Heritage Resources Agency.

In the list of research outputs, in all cases the heading "Papers published" refers to papers in refereed, published conference proceedings, and the heading "Journal articles" refers to articles published in accredited, peer-reviewed, refereed specialist journals.

Meyer A, Nienaber WC: Technical Report: 2011. Report: rescue recovery of human remains inadvertently discovered during construction on the farm Koringdraai, Heanertsburg. For: South African Heritage Resources Agency.

# Anatomical Pathology

### Journal articles

- Buffart TE, Louw M, Van Grieken CT, Tijssen M, Carvalho B, Ylstra B, Grabsch H, Mulder CJ, Van De Velde CJH, Van der Merwe SW, Meijer GA: 2011. Gastric cancers of Western European and African patients show different patterns of genomic instability. In BMC Medical Genomics, 4(7), pp 1–12.
- Ismail F, Van de Werke I, Khan N, Levay PF, Davel GH: 2011. Radiological chest manifestations in diffuse infiltrative lymphocytosis syndrome. In **SA Journal of Radiology**, 15(2), pp 46–47.
- Visser A, Van de Vyver A, Essop A, Nel CE: 2011. Disseminated skin lesions in a patient with AIDS. In Southern African Journal of Epidemiology and Infection, 26 (4(II)), pp 285–287.

# Anaesthesiology

### Journal articles

- Nienaber LN: 2011. Video laryngoscopy in paediatric anaesthesia in South Africa. In **Southern African Journal of Anaesthesia and Analgesia**, 17(6), pp 363–368.
- Mohr D: 2011. Cardiopulmonary resuscitation: state of the art in 2011. In **Southern African Journal of Anaesthesia and Analgesia**, 17(3), pp 225–239.
- Kluyts H: 2011. Anaesthesia for bariatric surgery. **Southern African Journal of Anaesthesia and Analgesia**, 17(1), pp 148–152.

# Surgery

### Journal articles

Pretorius E, Oberholzer HM, Van der Spuy WJ, Franz RC: 2011. Comparing techniques: the use of recalcified plasma in comparison with citrated plasma alone and in combination with thrombin in ultrastructural studies. In **Hematology**, 16(6), pp 337–340.

- Mulaudzi TV, Sikhosana MH: 2011. Arterio-venous fistula following a lumbar disc surgery. In **Indian Journal of Orthopaedics**, 45(6), pp 563–564.
- Stevens PS, De Villiers M, Van Niekerk ML: 2011. A survey on the current status of laparoscopic training in paediatric surgery in South Africa. In South African Journal of Surgery, 49(1), pp 36–38.
- Van Niekerk ML: 2011. Laparoscopic treatment of Type III paraoesophageal hernia. In South African Journal of Surgery, 49(1), pp 47–48.
- Van Niekerk ML: 2011. Paediatric thoracoscopy: state of the art. In **South African Journal of Surgery**, 49(1), pp 33–35.
- Hartley R, Becker JHR, Van der Walt H, Luvhengo TE: 2011. Gastro-intestinal stromal tumours – the Pretoria experience and a literature review. In **South African Journal of Surgery**, 49(3), pp 128–131.
- Pretorius JP, Liebenberg C, Piek D, Smith M: 2011. The open abdomen Part 2: management of the open abdomen using temporary abdominal closure. In **Wound Healing Southern Africa**, 4(1), pp 29–35.
- Pretorius JP, Liebenberg C, Piek D, Smith M: 2011. The open abdomen Part 3: management of the Grade 3 open abdomen with entero-atmospheric fistulae. In **Wound Healing Southern Africa**, 4(2), pp 94–102.
- Du Plessis HJC, Pretorius JP: 2011. The utilisation of maggot debridement therapy in Pretoria, South Africa. In Wound Healing Southern Africa, 4(2), pp 80–83.

# **Chemical Pathology**

- Oosthuizen NM, Laurens JB: 2011. Efavirenz interference in urine screening immunoassays for tetrahydrocannabinol. In Annals of Clinical Biochemistry, Online.
- Oosthuizen NM: 2011. Undetectable serum ALP activity in a patient with fulminant hepatic failure and hemolytic anemia. In **Clinical Chemistry**, 57(3), pp 382–387.
- Segal I, Ally R, Hunt LP, Sandle LN, Ubbink JB, Braganza JM: 2011. Insights Into the Development of Alcoholic Chronic Pancreatitis at Soweto, South Africa. In **Pancreas**, 40(4), pp 508–516.
- Visser A, Moore DP, Whitelaw A, Lowman W, Kantor G, Hoosen

AA, Madhi SA, Brink A, Van den Bergh D, Devenish L, Moodley P, Apalata T, Duse AG, Gelband H: 2011. Part VII: Interventions. In **South African Medical Journal**, 101(8), pp 587–595.

# Dental Management Sciences

### Journal articles

- Pickworth GE, Snyman WD: 2011. Changing assessment practice through *in situ* faculty development. In **European** Journal of Dental Education, 15, pp 1–5.
- Postma TC, Van Wyk PJ, Heymans JH, White JG, Prinsloo PM: 2011. An analysis of complaints against oral health professionals charged with misconduct at the HPCSA: 2004– 2009. In **South African Dental Journal**, 66(9), pp 420–425.
- Ayo-Yusuf OA, Okagbare M, Ayo-Yusuf IJ: 2011. Prevalence and socio-economic disparities in fissure sealant placement among adolescents in the Limpopo Province, South Africa. In South African Dental Journal, 66(8), pp 380–383.
- Ayo-Yusuf OA, Postma TC, Van Wyk C: 2011. Clinical correlates of oral malodour in a population of patients attending a preventive clinic in Pretoria, South Africa. In **South African Dental Journal**, 66(7), pp 326–331.

# Division of Dermatology

### Journal articles

- Visser A, Van De Vyver A, Essop A, Nel CE: 2011. Disseminated skin lesions in a patient with AIDS. In **Southern African Journal of Epidemiology and Infection**, 26(4(II)), pp 285–287.
- Moche MJ: 2011. Primary cutaneous CD30-positive lymphoproliferative disorders: an overview. In **Specialist** Forum, May, pp 11–18.
- Moche MJ: 2011. An overview of vitiligo. In **Specialist Forum**, Jul, pp 14–20.

# Pharmacology

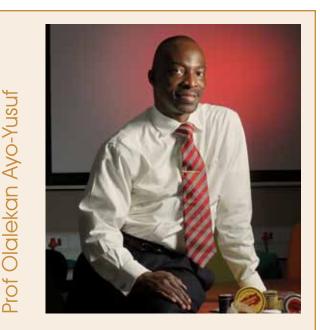
- Gandy JJ, Snyman JR, Van Rensburg CEJ: 2011. Randomized, parallel-group, double-blind, controlled study to evaluate the efficacy and safety of carbohydrate-derived fulvic acid in topical treatment of eczema.
- Greeff OBW: 2011. The pharmacotherapy of wet age-related macular degeneration.
- Fourie E, Erasmus E, Swarts JC, Jakob AA, Lang H, Joone GK, Van Rensburg CEJ: 2011. Cytotoxicity of Ferrocenyl-Ethynyl Phosphine Metal Complexes of Gold and Platinum. In Anticancer Research, 31(3), pp 825–829.
- Adewusi EA, Steenkamp V: 2011. *In vitro* screening for acetylcholinesterase inhibition and antioxidant activity of medicinal plants from southern Africa. In **Asian Pacific Journal of Tropical Medicine**, Online.
- Feng T-S, Guantai EM, Nell MJ, Van Rensburg CEJ, Ncokazi K, Egan TJ, Hoppe HC, Chibale K: 2011. Effects of highly active novel artemisinin-chloroquinoline hybrid compunds on β-hematin formation, parasite morphology and endocytosis in *Plasmodium falciparum*. In **Biochemical Pharmacology**, 82, pp 236–247.
- Feng T-S, Guantai EM, Nell MJ, Van Rensburg CEJ, Hoppe HC, Chibale K: 2011. Antiplasmodial and antitumor activity of dihydroartemisinin analogs derived via the aza-Michael addition reaction. In Bioorganic & Medicinal Chemistry Letters, 21, pp 2882–2886.
- Coetzee J, Cronje S, Dobrzanska L, Raubenheimer HG, Joone GK, Nell MJ, Hoppe HC: 2011. Novel N-heterocyclic ylideneamine gold (i) complexes: synthesis, characterisation and screening for antitumour and antimalarial activity. In **Dalton Transactions**, 40, pp 1471–1483.
- Dodgen T, Cromarty AD, Pepper MS: 2011. Quantitative plasma analysis using automated online solid-phase extraction with column switching LC-MS/MS for characterising cytochrome P450 2D6 and 2C19 metabolism. In **Journal of Separation Science**, 34(Feb), pp 1102–1110.
- De Caires S, Cromarty AD, Steenkamp V: 2011. Effect of Sutherlandia frutescens and Hypoxis hemerocallidea Extracts on Inflammatory Markers In Vitro. In Latin American Journal of Pharmacy, 30(8), pp 1574–1581.
- Muntingh GL: 2011. Do some of the newer COX-2 inhibitors cross-react with sulfonamide antibiotics? An overview. In **SA Orthopaedic Journal**, 10(1), pp 73–76.

- Muntingh GL: 2011. An overview of interactions between grapefruit juice and drugs. In **SA Pharmaceutical Journal**, 78(8), pp 40–45.
- Adewusi EA, Moodley N, Steenkamp V: 2011. Antioxidant and acetylcholinesterase inhibitory activity of selected southern African medicinal plants. In **South African Journal of Botany**, 77, pp 638–644.
- Van Wyk C, Steenkamp V: 2011. Host factors affecting oral candidiasis. In Southern African Journal of Epidemiology and Infection, 26(1), pp 18–21.
- Dzikiti TB, Stegmann GF, Cromarty AD, Dzikiti LN, Hellebrekers LJ: 2011. Effects of propofol on isoflurane minimum alveolar concentration and cardiovascular function in mechanically ventilated goats. In **Veterinary Anaesthesia and Analgesia**, 38, pp 44–53.

# Physiology

# Journal articles

- Du Toit PJ, Krüger PE, Mahomed AF, Kleynhans M, Jay-Du Preez T, Govender C, Mercier J: 2011. The effect of sports vision exercises on the visual skills of university students. In African Journal for Physical, Health Education, Recreation and Dance, 17(3), pp 429–440.
- Du Toit PJ, Krüger PE, Terblanche H, Janse Van Rensburg DC, Govender C, Mercier J, Jay-Du Preez T, Kleynhans M: 2011. Sex differences in the nine-point Beighton hypermobility test scores. In African Journal for Physical, Health Education, Recreation and Dance, 17(4), pp 603–611.
- Grant CC, Van Rensburg DCJ, Strydom N, Viljoen M: 2011. Importance of tachogram length and period of recording during noninvasive investigation of the autonomic nervous system. In **Annals Of Noninvasive Electrocardiology**, 16(2), pp 131–139.
- Koorts AM, Levay PF, Hall AN, Van der Merwe CF, Becker PJ, Viljoen M: 2011. Expression of the H-subunit and L-subunit of ferritin in bone marrow macrophages and cells of the erythron during cellular immune activation. In **Blood Cells Molecules and Diseases**, 47, pp 50–55.
- Pretorius E, Oberholzer HM, Van der Spuy WJ, Swanepoel E, Soma P: 2011. Qualitative scanning electron microscopy analysis of fibrin networks and platelet abnormalities in diabetes. In Blood Coagulation & Fibrinolysis, 22(6), pp 463–467.
- Pretorius E, Taute H, Engelbrecht M, Swanepoel AC, Oberholzer



Prof Olalekan Avo-Yusuf is a member of the Department of Community Dentistry. He is also a visiting scientist at the Centre for Global Tobacco Control at the Harvard School of Public Health in the United States. His comprehensive research on oral health promotion and tobacco has given him recognition as a leading expert in tobacco control and oral public health in South Africa and internationally. Prof Ayo-Yusuf is a member of the Scientific Group on Tobacco Regulation of the World Health Organisation, and he was nominated by the Minister of Health to represent South Africa on the steering committee of the Centre for Tobacco Control in Africa.

HM: 2011. Differences in fibrin fiber diameters in healthy individuals and thromboembolic ischemic stroke patients. In **Blood Coagulation & Fibrinolysis**, 22, pp 696–700.

- Visagie M, Joubert AM: 2011. *In vitro* effects of 2-methoxyestradiol-bis-sulphamate on reactive oxygen species and possible apoptosis induction in a breast adenocarcinoma cell line. In **Cancer Cell International**, 11(43), Online.
- Ker J: 2011. The serpentine mitral valve and cerebral embolism. In **Cardiovascular Ultrasound**, 9(7), Online.
- Stander X X, Stander BA, Joubert AM: 2011. *In vitro* effects of an *in silico* -modelled 17 β-estradiol derivative in combination

with dichloroacetic acid on MCF-7 and MCF-12A cells. In **Cell Proliferation**, 44, pp 567–581.

- Stander BA, Joubert F, Joubert AM: 2011. Docking, synthesis and *in vitro* evaluation of antimitotic estrone analogs. In Chemical Biology & Drug Design, 77, pp 173–181.
- Ker J: 2011. HLA-B27 and an Electrocardiographic Peculiarity. In Clinical Medicinal Insights: Cardiology, 2, p. 8.
- Ker J, Du Toit-Prinsloo L, Van Heerden WFP, Saayman G: 2011. Subendocardial fibrosis in left ventricular hypertrabeculation
  - Cause or consequence? In Clinical Medicinal Insights: Cardiology, 5, pp 13–16.
- Arnaout MS, Almahmeed W, Ibrahim M, Ker J, Khalil MT, Van Wyk CT, Mancia G, Mousa EA: 2011. Hypertension and its management in countries in Africa and the Middle East, with special reference to the place of  $\beta$ -blokade. In **Current Medical Research and Opinion**, 27(6), pp 1223–1236.
- Pretorius E, Oberholzer HM, Van der Spuy WJ, Franz RC: 2011. Comparing techniques: the use of recalcified plasma in comparison with citrated plasma alone and in combination with thrombin in ultrastructural studies. In **Hematology**, 16(6), pp 337–340.
- Mabeta P, Pepper MS: 2011. Hemangiomas current therapeutic strategies. In International Journal of Developmental Biology, 55(Jul), pp 431–437.
- Vieira WA, Oberholzer HM, Pretorius E: 2011. The morphological effects of asthma, as well as conventional and alternative asthma therapies on parietal and chief cells in the stomach of BALB/c mice. In **International Journal of Morphology**, 29(4), pp 1341–1350.
- Skerman NB, Joubert AM, Cronje MJ: 2011. The apoptosis inducing effects of *sutherlandia* spp. extracts on an oesophageal cancer cell line. In Journal of Ethnopharmacology, 137, pp 1250–1260.
- Sippel KH, Stander BA, Tu P, Venkatakrishnan B, Robbins A, Agbandje-McKenna M, Joubert F, Joubert AM, McKenna R: 2011. Characterization of carbonic anhydrase isozyme specific inhibition by sulfamated 2-Ethylestra compounds. In Letters In Drug Design & Discovery, 8, pp 678–684.
- Koorts AM, Levay PR, Becker PJ, Viljoen M: 2011. Pro- and anti-inflammatory cytokines during immune stimulation: Modulation of iron status and red blood cell profile. In **Mediators of Inflammation**, Online.
- Negrao BL, Viljoen M: 2011. Stimulants and growth in children with attention-deficit/hyperactivity disorder. In **Medical Hypotheses**, 77, pp 21–28.

- Visagie M, Joubert AM: 2011. 2- Methoxyestradiol-bis-sulfamate induces apoptosis and autophagy in a tumorigenic breast epithelial cell line. In **Molecular and Cellular Biochemistry**, 357(1–3), pp 343–352.
- Negrao BL, Bipath P, Van der Westhuizen D, Viljoen M: 2011. Autonomic correlates at rest and during evoked attention in children with attention-deficit/hyperactivity disorder and effects of methylphenidate. In **Neuropsychobiology**, 63, pp 82–91.
- Pretorius E, Oberholzer HM, Van der Spuy WJ, Swanepoel AC, Soma P: 2011. Scanning electron microscopy of fibrin networks in rheumatoid arthritis: A qualitative analysis. In **Rheumatology International**, Online.
- Jay-Du Preez T, Van Papendorp DH: 2011. Migraine-associated vertigo and dizziness as presenting complaint in a private general medical practice. In **South African Family Practice**, 53(2), pp 165–169.
- Stander BA, Marais S, Huyser C, Fourie Z, Leszczynski D, Joubert AM: 2011. Effects of non-thermal mobile phone radiation on breast adenocarcinoma cells. In South African Journal of Science, 107(9/10), Online.
- Ellemdin S, Rheeder P, Soma P: 2011. Providing clinicians with information on laboratory test costs leads to reduction in hospital expenditure. In **South African Medical Journal**, 101(10), pp 746–748.
- Pretorius E: 2011. The use of a desktop scanning electron microscope as diagnostic tool in studying fibrin networks of Thrombo-embolic Ischemic stroke. In **Ultrastructural Pathology**, 35(4–6), pp 245–250.

# Physiotherapy

- Brysiewicz P, Augustyn D, Heyns T: 2011. Emergency Nursing. In Nursing Update, 35(Feb) pp 32–33.
- Marais AM, Saaiman M, Vermeulen V, Wandrag L, Weys M: 2011. Strengthening of the Tibialis Posterior Muscle to decrease sutalar overpronation in young male soccer players – An exploratory study. In **South African Journal of Physiotherapy**, 67(1), pp 48–50.
- Mothabeng DJ: 2011. Management of decubitus ulcer using gentamicin sulphate iontophoresis: a case study. In The Internet Journal of Allied Health Sciences and Practice, 9(1), pp 1–4.

# Prof Resia Pretorius



Prof Resia Pretorius is Director of the Applied Morphology Research Centre in the Department of Physiology. She has been the number one publishing author in the Faculty of Health Sciences for the past nine years. She was among several of Africa's top women scientists who were honoured at a ceremony to mark the founding of a new Pan-African University by receiving a Kwame Nkrumah Science Award for her research on the use of electron microscopy in studying inflammation in the human body.

# Haematology

# Journal articles

- Visser A, Van der Vyver A, Du Preez SC, Crous A, Visser HF: 2011. Blood product utilisation during massive transfusions: audit and review of the literature. In **SA Orthopaedic Journal**, 10(4), pp 25–29.
- Louw VJ, Bassa F, Chan SW, Dreosti LM, Du Toit M, Ferreira M, Gartell K, Swart AM, Jogessar V, Littleton N, Mahlangu J, Pool R, Patel M: 2011. Guideline for the treatment of myelodysplastic syndromes in South Africa. In South African Medical Journal, 101(12), pp 900–906.
- Crous A, Visser A: 2011. Microscopy 'aids' in diagnosing a febrile infant. In **Southern African Journal of HIV Medicine**, Sep, pp 23–24.

# School of Health Systems and Public Health

- Lumadi TG, Buch E: 2011. Patient' satisfaction with midwifery services at a regional hospital and its referring clinics in the Limpopo Province of South Africa. In Africa Journal of Nursing and Midwifery, 13(2), pp 14–28.
- Trevisan PN, Claassen N: 2011. Diesel fuel additives: Worth considering? Local exhaust emissions and fuel consumption test results. In **Clear Air Journal**, 20(1), pp 3–9.
- Kembo J, Van Ginneken JK: 2011. Levels and trends in underfive mortality in Zimbabwe: findings from an analysis of recent demographic and health surveys. In **Genus**, 67(1), pp 61–75.
- Rudge CV, Calderon IMP, Rudge MVC, Volpato G, Silva JLP, Duarte G, Neto CM, Sass N, Mattar R, Röllin HB, Thomassen Y, Odland JO: 2011. Toxic and essential elements in blood from delivering women in selected areas of Sao Paulo State, Brazil. In **Journal of Environmental Monitoring**, 13, pp 563–571.
- Mwansa-Kambafwile J, Rendall-Mkosi KM, Jacobs R, Nel E, London L: 2011. Evaluation of a service provider short course for prevention of Fetal Alcohol Syndrome. In Journal of Studies On Alcohol And Drugs, 72(4), pp 530–535.
- Senkubuge F, Ayo-Yusuf OA, Louwagie GMC, Okuyemi KS: 2011. Water pipe and smokeless tobacco use among medical students in South Africa. In **Nicotine & Tobacco Research**, Online.
- Dzikiti TB, Stegmann GF, Dzikiti LN, Hellebrekers LJ: 2011. Effects of midazolam on isoflurane minimum alveolar concentration in goats. In **Small Ruminant Research**, 97, pp 104–109.
- Cameron DA, Wolvaardt JE, Van Rooyen M, Hugo JFM, Blitz JJ, Bergh A-M: 2011. Medical student participation in community-based experiential learning: Reflections from first exposure to making the diagnosis. In South African Family Practice, 53(4), pp 373–379.
- Bamford LJ, Stephen C, Patrick M: 2011. Saving Children 2009: Evaluating quality of care through mortality auditing. In South African Journal of Child Health, 5(2), pp 28–32.
- Archer B N, Weyer J, Paweska J, Nkosi DB, Leman PA, Tint DR, Blumberg L: 2011. Outbreak of Rift Valley fever affecting



Prof Maryna Steyn is a forensic anthropologist and heads the Forensic Anthropology Research Centre (FARC). Her research interests include skeletal remains from both forensic and archaeological contexts. She is currently working on a project to document and assess human remains of southern African origin, which had been exported to Europe and elsewhere in the world. Other interests include the assessment of sexual dimorphism in the skeleton, improving standards for the personal identification of decomposed remains, the application of techniques such as geometric morphometrics in skeletal assessment and palaeopathology. The FARC regularly assists the South African Police Service on decomposed or skeletonised remains found in forensic contexts.

veterinarians and farmers in South Africa, 2008. In **South** African Medical Journal, 101(4), pp 263–266.

- Ellemdin S, Rheeder P, Soma P: 2011. Providing clinicians with information on laboratory test costs leads to reduction in hospital expenditure. In **South African Medical Journal**, 101(10), pp 746–748.
- Westaway M, Mosaka PN: 2011. Investigating the healthrelated quality of life of surface and underground mine workers at a South African platinum mine. In **South African Medical Journal**, 101(6), p. 392.

- Dzikiti TB, Stegmann GF, Cromarty AD, Dzikiti LN, Hellebrekers LJ: 2011. Effects of propofol on isoflurane minimum alveolar concentration and cardiovascular function in mechanically ventilated goats. In **Veterinary Anaesthesia and Analgesia**, 38, pp 44–53.
- Dzikiti TB, Stegmann GF, Dzikiti LN, Hellebrekers LJ: 2011. Effects of fentanyl on isoflurane minimum alveolar concentration and cardiovascular function in mechanically ventilated goats. In **Veterinary Record**, 168(16), Online.

# Papers published

Ncube EJ, Voyi KVV, Du Preez HH: 2011. Selection and prioritization of organic contaminants for monitoring in the drinking water value chain. In 35th WEDC International Conference on the future of water, sanitation and hygiene: Innovation, adaptation and engagement in a changing world, Loughborough University, UK, WEDC Publications Team, pp 1–8.

# Research and technical/policy output

- Stephens CR, Bamford LJ, Patrick ME: Technical Report: 2011. Child Healthcare problem identification programme: Saving lives through death auditing. For: Centers for Disease Control and Prevention - MRC.
- Hyera FLM: Technical Report: 2011. Centre for Sustainable Malaria Control inauguration workshop. For: **CSMC**.
- Hyera FLM: Policy Document: 2011. Health Systems Trust Global HIV/AIDS workshop. For: Health Systems Trust Global.
- Hyera FLM: Technical Report: 2011. MOZIZA Cross-Border Malaria Initiative: Tzaneen Limpopo. A joint collaborative effort between Mozambique, Zimbabwe and South Africa to reduce malaria transmission in the targeted region. Chair of feedback session on Technical issues. For: **MOZIZA Cross-Border Malaria Initiative**.
- Voyi KVV: Technical Report: 2011. Report of the review committee on the functioning of the International Health Regualtions (2005) in relation to Pandemic (H1N1) 2009. For: World Health Organisation.
- Van den Berg H, Mutero CM, Ichimori K: Technical Report: 2011. Guidance on Policy-Making for Integrated Vector Management. For: **World Health Organisation**.
- De Jager C, Swemmer A, Aneck-Hahn NH, Van Zijl MC, Van Wyk S, Bornman MS, Barnhoorn IEJ, Jonker ML, Van Vuren JHJ,

Burger AEC: Technical Report: 2011. Endocrine Disrupting Chemical activity and health effects of identified veterinary growth stimulants in surface and groundwater. For: **Water Research Commission**.

# Community Dentistry

### Journal articles

- Senkubuge F, Ayo-Yusuf OA, Louwagie GMC, Okuyemi KS: 2011. Water pipe and smokeless tobacco use among medical students in South Africa. In **Nicotine & Tobacco Research**, Online.
- Ayo-Yusuf OA, Okagbare M, Ayo-Yusuf IJ: 2011. Prevalence and socio-economic disparities in fissure sealant placement among adolescents in the Limpopo Province, South Africa. In South African Dental Journal, 66(8), pp 380–383.
- Ayo-Yusuf OA, Booyens SJ: 2011. Principal motives for toothbrushing in a population of South African adolescents: Implications for oral health promotion. In South African Dental Journal, 66(4), pp 174–178.
- Ayo-Yusuf OA, Postma TC, Van Wyk C: 2011. Clinical correlates of oral malodour in a population of patients attending a preventive clinic in Pretoria, South Africa. In **South African Dental Journal**, 66(7), pp 326–331.
- Postma TC, Van Wyk PJ, Heymans JH, White JG, Prinsloo PM: 2011. An analysis of complaints against oral health professionals charged with misconduct at the HPCSA: 2004-2009. In **South African Dental Journal**, 66(9), pp 420–425.
- Omole OB, Ogunbanjo G, Ayo-Yusuf OA: 2011. Review of alternative practices to cigarette smoking and nicotine replacement therapy: How safe are they? In **South African Family Practice**, 53(2), pp 154–160.
- Van Wyk C, Steenkamp V: 2011. Host factors affecting oral candidiasis. In Southern African Journal of Epidemiology and Infection, 26(1), pp 18–21.
- Stanfill GN, Connolly GN, Zhang L, Jia AY, Henningfield JE, Richer P, Lawler T, Ayo-Yusuf OA, Ashley DL, Watson CH: 2011. Global surveillance of oral tobacco products: total nicotine, unionised nicotine and tobacco-specific *N*-nitrosamines. In **Tobacco Control**, 20(3), pp 1–10.
- Ayo-Yusuf OA, Connolly GN: 2011. Applying toxicological risk assessment principles to constituents of smokeless tobacco products: implications for product regulation. In **Tobacco Control**, 20, pp 53–57.

# Human Nutrition

# Journal articles

- Phaswana-Mafuya N, Peltzer K, Ladzani R, Davids A, Mlambo G, Phaweni K, Dana P, Ndabula M: 2011. Pre- and postintervention assessment of a PMTCT-orpgrammestrengthening initiative in a rural area of the Eastern Cape, South Africa. In African Journal of AIDS Research, 10(1), pp 38–93.
- Labadarios D, Mchiza ZJR, Steyn NP, Gericke GJ, Maunder EMW, Davids YD, Parker W: 2011. Food security in South Africa: a review of national surveys. In **Bulletin of the World Health Organization**, 89(Oct), pp 891–899.
- Hanekom LM, Gericke GJ, Becker PJ: 2011. South African private practising clinical dietitians' perceptions of the relevance of service-specific healthcare marketing principles and communication elements. In **South African Journal of Clinical Nutrition**, 24(4), pp 291–198.
- Kotze V: 2011. Perioperative nutrition; what do we know? In South African Journal of Clinical Nutrition, 24(3), pp 19–22.

# Medical Virology

### Journal articles

- Bowyer SM: 2011. Current Laboratory Diagnosis if Hepatitis B Virus Infection Including 8 years of Retrospective Laboratory Data. In **CME: Continuing Medical Education**, 29(5), pp 210–213.
- Grobbelaar AA, Weyer J, Leman PA, Kemp A, Paweska JT, Swanepoel R: 2011. Molecular epidemiology of Rift Valley Fever virus. In **Emerging Infectious Diseases**, 17(12), pp 2270–2276.
- Venter M, Human S, Van Niekerk S, Williams JH, Van Eeden C, Freeman F: 2011. Fatal neurological disease and abortion in mare infected with Lineage 1 West Nile Virus, South Africa. In Emerging Infectious Diseases, 17(8), pp 1534–1536.
- Bosch A, Sanchez G, Abbaszadegan M, Carducci A, Guix S, Le Guyader FS, Netshikweta R, Pinto RM, Van der Poel WHM, Rutjes S, Sano T, Taylor MB, Van Zyl WB: 2011. Analytical methods for virus detection in water and food. In Food Analytical Methods, 4, pp 4–12.

Revilleza MJR, Wang R, Mans J, Mans J, Hong M, Natarajan R,



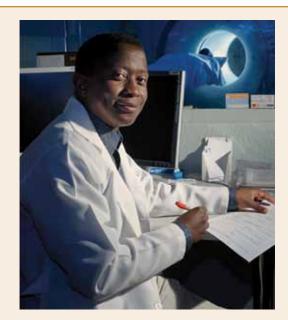
Margulies DH: 2011. How the virus outsmarts the host: function and structure of cytomegalovirus MHC-I-Like molecules in the evasion of natural killer cell surveillance. In Journal of Biomedicine and Biotechnology, Online.

- Li W, Kiulia NM, Mwenda J, Nyachieo A, Taylor MB, Zhang X, Xiao L: 2011. *Cyclospora papionis, Cryptosporidium hominis,* and human-pathogenic *Enterocytozoon bieneusi* in captive baboons in Kenya. In **Journal of Clinical Microbiology**, 49(12), pp 4326–4329.
- Wolfaardt M, Kiulia NM, Mwenda J, Taylor MB: 2011. Evidence of a recombinant Wild-Type Human Astrovirus strain from a Kenyan child with gastroenteritis. In **Journal of Clinical Microbiology**, 49(2), pp 728–731.
- Richter K L: 2011. Understanding and incorporating human papillomavirus testing in cervical cancer screening: a South African perspective. In **Journal of Gynecologic Oncology**.
- Kresfelder TL, Janssen M, Bont L, Venter M: 2011. Confirmation of an association between single nucleotide polymorphisms in the VDR Gene with respiratory syncytial virus related disease in South African children. In Journal of Medical Virology, 83, pp 1834–1840.
- Venter M, Lassauniere MM, Kresfelder TL, Westerberg Y, Visser A: 2011. Contribution of common and recently described respiratory viruses to annual hospitalizations in children in South Africa. In Journal of Medical Virology, 83, pp 1458–1469.
- Prabdial-Sing N, Giangaspero M, Puren A, Mahlangu J, Barrow P, Bowyer SM: 2011. Palindromic-nucleotide substitutions of hepatitis C virus genotypes 1 and 5a from South Africa. In Journal of Virological Methods, 175, pp 272–277.
- Venter M, Van Niekerk S, Rakgantso AM, Bent N: 2011. Identification of Deletion Mutant Respiratory Syncytial virus strains lacking most of the G Protein in immunocompromised children with Pneumonia in South Africa. In Journal of Virology, 85(16), pp 8453–8457.
- Van Niekerk S, Venter M: 2011. Replacement of previously circulating Respiratory Syncytial Virus Subtype B strains with the BA genotype in South Africa. In Journal of Virology, 85(17), pp 8789–8797.
- Nair CH, Brooks WA, Katz M, Roca A, Berkley JA, Madhi SA, Simmerman JM, Gordon A, Sato M, Howie S, Krishnan A, Ope M, Venter M: 2011. Global burden of respiratory infections due to seasonal influenza in young children: a systematic review and meta-analysis. In Lancet, 378(Dec), pp 1917–1930.

- Syebele K, Bütow K-W, Webber LM, Manda SO: 2011. Quantification of HIV-1 viral load in the fluid of ranulas in HIV-positive patients. In **Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics**, 111(6), pp 715–719.
- Wang B, Losina E, Stark RW, Munro A, Walensky RP, Wilke M, Martin DJ, Lu z, Freedberg KA, Wood R: 2011. Loss to followup in a community clinic in South Africa – roles of gender, pregnancy and CD4 count. In **South African Medical Journal**, 101(4), pp 253–257.
- Rossouw TM, Richter K L, Martin DJ, Avenant TJ, Spencer D: 2011. The 2010 South African guidelines for the management of HIV and AIDS: a review. In **South African Medical Journal**, 101(4), pp 237–239.

# Medical Microbiology

- Axelsson-Robertson R, Ahmed RK, Weichold FF, Ehlers MM, Kock MM, Sizemore D, Sadoff J, Maeurer M: 2011. Human leukocyte antigens A\*3001 and A\*3002 show distinct peptide-binding patterns of the*Mycobacterium tuberculosis* protein TB10.4: Consequences for immune recognition. In **Clinical and Vaccine Immunology**, 18(1), pp 125–134.
- Silberbauer EJ, Ismail NA, von Gottberg A, Hoosen AA: 2011. Serotype and antimicrobial profile distribution of invasive pneumococcal isolates in the pre-vaccine introduction era in Pretoria, South Africa, 2005 through 2009. In **Diagnostic Microbiology and Infectious Disease**, 71, pp 309–311.
- Venter M, Human S, Van Niekerk S, Williams JH, Van Eeden C, Freeman F: 2011. Fatal neurological disease and abortion in mare infected with Lineage 1 West Nile Virus, South Africa. In Emerging Infectious Diseases, 17(8), pp 1534–1536.
- Cholo MC, Steel HC, Fourie PB, Germishuizen WA, Anderson R: 2011. Clofazimine: Current status and future prospects. In Journal of Antimicrobial Chemotherapy, Online.
- Said HM, Ismail NA, Osman A, Veldsman C, Hoosen AA: 2011. Evaluation of TBc odentification immunochromotographic assay for rapid identification of *Mycobacterium tuberculosis* complex in samples from broth cultures. In **Journal of Clinical Microbiology**, 49(5), pp 1939–1942.
- Omar SV, Roth A, Ismail NA, Erasmus L J, Ehlers MM, Kock MM, Paulse N, Said HM, Hoosen AA, Reischl U: 2011. Analytical performance of the Roche LightCycler® *Mycobacterium*



Prof Mike Sathekge is Head of the Department of Nuclear Medicine. His research is focused on using imaging techniques to examine brain functions. The use of positron emission tomography (PET) allows non-invasive quantification of cerebral blood flow, metabolism, and receptor binding. The clinical application of PET includes the early diagnosis of brain metastasis, preoperative localisation of seizure foci in potential candidates for epilepsy surgery, and early and presymptomatic diagnosis of individuals at risk for neurodegenerative disorders. In neuropharmacology, scans provide information about the occupancy of the binding sites for a particular dosage to determine optimal drug-dosing regimens.

detection kit for diagnosis of clinically important mycobacterial species. In **Plos One**, 6(9), pp e24789–e24789.

- Moodley T, Lekalakala MR, De Gouveia L, Dangor Y, Hoosen AA: 2011. Meningococcal infections in hospitalised patients in Pretoria. In **South African Medical Journal**, 101(10), pp 736–738.
- Visser A, Moore DP, Whitelaw A, Lowman W, Kantor G, Hoosen AA, Madhi SA, Brink A, Van den Bergh D, Devenish L, Moodley P, Apalata T, Duse AG, Gelband H: 2011. Part VII:

Interventions. In **South African Medical Journal (SAMJ)**, 101(8), pp 587–595.

- Visser A, Van De Vyver A, Essop A, Nel CE: 2011. Disseminated skin lesions in a patient with AIDS. In Southern African Journal of Epidemiology and Infection, 26(4(II)), pp 285–287.
- Bamford C, Bonorchis K, Ryan A, Simpson JF, Elliot E, Hoffmann R, Naicker P, Ismail NA, Mbelle N, Nchabeleng M, Nana T, Sriruttan C, Seetharam S, Wadula J: 2011. Antimicrobial susceptibility patterns of selected bacteraemic isolates from South African public sector hospitals, 2010: surveillance data. In Southern African Journal of Epidemiology and Infection, 26(4), pp 243–250.

# Forensic Medicine

# Journal articles

- Ker J, Du Toit-Prinsloo L, Van Heerden WFP, Saayman G: 2011. Subendocardial fibrosis in left ventricular hypertrabeculation
  - cause or consequence? In Clinical Medicinal Insights: Cardiology, 5, pp 13–16.
- Du Toit-Prinsloo L, Dempers JJ, Wadee SA, Saayman G: 2011. The medico-legal investigation of sudden, unexpected and/ or unexplained infant deaths in South Africa: where are we – and where are we going? In **Forensic Science Medicine and Pathology**, 7, pp 14–20.
- Bernitz H, Bernitz Z, Steenkamp G, Blumenthal R, Stols GH: 2011. The individualisation of a dog bite mark: a case study highlighting the bite mark analysis, with emphasis on differences between dog and human bite marks. In International Journal of Legal Medicine, Online.

# Family Medicine

# Journal articles

- Cameron DA: 2011. The strange case of Dr Jekyll and Mr Hyde: Can we effectively manage sudden behaviour changes in the dying patient. In **CME: Continuing Medical Education**, 29(7), pp 278–281.
- Cameron DA: 2011. Career Intentions of Medical Students Trained in Six Sub-Saharan African Countries. In **Education for Health**, 24(3).

Cassol E, Rossouw TM, Seebregts C, Cassol SA: 2011. Microbial

translocation: A marker of advanced HIV-1 infection and a predictor of treatment failure? In **Journal of Infectious Diseases**, 203(5), pp 747–748.

- Hodges CS, Ginsburg S, Cruess R, Cruess S, Delport R, Hafferty F, HO M-J, Holmboe E, Holtman M, Ohbu S, Rees C, Cate OT, Tsugawa Y: 2011. Assessment of professionalism: Recommendations from the Ottawa 2010 Conference. In Medical Teacher, 33(5), pp 354–363.
- Marcus TS: 2011. The Place of Social Science in Medical Education: a case study of language and culture in experiential learning in a multilingual society. In **Multicultural Learning and Teaching**, 6(2).
- Lutala PM, Hugo JFM, Luhiriri LN: 2011. Psycococial implications of tubal ligation in rural health district: a phenomenological study. In **Reproductive Health**, 8(38).
- Peters FM, Marcus TS: 2011. Circumcision weeks: making circumcision part of routine training and service delivery at district-level hospitals in South Africa. In South African Family Practice, 53(3), pp 262–266.
- Cameron DA, Wolvaardt JE, Van Rooyen M, Hugo JFM, Blitz JJ, Bergh A-M: 2011. Medical student participation in community-based experiential learning: Reflections from first exposure to making the diagnosis. In South African Family Practice, 53(4), pp 373–379.
- Rossouw TM, Richter K L, Martin DJ, Avenant TJ, Spencer D: 2011. The 2010 South African guidelines for the management of HIV and AIDS: a review. In **South African Medical Journal**, 101(4), pp 237–239.

# Immunology

### Journal articles

- Kwofie L, Rapoport BL, Fickl H, Meyer PWA, Rheeder P, Hlope H, Anderson R, Tintinger GR: 2011. Evaluation of circulating soluble triggering receptor expressed on myeloid cells-1 (sTREM-1) to predict risk profile, response to antimicrobial therapy, and development of complications in patients with chemotherapy-associated febrile neutropenia: a pilot. In Annals of Hematology, Online.
- Meyer PWA, Hodkinson B, Ally MMTM, Musenge E, Wadee AA, Fickl H, Tikly M, Anderson R: 2011. HLA-DRB1 shared epitope genotyping using the revised classification and its association with circulating autoantibodies, acute phase reactants, cytokines and clinical indices of disease activity in a cohort of South African rheumatoid arthritis patients. In

Arthritis Research & Therapy, 13(5), pp 160.

- Slabbert MN, Maister B, Botes M, Pepper MS: 2011. The application of the Consumer Protection Act in the South African health care context: concerns and recommendations. In **Comparative and International Law Journal of Southern Africa**, 44(2), pp 168–203.
- Feldman C, Anderson R: 2011. Bacteraemic Pneumococcal Pneumonia. Current therapeutic options. In **Drugs**, 71(2), pp 131–153.
- Tintinger GR, Van der Merwe JJ, Fickl H, Rheeder P, Feldman C, Anderson R: 2011. Soluble triggering receptor expressed on myeloid cells in sputum of patients with community acquired pneumonia or pulmonary tuberculosis: a pilot study. In European Journal of Clinical Microbiology & Infectious Diseases, Online.
- Lameris R, Du Plessis J, Nieuwoudt MJ, Scheepers A, Van der Merwe SW: 2011. A visceral pseudoaneurysm: Management by EUS-guided thrombin injection. In Gastrointestinal Endoscopy, 73(2), pp 392–395.
- Mabeta P, Pepper MS: 2011. Hemangiomas current therapeutic strategies. In International Journal of Developmental Biology, 55(Jul), pp 431–437.
- Cholo MC, Steel HC, Fourie PB, Germishuizen WA, Anderson R: 2011. Clofazimine: Current status and future prospects. In Journal of Antimicrobial Chemotherapy, Online.
- Cockeran R, Mutepe M D, Theron AJ, Tintinger GR, Steel HC, Stivaktas PI, Richards GA, Feldman C, Anderson R: 2011. Calcium-dependent potentiation of the pro-inflammatory functions of human neutrophils by tigecycline *in vitro*. In Journal of Antimicrobial Chemotherapy, Online.
- Potgieter A, Van der Merwe M-T: 2011. Metabolic surgery: a concise overview and understanding of potential complications. In Journal of Endocrinology, Metabolism and Diabetes of South Africa, 16(3), pp 138–144.
- Cassol E, Rossouw TM, Seebregts C, Cassol SA: 2011. Microbial translocation: a marker of advanced HIV-1 infection and a predictor of treatment failure? In Journal of Infectious Diseases, 203(5), pp 747–748.
- Dodgen T, Cromarty AD, Pepper MS: 2011. Quantitative plasma analysis using automated online solid-phase extraction with column switching LC-MS/MS for characterising cytochrome P450 2D6 and 2C19 metabolism. In **Journal of Separation Science**, 34(Feb), pp 1102–1110.
- Pepper MS, Slabbert MN: 2011. Is South Africa on the verge of a medical malpractice litigation storm? In **South African Journal of Bioethics and Law**, 4(1), pp 29–35.

# Prof Fhumulani Mulaudzi



Prof Fhumulani Mulaudzi is Head of the Department of Nursing Science and was a runner-up in the Distinguished Women in Science Award in the category Indigenous Knowledge Systems for her contribution to the advancement of indigenous knowledge in systems health care. She is one of the founder members of the Academy of Nursing of South Africa and serves as a reviewer for national and international nursing journals. She has published 14 articles in peer-reviewed journals, seven articles in non-peer-reviewed journals, and three chapters in books. In all her work, she has contributed significantly to the advancement of indigenous knowledge systems in health care.

- Tintinger GR, Pretorius L, Labadarios D: 2011. Obstructive sleep apnoea and obesity. In **South African Journal of Clinical Nutrition**, 24(4), pp 174–177.
- Slabbert MN, Pepper MS: 2011. Medicine and the law. The Consumer Protection Act: no-fault liability of healthcare providers. In **South African Medical Journal**, 101(11), pp 800–801.
- Anderson R, Feldman C: 2011. Key virulence factors of Streptococcus pneumoniae and non-typeable Haemophilus influenzae: roles in host defence and immunisation. In Southern African Journal of Epidemiology and Infection, 26(1), pp 6–12.

Cockeran R, Steel HC, Theron AJ, Mitchell TJ, Feldman C, Anderson R: 2011. Characterization of the interactions of the pneumolysoid, delta 6 PLY, with human neutrophils *in vitro*. In **Vaccine**, 29, pp 8780–8782.

# Internal Medicine

- Kwofie L, Rapoport BL, Fickl H, Meyer PWA, Rheeder P, Hlope H, Anderson R, Tintinger GR: 2011. Evaluation of circulating soluble triggering receptor expressed on myeloid cells-1 (sTREM-1) to predict risk profile, response to antimicrobial therapy, and development of complications in patients with chemotherapy-associated febrile neutropenia: a pilot. In Annals of Hematology, Online.
- Meyer PWA, Hodkinson B, Ally MMTM, Musenge E, Wadee AA, Fickl H, Tikly M, Anderson R: 2011. HLA-DRB1 shared epitope genotyping using the revised classification and its association with circulating autoantibodies, acute phase reactants, cytokines and clinical indices of disease activity in a cohort of South African rheumatoid arthritis patients. In Arthritis Research & Therapy, 13(5), pp 160.
- Koorts AM, Levay PF, Hall AN, Van der Merwe CF, Becker PJ, Viljoen M: 2011. Expression of the H-subunit and L-subunit of ferritin in bone marrow macrophages and cells of the erythron during cellular immune activation. In **Blood Cells Molecules and Diseases**, 47, pp 50–55.
- Buffart TE, Louw M, Van Grieken CT, Tijssen M, Carvalho B, Ylstra B, Grabsch H, Mulder CJ, Van De VelDe CJH, Van der Merwe SW, Meijer GA: 2011. Gastric cancers of Western European and African patients show different patterns of genomic instability. In BMC Medical Genomics, 4(7), pp 1–12.
- Ally MMTM: 2011. Upper limb pain syndromes: more about rheumatology. In CME: Your SA Journal of CPD, 29(8), pp 338–339.
- Ally MMTM: 2011. Upper limb pain syndromes. In CME: Your SA Journal of CPD, 29(8), pp 331–332.
- Tintinger GR, Van der Merwe JJ, Fickl H, Rheeder P, Feldman C, Anderson R: 2011. Soluble triggering receptor expressed on myeloid cells in sputum of patients with community acquired pneumonia or pulmonary tuberculosis: a pilot study. In European Journal of Clinical Microbiology & Infectious Diseases, Online.
- Cockeran R, Mutepe M D, Theron AJ, Tintinger GR, Steel HC, Stivaktas PI, Richards GA, Feldman C, Anderson R: 2011. Calcium-dependent potentiation of the pro-inflammatory



functions of human neutrophils by tigecycline *in vitro*. In **Journal of Antimicrobial Chemotherapy**, Online.

- Sathekge MM, Maes A, Kgomo M, Stoltz AC, Van De Wiele C: 2011. Use of <sup>18</sup>F-FDG PET to predict response to first-line Tuberculostatics in HIV-associated Tuberculosis. In Journal of Nuclear Medicine, 52(6), pp 880–885.
- Ismail F, Van De Werke I, Khan N, Levay PF, Davel GH: 2011. Radiological chest manifestations in diffuse infiltrative lymphocytosis syndrome. In **SA Journal of Radiology**, 15(2), pp 46–47.
- Ker JA: 2011. Antihypertensive treatment in the elderly. In South African Family Practice, 53(1), pp 40–43.
- Ker JA: 2011. Hypertension. In **South African Family Practice**, 53(4), pp 336–339.
- Ker JA: 2011. Management issues in hypertensive diabetics. In South African Family Practice, 53(2), pp 144–148.
- Ker JA: 2011. Secondary hypertension. In South African Family Practice, 53(5), pp 441–442.
- Tintinger GR, Pretorius L, Labadarios D: 2011. Obstructive sleep apnoea and obesity. In **South African Journal of Clinical Nutrition**, 24(4), pp 174–177.
- Ellemdin S, Rheeder P, Soma P: 2011. Providing clinicians with information on laboratory test costs leads to reduction in hospital expenditure. In **South African Medical Journal**, 101(10), pp 746–748.

# Internal Medicine Kalafong

### Journal articles

- Koorts AM, Levay PR, Becker PJ, Viljoen M: 2011. Pro- and anti-inflammatory cytokines during immune stimulation: Modulation of iron status and red blood cell profile. In **Mediators of Inflammation**, Online.
- Visser A, Van De Vyver A, Essop A, Nel CE: 2011. Disseminated skin lesions in a patient with AIDS. In Southern African Journal of Epidemiology and Infection, 26(4(II)), pp 285–287.

# Maxillo-Facial and Oral Surgery

### Journal articles

Syebele K, Bütow K-W: 2011. Comparative study of the effect of antiretroviral therapy on benign lymphoepithelial cyst of parotid glands and ranulas in HIV-positive patients. In Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics, 111(2), pp 205–210.

Syebele K, Bütow K-W, Webber LM, Manda SO: 2011. Quantification of HIV-1 viral load in the fluid of ranulas in HIV-positive patients. in **Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics**, 111(6), pp 715–719.

# Cardiology

# Journal articles

MacDonald AP, Mathivha TM, Nene L, Soma-Pillay P: 2011. The effect of warfarin dosage on maternal and fetal outcomes in pregnant women with prosthetic heart valves. In **Obstetric Medicine**, 4, pp 24–27.

# Nuclear Medicine

- Szucs Z, Sathekge MM, Marjanovic-Painter B, Wagener J, Sello T, Wagener C, Zeevaart JR: 2011. Synthesis of I-131 labelled
  4-iodophenylacetic acid. In Journal of Labelled Compounds
  & Radiopharmaceuticals, 54, pp 54–58.
- Sathekge MM, Maes A, Kgomo M, Stoltz AC, Van De Wiele C: 2011. Use of <sup>18</sup>F-FDG PET to predict response to first-line Tuberculostatics in HIV-associated Tuberculosis. In Journal of Nuclear Medicine, 52(6), pp 880–885.
- Sathekge MM, Buscombe JR: 2011. Can positron emission tomography work in the African tuberculosis epidemic? In **Nuclear Medicine Communications**, 32(4), pp 241–244.
- Botelho MF, De Lima JJP, Dormehl IC, Fontes-Baganha M, Santos CM, Moreira JN, Kilian E: 2011. Visualization of deep lung lymphatic network using radioliposomes. In Revista Portuguesa De Pneumologia, 17(3), pp 124–130.
- Warwick J, Sathekge MM: 2011. PET/CT scanning with a high HIV/AIDS prevalence. In **Transfusion and Apheresis Science**, 44, pp 167–172.
- Sathekge MM: 2011. Optimization of Ordered Subset Expectation Maximization Reconstruction for Reducing Urinary Bladder Artifacts in Single-photon Emission Computed Tomography Imaging. In World Journal of Nuclear Medicine, 10(1), pp 3–8.

# Paediatrics

### Journal articles

- Riordan GT, Smuts I: 2011. When to consider an inborn error of metabolism: an approach to paediatric neurometabolic disorders. Apr, pp 162–164.
- Green RJ, Kling S: 2011. Diploma in Allergology Levels of competence required and new developments. In Current Allergy and Clinical Immunology, 24(3), pp 130–133.
- Ives K, Green RJ: 2011. Vitamin D and asthma. In **Current** Allergy and Clinical Immunology, 24(4), pp 176–180.
- Halkas A, Green RJ: 2011. Evolving concepts in the management of the preschool wheezer. In **Current Allergy and Clinical Immunology**, 24(4) pp 182–184.
- Kitchin OP, Wessels F, Masekela R, Becker PJ, Green RJ: 2011. Cost of admission for paediatric pneumonia in a setting of human immunodeficiency virus infection. In International Journal of Tuberculosis and Lung Disease, 15(12), pp 1702–1707.
- Green RJ: 2011. Viral infections of the respiratory tract in HIV-infected children. In Journal of Antivirals and Antiretrovirals, 3(4), pp 193.
- Bergh A-M, Davy K, Van Rooyen E: 2011. The neonatal nurses's role in kangaroo mother care. In **Professional Nursing Today**, 15(3), pp 32–37.
- Lloyd LG, De Witt TW: 2011. Splenic rupture in a neonate a rare complication. In **South African Journal of Child Health**, 5(3), pp 94–96.
- Rossouw TM, Richter K L, Martin DJ, Avenant TJ, Spencer D: 2011. The 2010 South African guidelines for the management of HIV and AIDS: a review. In **South African Medical Journal**, 101(4), pp 237–239.
- Kitchin OP, Masekela R, Pentz A, Potgieter J, K-Mensah M, Els C, White D, Green RJ: 2011. Cytomegalovirus pneumonia occurring soon after initiation of highly active antiretroviral in an infant. In Southern African Journal of Epidemiology and Infection, 26(2), pp 90–91.

# Chapters in books

Van Biljon G: 2011. Nephrotic Syndrome in Children – Studies from South Africa. In An update on glomerulopathies: Clinical and treatment aspects, InTech: Open Access Publisher, pp 439–454.

# Paediatrics Kalafong

# Journal articles

Proesmans M, Els C, Vermeulen F, De Boeck K: 2011. Change in IgG and evolution of lung function in children with cystic fibrosis. In **Journal of Cystic Fibrosis**, 10, pp 128–131.

# Division of Clinical Epidemiology

# Journal articles

- Brits J, Strauss S, Eloff Z, Becker PJ, Swanepoel DW: 2011. Hearing profile of gold miners with and without tuberculosis. In **Occupational and Environmental Medicine**, 17(Nov), Online.
- Basson H, Vermaak SS, Visser HF, Rheeder P: 2011. Canterbury index: an accurate predictor of fracture re-displacement? In SA Orthopaedic Journal, 10(4), pp 39–47.
- Mendes JF, Mathee A, Naicker N, Becker PJ, Naidoo S: 2011. The prevalence of intentional and unintentional injuries in selected Johannesburg housing settlements: original articles. In **South African Medical Journal**, 101(11), pp 835–838.
- Kruger K, Stegmann GF, Becker PJ: 2011. Preliminary investigation of concurrent administration of phenylbutazone and romifidine in healthy horses. In **Veterinary Anaesthesia and Analgesia**, 38, pp 505–509.

# Medical Oncology

- Visser A, Van der Vyver A, Du Preez SC, Crous A, Visser HF: 2011. Blood product utilisation during massive transfusions: audit and review of the literature. In **SA Orthopaedic Journal**, 10(4), pp 25–29.
- Louw VJ, Dreosti LM, Ruff P, Jogessar V, Moodley D, Novitzky N, Patel M, Schmidt A, Willem P: 2011. Recommendations for the management of adult chronic myeloid leukaemia in South Africa. In **South African Medical Journal**, 101(11), pp 840–846.
- Louw VJ, Bassa F, Chan SW, Dreosti LM, Du Toit M, Ferreira M, Gartell K, Swart AM, Jogessar V, Littleton N, Mahlangu J,

Pool R, Patel M, *et al* : 2011. Guideline for the treatment of myelodysplastic syndromes in South Africa. In **South African Medical Journal**, 101(12), pp 900–906.

# Oral Pathology and Oral Biology

### Journal articles

- Ker J, Du Toit-Prinsloo L, Van Heerden WFP, Saayman G: 2011.
  Subendocardial fibrosis in left ventricular hypertrabeculation

  cause or consequence? In Clinical Medicinal Insights:
  Cardiology, 5, pp 13–16.
- Bernitz H, Bernitz Z, Steenkamp G, Blumenthal R, Stols GH: 2011. The individualisation of a dog bite mark: a case study highlighting the bite mark analysis, with emphasis on differences between dog and human bite marks. In International Journal of Legal Medicine, Online.
- Boy SC, Van Heerden MB, Babb DR, Van Heerden WFP, Willem P: 2011. Dominant genetic aberrations and coexistent EBV infection in HIV-related oral plasmablastic lymphomas. In Oral oncology, 47, pp 883–887.
- Van Heerden WFP, Van Zyl AW: 2011. The role of the dentist in the early detection of oral cancer. In **South African Dental Journal**, 66(8), pp 1–4.
- Fourie J, Van Heerden WFP, McEachen S, Van Zyl AW: 2011. Chronic ulcerative stomatitis: a distinct clinical entity? In South African Dental Journal, 66(3), pp 119–121.
- Van Zyl AW, Fourie J, Van Heerden WFP: 2011. Oral malodour. In South African Family Practice, 53(4), pp 313–316.
- Van Heerden WFP, Van Zyl AW: 2011. Burning mouth syndrome. In South African Family Practice, 53(1), pp 8–10.
- Nel S, Van Heerden MB, Steenkamp G, Van Heerden WFP, Boy SC: 2011. Immunohistochemical profile of Odontegenic Epithelium in developing dog teeth (*Canis familiars*). In Veterinary Pathology, 48(1), pp 276–282.

# Obstetrics and Gynaecology

### Journal articles

Bills VL, Salmon AH, Harper SJ, Overton TG, Neal CR, Jeffery BS, Soothill PW, Bates DO: 2011. Impaired vascular

permeability regulation caused by the VEGF(165)b splice variant in pre-eclampsia. In **BJOG-An International Journal of Obstetrics and Gynaecology**, 118(10), pp 1253–1261.

- Belizan M, Bergh A-M, Cilliers C, Pattinson RC, Voce A: 2011. Stages of change: A qualitative study on the implementation of a perinatal audit program in South Africa. In **BMC Health Services Research**, 11(243), Online.
- Haddad SM, Cecatti JG, Parpinelli MA, Souza JP, Costa M, Sousa M, Surita FG, Pinto e Silva JL, Pacagnella RC, Camargo RS, Bahamondes MV, Zotareli V, Gurgel LT, Say L, Pattinson RC: 2011. From planning to practice: Building the national network for the surveillance of severe maternal morbidity. In **BMC Public Health**, 11(283), Online.
- Lee C, Cousens S, Darmstadt GL, Blencowe H, Pattinson RC, Moran N, Hofmeyr GJG, Haws RA, Bhutta Z, Lawn JE: 2011. Care during labor and birth for the prevention of intrapartum-related neonatal deaths: a systematic review and Delphi estimation of mortality effect. In **BMC Public Health**, 11(3), Online.
- Bergh A-M, Carroli G, Cecatti JG, Germar MJ, Gulmezoglu AM, Khan KS, Kulier R, Lumbiganon P, May W, Mittal S, Pattinson RC, Wolomby-Molondo JJ: 2011. A cluster randomized controlled trial to evaluate the effectiveness of the clinically integrated RHL evidence-based medicine course. In BMC Reproductive Health, 7, pp 8–17.
- Roos AM, Abdool Z, Sultan AH, Thakar R: 2011. The diagnostic accuracy of endovaginal and transperineal ultrasound for detecting anal sphincter defects: the PREDICT study. In **Clinical Radiology**, 66, pp 597–604.
- Lawn JE, Blencowe H, Pattinson RC, Cousens S, Kumar R, Ibiebele I, Gardosi J, Day L.T, Stanton C: 2011. Stillbirths 2: Where? When? Why? How to make data count? In Lancet, 377(Apr), pp 1448–1463.
- Pattinson RC, Kerber K, Buchmann E, Friberg IK, Belizan M, Lansky S, Weissman E, Mathai M, Rudan I, Walker N, Lawn JE: 2011. Stillbirths 4: How can health systems deliver for mothers and babies? In Lancet, 377(9777), pp 1610–1623.
- MacDonald AP, Mathivha TM, Nene L, Soma-Pillay P: 2011. The effect of warfarin dosage on maternal and fetal outcomes in pregnant women with prosthetic heart valves. In **Obstetric** Medicine, 4, pp 24–27.
- De Bruin AK: 2011. Affluent gynaecological conditions. In **Obstetrics and Gynaecology Forum**, 21, pp 29–31.
- Soma-Pillay P: 2011. The inevitable demise of clinical skills in



Prof Marthie Ehlers is Head of Research in the Department of Medical Microbiology. Her research focuses mainly on the molecular detection and genotyping of clinically important pathogens, such as *Mycobacterium tuberculosis*, and emerging and re-emerging pathogens, such as methicillin-resistant *Staphylococcus aureus*. She is also investigating the prevalence and genotypes of MRSA strains that are in circulation among animal populations and the associated health risks for close contacts and the community.

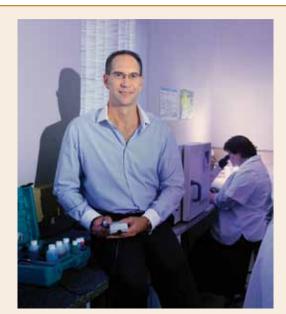
examination of patients. In **Obstetrics and Gynaecology** Forum, 21, pp 21–23.

- Howarth GR, Odendaal HJ, Pattinson RC: 2011. Obstetric litigation time to reflect? In **Obstetrics and Gynaecology** Forum, 21, pp 1–3.
- MacDonald AP: 2011. Adult learning and CME. In **Obstetrics** and Gynaecology Forum, 21(May), pp 1–3.
- Lawn JE, Bahl R, Bergstrom D, Bhutta Z, Darmstadt GL, Ellis M, English M, Kurinczuk JJ, Lee A, Merialdi M, Mohamed M, Osrin D, Pattinson RC: 2011. Setting research priorities to reduce almost one million deaths from birth asphyxia by 2015. PLoS Medicine, 8(1), Online.
- Bergh A-M, Davy K, Van Rooyen E: 2011. The neonatal nurses's role in kangaroo mother care. In **Professional Nursing Today**, 15(3), pp 32–37.

- Cecatti JG, Souza JP, Neto AFO, Parpinelli MA, Sousa M, Say L, Pattinson RC: 2011. Pre-validation of the WHO organ dysfunction based criteria for identification of maternal near miss. In **Reproductive Health**, 8, pp 22–28.
- Cameron DA, Wolvaardt JE, Van Rooyen M, Hugo JFM, Blitz JJ, Bergh A-M: 2011. Medical student participation in community-based experiential learning: reflections from first exposure to making the diagnosis. In South African Family Practice, 53(4), pp 373–379.
- Abdool Z: 2011. Evaluation of vaginal pessary use by South African gynaecologists. In **South African Journal of Obstetrics and Gynaecology**, 17(3), pp 64–67.
- Stander BA, Marais S, Huyser C, Fourie Z, Leszczynski D, Joubert AM: 2011. Effects of non-thermal mobile phone radiation on breast adenocarcinoma cells. in South African Journal of Science, 107(9/10), Online.
- Botha H, Cooreman B, Dreyer G, Dyson N, Guidozzi F, Hoosen AA, Koller T, Lindeque BG, Marcus L, Moodley M, Mouton A, Smith T, Soeters R: 2011. Cervical cancer and human papillomarvirus: South Afrcian guidelines for screening and testing. In **Southern African Journal of Gynaecological Oncology**, 2(1), pp 23–26.
- Dreyer G, Lindeque BG, Mouton A: 2011. Prophylactic human papillomavirus vaccination against cervical cancer: a summarised resource for clinicians. In **Southern African Journal of Gynaecological Oncology**, 3(1), pp 39–42.
- Hassan SS, Romero R, Vidyadhari D, Fusey S, Baxter JK, Khandelwal M, VijayaraghaVan J, Trivedi Y, Soma-Pillay P, Sambarey P, Dayal A, Potapov V, OBrien JM: 2011. Vaginal progesterone reduces the rate of preterm birth in women with a sonographic short cervix: a multicenter, randomized, double-blind, placebo-controlled trial. In **Ultrasound in Obstetrics & Gynecology**, 38, pp 18–31.

#### Research and technical/policy output

- Dreyer G: Policy Document: 2011. SA Cervical Cancer Screeining Policy. For: NDOH: SA Government.
- Dreyer G: Policy Document: 2011. SA National Contraception Policy. For: **SA Government**.



Prof Tiaan de Jager is the Deputy Dean: Research and is a member of the School of Health Systems and Public Health. His research focus is on environmental endocrine-disrupting chemicals (including pesticides and industrial pollutants), toxicology and male reproductive health. His publications on the organochlorine pesticide DDT, used for malaria vector control, received international recognition and impacts on policy. He heads the University's new multidisciplinary initiative, the UP Centre for Sustainable Malaria Control, which will provide new research opportunities as it focuses on the elimination of malaria. He has been invited as plenary and guest speaker to several international scientific conferences.

# Otorhinolaryngology

#### Journal articles

Heinze BM, Swanepoel DCD, Hofmeyer L:2011. Systematic review of vestibular disorders related to human immunodeficiency virus and acquired immunodeficiency syndrome. In **Journal** of Laryngology and Otology, 125(Oct), pp 881–890.

# Orthopaedics

#### Journal articles

- Van den Bout HET, Snyckers CH: 2011. Bilateral clavicle fractures. A case report and review of the literature. In **SA Orthopaedic Journal**, 10(2), pp 56–66.
- Steyn R, Le Roux TLB, Snyckers CH, McLoughlin HA: 2011. Low grade chondrosarcoma: Is long-term follow-up necessary? In **SA Orthopaedic Journal**, 10(3), pp 62–67.
- East SC, Snyckers CH: 2011. Orthopaedic litigation in South Africa: a review of the Medical Protection Society data base involving orthopaedic members over the last 10 years. In **SA Orthopaedic Journal**, 10(3), pp 71–79.
- Grobbelaar CJ, Weber FA, Du Plessis T: 2011. Thirty-three years of clinical experience with crosslinking of polyethylene in cemented total hip replacement. In **SA Orthopaedic Journal**, 10(1), pp 42–48.
- Grobbelaar CJ, Du Plessis T, Steffens FE, Van der LinDe MJ: 2011. Analysis of wear-related *failures* in long-term follow-up of crosslinkde polyethylene hip sockets. In **SA Orthopaedic Journal**, 10(1), pp 58–65.
- Grobbelaar CJ, Du Plessis T, Steffens FE, Van der Linde MJ: 2011. Long-term evaluation of polyethylene wear in total hip replacement: a statistical analysis of the *association* between the degree of wear versus pain, interface change, osteolysis and implant failure. In **SA Orthopaedic Journal**, 10(1), pp 49–55.
- Sprong F, Snyckers CH, Birkholtz FF: 2011. Autologous intramedullary bone graft harvesting as an alternative to conventional harvesting methods. In SA Orthopaedic Journal, 10(4), pp 53–58.
- Basson H, Vermaak SS, Visser HF, Rheeder P: 2011. Canterbury index: an accurate predictor of fracture re-displacement? In **SA Orthopaedic Journal**, 10(4), pp 39–47.

# Periodontics and Oral Medicine

#### Journal articles

Fourie J, Smit CF: 2011. Cervical microleakage in Class II open-sandwich restorations: an in vitro study. In **South African Dental Journal**, 66(7), pp 320–324.

- Van Heerden WFP, Van Zyl AW: 2011. The role of the dentist in the early detection of oral cancer. In **South African Dental Journal**, 66(8), pp 1–4.
- Fourie J, Van Heerden WFP, McEachen S, Van Zyl AW: 2011. Chronic ulcerative stomatitis: a distinct clinical entity? In South African Dental Journal, 66(3), pp 119–121.
- Van Zyl AW, Fourie J, Van Heerden WFP: 2011. Oral malodour. In **South African Family Practice**, 53(4), pp 313–316.
- Van Heerden WFP, Van Zyl AW: 2011. Burning mouth syndrome. In **South African Family Practice**, 53(1), pp 8–10.

# Psychiatry

#### Journal articles

- Roos JL: 2011. Genetics of schizophrenia: communicating scientific findings in the clinical setting. In African Journal of Psychiatry, 14(2) pp 105–111.
- Krüger C, Lewis C: 2011. Patient and social work factors related to successful placement of long-term psychiatric in-patients from a specialist psychiatric hospital in South Africa. In African Journal of Psychiatry, 14(2), pp 120–129.
- Roos JL, Lombard M, Ladikos A: 2011. Can we close the barn door before the horses get out? A case study of high genetic loading and subsequent development of psychosis. In African Journal of Psychiatry, 14(3), pp 242–244.
- Böhmer MW: 2011. Dynamic psychiatry and the psychodynamic formulation. In African Journal of **Psychiatry**, 14(4), pp 273–277.
- Van Staden CW: 2011. African approaches to an enriched ethics of person centred health practice. In **International Journal of Person Centred Medicine**, 1(1), pp 14–17.
- Xu B, Roos JL, Dexheimer P, Boone B, Plummer B, Levy S, Gogos JA, Karayiorgou M: 2011. Exome sequencing supports a *De novo* mutational paradigm for schizophrenia. In Nature Genetics, 43(9), pp 864–868.
- Negrao BL, Bipath P, Van der Westhuizen D, Viljoen M: 2011. Autonomic correlates at rest and during evoked attention in children with attention-deficit/hyperactivity disorder and effects of methylphenidate. In **Neuropsychobiology**, 63, pp 82–91.

- Krüger C, Van der Westhuizen R: 2011. An audit of attendance at occupational therapy by long-term psychiatric in-patients at Weskoppies Hospital. In South African Journal of Occupational Therapy, 41(2), pp 2–7.
- Swanepoel I, Krüger C: 2011. Revisiting validity in crosscultural psychometric test development: a systemsinformed shift towards qualitative research designs. In South African Journal of Psychiatry, 17(1), pp 10–15.
- Böhmer MW: 2011. Psychotherapy in psychiatry reality, delusion or relic. In **South African Journal of Psychiatry**, 17(2), pp 34–38.
- Lombard M, Roos JL: 2011. Velocardiofacial syndrome a syndrome with many faces. In **South African Journal of Psychiatry**, 17(3), pp 82–88.
- Kotzé C, De Wet PH: 2011. A 4-year review of psychiatrists' participation in prosecutorial workshops on criminal capacity. In **South African Journal of Psychiatry**, 17(4), pp 112–117.

#### Research and technical/policy output

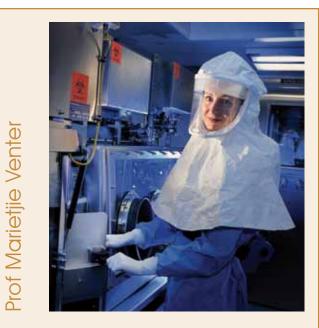
- De Wet PH: Policy Document: 2011. A turnaround study to reduce the long waiting list and waiting period for forensic psychiatric observations/evaluations of waiting trial detainees referred by courts in terms of section 77.78 and 79 of the criminal procedures act 51 of 1977 (Amendment). For: Director General of The Gauteng department of health.
- De Wet PH: Policy Document: 2011. Application for extension of 30 day period for evaluation and report in terms of the Criminal Procedures Act No. 51 of 1977. For: Director: Revenue Management. National Department of Health.
- Van der Westhuizen D: Policy Document: 2011. Draft Concept Document for Kungwini Child and Youth Care Centre Reagrding Admission Criteria. For: Kungwini Child and Youth Care Centre.
- De Wet PH: Policy Document: 2011. Review of Criminal Justice system: The establishment of a new modernised efficient effective and transformed criminal justice system for SA. Protocol on procedure to be followed in the case of mental enquiries iro accused persons. For: National Intersector Task Team.
- Sokudela FB: Policy Document: 2011. National Core Standards: Patient referral policy and protocol for Weskoppies Hospital. For: **Weskoppies Hospital**.

Macklin D: Policy Document: 2011. The proposed outline for Journal discussions for Clinical Psychology interns. For: Weskoppies Hospital.

# Radiology

#### Journal articles

- Suleman FE: 2011. Lower Limb Pain Syndromes. In CME: Continuing Medical Education, 29(8), pp 338–339.
- Ahmad S, Suleman FE: 2011. Rare cause of a neck mass: successful balloon embolisation of a congenital external carotid artery – internal jugular vein fistula. In **Pediatric Surgery International**, 27(12), pp 1375–1376.
- Khan N, Van De Werke I, Ebrahim ZI, Ismail F: 2011. Metastatic melanoma of the small bowel complicated by fistula formation. In **SA Journal of Radiology**, Dec, pp 127–128.
- Khan N, Ebrahim ZI, Van De Werke IEA: 2011. Mystery of bilateral breast masses. In SA Journal of Radiology, 15(4), pp 129–130.
- Van Heerden J, Lockhat ZI, Bam DA, Fletcher L, Sommerville JEM: 2011. PACS: Do clinical users benefit from it as a training adjunct? In SA Journal of Radiology, Jun, pp 38–41.
- Ebrahim ZI, Lockhat ZI, Ismail F: 2011. Pseudomyxoma peritonei a rare entity. In **SA Journal of Radiology**, 15(3), pp 79–81.
- Ismail F, Van De Werke I, Khan N, Levay PF, Davel GH: 2011. Radiological chest manifestations in diffuse infiltrative lymphocytosis syndrome. In **SA Journal of Radiology**, 15(2), pp 46–47.
- Ismail F, Khan N, Van De Werke IEA, Ahmed RA: 2011. A severe case of astrogliosis and encephalomalacia in a neonate with a massive vein of Galen malformation. In SA Journal of Radiology, 15(2), pp 42–44.
- Davel L, Smal J, Lockhat ZI: 2011. MRI imaging of vein of Galen malformations at Steve Biko Academic Hospital: a mini case series. In SA Journal of Radiology, 15(2), pp 53–55.
- Bellew N, Wagener G: 2011. Camurati-Engelmann disease. In **SA Journal of Radiology**, 15(1), pp 20–24.
- Suleman FE, Velleman MD: 2011. Intra-articular rice bodies: Imaging for persistent joint pain. In **SA Orthopaedic**



Prof Marietjie Venter developed a research programme at the University of Pretoria on respiratory and vector-borne zoonotic viruses. She holds a joint appointment in the Zoonosis Research Unit in the Department of Medical Virology and as Co-director of the Centre for Respiratory Diseases and Meningitis in the National Institute for Communicable Diseases (a division of the National Health Laboratory Service). She is a member of the Global Influenza Surveillance Network, the International Infectious Disease Society, the International Society for Influenza and Other Respiratory Viruses, Arbozoonet of Europe, and the Infectious Disease Society of South Africa.

#### Journal, 10(4), pp 80-82.

- Suleman FE, Bellew N: 2011. Primary bone lymphoma: Imaging findings of a rare primary bone tumour. In SA Orthopaedic Journal, 10(3), pp 68–70.
- Pretorius JP, Liebenberg C, Piek D, Smith M: 2011. The open abdomen Part 2: management of the open abdomen using temporary abdominal closure. In **Wound Healing Southern Africa**, 4(1), pp 29–35.
- Pretorius JP, Liebenberg C, Piek D, Smith M: 2011. The open abdomen Part 3: management of the Grade 3 open abdomen with entero-atmospheric fistulae. In **Wound Healing Southern Africa**, 4(2), pp 94–102.

# Division of Sports Medicine

#### Journal articles

- Van der Linde E, Oschman Z: 2011. Comparative ultrasound study of acute lateral ankle ligament injuries rehabilitated with conventional and jump stretch flex band programmes. In African Journal for Physical, Health Education, Recreation and Dance, 17(4), pp 591–602.
- Du Toit PJ, Krüger PE, Terblanche H, Janse Van Rensburg DC, Govender C, Mercier J, Jay-Du Preez T, Kleynhans M: 2011. Sex differences in the nine-point Beighton hypermobility test scores. In African Journal for Physical, Health Education, Recreation and Dance, 17(4), pp 603–611.
- Grant CC, Van Rensburg DCJ, Strydom N, Viljoen M: 2011. Importance of tachogram length and period of recording during noninvasive investigation of the autonomic nervous system. In **Annals Of Noninvasive Electrocardiology**, 16(2), pp 131–139.
- Kuisis SM, Camacho TC, Dafel SM, Janse Van Rensburg DC: 2011. Kinetic profile and incidence of injuries amoung high performance trampoline gymnasts. In **Portuguese** Journal of Sport Sciences, 11(2), pp 1001–1004.
- Wasserman D, Oschman Z: 2011. Role of ultrasound as a non-invasive method of diagnosis of Chronic Exertional Compartment syndrome. In **SA Orthopaedic Journal**, 10(4), pp 59–65.
- Collins RM, Janse Van Rensburg DC, Patricios JS: 2011. Common work-related musculoskeletal strains and injuries. In **South African Family Practice**, 53(3), pp 240–246.
- Janse Van Rensburg DC, Nolte K: 2011. Sports injuries in adults: overview of clinical examination and management. In **South African Family Practice**, 53(1), pp 21–27.
- Nolte K, Janse Van Rensburg DC, Krüger PE: 2011. Land- and water-based exercises in rheumatoid arthritis patients: A series of case reports. In **South African Journal of Sport Medicine**, 23(3), pp 84–88.

# Urology

#### Journal articles

- Adam A, Engelbrecht MJ, Bornman MS, Manda SO, Moshokoa EM, Feilat R: 2011. The role of the PCA3 assay in predicting prostate biopsy outcome in a South African setting. In **BJU International**, 108, pp 1728–1733.
- Adam A: 2011. Use of a combination of variables along with the PCA3 assay in better defining the "low risk" patient: A message from Pretoria to Kyoto. In **International Journal of Urology**, 18, pp 736.
- Adam A, Adam A, Van Wijk F, Coetzee J, Bebington B, Jeffery
   S: 2011. A template for the comprehensive evaluation of pelvic organ prolapse in a South African context. In Pelvi-Perineologie, 30, pp 7–9.
- Adam A, Jeffery S, Adam A, De Jong P, Arieff Y: 2011. Do urologists and gynaecologists manage posterior compartment prolapse differently? In South African Journal of Obstetrics and Gynaecology, 17(1), pp 4–8.

#### Research and technical/policy output

De Jager C, Swemmer A, Aneck-Hahn NH, Van Zijl MC, Van Wyk S, Bornman MS, Barnhoorn IEJ, Jonker ML, Van Vuren JHJ, Burger AEC: Technical Report: 2011. Endocrine Disrupting Chemical (EDC) activty and health effects of identified veterinary growth stimulants in surface and groundwater. For: WRC, Water Research Commission.

# Nursing Science

- Mangena MP, Mulaudzi FM, Peu MD: 2011. The experiences of nurses in caring for circumcised initiates admitted to hospital with complications. In **Contemporary Nurse**, 37(1), pp 69–81.
- Van Tonder AM, Van Wyk NC: 2011. The perceptions of visitors at acute care units in two private hospitals in Gauteng, South Africa regarding the image of nurses and nursing. In International Journal of Nursing and Midwifery, 3(9), pp 128–138.
- Brysiewicz P, Augustyn D, Heyns T: 2011. Emergency Nursing. In **Nursing Update**, 35(Feb), pp 32–33.



June 2011 to April 2012 Prof Hennie Stander Acting Dean



Prof Norman Duncan Dean

# **4.5** Humanities

The recent *Consensus Study on the State of the Humanities in South Africa* (Jansen & Vale, 2011) posits that the central value of the humanities resides in the tradition of critical thought that has forever been a central aspect of its functioning, that is, the tradition of asking probing questions aimed at gaining penetrating "insight into the multiple challenges that face the human condition". In the South African context, the Consensus Study continues. The humanities critically contributes to "the understanding, analysis and attempts to resolve many of the most intractable social and economic challenges faced by the South African polity". Of course, as the Consensus Study also notes, another core value of the humanities is its capacity to "lift humankind out of the mundane world of the everyday".

Original and generative research, artistic productions, professional practice innovation and publications constitute some of the key vehicles for the aforementioned contributions of the humanities to society.

As one of the largest faculties of its kind in South Africa, the University of Pretoria's Faculty of Humanities continued the tradition of asking critical questions and seeking solutions to societal problems through its creative productions and research and publications outputs during 2011. Specifically, during the 2011 academic year, the Faculty produced 146 journal articles, 34 book chapters and nine books. These outputs represent not only a significant improvement on the Faculty's outputs for the preceding two years, but also attest to its commitment to contribute substantively to efforts to enliven the traditions and aspirations of the humanities in South Africa and globally.

Obviously, it is not only in terms of quantity that the Faculty's research outputs during the 2011 academic year can be

#### **Research entities**

#### Institutes

- Institute for Sport Research
- Institute for Strategic and Political Affairs (ISPA)
- Institute for Women's and Gender Studies

#### Centres

- Centre for Augmentative and Alternative Communication (CAAC)
- Centre for Early Intervention in Communication Pathology (CEICP)
- Centre for Research in the Politics of Language (CentRePol)
- Psychology @ Itsoseng

#### Units

Cochlear Implant Unit

considered as having been significant; but also in terms of quality and range. Indeed, the Faculty's corpus of scholarly outputs for the reporting period was remarkably rich in its diversity, including various successful creative productions, as well as research related to health and wellbeing, the arts, debates in literary studies linked to issues of identity and other aspects of the human condition, and poverty. Importantly, many of these outputs had their locus not only in South Africa, but also in a range of other countries, including Australia, Brazil, Germany, India, Mozambique and the United Kingdom.

Specifically, the 2011 academic year saw the launch and/or publication of research on a range of health-related issues, including research on sports injuries (for example, by Dr Paola Wood of the Department of Biokinetics, Sport and Leisure Sciences), apraxia of speech and hearing loss identification among new-borns (by Prof Anita van der Merwe and Prof De Wet Swanepoel, respectively, both from the Department of Communication Pathology), as well as research on the influence of culture in the use of the Picture Communication Symbols Library with children with little or no functional speech (by Dr Shakila Dada of the Centre for Augmentative and Alternative Communication).

During 2011, various departments, as well as the Human Economy Programme in the Faculty, also produced a range of publications focusing on poverty and other forms of social inequality. These include the important research outputs on poverty and poverty reduction interventions by Prof Antoinette Lombard of the Department of Social Work and Criminology. The issues of poverty and social asymmetries also constituted one of the key foci of the Human Economy Programme's research endeavours. While still in the formative period of its establishment, the Human Economy Programme, under the leadership of Prof John Sharp and Prof Keith Hart, contributed significantly to research in the Faculty in 2011.

Two other notable contributions to the Faculty of Humanities' research outputs were the compelling studies by Molly Brown and Rick de Villiers of the Department of English on identity in the work of Chris Zithulele Mann and TS Eliot's increasing interest in religion, as reflected in his *The Hippopotamus*, respectively.

In Historical and Heritage Studies, Prof Johan Bergh and Prof Ian Phimister, in collaboration with Herman Giliomee, Extraordinary Professor of History at the University of Stellenbosch, continued their research on the Kruger papers, and Prof Alois Mlambo continued his research in the project, "The comparative history of political engagement in Western and African societies".

Here it should be noted that with an output of 27 publications, the Department of Historical and Heritage Studies had been singularly productive during 2011.

From the Department of Anthropology and Archaeology, two research initiatives among several that stood out during 2011 are Laurenco Pinto's site-specific study on rock art in the southern region of the Eastern Cape and Dr Fraser McNeill's ethnographic investigations into child antiretroviral workshops as ritualistic rites of passage.

As indicated above, during 2011, academics in the Faculty produced a total of nine books or volumes. These include *Imaginary antipodes: Essays on contemporary Australian literature* by Russell West-Pavlov of the Department of English, *Dias, Da Gama en die Khoikhoin: Ontmoeting van kulture aan die suidpunt van Afrika* by Cobus Ferreira of the Department of Historical and Heritage Studies, and *Community of insecurity: SADC's struggle for peace and security in Southern Africa* by Prof Laurie Nathan of the Department of Political Sciences.

The 2011 academic year also witnessed the production of several noteworthy creative outputs, including the award-winning movement piece, *As the Night Falls/Penumbra*, choreographed by Nicola Haskins, two CDs, namely *Beethoven Tango* and *Shanghai Brunch*, by Dr Charl du Plessis of the Department of Music, as well as the scenographic productions for Picasso and Molière by Prof Heidi Hoffer of the Department of Drama.

Attesting to the depth and impact of scholarship in the Faculty, several departments and academics in the Faculty were the recipients of various awards and accolades during 2011, including the KykNet Ghoema Award for Best Instrumental CD in 2011 awarded to Dr Charl du Plessis for his CD, *Shanghai Brunch*, and the 2011 Standard Bank Ovation Award conferred on the Department of Drama for the production, *As the Night Falls/Penumbra*. In 2011, Prof David Medalie of the Department of English was also shortlisted for the Caine Prize for African Literature for his short story, *The mistress's dog*.

Of course, we acknowledge that while 2011 was a decidedly fruitful year for the Faculty, the year can only be considered truly productive if the outputs produced are used as the basis for even greater levels of outputs in the years to come.

#### Prof Norman Duncan

Dean: Humanities Tel: 012 420 2360/2318 Email: dean@hum.up.ac.za

# Faculty Research Output

# Afrikaans

#### Journal articles

- Bosman HJ: 2011. Die diagnostiese waarde van 'n Nederlandse woordeskattoets vir Afrikaanssprekende aanleerders. In LitNet Akademies, 8(3), pp 137–166.
- Botes N, Cochrane N: 2011. Generiese merkers in die kortverhaalsiklus: Deel 1: Teoretiese uitgangspunte. In LitNet Akademies, 8(2), pp 112–151.
- Botes N, Cochrane N: 2011. Generiese merkers in die kortverhaalsiklus: Deel 2: 'n Toepassing op *Die dag toe ek my hare losgemaak het* Van Willemien Brummer. In LitNet Akademies, 8(2), pp 152–187.
- Burger WD: 2011. 'n Verandering van vorm as die vorm van verandering: Antjie Krog se *'n Ander tongval*. In **Stilet: Tydskrif** vir die Afrikaanse Letterkundevereniging, 23(1), pp 18–35.
- Van Niekerk J: 2011. Die leiersfigure Van Mandela en Moshoeshoe in A Change of Tongue en Beggin to Be Black deur Antjie Krog: 'n Voorlopige ondersoek. In Stilet: Tydskrif vir die Afrikaanse Letterkundevereniging, 23(1), pp 75–86.
- Zajas P:2011. Die etiek (al dan nie) van niefiksie. Kantaantekeninge by Ryszard Kapuscinski, Frank Westerman en Antjie Krog. In **Stilet: Tydskrif vir die Afrikaanse Letterkundevereniging**, 23(1), pp 114–129.
- Zajas P: 2011. Around Kapuscinski non-fiction. Evaluating the discussion. In **Teksty Drugie**, (1/2), pp 265–278.
- Van Niekerk J: 2011. Verstedeliking, Suid-Afrikaanse letterkundes en die kultuurteks. In **Tydskrif vir Letterkunde**, 48(2), pp 50–70.
- Koch J, Zajas P: 2011. Uit de donkere dagen van voor *linguistic turn* oftewel wat J.M. Coetzee in de bekentenis van Willem Termeer zag en wat hij daarmee deed. In Tydskrif vir Letterkunde, 48(2), pp 93–111.
- Willemse HSS: 2011. Tydskrif vir Letterkunde 'n aaneenlopende rekord van 75 jaar. In **Tydskrif vir Letterkunde**, 48(2), pp 5–12.
- Willemse HSS: 2011. S.V. Petersen se poësie van verwantskap. In **Tydskrif vir Nederlands en Afrikaans,** 17(2), pp 3–20.

#### Chapters in books

Webb VN: 2011. Standaardafrikaans: 'n vurk in die pad? 'n Taalpolitieke perspektief. In **Standaardtalen in beweging**, Stichting Neerlandistiek VU, pp 193–214.

# African Languages

#### Journal articles

- De Schryver G-M, Prinsloo DJ: 2011. Do dictionaries define on the level of their target users? a case study for Three Dutch Dictionaries. In **International Journal of Lexicography**, 24(1), pp 5–28.
- Taljard E, Nchabeleng MJ: 2011. Management and internal standardization of chemistry terminology: a Northern Sotho case study. In Lexikos, 21, pp 194–216.
- Prinsloo DJ: 2011. A critical analysis of the lemmatisation of nouns and verbs in isiZulu. In Lexikos, 21, pp 169–193.
- Faasz G, Prinsloo DJ: 2011. A computational implementation of the Northern Sotho infinitive. In South African Journal of African Languages/Suid-Afrikaanse Tydskrif vir Afrikatale, 31(2), pp 281–301.
- Prinsloo DJ, Heid U: 2011. A bilingual dictionary for a specific user group: supporting Setswana speakers in the production and reception of English. In South African Journal of African Languages/Suid-Afrikaanse Tydskrif vir Afrikatale, 31(1), pp 66–86.
- Taljard E, Prinsloo DJ, Fricke I: 2011. The use of LSP dictionaries in secondary schools – a South African case study. In **South African Journal of African Languages/Suid-Afrikaanse Tydskrif vir Afrikatale**, 31(1), pp 87–109.
- Groenewald PS: 2011. Woordgroepvers. In South African Journal of African Languages/Suid-Afrikaanse Tydskrif vir Afrikatale, 31(1), pp 17–29.
- Mojalefa MJ: 2011. Ngwaga wa Mopedi: seka sa ngwaga wa merafe ye mengwe ya Bibele. In **Verbum et Ecclesia**, 32(1), pp 1–8.

In the list of research outputs, in all cases the heading "Papers published" refers to papers in refereed, published conference proceedings, and the heading "Journal articles" refers to articles published in accredited, peer-reviewed, refereed specialist journals.

#### Papers published

Prinsloo DJ, Heid U, Bothma TJD, Faasz G: 2011. Interactive, dynamic electronic dictionaries for text production. In Electronic lexicography in the 21st century: New applications for new users Proceedings of eLex 2011, 10-12 Nov, Trojina, Institute for Applied Slovene Studies, pp 215–220.

# Ancient Languages

#### Journal articles

- Straeuli C: 2011. Why did the Thebans defeat the normally militarily superior Spartans at the Battle of Leuctra (371 BC)? In Akroterion: Journal for the Classics in South Africa/ Tydskrif Vir Die Klassieke in Suid-Afrika, 56, pp 159–168.
- Stander HF: 2011. Chrysostom on hunger and famine. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–7.
- Sutton L: 2011. The rising of dawn an investigation of the spatial and religious background of 'dawn' in Psalm 139:7-12. In Journal for Semitics/Tydskrif Vir Semitistiek, 20(2), pp 546–561.
- Botha PJ: 2011. Poetry and Perlocution in Psalm 26. In Old Testament Essays (New Series): Journal of the Old Testament Society of South Africa, 24(1), pp 30–48.
- Mondriaan ME: 2011. Who were the Kenites? In Old Testament Essays (New Series): Journal of the Old Testament Society of South Africa, 24(2), pp 414–430.

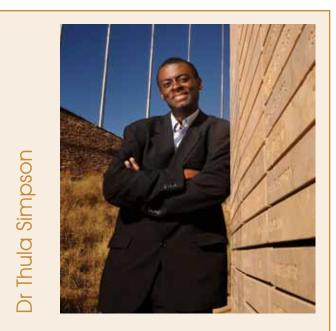
#### Chapters in books

Botha PJ: 2011. Freedom to roam in a Wide Open Space. Psalm 31 Read in Conjunction with the History of David in the Books of Samuel and the Psalms. In **Seitenblicke. Literarische und historische Studien zu Nebenfiguren im zweiten Samuelbuch**, Academic Press Fribourg, pp 424–442.

# Anthropology and Archaeology

#### Journal articles

Trapido J: 2011. The Political Economy of Migration and reputation in Kinshasa. In Africa: Journal of the International African Institute, 81(2), pp 204–225.



Dr Thula Simpson is a member of the Department of Historical and Heritage Studies. He joined the Department as a postdoctoral fellow and was appointed as a senior lecturer on a full-time basis in 2009. His research focuses on the history of the liberation struggle in southern Africa and he has published articles on this theme in a number of journals, including African Historical Review, African Studies, Journal of Southern African Studies, Social Dynamics and South African Historical Journal.

- Pikirayi I, Chirikure S: 2011. Debating Great Zimbabwe. In Azania-Archaeological Research In Africa, 46(2), pp 221–231.
- Ashley CZ, Bouakaze-Khan d: 2011. Conservation and Management of Archaeological Sites in Sub-Saharan Africa. In **Conservation and management of archaeological sites**, 13(2/3), pp 95–102.
- Schoeman MH, Pikirayi I: 2011. Repatriating more than Mapungubwe human remains: Archaeological material culture, a shared future and an artificially divided past. In Journal of Contemporary African Studies, 29(4), pp 389–403.

#### Books

McNeill FG: 2011. AIDS, Politics, and Music in South Africa. Cambridge University Press, pp 278. Pikirayi I: 2011. Tradition, Archaeological Heritage Protection and communities in the Limpopo Province of South Africa. OSSREA Publications, pp 128.

#### Chapters in books

- Boonzaaier CC, Wilson D: 2011. Institutionlisation of community Involvement in Nature Conservation: The case of the Masebe Nature Reserve, South Africa. In **New Alliances for Tourism**, **Conservation and Development in Eastern and southern Africa**, EDULINK, Published with the support of ACP-EU Cooperation Programme in Higher Education, pp 165–184.
- McNeill FG, James D: 2011. Singing Songs of AIDS in Venda, South Africa: Performance, Pollution, and Ethnomusicology in a Neo-Liberal Setting. In The Culture of AIDS in Africa, Oxford University Press, pp 193–212.

# Drama

#### Journal articles

Munro MMS: 2011. Lessac's structural NRG as an aid to Zulu performers' production of English vowels – a preliminary exploration. In **Essay EarWitness**, 23(6), pp 121–131.

# English

#### Journal articles

- Brown MA: 2011. Light on shades: Complex constructions of identity in the poetry of Chris Mann. In **English Academy Review**, 28(1), pp 64–72.
- De Villiers A R: 2011. A hunger for seriousness? T.S. Eliot's 'The Hippopotamus'. In **English Academy Review**, 28(2), pp 62–74.
- Coetzee L: 2011. Empowering girls? The portrayal of Anne and George in Enid Blyton's *Famous Five* series. In **English Academy Review**, 28(1), pp 85–98.
- Brown MA: 2011. The physics of responsibility: Alternate worlds and adolescent choices. In **Mousaion: South African Journal** of Information Studies, 28(2 (Spes)), pp 1–13.
- Robson G: 2011. Negotiating a new cultural space: Aspects of fantasy in contempory South African youth literature, with specific reference to *Because Pula Means Rain* by Jenny Robson. In **Mousaion: South African Journal of Information Studies**, 28(2), pp 14–25.

- Soldati-Kahimbaara KT: 2011. Johannesburg: City of Dreams or Dream City. In **TRANS Internet-Zeitschrift für Kulturwissenschaften**, 18(June), pp 5.
- Wessels JA: 2011. Intertekstualiteit en modernistiese kompleksiteit in Henriette Grove se Linda Joubert-romans. In **Tydskrif vir Letterkunde**, 48(2), pp 32–49.

#### Books

West-Pavlov RB: 2011. Imaginary Antipodes: Essays on Contemporary Australian Literature and Culture. Universitatsverlag Winter (Winter University Press Heidelberg, Germany), pp 238.

#### Chapters in books

West-Pavlov RB: 2011. Intertextuality and the "Spatialization" of Reading Conradian Journeys in Dabydeen's *Disappearance*.
In Talking Words: New Essays on the Work of David Dabydeen, University of the West Indies Press, pp 58–72.

#### Papers published

Green PM: 2011. The Role of the Media in a New Democracy. In **Media, Politics and the Public**, Axel and Margaret Ax: son Johnson Foundation, pp 149–158.

# Philosophy

- Rossouw GJ: 2011. The Sub-Sahara African survey of Business Ethics as field of teaching, training and research. In African Journal of Business Ethics, 5(2), pp 61–65.
- Rossouw GJ: 2011. The state of Business Ethics as field of teaching, training and research in Sub-Saharan Africa. In **African Journal of Business Ethics**, 5(2), pp 96–102.
- Rossouw GJ: 2011. Global business ethical perspectives on capitalism, finance and corporate responsibility: The impact of the global financial crisis of 2008. In **Asian Journal of Business Ethics**, 1(1), pp 63–72.
- Siemens HW: 2011. The Problem of Law and Life in Nietzsche's Thought. In **CR-The New Centennial Review**, 10(3), pp 189–216.
- Painter-Morland MJ: 2011. Rethinking Responsible Agency in Corporations: Perspectives from Deleuze and Guattari. In Journal of Business Ethics, 101(1), pp 83–95.

- Painter-Morland MJ: 2011. Voice as "Relational Space": Agency beyond Narcissism or the loss of self. In **Mosaic-A Journal for the Interdisciplinary Study of Literature**, 44(1), pp 141–152.
- Wolff E: 2011. Responsibility and Technics in Levinas and Jonas Two strategies in response to the disorientation of ethics in the modern world. In **Philosophy Today**, May, pp 127–143.
- Hofmeyr AB: 2011. The culture and subjectivity of neo-liberal governmentality. In Phronimon: Journal of the South African Society for Greek Philosophy and the Humanities, 12(2), pp 19–42.
- Kistner U: 2011. The Exception and the Rule: Fictive, Real, Critical. In **Telos**, (157), pp 43–59.
- Kistner U: 2011. Under new management: the ambiguities of 'tranformation' in higher education. In **Transformation Critical perspectives on Southern Africa**, 77, pp 146–162.
- Wolff E: 2011. *Poiesis*. Oor maaksels en hul wêreld na aanleiding van Versfeld se *Pots and Poetry*. In **Tydskrif vir Letterkunde**, 48(1), pp 206–215.

#### Books

Wolff E: 2011. Political Responsibility for a Globalised World After levinas' Humanism. Transcript, pp 283.

#### Chapters in books

- Rossouw GJ: 2011. The ethics of corporate governance in global perspective. In **Corporate Governance and Business Ethics**, Springer, pp 327–341.
- Painter-Morland MJ: 2011. Systemic Leadership, Gender, Organization. In Leadership, Gender, and Organization, Springer, pp 139–165.

# Historical and Heritage Studies

- Simpson TW: 2011. Main Machinery: The ANC's Armed Underground in Johannesburg During the 1976 Soweto Uprising. In **African Studies**, 70(3), pp 415–436.
- Simpson TW: 2011. Military Combat Work: The Reconstitution of the ANC's Armed Underground, 1971-1976. In African Studies, 70(1), pp 103–122.

- Phimister I: 2011. Corporate Profit and Race in Central African Copper Mining, 1946-1958. In **Business History Review**, 85, pp 749–774.
- Bojé JG, Pretorius F: 2011. Kent gij dat volk: the Anglo-Boer War and Afrikaner identity in postmodern perspective. In **Historia**, 56(2), pp 59–72.
- Grobler JEH: 2011. The Retief Massacre of 6 February 1838 revisited. In **Historia**, 56(2), pp 113–132.
- Van der Merwe DM: 2011. Moulding *volksmoeders* or *volks* enemies? Female students at the University of Pretoria, 1920-1970. In **Historia**, 56(1), pp 77–100.
- Brownell FG: 2011. Flagging the "new" South Africa, 1910–2010. In **Historia**, 56(1), pp 42–62.
- Machaba TA: 2011. American press reportage on PW Botha's attempts at reforming apartheid, 1978-1989, with specific reference to the New York Times, Newsweek and Africa Report. In Journal for Contemporary History/Joernaal vir Eietydse Geskiedenis, 36(1), pp 75–97.
- Pretorius W, Pretorius F: 2011. Konsentrasiekampe vir swart vlugtelinge in die Heidelbergdistrik gedurende die Anglo-Boereoorlog. In Journal for Contemporary History/Joernaal vir Eietydse Geskiedenis, 36(2), pp 48–69.
- Calitz GJ, Pretorius F: 2011. Deneys Reitz se deelname aan die Anglo-Boereoorlog. In Journal for Contemporary History/ Joernaal vir Eietydse Geskiedenis, 36(2), pp 90–111.
- Ferreira OJO: 2011. Neerslag van die Anglo-Boereoolog (1899– 1902) in die Portugese geskiedskrywing. In Journal of Contemporary History, 36(2), pp 179–192.
- Cohen AP: 2011. Lonrho and Oil Sanctions against Rhodesia in the 1960s. In Journal of Southern African Studies, 37(4), pp 715–730.
- Bergh JS: 2011. S.J.P. Kruger in the Dock, 1872. In South African Historical Journal/Suid-Afrikaanse Historiese Joernaal, 63(1), pp 1–19.
- Phimister I: 2011. Workers in Wonderland? White Miners and the Northern Rhodesian Copperbelt, 1946-1962. In South African Historical Journal/Suid-Afrikaanse Historiese Joernaal, 63(2), pp 183–233.
- Bojé JG, Pretorius F: 2011. Of Gold and Iron: Collaborators in the Winburg District. In **South African Historical Journal/Suid-Afrikaanse Historiese Joernaal**, 63(2), pp 277–294.
- Klein G: 2011. Publicising the African National Congress: *The Anti-Apartheid News*. In **South African Historical Journal**/ **Suid-Afrikaanse Historiese Joernaal**, 63(3), pp 394–413.

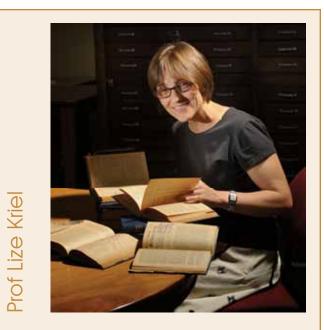
- Joubert A: 2011. Rain songs and the observance of the rain cult amongst the Lobedu people of Queen Modjadji. In South African Journal of African Languages/Suid-Afrikaanse Tydskrif vir Afrikatale, 31(1), pp 6–16.
- Sevenhuysen K: 2011. Vry (néé) hofmaak in die 19de eeu: 'n ontleding van 21ste-eeuse studentetekste. In South African Journal of Cultural History/Suid- Afrikaanse Tydskrif vir Kultuurgeskiedenis, 25(1), pp 102–130.
- Eloff S, Sevenhuysen K: 2011. Urban black social life and leisure activities in Johannesburg, depicted by township art (1940s to 1970s). In South African Journal of Cultural History/ Suid-Afrikaanse Tydskrif vir Kultuurgeskiedenis, 25(2), pp 21–44.
- Eloff S, Sevenhuysen K: 2011. Urban black living and working conditions in Johannesburg, depicted by township art (1940s to 1970s). In South African Journal of Cultural History/Suid-Afrikaanse Tydskrif vir Kultuurgeskiedenis, 25(1), pp 1–25.

#### Books

Ferreira OJO: 2011. Dias, Da Gama en die Khoikhoin: Ontmoeting van kulture aan die suidpunt van Afrika. Adamastor, pp 101.

#### Chapters in books

- Phimister I: 2011. Making Markets: Base Minerals and the City of London before World War II. In Africa, Empire and Globalization: Essays in Honour of A. G. Hopkins, Carolina Academic Press, pp 377–397.
- Melck MR: 2011. Kroondal im Kontext des Südafrikanischen Krieges Die Beziehungen deutschsprachiger Siedler zu Buren und Afrikanern. In **Deutsche evangelische Kircheim kolonialen südlichen AfrikaDie Rolle der Auslandsarbeitvon den Anfängen bis in die 1920er Jahre**, Harrassowitz Verlag Wiesbaden, pp 455–469.
- Kriel L, Bodenstein M: 2011. Die Rolle der Frauen in deutschen Siedlergemeinschaften nach dem Endedes Kaiserreichs – "Zugeschriebene, abgelehnte und akzeptierte Identitäten" erforscht anhand von Printmedien und Erinnerungen. In Deutsche evangelische Kircheim kolonialen südlichen AfrikaDie Rolle der Auslandsarbeitvon den Anfängen bis in die 1920er Jahre, Harrassowitz Verlag, pp 323–348.
- Phimister I: 2011. Proletarians in Paradise: The Historiography and Historical Sociology of White Miners on the Copperbelt. In Living the End of Empire, Brill, pp 141–160.
- Pieterse J: 2011. Reading and Writing the Mpondo Revolts. In **Rural Resistance in South Africa**, Brill, pp 43–65.



Prof Lize Kriel is a member of the Department of Historical and Heritage Studies. She joined the Department in 1998. For her doctoral research, she used reportage on a colonial conflict in the nineteenth-century Transvaal as a case study to interrogate the use of missionary sources as historical evidence. In her subsequent research, she continued to look into missionary diaries, correspondence and periodical publications, asking what meaning can be allocated to these texts in a colonial context, especially where ordinary women become more visible. Her current project is on an epistolary network facilitated by Lutheran deaconesses for a German-African community of Christian readers.

- Pretorius F: 2011. Welcome not that welcome: The Relations between Foreign Volunteers and the Boers in the Anglo-Boer War of 1899–1902. In War Volunteering in Modern Times: From the French Revolution to the Second World War, Palgrave Macmillan, pp 122–149.
- Kriel L: 2011. To my Dear Minister: official letters of African Wesleyan evangelists in the late 19th-century Transvaal.
  In Written Culture in a Colonial Context: Africa and the Americas 1500–1900, UCT Press, pp 232–246.

# Communication Pathology

#### Journal articles

- Van der Merwe A: 2011. A speech motor learning approach to treating apraxia of speech: Rationale and effects of intervention with an adult with acquired apraxia of speech. In Aphasiology, In Effects on Intervention of SML treatment, 25(10), pp 1174–1206.
- Heinze BM, Swanepoel DCD, Hofmeyer L: 2011. Systematic review of vestibular disorders related to human immunodeficiency virus and acquired immunodeficiency syndrome. In **Journal of Laryngology and Otology**, 125(Oct), pp 881–890.
- Swanepoel DCD, Biagio L: 2011. Validity of diagnostic computerbased air and forehead bone conduction audiometry. In Journal of Occupational and Environmental Hygiene, 8(4), Taylor and Francis, pp 210–214.
- Marx EMM, Soer ME, Dick AL: 2011. The ability of adolescents with hearing loss in special schools to access and use academic material in three provinces in South Africa. In **Mousaion: South African Journal of Information Studies**, 29(1), pp 37–55.
- Brits J, Strauss S, Eloff Z, Becker PJ, Swanepoel DW: 2011. Hearing profile of gold miners with and without tuberculosis. In **Occupational and Environmental Medicine**, 17(Nov), Online.
- Swanepoel DCD: 2011. Clinical Status of the Auditory Steady-State Response in Infants. in **Seminars in Hearing**, 32(2), pp 163–171.
- Wium AM, Louw B, Eloff I: 2011. Evaluation of a programme to support foundation-phase teachers to facilitate literacy. In South African Journal of Communication Disorders, 58(2), pp 72–78.
- Wium AM, Louw B: 2011. Teacher support an exploration of how foundation-phase teachers facilitate language skills. In South African Journal of Communication Disorders, 58(2), pp 86–94.
- Strasheim E, Kritzinger AM, Louw B: 2011. The development of a neonatal communication intervention tool. In **South African** Journal of Communication Disorders, 58(Oct), pp 13–18.
- Crewe-Brown SJ, Stipinovich AM, Zsilavecz UL: 2011. Communication after mild traumatic brain injury – a spouse's perspective. In **South African Journal of Communication Disorders**, 58(Oct), pp 48–51.

- Uys M, Van Dijk C: 2011. Development of a music perception test for adult hearing-aid users. In **South African Journal of Communication Disorders**, 58(Oct), pp 19–47.
- Kathard H, Ramma L, Pascoe M, Jordaan H, Moonsamy S, Wium AM, Du Plessis S, Pottas L, Khan NB: 2011. How can speechlanguage therapists and audiologists enhance language and literacy outcomes in South Africa? (And why we urgently need to). In **South African Journal of Communication Disorders**, 58(2), pp 59–71.
- Geertsema S, Hyman C, Van Deventer C: 2011. Short message service (SMS) language and written language skills: educators' perspective. In **South African Journal of Education/Suid-Afrikaanse Tydskrif vir Opvoedkunde**, 31(4), pp 475–487.
- Meyer ME, Swanepoel DCD: 2011. Newborn hearing screening in the private healthcare sector – a national survey. **South African Medical Journal**, 101(9), pp 665–667.

# Dean's Office: Human Economy Programme

- Krige PFD: 2011. We are Running for a Living: Work, Leisure and Speculative Accumulation in an Underground Numbers Lottery in Johannesburg. In **African Studies**, 70(1), pp 3–24.
- Hart JK: 2011. The Financial Crisis and the End of All-Purpose Money. In Economic Sociology: The European Electronic Newsletter, 12(2), pp 4–10.
- Shakya M: 2011. Bridging the Design Gap: The Case of the Nepali Clothing Industry. In **Journal of Modern Craft**, 4(3), pp 295– 310.
- Mpofu B: 2011. Operation 'Live Well' or 'Cry Well'? An Analysis of the Rebuilding Programme in Bulawayo, Zimbabwe. In **Journal** of Southern African Studies, 37(1), pp 177–192.
- Hart JK: 2011. After the financial crisis: towards a human economy. In **Norsk Antropologisk Tidsskrift**, 3(4), pp 181–193.
- Hart JK: 2011. Money as a Form of Religious Life. In **Religion and Society: Advances in Research**, 1(1), pp 156–163.
- Mpofu B: 2011. Undesirable Indians, Residential Segregation and the Ill-Fated Rise of the White 'Housing Covenanters' in Bulawayo, Colonial Zimbabwe, 1930–1973. In **South African Historical Journal/Suid-Afrikaanse Historiese Joernaal**, 63(4), pp 553–580.



Prof Jerry Mojalefa is Head of the Department of African Languages. He started his career as a teacher. He was later a radio announcer, translator and producer until he turned his interests to an academic career. He received the EM Ramaila literary prize for best author, as well as the Best Contribution in Teaching and Research Award from the Pan South African Language Board (PanSALB). He has acted as a referee for five national and international journals on literature and linguistics, and has published more than 20 books in Sepedi, Setswana and English, including novels, collections of short stories, poetry and essays.

- Shakya M: 2011. Apparel Exports in Lesotho: The State's Role in Building Critical Mass for Competitiveness. In **St Antony's International Review**, (13), pp 219–230.
- Hart JK: 2011. Building the Human Economy: A Question of Value? In Suomen Antropologi: Journal of the Finnish Anthropological Society, 36(2), pp 5–17.
- Braz-Dias J: 2011. Entre Virtudes e Vícios. In Trans Transcultural Music Review, 15, pp 1–26.
- Braz-Dias J: 2011. Cape Verde and Brazil: Musical Connections. In Vibrant: Virtual Brazilian Anthropology, 8, pp 95–116.

#### Books

Hann C, Hart JK: 2011. Economic Anthropology: History, Ethnography, Critique. Polity Press, pp 206.

# Unit for Academic Literacy

#### Journal articles

- Boakye N: 2011. The influence of socio-affective factors on students; reading ability. In Hermeneia: Journal of Hermeneutics, Art Theory and Criticism, 11, pp 38–53.
- Marais R, De Kamper G: 2011. Gedenkkeramiek in de van Gybland Oosterhoff-collectie (Pretoria). In Kunsttijdschrift Vlaanderen, 60(334), pp 47–48.
- Kleyn AJT, Snyman ME: 2011. "Haai, Jaco Jacobs! Wanneer skryf jy 'n regte boek?" 'n bestekopname van Afrikaanse kinder- en jeugboeke (1999-2009). In Mousaion: South African Journal of Information Studies, 28(2), pp 26–49.
- Marais R: 2011. Article on Groot Woordeboek Afrikaans en Nederlands/Prisma Groot Woordenboek Afrikaans en Nederlands. In **Ons Erfdeel**.
- Boakye N: 2011. A multifaceted model for designing reading development programmes for L2 learners at tertiary level. In **Per Linguam: A Journal of Language Learning/Tydskrif vir Taalaanleer**, 27(2), pp 111–128.
- Brandt M, Carstens A: 2011. Visuele stereotipering van sportvroue in die sportmedia. In South African Journal for Research in Sport, Physical Education and Recreation/Suid-Afrikaanse Tydskrif vir Navorsing in Sport, Liggaamlike Opvoedkunde en Ontspaning, 33(2), pp 1–15.
- Kleyn AJT: 2011. Poësieterapie: Enkele tegnieke met voorbeeldtekste. In **Stilet: Tydskrif vir die Afrikaanse** Letterkundevereniging, 23(1), pp 130–154.

# Social Work and Criminology

#### Journal articles

Bezuidenhout C, Minnaar A: 2011. To professionalise or not? In Acta Criminologica: South African Journal of Criminology, 1(1), pp 1–17.

#### Delport CSL, Strydom H, Theron L, Geyer LS: 2011. Voices of HIV-



Prof De Wet Swanepoel is a member of the Department of Communication Pathology. He is a clinical research audiologist and his research and clinical interests include infant hearing loss and early detection and intervention systems, as well as telehealth in audiology and HIV/Aids-related audiovesibular pathophysiology. Among his research achievements are the evaluation of a novel approach to screening for hearing loss at immunisation visits for young infants as a viable alternative in developing contexts. He has received several awards and research grants for his work and has published numerous peer-reviewed articles.

and AIDS- affected educators: How they are psychosocially affected and how REds enabled their resilience. In **AIDS Care**, 23(1), pp 121–126.

- Bezuidenhout C: 2011. Sector Policing in South Africa: case closed or not? In Pakistan Journal of Criminology, 3(2/3), pp 11–25.
- Lombard A, Strydom R: 2011. Community development through social entrepreneurship. In Social Work Practitioner-Researcher/Maatskaplikewerk Navorser-Praktisyn, 23(3), pp 327–344.
- Bila NJ, Roestenburg W: 2011. The feasability of Employee Assistence Programmes for rural schools in Limpopo. In Social Work Practitioner-Researcher/Maatskaplikewerk Navorser-Praktisyn, 23(2), pp 210–228.

# Biokinetics, Sport and Leisure Sciences

#### Journal articles

- Grobbelaar H W, Malan DDJ, Steyn BJM, Ellis SM: 2011. The relationship between burnout and mood state among student rugby union players. In African Journal for Physical, Health Education, Recreation and Dance, 17(4:1), pp 647–664.
- Edwards DJ, Steyn BJM: 2011. Establishment of norms for the Bull's mental skills questionnaire in South African university students: An exploratory study. In African Journal for Physical, Health Education, Recreation and Dance, 17(3), pp 526–534.
- Du Toit PJ, Krüger PE, Mahomed AF, Kleynhans M, Jay-Du Preez T, Govender C, Mercier J: 2011. The effect of sports vision exercises on the visual skills of university students. In African Journal for Physical, Health Education, Recreation and Dance, 17(3), pp 429–440.
- Young MEM, Goslin AE, Potgieter N, Nthangeni S, Modise J: 2011. Sport and recreation participation preferences in the Botswana Defence Force. In African Journal for Physical, Health Education, Recreation and Dance, 17(2), pp 134–145.
- Du Toit PJ, Krüger PE, Terblanche H, Janse Van Rensburg DC, Govender C, Mercier J, Jay-Du Preez T, Kleynhans M: 2011. Sex differences in the nine-point Beighton hypermobility test scores. In African Journal for Physical, Health Education, Recreation and Dance, 17(4), pp 603–611.
- Nolte HW, Noakes TD, Van Vuuren B: 2011. Protection of total body water content and absence of hyperthermia despite 2% body mass loss ('voluntary dehydration') in soldiers drinking ad libitum during prolonged exercise in cool environmental conditions. In **British Journal of Sports Medicine**, 45(14), pp 1106–1112.
- Nolte HW, Noakes TD, Van Vuuren BJ: 2011. Trained humans can exercise safely in extreme dry heat when drinking water ad libitum. In **Journal of Sports Sciences**, 29(12), pp 1233–1241.
- Kuisis SM, Camacho TC, Dafel SM, Janse Van Rensburg DC: 2011. Kinetic profile and incidence of injuries amoung high performance trampoline gymnasts. In Portuguese Journal of Sport Sciences, 11(2), pp 1001–1004.

Wood PS, Krüger PE, Faria A: 2011. Isokinetic leg strength

changes in young female South African recruits following basic military training. In **Portuguese Journal of Sport Sciences**, 11(2), pp 1039–1042.

- Faria A, Gabriel R, Abrantes J, Wood PS, Moreira H: 2011. Triceps surae musculotendinous stiffness: Relative differences between soccer and non-soccer players. In **Portuguese** Journal of Sport Sciences, 11(2), pp 697–700.
- Janse van Rensburg DC, Nolte K: 2011. Sports injuries in adults: Overview of clinical examination and management. In **South African Family Practice**, 53(1), pp 21–27.
- Nolte K, Janse Van Rensburg DC, Krüger PE: 2011. Land- and water-based exercises in rheumatoid arthritis patients: A series of case reports. In **South African Journal of Sport Medicine**, 23(3), pp 84–88.
- Nolte K, Krüger PE, Els PS: 2011. Three dimensional musculoskeletal modelling of the seated biceps curl resistance training exercise. **Sports Biomechanics**, 10(2), pp 146–160.

# Modern European Languages

#### Journal articles

Mühr S: 2011. Das Fach Deutsch an der Universität Pretoria. In eDUSA, 6(1), pp 48–59.

#### Papers published

Mühr S: 2011. Zwischen Xenologie und Assimolation. In **Deutsch als Fremdsprache und Literaturwissenschaft**, 25-27 Feb, iudicium, pp 29–50.

### Music

#### Journal articles

- Vermeulen D, Kloppers EC, Van Niekerk C: 2011. South-South Comparisons: a Syntegrated Approach to the Teaching of the Arts for Primary School Teacher Preparation in South Africa and Australia. In **Arts Education Policy Review**, 112(4), pp 199–205.
- Swart I, Van Niekerk C: 2011. Trauma-related dissociation as a factor affecting musicians' memory for music: Some possible solutions. In **Australian Journal of Music Education**, 2010(2), pp 117–134.

- Human RI, Joseph D: 2011. African music: negotiating a space in contemporary society. In **Intercultural Education**, 20(4), pp 359–370.
- Van Rensburg H, Spies BM: 2011. Musikale ontleding en die voortbestaan Van melodiese spore uit die verlede. In Journal for Transdisciplinary Research in Southern Africa, 7(1), pp 1–24.
- Spies BM: 2011. Five new South African short operas: a report. In Journal of the Musical Arts in Africa, 7, pp 79–91.
- Spies BM: 2011. Tematiese fisionomie skep toegang tot drie uiteenlopende 20ste-eeuse komposisies. In LitNet Akademies, pp 188–209.
- Van der Mescht HH: 2011. Their death shall in no wise have been in vain: Gideon Fagan's studies at the Royal College of Music in London, 1922–1926. In South African Journal of Cultural History/Suid- Afrikaanse Tydskrif vir Kultuurgeskiedenis, 25(2), pp 137–157.
- Panebianco-Warrens CR: 2011. Music journals in South Africa 1854–2010: An annotated bibliography. In South African Journal of Cultural History/Suid- Afrikaanse Tydskrif vir Kultuurgeskiedenis, 25(2), pp 65–95.
- Vermeulen O: 2011. Estetiese denke in die Gereformeerde erediens. In Vir die Musiekleier, 31(Dec), pp 33-44.
- Spies BM: 2011. Het Klassieke musiek 'n toekoms in Suid-Afrika? In Word and Action, 50(414), pp 21–24.

# **Political Sciences**

- Nathan L, Nathan L: 2011. Interests, ideas and ideology: South Africa's policy on Darfur. In **African Affairs**, 110(438), pp 55–74.
- Melber H: 2011. Dealing with injustice: Dag Hammarskjold and the international community today. In African Journal on Conflict Resolution, 11(1), pp 87–99.
- Claassen CH, Ntasano EC: 2011. Transnationalism and foreign policy analysis: The sustained primacy of the state in a transformed post-Cold War foreign policy arena. In **Crossroads Foreign Policy Journal**, 11(4), pp 161–181.
- Melber H, Schoeman MME: 2011. The United Nations and Regional Challenges: Preface. In **Development Dialogue**, (57), pp 5–9.
- Mutton JF: 2011. Responsibility to protect. In **Development Dialogue**, (57), pp 185–189.

- Africa S: 2011. Africa and global governance international perspectives for peace, security and the rule of law. In **Development Dialogue**, (57), pp 192–194.
- Melber H: 2011. Dag Hammarskjold ethics, solidarity and global leadership. In **Development Dialogue**, (57), pp 39–50.
- Nathan L: 2011. Solidarity triumphs over democracy the dissolution of the SADC Tribunal. In **Development Dialogue**, (57), pp 123–137.
- Melber H: 2011. Why normative frameworks? An introduction. In **Development Dialogue**, (55), pp 3–11.
- Hill PS, Vermeiren P, Miti K, Ooms G, Van Damme W: 2011. The Health Systems Funding Platform: is this where we thought we are going? In **Globalization and Health**, 7(16), pp 2–21.
- Nathan L, Duffy Toft M: 2011. Civil war settlements and the prospects for peace. In **International Security**, 36(1), pp 202–207.
- Fioramonti L, Kimunguyi P: 2011. Public and elite views on Europe vs. China in Africa. In **International Spectator**, 46(1), pp 69–82.
- Olivier G: 2011. From colonialism to partnership in Africa-Europe relations? In International Spectator, 46(1), pp 53–67.
- Schoeman MME: 2011. Of BRICs and mortar: The growing relations between Africa and the Global South. In **International Spectator**, 46(1), pp 33–51.
- Grabe ME, Samson L, Zelenkauskaite A, Yegiyan NS: 2011. Covering presidential election campaigns: does reporter gender affect the worklives of correspondents and their reportage? In Journal of Broadcasting & Electronic Media, 55(3), pp 285–306.
- Funke N, Nienaber S, Henwood RD: 2011. Scientists as lobbyists? How science can make its voice heard in the South African policymaking-arena. In **Journal of Public Affairs**, 11(4), pp 287–296.
- Ellis S: 2011. The Genesis of the ANC's armed struggle in South Africa 1948–1961. In Journal of Southern African Studies, 37(4), pp 657–676.
- Yang J, Grabe ME: 2011. Knowledge acquisition gaps: A comparison of print versus online news sources. In New Media & Society, 13(8), pp 1211–1227.
- Melber H: 2011. Editorial: Dag Hammarskjold re-visited. In **New Routes**, 16(2), pp 3–6.
- Spies YK, Dzimiri P: 2011. A conceptual safari: Africa and R2P. In **Regions and Cohesion**, 1(1), pp 32–53.
- Melber H: 2011. Namibia: a trust betrayed again? In **Review of** African Political Economy, 38(127), pp 103–111.

- Vickers B: 2011. Between a rock and a hard place: Small States in the EU-SADC EPA negotiations. In **Round Table. The Commonwealth Journal of International Affairs**, 100(413), pp 183–197.
- Melber H: 2011. Beyond settler colonialism is not yet emancipation: On the limits to liberation in Southern Africa. In **Socialist History**, (39), pp 81–91.
- Spies YK: 2011. South Africa's foreign policy: 2010 overview. In South African Yearbook of International Law, 35, pp 270–295.
- Hartwell L: 2011. Questioning Africa's economic 'resilience'. In Strategic Review for Southern Africa/Strategiese Oorsig vir Suider-Afrika, 33(2), pp 81–105.
- Alden C, Thakur M, Arnold MB: 2011. Militias: a conceptual framework. In Strategic Review for Southern Africa/ Strategiese Oorsig vir Suider-Afrika, 33(1), pp 1–28.
- Melber H: 2011. Liberation movements as governments in Southern Africa – on the limits to emancipation. In **Strategic Review for Southern Africa/Strategiese Oorsig vir Suider-Afrika**, 33(1), pp 78–102.
- Duvenage PC, Hough M: 2011. The conceptual structuring of the intelligence and counterintelligence processes: enduring holy grails or crumbling axioms –quo vadis? In Strategic Review for Southern Africa/Strategiese Oorsig vir Suider-Afrika, 33(1), pp 29–77.
- Solomon H, Theron S: 2011. Behind the veil: India's relations with *apartheid* South Africa. In **Strategic Review for Southern Africa / Strategiese Oorsig vir Suider-Afrika**, 33(1), pp 103–119.
- Frohlich M, Melber H: 2011. Die Hammarskjold-Tradition in der internationalen Politik. In Vereinte Nationen: Zeitschrift für die Vereinten Nationen und ihre Sonderorganisationen, (6), pp 262–265.
- Melber H: 2011. Grenzen einer Weltwirtschaftsregierung: Neue Akteure in neuen Governance-Strukturen? In **Welt Trends:** Internationale Politik Und VergleichenDe Studien, 19(79), pp 81–86.

#### Books

Mashele HP: 2011. The death of our society. CPR Press, pp 153.

#### Chapters in books

Mehler A, Melber H, Van Walraven K: 2011. Sub-Saharan Africa. In Africa yearbook: politics, economy and society south of the Sahara in 2010, Koninklijke Brill, pp 1–17.

- Melber H: 2011. Southern Africa. In Africa Yearbook: politics, economy and society south of the Sahara in 2010, Koninklijke Brill, pp 425–435.
- Melber H: 2011. Namibia. In Africa Yearbook: politics, economy and society south of the Sahara in 2010, Koninklijke Brill, pp 493–503.
- Melber H: 2011. The impact of the Constitution on state- and nation-building. In **Constitutional democracy in Namibia: a critical analysis after two decades**, Macmillan Education Namibia, pp 35–44.
- Melber H: 2011. Als Diener der Organisation: Dag Hammarskjold und der der internationale Dienst. In Dag Hammarskjold (1905–1961): Fur eine friedlich Welt – Ideen und Impulse des Zweiten UN-Generalsekretars, Brandes & Apsel, pp 15–49.

#### Research and technical/policy output

Alden C, Anseeuw W: Policy Document: 2011. From Freedom Charter to cautious Land reform – The politics of Land in South Africa. For: **University of Pretoria**.

### Centre for Augmentative and Alternative Communication (CAAC)

#### Journal articles

- Bornman J, Bryen D N, Kershaw P, Ledwaba GR: 2011. Reducing the risk of being a victim of crime in South Africa: You can tell and be heard! In **Augmentative and Alternative Communication**, 27(2), pp 117–130.
- Harty M, Griesel M, Van der Merwe A: 2011. The ICF as a common language for rehabilitation goal-setting: Comparing client and professional priorities. In Health And Quality Of Life Outcomes, 9(87), pp 1–9.
- Park WH, Jeong YS, Bornman J: 2011. The effect of psychomotor play on motor and body perception competence for young children with developmental delays. In **South African Journal of Occupational Therapy**, 41(1), pp 13–18.

#### Chapters in books

Bornman J: 2011. Low technology. In Assistive Technology. Principles and Applications for Communication Disorders and Special Education, Emerald Group, pp 175–220.



Prof Benda Hofmeyr is a member of the Department of Philosophy. She has served as a research fellow and guest lecturer to the Department of Philosophical Anthropology at the Radboud University Nijmegen. Her current research is focused on the conditions of possibility of ethical agency in Levinas and Kant. She has received numerous prestigious scholarships and awards, including an Exceptional Young Researcher's Award in 2010. She has published in a variety of fields, including contemporary continental, political and moral philosophy, as well as art and cultural production.

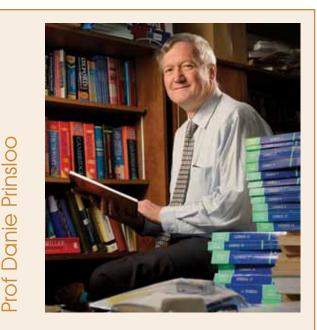
# Psychology

- Coetzee N: 2011. Measurement of heart rate variability and salivary cortisol levels in beginner scuba divers. In African Journal for Physical, Health Education, Recreation and Dance, 17(4(1)), pp 729–742.
- Shefer T, Strebel A, Potgieter C, Wagner C: 2011. *Sometimes taxi men are rough..*: Young women's experiences of the risks of being a *taxi queen*. In **African Safety Promotion**.

- Basson PA, Mawson P: 2011. The experience of violence by male juvenile offenders convicted of assault: a descriptive phenomenological study. In **Indo-Pacific Journal of Phenomenology**, 11(1), pp 1–10.
- Murphy R, Cassimjee N, Schur C: 2011. Influence of Socio-Demographic factors on SRAVEN performance. In Journal of Psychology in Africa, 21(1), pp 91–102.
- Lemmens J, Du Plessis GI, Maree D: 2011. Measuring readiness and success at a higerh education institution. In **Journal of Psychology in Africa**, 21(4), pp 615–621.
- Du Preez E, Cassimjee N, Lauritz L E, Ghazinour M, Richter J: 2011. Personality and Mental Health: an investigation of South African police trainees. In Psychological Reports, 108(1), pp 301–316.
- Timm V, Eskell-Blokland LM: 2011. A construction of bullying in a primary school in an underprivileged community: an ecological case study. In **South African Journal of Psychology**, 41(3), pp 339–350.
- Eloff I, Forsyth BWC, Finestone M, Ebersöhn L, Visser MJ, Ferreira R, Boeving A, Sikkema KJ: 2011. Intervention groups for HIVinfected women: the need for additional services. In South African Journal of Psychology, 41(1), pp 38–51.
- Tshabalala J, Visser MJ: 2011. Developing a cognitive behavioural therapy model to assist women to deal with HIV and stigma. In **South African Journal of Psychology**, 41(1), pp 17–28.
- Wagner C, Garner M, Kawulich B: 2011. The state of the art of teaching research methods in the social sciences: towards a pedagogical culture. In **Studies in Higher Education**, 36(1), pp 75–88.
- Mundell JP, Visser MJ, Makin JD, Kershaw TS, Forsyth BWC, Jeffrey B: 2011. The Impact of Structured Support Groups for Pregnant South African Women Recently Diagnosed HIV Positive. In Women & Health, 51(6), pp 546–565.

#### Chapters in books

- Jithoo V, Bakker TM: 2011. Family therapy within the African context. In **Counseling people of African Ancestry**, Cambridge University Press, pp 142–154.
- Mpofu E, Bakker TM, Lopez-Levers L: 2011. Counseling in African culture heritage settings: The challenges and opportunities.
   In Counseling People of African Ancestry, Cambridge Unniversity Press, pp 313–316.



Prof Danie Prinsloo is a member of the Department of African Languages. He started his professional career as a junior lecturer in African Languages. His research focuses on Sepedi grammar and on corpusbased African language lexicography. He acted as a consultant for the Pan South African Language Board (PanSALB) to guide the eleven national lexicography units and was appointed as the Linguistic Manager for a multimillion rand text-processing project for the official African languages of South Africa for the Department of Arts and Culture. He received the PanSALB Award for the Effective Innovation of Technology to Promote Multilingualism in 2010.

# Sociology

- Puttergill CH, Bomela NJ, Grobbelaar JI, Moguerane KD: 2011. The limits of land restitution: Livelihoods in three rural communities in South Africa. In **Development Southern Africa**, 28(5), pp 597–611.
- Naidoo K, Naidoo K, Matsie R, Ochse A: 2011. Resting, AIDSaffliction and marital constraints: Engendered livelihood issues

in the aftermath of Lesotho mineworker retrenchments. In **Development Southern Africa**, 28(5), pp 681–689.

- Abdi CM: 2011. Moving beyond xenophobia: Structural violence, conflict and encounters with the 'other' Africans. In **Development Southern Africa**, 28(5), pp 691–704.
- Bezuidenhout AJ, Jeppesen S: 2011. Between market, state and society: labour codes of conduct in the southern African garment industry. In **Development Southern Africa**, 28(5), pp 653–668.
- Naidoo K, Naidoo K: 2011. Poverty and socio-political transition: perceptions in four racially demarcated residential sites in Gauteng. In **Development Southern Africa**, 28(5), pp 627–639.
- Hyslop J: 2011. An 'Eventful' History of *Hind Swaraj*: Ghandhi between the Battle of Tsushima and the Union of South Africa. In **Public Culture**, 23(2), pp 299–319.
- Hyslop J: 2011. The Invention of the Concentration Camp: Cuba, Southern Africa and the Philippines, 1896–1907. In **South African Historical Journal/Suid-Afrikaanse Historiese Joernaal**, 63(2), pp 251–276.
- Du Plessis I: 2011. Nation, Family, Intimacy: The Domain of the Domestic in the Social Imaginary. In **South African Review of Sociology**, 42(2), pp 45–65.
- Ochse A: 2011. 'Real Women' and 'Real Lesbians': Discourses of Heteronormativity amongst a group of Lesbians. In **South African Review of Sociology**, 42(1), pp 3–20.

# Visual Arts

- Swanepoel PJ: 2011. Views and (Re)Views: Wayne Barker's 'Super Boring' retrospective. In **De Arte**, 83, pp 69–71.
- Du Preez AA: 2011. Die Antwoord gooi zef liminality: of monsters, carnivals and affects. In Image and Text, (17), pp 102–118.
- Bowie A: 2011. Aesthetics versus functionality: challenging dichotomies in information visualisation. In Image and Text, (18), pp 64–81.
- Reyburn DB: 2011. Chesterton's ontology and the ethics of speculation. In Image and Text, (18), pp 50–62.
- Van Eeden J: 2011. Surveying the 'empty land' in selected South African landscape postcards. In International Journal of Tourism Research, 13(6), pp 600–612.
- Lauwrens J: 2011. Disciplining images in Visual Culture Studies: plotting a course. In Scope: Contemporary Research Topics (Art & Design), Nov, pp 24–33.



January to October 2011 Prof Anton Kok Acting Dean



Prof André Boraine Dean

# 4.6 Law

The Faculty of Law is committed to playing a significant role in legal research in South Africa and in Africa. As a result of this commitment, various initiatives are continuously considered to improve – in volume and in quality – the Faculty's research outputs.

In 2011, 71 accredited journal publication units were produced. In addition, four academic books, 10 chapters in three book collections, and four conference proceedings were submitted to the Department of Education for accreditation purposes. Faculty members presented papers at 20 conferences with international status and eight at national conferences and/or seminars.

Innovative research was conducted on various important areas of the law and the following are some of the highlights: The Centre for Human Rights saw the publication of an important peer-reviewed book entitled *Prosecuting international crimes in Africa*, edited by two alumni of the LLM (Human Rights and Democratisation in Africa) degree programme.

Two researchers in the Department of Jurisprudence respectively published on the ethical and legal implications of post-mortem sperm retrieval for the purposes of artificial insemination, and the still highly relevant and important question of transformation, restoration and reconciliation in post-apartheid South Africa.

Interesting and relevant articles were published by members of the Department of Mercantile Law relating to proposals for tax reform in order to promote South Africa as a gateway for investment in Africa; the impact of labour law on aspects of the

#### **Research entities**

#### Institutes

Institute for International and Comparative Law in Africa

#### Centres

- Centre for Advanced Corporate and Insolvency Law
- Centre for Medicine and Law
- Centre for Sport and Entertainment Law
- Centre for Child Law
- Centre for Human Rights
- Centre for Intellectual Property Law

#### Units

International Development Law Unit

newly introduced business rescue procedure and company law in general; and deficiencies in the new Companies Act of 2008 regarding offers of securities to the public. A researcher in the Department of Private Law levelled stringent criticism in a journal publication and indicated that the Supreme Court of Appeal ignored crucial provisions of the Constitution, 1996, in holding that the Minister of Safety and Security cannot be held vicariously liable in delict for the rape of a young woman by an off-duty policeman.

Members of the Department of Public Law wrote and/or contributed to three interesting new books relating to politocracy, disability law in Africa and medical jurisprudence. Research was undertaken around the question of whether, in the light of its constitutional recognition, proving the existence of customary law should not be dealt with in the same fashion as common law – by way of judicial notice.

Prof Danny Bradlow, a member of the Centre for Human Rights (CHR) and the SARChI Professor of International Development Law and African Economic Relations, served as the lead researcher for a study on the incorporation of international standards into financial supervisory structures in Southern African Customs Union (SACU) member states. The International Development Law Unit (IDLU) was also launched as a research unit in the CHR.

Researchers identified poverty as a new research focus area for the Faculty and in 2011 took the first steps to establish this as a Faculty-wide research theme. The purpose of establishing this as a focus area is to consolidate and coordinate existing research on the topic so as to ensure more depth in research and generate more scholarly outputs and postgraduate students. This focus lends itself particularly well to collaboration with other faculties and disciplines.

The Faculty hosted a Winter School for postgraduate study and research, with the aim of developing not only generic research skills, but also substantive knowledge to enhance more conceptual research.

In 2011, three members of staff (one being an extraordinary professor) applied for and received NRF ratings. They were Prof Johan van der Vyver (A2), Prof Danny Bradlow (B1) and Dr Magnus Killander (Y2). Prof Steve Cornelius received the South African Academy of Arts and Science Prize for the best journal article in a law journal. Dr Elzette Muller received the Norton Rose Tax Award for the best doctoral thesis. Prof Piet Delport received the *Tydskrif vir Hedendaagse Romeins-Hollandse Reg* (THRHR) prize for the best short contribution to this law journal. Prof Christof Heyns was accepted as a Fulbright Visiting Fellow at Harvard Law School.

#### **Centre for Human Rights**

The Centre for Human Rights enjoys the status of an academic department and focuses its research on human rights law and the rule of law in Africa. The Centre's International Development Law Unit is headed by Prof Danny Bradlow. It is the mission of the Unit to conduct and promote policy-oriented legal research on international development law topics, with a particular emphasis on the needs of Africa in general and southern Africa in particular.

#### **Centre for Child Law**

Apart from its strong and ground-breaking focus on children's rights litigation, the Centre for Child Law conducts research on this important area of the law.

#### Centre for Intellectual Property Law

The Centre for Intellectual Property Law is located in the Department of Private Law. One of its aims is to promote and increase research in the area of intellectual property law. The Centre became fully operational in 2011 with the appointment of two extraordinary professors and the presentation of the first LLM modules in Intellectual Property Law, further strengthening this Centre. This was an important step in enhancing the Faculty's research capacity in this important area of the law.

#### Centre for Advanced Corporate and Insolvency Law

The Centre for Advanced Corporate and Insolvency Law provides a platform for researchers to work in both these areas of law since there is a strong link between certain aspects of these areas of commercial law. One of its research aims is to compile a comparative law book on the insolvency law systems in Africa.

#### **Centre for Sport and Entertainment Law**

The Centre for Sport and Entertainment Law was transferred to the Faculty of Law and it busies itself, among other activities, with research in these areas of the law.

#### Institute for International and Comparative Law in Africa

The Institute for International and Comparative Law in Africa (ICLA) is a research institute with the primary objective of enhancing the internationalisation and the growth of the research outputs and postgraduate focus of the Faculty, while promoting the role and the rule of law in Africa. It became fully operational in 2011, and it is envisaged that it will further strengthen the research capacity of the Faculty in relation to its focus on Africa by way of collaborative research and also an increase in accredited international publications.

#### Prof André Boraine

Dean: Law Tel: 012 420 2142 Email: andre.boraine@up.ac.za

# Faculty Research Output

# Mercantile Law

#### Journal articles

- Joubert EP: 2011. Ondernemingsredding uit die wegspringblokke: Is dit sterk genoeg? Swart v Beagles Run Investments 25 (Pty) Ltd. In **De Jure**, 2(44), pp 439–446.
- Van Heerden C, Boraine A: 2011. The money or the box: perspectives on reckless credit in terms of the National Credit Act 34 of 2005. In **De Jure**, 2(44), pp 392–415.
- Van Heerden C, Coetzee H: 2011. Wesbank v Winston Papier and the National Credit Regulator. In **De Jure**, pp 463–479.
- Joubert EP, Van Eck BPS, Burdette DA: 2011. Impact of Labour Law on South Africa's New Corporate Rescue Mechanism. In International Journal of Comparative Labour Law and Industrial Relations, 27(3), pp 65–84.
- Van Heerden C: 2011. Unsolicited goods or services in terms of the Consumer Protection Act 68 of 2008. In **International Journal of Private Law**, 4, pp 533–545.
- Van Heerden C: 2011. The impact of the National Credit Act 34 of 2005 on standard acknowledgements of debt. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(4), pp 644–659.
- Delport PA: 2011. About offers of securities to the public. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(4), pp 668–676.
- Esser I, Delport PA: 2011. The duty of care, skill and diligence: The *King Report* and the 2008 Companies Act. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(3), pp 449–455.
- Delport PA: 2011. 'Offers' and the companies Act 71 of 2008. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(2), pp 280–286.
- Delport PA: 2011. Companies Act 71 of 2008 and the 'Turquand' rule. In Journal of Contemporary Roman Dutch Law/ Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(1), pp 132–138.

- Botha MM, Joubert EP: 2011. Does the Consumer Protection Act 63 of 2008 provide for strict product liability? A comparative analysis. In Journal of Contemporary Roman Dutch Law/ Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(2), pp 305–319.
- Renke S: 2011. Aspects of incidental credit in terms of the National Credit Act 34 of 2005. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(3), pp 464–472.
- Renke S: 2011. Measures in South African consumer credit legislation aimed at the prevention of reckless lending and over-indebtedness: an overview against the background of recent developments in the European Union. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(2), pp 208–229.
- Roestoff M, Smit A: 2011. Non-compliance with time periods – Should the debt review procedure lapse once a reasonable time has expired? Plelzer v Nedbank Limited. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(3), pp 501–509.
- Van Heerden C, Barnard J: 2011. Redress for Consumers in terms of the Consumer Protection Act 68 of 2008: a comparative discussion. In Journal of Internation Commercial Law and Technology, 6(3), pp 131–144.
- Botha MM, Morajane TCR: 2011. Is a demand for a higher percentage of share equity a mutual interest in respect of which employees may embark on a strike? In Journal of South African Law/Tydskrif vir die Suid-Afrikaanse Reg, 1, pp 174–185.
- Legwaila T: 2011. Tax reasons for establishing a headquater company. In **Obiter**, 32(1), pp 126–142.
- Gericke Mrs: 2011. A new look at the old problem of a reasonalbe expectation: The reasonableness of repeated renewals of fixed-term contracts as opposed to indefinite employment. In **Potchefstroom Electronic Law Journal**, 14(1), pp 105–131.
- Coetzee H, Van Heerden C: 2011. Perspective on the Termination of Debt Review in terms of section 86(10) of the National

In the list of research outputs, in all cases the heading "Papers published" refers to papers in refereed, published conference proceedings, and the heading "Journal articles" refers to articles published in accredited, peer-reviewed, refereed specialist journals.

Credit Act 34 of 2005. In **Potchefstroom Electronic Law** Journal, 14(2), pp 37–65.

- Maghembe N: 2011. The Appellate Division has spoken Sequestration Proceedings do not qualify as proceeding to enforce a credit agreement under the National Credit Act 34 of 2005: Naidoo v ABSA Bank 2010 4 SA 597 (SCA). In Potchefstroom Electronic Law Journal, 14(2), pp 171–180.
- Van Heerden C, Boraine A: 2011. The Conundrum of the Non-compulsory Compulsory Notice in terms of Section 129(1)
  (a) of the National Credit Act. In SA Mercantile Law/SA Tydskrif Vir Handelsreg, 1(23), pp 45–63.
- Legwaila T: 2011. The Tax Treatment of Holding Companies in Mauritius: lessons for South Africa. In **SA Mercantile Law/ SA Tydskrif Vir Handelsreg**, 23(1), pp 1–15.
- Legwaila T: 2011. Tax impediments to holding company structures in Belgium, Ireland and The United Kingdom: Caution for South Africa. In **South African Law Journal**, pp 533–559.

#### Chapters in books

Grobbelaar-Du Plessis I, Van Eck BPS: 2011. Protection of disabled employees in South Africa: an analysis of the Constitution and Labour Legislation. In **Aspects of Disability Law in Africa**, PULP, pp 231–260.

#### Research and technical/policy output

Brink G: Technical Report: 2011. Determining the Weighted Average Margin of Dumping. For: **Trade Law centre for Southern Africa**.

# Centre for Human Rights

#### Journal articles

- Dinokopila B: 2011. The right to water in Botswana: a review of the *Matsipane Mosetlhanyane* case. In African Human Rights Law Journal, 11(1), pp 282–295.
- Ebobrah S: 2011. Human rights developments in African subregional economic communities during 2010. In **African Human Rights Law Journal**, 11(1), pp 216–250.
- Djoyou Kamga SA: 2011. Realising the right to primary education in Cameroon. In African Human Rights Law Journal, 11(1), pp 171–193.

Djoyou Kamga SA: 2011. The right to development in the

African human rights system: The *Endorois* case. In **De Jure**, 44(2), pp 381–391.

- Viljoen FJ: 2011. Contemporary challenges to international human rights law and the role of human rights education. In **De Jure**, 2(44), pp 207–231.
- Hansungule M: 2011. How to Tackle Impunity a comment. In **Development Dialogue**, (57), pp 108–122.
- Bradlow DD, Chapman M: 2011. Public participation and the private sector: the role of multilateral development banks in the evolution of international legal standards. In **Erasmus** Law Review, 4(2), pp 91–125.
- Ebobrah S: 2011. Towards a positive application of complementarity in the African human rights system: Issues of functions and relations. In **European Journal of International Law**, 22(3), pp 663–688.
- Murungu CB: 2011. Towards a Criminal Chamber in the African Court of Justice and Human Rights. In Journal of International Criminal Justice, 9(5), pp 1067–1088.
- Ebobrah S: 2011. Tackling threats to the existence of the SADC Tribunal: a critique of perilously ambigous provisions in the SADC Treaty and the Protocol on the SADC Tribunal. In **Malawi Law Journal**, 4(2), pp 199–213.
- Allain J: 2011. Trafficking of persons for the removal of organs and the admission of guilt of a South African hospital. In **Medical Law Review**, 19, pp 117–122.
- Viljoen FJ: 2011. Human rights in Africa: normative, institutional and functional complementarity and distinctiveness. In **South African Journal of International Affairs**, 18(2), pp 191–216.
- Killander UM: 2011. Judicial immunity, compensation for unlawful detention and the elusive self-executing treaty provision: *Claassen vs Minister of Justice and Consitutional Develoopment* 2010 (6) SA 399 (WCC). In South African Journal on Human Rights, 26(2), pp 386–394.
- Killander UM: 2011. Interpreting regional human rights treaties. In Sur: InternationalJjournal on Human Rights, 7(13), pp 145–169.

#### Books

- Adjolohoun H: 2011. Droits De l'Homme et Justice Constitutionnelle en Afrique: Le Modele Beninois. Harmattan, pp 193.
- Dugard CJR: 2011. International Law: a South African Perspective. Juta, pp 583.

Mwenda KK: 2011. Public international law and the regulation of diplomatic immunity in the fight against corruption. Pretoria University Law Press, pp 218.

#### Chapters in books

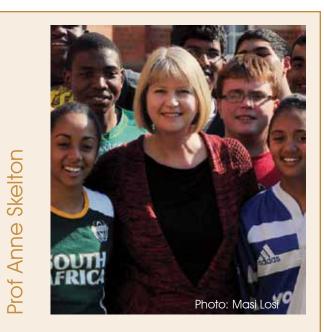
- Pfumorodze J, Fombad CM: 2011. Protecting the disabled in Botswana: an anomalous case of legislative neglect. In Aspects of Disability Law in Africa, PULP, pp 85–104.
- Dinokopila B: 2011. The rights of people with disabilities in Botswana: legal, institutional and policy framework. In Aspects of Disability Law in Africa, PULP, pp 261–280.
- Biegon J: 2011. The promotion and protection of disability rights in the African human rights system. In **Aspects of Disability Law in Africa**, PULP, pp 53–84.
- Dinokopila B: 2011. Sentencing practices of the Special Court for Sierra Leone. In **Prosecuting international Crimes in Africa**, Pretoria University Law Press, pp 119–144.
- Nkhata M: 2011. Implementation of the Rome Statute in Malawi and Zambia: progress, challenges and prospects. In **Prosecuting International Crimes in Africa**, Pretoria University Law Press, pp 277–303.
- Murungu CB: 2011. Immunity of state officials and the prosecution of international crimes. In **Prosecuting International Crimes in Africa**, Pretoria University Law Press, pp 33–60.
- Murungu CB: 2011. Prosecution and punishment of international crimes by the Special Court of Sierra Leone.
   In Prosecuting International Crimes in Africa, Pretoria University Law Press, pp 97–118.

#### Papers published

Nkhata M: 2011. Towards constitutionalism and democratic governance: *Ubuntu* and equity as a basis for regulating public functionaries in common-law Africa. In **Ubuntu, Good Faith & Equity: Flexible Legal Principles in Developing a Contemporary Jurisprudence**, 1, pp 88–114.

#### Research and technical/policy output

Bradlow DD, Naude Fourie A: Technical Report: 2011. The evolution of operational policies and procedures at international financial institutions: Normative significance and enforcement potential. For: **International Law Association**.



Prof Anne Skelton is the Director of the Centre for Child Law at the University of Pretoria. She has been fighting for the rights of children in South Africa for more than two decades and was instrumental in several landmark court cases involving children. This, together with her involvement in drafting legislation affecting children, makes her a leading figure in changing child law for the better. She was recently nominated as one of the three laureates of the prestigious 2012 World's Children's Prize, which recognises people who have done outstanding work for children whose rights have been violated.

# Private Law

- Van der Vyver JD: 2011. Prosecuting the President of Sudan: A dispute between the African Union and the International Criminal Court. In **African Human Rights Law Journal**, 11(2), pp 683–698.
- Van Schalkwyk LN: 2011. Kruger NO v Goss and Another 2010 2 SA 507 (HHA). In **De Jure**, 1(44), pp 170–178.

- Van der Vyver JD: 2011. Soewereniteit van kerklike organisasies
  die geval van die Moreletaparkse gemeente van die NG Kerk. In **De Jure**, 1(44), pp 1–17.
- Boezaart CJ, De Bruin DW: 2011. Section 14 of the Children's Act 38 of 2005 and the child's capacity to litigate. In **De** Jure, 2(44), pp 416–438.
- Klopper HB: 2011. The Nature and content of "erious injury". **De Rebus**, Oct, pp 32–34.
- Klopper HB: 2011. Determining "serious injury". In **De Rebus**, Nov, pp 28–31.
- Van der Vyver JD: 2011. Prosecuting Terrorism in International Tribunals. In **Emory International Law Review**, 24(2), pp 527–547.
- Cornelius SJ: 2011. Ambush marketing in sport. In **Global Sports Law and Taxation Reports**, 4(Dec), pp 12–21.
- Scott TJ: 2011. Effect of the destruction of a dwelling on the personal servitude of *HabitationKidsonv JimspeedEnterprises* CC 2009 5 SA 246 (GNP). In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(1), pp 155–169.
- Boezaart CJ: 2011. The Children's Act: a valuable tool in realising the rights of children with disabilities. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(2), pp 264–279.
- Scott TJ: 2011. Middellike aanspreeklikheid Van die Staat vir Misdadige Polisie-optrede: Die Heilsame Ontwikkeling duur voort F v Minister of Safety and Security 2010 1 SA 606 (WKK). In Journal of South African Law/Tydskrif vir die Suid-Afrikaanse Reg, 1, pp 135–147.
- Scott TJ: 2011. Die hoogste hof van Appél smoor heilsame regsontwikkeling Minister of Safety and Security v F 2011
  3 SA 487 (HHA). In Journal of South African Law/Tydskrif vir die Suid-Afrikaanse Reg, 4, pp 773–787.
- Scott TJ: 2011. Die Condictio Furtiva: Gepaste remedie of Deus Ex Machna? Crots v Pretorius 2010 6 SA 512 (HHA).
  In Journal of South African Law/Tydskrif vir die Suid-Afrikaanse Reg, 2, pp 383–393.
- Louw AS: 2011. Domesticating life partnerships in South Africa. In Juridikum - Austria's Critical Law Review, 2, pp 234–243.
- Cornelius SJ: 2011. Sluikreklame in Sport. In LitNet Akademies, 8(3), pp 1–19.
- Van der Vyver JD: 2011. Prosecuting the Crime of Aggression in the International Criminal Court. In **National Security & Armed Conflict Law Review**, pp 1–56.



Prof Erika de Wet is an extraordinary professor in the Department of Public Law. She is also a professor in International Constitutional Law at the University of Amsterdam in The Netherlands. In 2007, she received a fiveyear excellence grant from The Netherlands Organisation for Scientific Research for a research project on hierarchy in international law. Her publication, The Chapter VII powers of the United Nations Security Council, has, among others, been cited by the International Court of Justice, the European Court of Human Rights and the Supreme Court of the United Kingdom (2007). She is a member of the Advisory Committee on Issues of Public International Law of The Netherlands.

Skelton AM: 2011. From Cook County to Pretoria: a Long Walk to Justice for Children. In **Northwestern Journal of Law and Social Policy**, 6(2), pp 414–427.

- Vessio M: 2011. A short discussion on the effects of the *In Duplem* rule upon commencement of litigation and after judgement. A view both 'inside' and 'outside' the National In Credit Act. **Obiter**, 31(3), pp 725–734.
- Van der Linde A, Van Schalkwyk LN: 2011. Die reg van die kind op kontak met beide ouers: Opmerkings na aanleiding van onlangse ontwikkelinge in die Nederlandse reg. In Potchefstroom Electronic Law Journal, 14(1), pp 68–103.

- Van der Vyver JD: 2011. The Right to Self-Determination of Cultural, Religious and Linguistic Communities in South Africa.
   In Potchefstroom Electronic Law Journal, 14(1), pp 1–28.
- Cornelius SJ: 2011. Commercial Appropriation of a person's image: Wells v Atoll Media (Pty) Ltd (unreported 11961/2006) [2009] ZAWCHC 173 (9 November 2009). In Potchefstroom Electronic Law Journal, 14(2), pp 182–205.
- Bekker JC, Van der Merwe IA: 2011. Proof and ascertainment of the customary law. In **Southern African Public Law**, 26(1), pp 115–127.
- Cornelius SJ: 2011. Commercial Appropriation of Identity: How Could Two Courts Get It So Wrong? In **The International Sports Law Journal**, (3-4), pp 165–167.

#### Chapters in books

Boezaart CJ, Skelton AM: 2011. From pillar to post: Legal solutions for children with debilitating conduct disorder. In **Aspects of Disability Law in Africa**, PULP, pp 107–132.

#### Papers published

Cornelius SJ: 2011. The Unexpressed Terms of a Contract. In Law Across Nations Governance, Policy & Statutes, International Association of IT Lawyers, pp 332–341.

#### Research and technical/policy output

Kuschke B: Policy Document: 2011. Climate Change and Insurance Law General Report submitted to the Aida World Congress held in Paris (May 2010) [Preliminary General Report which will be followed by the future publication of a selection of individual reports (Marcel Fontaine)]. In Climate Change and Insurance Law General Report submitted to the Aida World Congress held in Paris (May 2010) [Preliminary General Report which will be followed by the future publication of a selection of individual reports (Marcel Fontaine)], For: International Association of Insurance Law/Association Internationale De Droit des Assurances, pp 1–18.

# Procedural Law

#### Journal articles

Van der Merwe IA: 2011. Criminal Procedure. In Annual Survey of South African Law, pp 325–392.

- Van Heerden C, Boraine A: 2011. The money or the box: perspectives on reckless credit in terms of the National Credit Act 34 of 2005. In **De Jure**, 2(44), pp 392–415.
- Olivier NJJ, Williams C: 2011. Wary Holdings (Pty) Ltd v Stalwo (Pty) Ltd & another (Trustees of the Hoogekraal Highlands Trust & SAFAMCO Enterprises (Pty) Ltd (amicus curiae): Minister of Agriculture & Land Affairs (intervening) [2008] JOL 22099 (CC). In Journal for Juridical Science/Tydskrif Vir Regswetenskap, 35(2), pp 99–128.
- Pickles CMS: 2011. The introduction of a statutory crime to address third-party foetal violence. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(4), pp 546–566.
- De Villiers WP: 2011. Is the prosecuting authority under South African law politically independent? An investigation into the South African and analogous models. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(2), pp 247–263.
- Boraine A, Van Wyk JS: 2011. Reconsidering the plight of the five foolish maidens: Should the unsecured creditor stake a claim in real security? In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(3), pp 347–371.
- Bekker PM: 2011. Die Regsteoretiese Grondlsag van die Integrasiereël in die Suid-Afrikaanse Kontraktereg. in Obiter, 32(2), pp 341–354.
- Olivier NJJ, Williams C: 2011. State liability for Final Court Orders Sounding in Money: at long last alignment with the Constitution. **Obiter**, 32(3), pp 489–520.
- Van Heerden C, Boraine A: 2011. The Conundrum of the Non-compulsory Compulsory Notice in terms of Section 129(1)
  (a) of the National Credit Act. In SA Mercantile Law/SA Tydskrif vir Handelsreg, 1(23), pp 45–63.
- De Villiers WP: 2011. Should legal professional privilege be limited to exclude in-house lawyers under South African criminal law? In **South African Journal of Criminal Justice**, 24(1), pp 42–51.
- Bekker JC, Van der Merwe IA: 2011. Proof and ascertainment of the customary law. In **Southern African Public Law**, 26(1), pp 115–127.

# Prof Christof Heyns



Prof Christof Heyns is the former dean of the Faculty of Law and is currently serving as United Nations Special Rapporteur on extrajudicial, summary and arbitrary executions. His research focus is the legal principles that apply to the killing of people under circumstances that violate international law. His first thematic report will deal with crowd control, and more specifically the use of lethal force by the security forces during social demonstrations. He is currently co-writing a book on regional human rights systems.

# Public Law

#### Journal articles

- Fombad CM: 2011. Constitutional reforms and Constitutionalism in Africa: reflections on some current challenges and future prospects. In **Buffalo Law Review**, 59(4), pp 1007–1108.
- Stevens GP: 2011. Forget me not: Thoughts on the crossroads between law and medicine in assessing claims of amnesia. In **De Jure**, 2(44), pp 273–289.
- Fombad CM: 2011. African bill of rights in a comparative perspective. In Fundamina: A Journal of Legal History, 17(1), pp 33–64.

- Le Roux-Bouwer J, Courtenay M: 2011. Sexual penetration, participation and new legislation: a critical note. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(2), pp 286–295.
- Stevens GP: 2011. Unravelling the entrapment enigma: Reflections on the role of the mental health expert in the assessment of battered woman syndrome and coercive control advanced in support of a defence of non-pathological criminal incapacity. In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(3), pp 432–448.
- Carstens PA: 2011. Revisiting criminal medical negligence resulting in death S v Van Heerden 2010 1 SACR 529 (ECP). In Journal of Contemporary Roman Dutch Law/ Tydskrif vir Hedendaagse Romeins- Hollandse Reg, 74(4), pp 677–682.
- Malan JJ: 2011. The discretionary nature of the official language clause of the Constitution. In **Southern African Public Law**, 26(2), pp 381–407.
- Bishop M: 2011. Rationality is dead! Long live rationality! Saving rational basis review. In **Southern African Public** Law, 25(2), pp 312–345.
- Brand JFD: 2011. Judicial deference and democracy in socioeconomic rights cases in South Africa. In **Stellenbosch Law Review**, 22(3), pp 614–638.

#### Books

Malan JJ: 2011. Politokrasie. PULP, pp 358.

#### Chapters in books

- Grobbelaar-Du Plessis I, Van Eck BPS: 2011. Protection of disabled employees in South Africa: an analysis of the Constitution and Labour Legislation. In **Aspects of Disability Law in Africa**, PULP, pp 231–260.
- Pfumorodze J, Fombad CM: 2011. Protecting the Disabled in Botswana: an Anomalous Case of Legislative Neglect. In Aspects of Disability Law in Africa, PULP, pp 85–104.
- De Wet E: 2011. Human rights considerations and the enforcement of targeted sanctions in Europe: The emergence of core standards of judicial protection. In Securing Human Rights? Achievements and Challenges of the UN Security Council, Oxford University Press, pp 141–169.

# Jurisprudence

#### Journal articles

- Nienaber AG: 2011. Consent to and authorisation of the export and use of human biological specimens for future research perspectives from three African countries. In Comparative and International Law Journal of Southern Africa, XLIV(2), pp 225–254.
- Van Marle K: 2011. Reflections on post-apartheid being and becoming in the aftermath of amnesty: Du Toit v Minister of Safety and Security. In Constitutional Court Review, 3, pp 347–367.
- Van Marle K: 2011. Feminist futures. In **Feminists@law**, 1(1), pp 3.
- Van Marle K: 2011. Asking for the moon: A 'musing' on Cornell's Beyond Accomodation: Ethical feminism, deconstruction and the law'. In **Feminists@law**, 1(1), pp 5.
- Thomas PJ: 2011. Different responses to juducial corruption: the South African common law. In **Fundamina: A Journal of Legal History**, 17(2), pp 139–152.
- Kok JA: 2011. Not so hunky-dory: Failing to distinguish between differentiation and discrimination – Standard Bank of South Africa Ltd v Hunkydory Investments 194 (Pty) Ltd (No 1). In Journal of Contemporary Roman Dutch Law/Tydskrif vir Hedendaagse Romeins-Hollandse Reg, 74(2), pp 340–346.
- Madlingozi T: 2011. On Transitional Justice Entrepreneurs and the Production of Victims. In Journal of Human Rights Practice, 2(2), pp 208–228.
- Lwabukuna OK: 2011. Internal displacement in Africa, African solutions to African Problems: challenges and prospects. In Journal of Internal Displacement, 1(2), pp 131–141.
- Arendse LE: 2011. The school funding system and its discriminatory impact on marginalised learners. In Law, Democracy and Development, 15(1), pp 339–357.
- Arendse LE: 2011. The obligation to provide free basic education in South Africa: an international law perspective. In **Potchefstroom Electronic Law Journal**, 14(6), pp 97–127.
- Van der Walt J: 2011. The murmur of Being and the Chatter of Law. In **Social and Legal Studies**, 20(3), pp 389–400.
- Dountio J: 2011. The protection of traditional knowledge: challenges and possibilities arising from the protection of biodiversity in South Africa. In **South African Journal of Art History**, 26(1), pp 10–22.

- Nienaber AG: 2011. The grave's a fine and private place. A preliminary exploration of the law relating to posthumous sperm retrieval". In **Southern African Public Law**, 25(2), pp 707–714.
- Modiri JM: 2011. The grey line in between the rainbow: (re) thinking and (re)talking critical race theory in postapartheid legal and social discourse. In **Southern African Public Law**, 26(1), pp 177–201.
- Thomas PJ: 2011. Harmonisation of law: the South African experience. In **Studia Universitatis Babes-Bolyai. Serie: lurispudentia**, 3(Sep).



Prof Karin van Marle is Head of the Department of Jurisprudence. Her main areas of interest are post-apartheid jurisprudence, critical legal theory, feminist theory (ethical feminism, ethics of care, violence, poverty and death), critical race theory, gender theory, postmodern legal theory, and law and literature. She is a member of the South African Association of Law Teachers and serves on the Editorial Board of *Law and Critique* and *Feminist Legal Studies*. She has published widely in national and international accredited journals and has acted as referee for national accredited journals, as well as for applications for NRF ratings.



Prof Anton Ströh Dean

# **4.7** Natural and Agricultural Sciences

Apart from establishing itself as one of the top international faculties of sciences, the Faculty strives to be the leading science faculty on the African continent, contributing significantly through its research and postgraduate students to some of the major challenges the continent faces in relation to poverty and food, energy and water security, climate change and its impact on agriculture, animal and human health, as well as economic sustainability.

The Faculty is one of the most diverse science faculties in South Africa. According to the ISI Web of Knowledge field rankings, the Faculty is highly recognised internationally in the fields of agriculture, environment and ecology, as well as in the plant and animal sciences. In plant and animal sciences, the University produces by far the highest number of articles in South Africa and is listed under the top 60 universities worldwide in relation to the total number of outputs in this field. The Faculty also has significant expertise in the physical and mathematical sciences with strong connections to the mining and mineral industries, including Sasol and the Nuclear Energy Corporation of South Africa (NECSA).

The strong research ethos of the Faculty is emphasised by the fact that 127 of its scientists are formally recognised by the NRF's peer evaluation system for the high quality and impact of their research on the national and international front.

The new R100 million Plant Sciences Complex, which will enhance interdisciplinary and cross-disciplinary research collaboration, brings together departments and faculties that would not have interacted with one another in traditional paradigms. This new facility includes, among others, research laboratories that are dedicated to conducting work in fields such as plant diversity, ecology, biotechnology and medicinal plant science. One wing of the Complex houses the new Forestry Research Programme, which includes the South African Forestry Company (SAFCOL) Forestry Chair, as well as a suite of laboratories to accommodate the growing activities of the Forestry and Agricultural Biotechnology Institute (FABI).

#### Research entities

#### Institutes

- Institute of Applied Materials (IAM)
- Institute for Food, Nutrition and Wellbeing
- Forestry and Agricultural Biotechnology Institute (FABI)
- Mammal Research Institute
- UP Water Institute (UPWI)

#### Centres

- Aon-Benfield Natural Hazards Centre, Africa
- Centre for Geoinformation Sciences (CGIS)
- Joint Centre for Science, Mathematics and Technology Education
- Centre for Environmental Economics and Policy in Africa (CEEPA)
- Centre for Land-related, Regional and Development
   Policy
- Centre for Wildlife Management
- African Centre for Gene Technologies (joint centre with the CSIR and University of the Witwatersrand)
- Centre for Environmental Studies (CFES)

#### Units

- Bioinformatics and Computational Biology Unit
- Conservation Ecology Research Unit (CERU)
- Unit for Advanced Studies

During 2011, the Faculty contributed significantly to the production of high-quality, internationally recognised research publications. The 319 Department of Higher Education and Training (DHET) units recorded constitute more than 20% of the total publication output of the University of Pretoria. Through the Faculty's research endeavours for 2011, 128 master's and 48 doctoral degrees were awarded.

Although it is not possible to mention all the special awards in recognition of the Faculty's scientists, it is appropriate to note the following outstanding achievements:

The Tree Protection Cooperative Programme (TPCP) of FABI won a Technology and Human Resources for Industry Programme (THRIP) Award in the category Human Resource Development – Quantity and Quality of Postgraduate Education. This award represents a very substantial vote of confidence not only in the TPCP, but also in its South African forestry industry partners. This award clearly recognises the commitment that the South African forestry industry makes, not only to research and development, but also to the education of young South Africans.

Two highly acclaimed female researchers in the Faculty were honoured with the prestigious South African Women in Science Awards of the Department of Science and Technology (DST). Prof Namrita Lall of the Department of Plant Science received the Distinguished Woman Scientist Award for her outstanding scientific contribution to advancing science and building the knowledge base in the field of indigenous knowledge systems. Prof Jolanda Roux of FABI was the recipient of the Distinguished Young Woman Scientist Award (under the age of 40) for her outstanding contribution to advancing science and building the knowledge base in the Life, Natural and Engineering Sciences category. The Commonwealth Forestry Association also bestowed the Queen's Award on Prof Roux for her contribution to forestry.

Prof Sospeter Muhongo, Honorary Professor in the Department of Geology, was awarded the *Ordre des Palmes Académiques* by the French government. Originally established in 1808 by the Emperor Napoleon as a way of rewarding academics in the newly secularised university system, the *Ordre des Palmes Académiques* was conferred to honour eminent members of the University of Paris. Prof Muhongo was the Director of the Regional Office for Africa of the International Council for Science (ICSU), based at the NRF in Pretoria.

Prof Jean Lubuma was inducted as Fellow of the African Academy of Sciences (AAS) in 2011. Prof Lubuma was also awarded with the prestigious South African Mathematical Society (SAMS) Award for Research Distinction.

Prof Bernard Slippers (FABI and the Department of Genetics) was awarded the 2011 African Union's Academy of Sciences for the Developing World (TWAS) Young Scientists' National Award. Another feather in his cap was his election as the co-chair of the Global Young Academy (GYA), an international, independent, science-based institution that aims for excellence and impact. Prof Slippers and Prof Andrew McKechnie (Department of Zoology and Entomology and a core team member of the DST/NRF Centre of Excellence at the Percy FitzPatrick Institute) are also two of three UP staff members to be elected as founding members of the South African Young Academy of Science (SAYAS).

Prof Casper Schutte, an Honorary Professor and a member of the Unit for Advanced Studies in the Department of Chemistry, was honoured with two prestigious medals for his scientific contributions in the field of chemistry. Prof Schutte was awarded the Gold Medal of the South African Chemical Institute (SACI), which is given to a person whose scientific contributions in the field of chemistry or chemical technology are judged to be of outstanding merit. The Southern Africa Association for the Advancement of Science ( $S_2A_3$ ) also bestowed the South Africa Gold Medal on Prof Schutte for his exceptional contribution to the advancement of science.

Acknowledging the doyen of Precambrian, and especially Archaean palaeobiology and palaeontology, and his ground-breaking work on the origin, evolution and habitats of life on the early Earth, Prof James William Schopf was awarded the degree Doctor Scientiae (honoris causa) during the April graduation ceremonies. Prof Schopf developed many of the globally applied techniques and several important scientific indices, which have become accepted standards in the evaluation of the fossil content of ancient rocks.

Prof Nigel Bennett was appointed as a visiting professor in the Department of Zoology at the King Saud University in Riyadh, Saudi Arabia. Prof Bennett currently holds the Austin Roberts Chair of African Mammalogy and the SARChl Chair of Mammal Behavioural Ecology and Physiology at UP. During his recent visit, Prof Bennett received a gold medal of partnership from the Vice- Rector of Graduate Studies and Research at the University, Prof Ali S Al-Ghamdi.

Being people-centred, the Faculty continuously seeks for opportunities to recruit and appoint highly recognised researchers to either strengthen its existing research teams or to introduce new and relevant research foci in the Faculty.

Prof Robert (Bob) Millar was appointed as the Director of the Mammal Research Institute (MRI) in the Faculty from 1 April 2011. He has been the Director of the prestigious MRC Human Reproductive Sciences Unit at the University of Edinburgh, UK, for the past 12 years.

Two researchers have been appointed in the new SARChI Chair in the Faculty. Prof Pavel Selyshchev will head the Chair in Complex Systems in the Department of Physics and Prof Subhabrata Chakraborti will head the Chair in Nonparametric, Robust Statistical Inference and Statistical Process Control in the Department of Statistics. The African Centre for Gene Technologies (ACGT) partner institution appointed Dr John Becker as the new manager of the Centre. Dr Becker took over from Dr Jane Morris, who announced her retirement as the Centre's Director last year after serving in the position since the inception of the ACGT.

New DNA sequencing technologies developed over the past five years are now allowing scientists to simultaneously determine the sequence of all expressed genes in a developing tissue and determine the expression level of each gene, yielding unprecedented insights into the genetic control of growth and development of *Eucalyptus* tree species and hybrids (commonly known as gum trees). Over the past two years, the research team of Prof Zander Myburg of the Department of Genetics set out to decipher the DNA sequence of the entire catalogue of genes expressed during the growth and development of eucalyptus trees. PhD students Eshchar Mizrachi and Martin Ranik sampled different woody and leaf tissues from a commercially grown eucalypt tree genotype of Sappi and used a new ultra-high throughput technology to generate more than four billion bases of expressed DNA sequences. In collaboration with Prof Fourie Joubert and PhD student Charles Hefer in the Bioinformatics and Computational Biology Unit at UP, they assembled these sequences into a transcriptome catalogue of 18 894 expressed genes. Prof Myburg's research team is now using the transcriptome sequence and profiles to identify candidate genes involved in the genetic control of wood development and cellulose production in trees.

Research led by Dr Justin Boyles of the Department of Zoology and Entomology suggests that pest control services provided by insect-eating bats in the USA are likely to save the American agricultural industry at least \$3 billion a year. The research was published in the April issue of *Science* magazine. The goal of the study was a universal one: to convince people that bats are worth saving. A total of 45 species of bats are found in the USA, while southern Africa – a much smaller area – is the habitat of up to 60 species. The value of the pest control services to agriculture provided by bats in the USA alone ranges from a low of \$3,7 billion to a high of \$53 billion a year, as estimated by the study. Bats eat tremendous quantities of flying pest insects, so the loss of bats is likely to have long-term effects on agricultural and ecological systems. Consequently, not only is the conservation of bats important for the wellbeing of ecosystems, but it is also in the best interest of national and international economies. This issue is of particular importance because bat populations are at risk as a result of the emerging disease of white-nose syndrome.

A \$4,475 million grant from the Bill and Melinda Gates Foundation to the Department of Agricultural Economics, Extension and Rural Development (LEVLO) will allow UP to build long-term expertise in agricultural economics alongside partner universities in Africa. An important outcome of the grant is to allow LEVLO and its partner African universities to offer more areas of specialisation, to deepen research foci, and to leverage the expertise for developing similar capacities in three other countries in the region.

Prof Gretel van Rooyen (Department of Plant Science), and Ms Yvette Naudé and Prof Egmont Rohwer (both from the Department of Chemistry) are investigating their new theory of a geochemical origin of "fairy circles" in the Namibian desert areas. This work was published in the *Journal of Arid Environments*, 2011. *National Geographic Wild* has commissioned Tigress Productions from Bristol in the UK to make a documentary on "fairy circles" as part of its *Wild Case Files 2* series. The documentary on the theories of the origin of the mysterious "fairy circles" will debut during 2012.

The first ever comprehensive dictionary of names for southern African trees was launched during Arbour Week 2011, which is celebrated across the world. Prof Braam van Wyk of the Department of Plant Science is one of the authors of the book.

An expert on seismic hazards, Prof Andrzej Kijko, Director of the Aon-Benfield Natural Hazard Centre, is one of the senior authors associated with the *Encyclopaedia of Solid Earth Geophysics*, Volume 1 (1st edition). The encyclopaedia, which was edited by Prof Harsh Gupta, consists of two volumes with 220 articles by leading experts and aims to serve as a collection of concise and detailed reference topics of solid earth geophysics. Prof Kijko was invited by the editor of the encyclopaedia to provide a contribution to the category on seismic hazards.

#### **Prof Anton Ströh**

Dean: Natural and Agricultural Sciences Tel: 012 420 2478 Email: dean.nas@up.ac.za

# Faculty Research Output

# Biochemistry

#### Journal articles

- Yssel A, Reva O, Tastan Bishop O: 2011. Comparative structural bioinformatics analysis of Bacillus amyloliquefaciens chemotaxis proteins within Bacillus subtilis group.
   In Applied Microbiology and Biotechnology, 92, pp 997–1008.
- Birkholtz L, Williams M, Niemand J, Louw AI, Persson L, Heby
  O: 2011. Polyamine homoeostasis as a drug target in pathogenic protozoa: peculiarities and possibilities. In Biochemical Journal, 438, pp 229–244.
- Henriques R, Griffiths CA, Rego EH, Mhlanga M: 2011. PALM and STORM: Unlocking live-cell super-resolution. In **Biopolymers**, 95(5), pp 322–331.
- Gounder K, Brzuszkiewicz E, Liesegang H, Wollherr A, Daniel R, Gottschalk G, Reva O, Kumwenda B, Srivastava M, Bricio C, Berenguer J, Van Heerden E, Litthauer D: 2011. Sequence of the hyperplastic genome of the naturally competent Thermus scotoductus SA-01. In **BMC Genomics**, 12(577), pp 1471–2164.
- Stander BA, Joubert F, Joubert AM: 2011. Docking, synthesis and in vitro evaluation of antimitotic estrone analogs. In Chemical Biology & Drug Design, 77, pp 173–181.
- Naidoo S, Fouche-Weich J, Law PJ, Denby KJ, Marco Y, Berger DK: 2011. A Eucalyptus bacterial wilt isolate from South Africa is pathogenic on Arabidopsis and manipulates host defences. In **Forest Pathology**, 41, pp 101–113.
- Rückert C, Blom J, Chen XHC, Reva O, Borriss R: 2011. Genome sequence of B. amyloliquefaciens type strain DSM7(T) reveals differences to plant-associated B. amyloliquefaciens FZB42. In Journal of Biotechnology, 155, pp 78–85.
- Adebowale Abdu, Emmambux MN, Beukes M, Taylor JRN: 2011. Fractionation and characterization of teff proteins. In Journal of Cereal Science, 54, pp 380–386.
- FontehP,KeterFK,MeyerD:2011.Newbis(thiosemicarbazonate) gold (III) complexes inhibit HIV replication at cytostatic concentrations: Potential for incorporation into virostatic cocktails. In Journal of Inorganic Biochemistry, 105, pp 1173–1180.

- Verlinden BK, Niemand J, Snyman J, Sharma SK, Beattie RJ, Woster PM, Birkholtz L: 2011. Discovery of novel alkylated(bis)urea and (bis)thiourea polyamine analogues with potent antimalarial activities. In Journal of Medicinal Chemistry, 54(19), pp 6624–6633.
- Sippel KH, Stander BA, Tu P, Venkatakrishnan B, Robbins A, Agbandje-McKenna M, Joubert F, Joubert AM, McKenna R: 2011. Characterization of carbonic anhydrase isozyme specific inhibition by sulfamated 2-Ethylestra compounds. In Letters In Drug Design & Discovery, 8, pp 678–684.
- Williams AA, Koekemoer G, Lindeque Z, Reinecke C, Meyer D: 2011. Qualitative serum organic acid profiles of HIVinfected individuals not on antiretroviral treatment. In **Metabolomics**, Oct.
- Potgieter M, Pretorius E, Van der Merwe CF, Beukes M, Vieira WA, Auer REJ, Auer M, Meyer S: 2011. Histological assessment of SJL/J mice treated with the antioxidants coenzyme Q10 and reveratrol, Micron. In Histological assessment of SJL/J mice treated with the antioxidants coenzyme Q10 and reveratrol, 42, pp 275–282.
- Williams M, Sprenger J, Human E, Al-Karadaghi S, Persson L, Louw AI, Birkholtz L: 2011. Biochemical characterisation and novel classification of monofunctional S-adenosylmethionine decarboxylase of Plasmodium falciparum. In Molecular and Biochemical Parasitology, 180, pp 17–26.
- Coetzer N, Myburg AA, Berger DK: 2011. Maize microarray annotation database. In **Plant Methods**, 7(31), pp 1–10.
- Bezuidt KIO, Pierneef RE, Mncube SK, Lima-Mendez G, Reva O: 2011. Mainstreams of Horizontal Gene Exchange in Enterobacteria: consideration of the Outbreak of Enterohemorrhagic E. coli O104:H4 in Germany in 2011. In **Plos One**, 6(10), p e25702.

#### Chapters in books

Meyer D: 2011. Technology in an indigenous setting: community-based HIV/AIDS support. In From Technology Transfer to Intercultural Development, (1), Sun Press, pp 33–49.

In the list of research outputs, in all cases the heading "Papers published" refers to papers in refereed, published conference proceedings, and the heading "Journal articles" refers to articles published in accredited, peer-reviewed, refereed specialist journals.

#### Patents

- Van Breda SV, Apostolides Z: 2011. A method for decaffeination. (2011/05726).
- Verschoor JA, Beukes M: 2011. A method of detecting surrogate markers in a serum sample. (PCT/IB2011/053108).
- Malebe MP, Apostolides Z: 2011. Method for screening plants for drought tolerance. (2011/09196).

# Chemistry

#### Journal articles

- Rademeyer M: 2011. Bis(3-methylanilinium) sulfate. In Acta Crystallographica Section E-Structure Reports Online, E67(Oct), p o3172.
- Sarkar A, Cukrowski I: 2011. Tris(dicyclohexylammonium) hydrogen [1-hydroxy-2-(1H-imidazol-1-yl)-1-phosphonatoethane] phosphonate ethanol monosolvate monohydrate. In Acta Crystallographica Section E-Structure Reports Online, E67(Oct), p o2980.
- Sarkar A, Cukrowski I: 2011. N,N-Dimethylethane-1,2-diaminimum bis(3-hydroxybenzoate). In Acta Crystallographica Section E-Structure Reports Online, E67(Oct), p o2901.
- Rademeyer M: 2011. 1-(2-Azaniumylethylethyl)piperazine-1,4-diium trinitrate. In Acta Crystallographica Section E-Structure Reports Online, E67(Nov), p 03301.
- Landman M, Van der Westhuizen B, Bezuidenhout DI, Liles DC: 2011. N-(2,4,6-Trimethylphenyl) formamide. In Acta Crystallographica Section E-Structure Reports Online, E67(Jan), p o120.
- Landman M, Van der Westhuizen B, Bezuidenhout DI, Liles DC: 2011. 1,3-Bis(2,4,6-trimethylphenyl)-3H-imidazol-1-ium tetraoxidorhenate (VII). In Acta Crystallographica Section E-Structure Reports Online, E67(Nov), p m1897.
- Oosthuizen NM, Laurens JB: 2011. Efavirenz interference in urine screening immunoassays for tetrahydrocannabinol. Annals of Clinical Biochemistry, Online(Nov), pp 1–3.
- Potgieter M, Davidowitz B: 2011. Preparedness for tertiary chemistry: multiple applications of the Chemistry Competence Test for diagnostic and prediction purposes. In **Chemistry Education Research and Practice**, 12(Mar), pp 193–204.
- De Vos J, Dixon R, Vermeulen G, Gorst-Allman P, Cochran J,

Rohwer ER, Focant J: 2011. Comprehensive two-dimensional gas chromatography time of flight mass spectrometry (GC x GC-TOFMS) for environmental forensic investigations in developing countries. In **Chemosphere**, 82(Jan), pp 1230–1239.

- Cukrowski I, Matta CF: 2011. Protonation sequence of linear aliphatic polyamines from intramolecular atomic energies and charges. In **Computational and Theoretical Chemistry**, 966(Mar), pp 213–219.
- Rademeyer M, Tsouris C, Billing DG, Lemmerer A, Charmant J:2011. Robust motifs in 2-phenylethylammonium and related tetrahalometallates. In Crystengcomm, 13(Feb), pp 3485–3497.
- Bezuidenhout DI, Barnard W, Van der Westhuizen B, Van der Watt E, Liles DC: 2011. Multimetal Fischer carbene complexes of Group VI transition metals: synthesis, structure and substituent effect investigation. In **Dalton Transactions**, 40(May), pp 6711–6721.
- Lotz S, Landman M, Olivier AJ, Bezuidenhout DI, Liles DC, Palmer ER: 2011. Rhenium ethoxy- and hydroxycarbene complexes with thiophene substituents. In **Dalton Transactions**, 40(Jun), pp 9394-9403.
- Adekunle AS, Ozoemena KI: 2011. Electrosynthesised Metal (Ni, Fe, Co) OxiDe Films on Single-Walled Carbon Nanotube Platforms and Their Supercapacitance in Acidic and Neutral pH Media. In **Electroanalysis**, 23(4), pp 971–979.
- Maxakato NW, Mamuru SA, Ozoemena KI: 2011. Efficient Oxygen Reduction Reaction Using Ruthenium Tetrakis (diaquaplatinum) Octacarboxyphthalocyanine Catalyst Supported on MWCNT Platform. **Electroanalysis**, 23(2), pp 325–329.
- Forbes PBC, True A, Rohwer ER: 2011. Laser-induced fluorescence of polycyclic aromatic hydrocarbons: an approach to gas standards. In **Environmental Chemistry Letters**, 9(Sep), pp 7–12.
- Manhique AJ, Focke WW, Madivate C: 2011. Titania recovery from Low-GraDe Titanoferous Minerals. In Hydrometallurgy, 109(3–4), pp 230–236.
- Bezuidenhout DI, Lotz S, Landman M, Liles DC: 2011. Synthesis, Characterization, and Structural Studies of Multimetallic Ferrocenyl Carbene Complexes of Group VII Transition Metals. In **Inorganic Chemistry**, 50(Jan), pp 1521–1533.
- Adekunle AS, Ozoemena KI, Mamba BB, Agboola BO, Oluwatobi OS: 2011. Supercapactive Properties of Symmetry and the Asymmetry Two Electrode Coin type Supercapacitor

Cells Made from MWCNTS/Nickel Oxide Nanocomposite. In International Journal of Electrochemical Science, 6(Oct), pp 4760–4774.

- Snyman LD, Kellerman TS, Vleggaar R, Flett BC, Basson K, Schultz RA: 2011. Diplonine, a Neurotoxin Isolated from cultures of the fungus Stenocarpella maydis (Berk.) Sacc. that induces Diplodiosis. In Journal of Agricultural and Food Chemistry, 59(Jul), pp 9039–9044.
- Naude Y, Van Rooyen MW, Rohwer ER: 2011. Evidence for a geochemical origin of the mysterious circles in the Pro-Namib desert. In **Journal of Arid Environments**, 75(Jan), pp 446–456.
- De Vos J, Gorst-Allman P, Rohwer ER: 2011. Establishing an alternative method for the quantitative analysis of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans by comprehensive two dimensional gas chromatography-time-of-flight mass spectrometry for developing countries. In **Journal of Chromatography A**, 1218(Apr), pp 3282–3290.
- Cukrowski I, Govender KK, Mitoraj MP, Srebro M: 2011. QTAIM and ETS-NOCV Analyses of Intramolecular CH ... HC Interactions in Metal Complexes. In Journal of Physical Chemistry A, 115(Aug), pp 12746–12757.
- Varadwaj PR, Cukrowski I, Perry CB, Marques HM: 2011. A Density Functional Theory and Quantum Theory of Atomsin-Molecules Analysis of the Stability of Ni (II) Complexes of some Amino Alcohol Ligands. In Journal of Physical Chemistry A, 115(May), pp 6629–6640.
- Sibanda MM, Focke WW, Labuschagne FJW, Moyo L, Nhlapo NS, Maity A, Muiambo HF, Masinga Junior PH, Crowther NAS, Coetzee M, Brindley GAW: 2011. Degradation of insecticides used for indoor spraying in malaria control and possible solutions. In **Malaria Journal**, 10(307), pp 1–12.
- Schutte CJH, Pretorius JA: 2011. A computational study of the molecular and crystal structure and selected physical properties of octahydridosilasequioxane (S1<sub>203H2</sub>)<sub>4</sub>.
   I Electronic and structural aspects. In Proceedings of the Royal Society of London Series A-Mathematical Physical and Engineering Sciences, 467, pp 928–953.
- Ozoemena KI, Fashedemi OO: 2011. A facile approach to the synthesis of hydrophobic iron tetrasulfophthalocyanine (FeTSPc) nano-aggregates on multi-walled carbon nanotubes: a potential electrocatalyst for the detection of dopamine. In Sensors and Actuators B-Chemical, 160(Jul), pp 7–14.

Smit E: 2011. Analise van diesel-monsters deur middel van omvattende twee-dimensionele gaschromatografie (GCXGC/ TOFMS) om die smeerbaarheid van hierdie brandstof fundamenteel-chemies beter te probeer verstaan. In South African Journal for Science and Technology, 30(1), pp 1–1.

# Zoology and Entomology

- Mann BQ, Lieberman V, Köhler A, Korine C, Hedworth H, Voigt-Heucke SL: 2011. Finding your friends at densely populated roosting places: Male Egyptian fruit bats (*Rousettus aegyptiacus*) distinguish between familiar and unfamiliar conspecifics. In **Acta Chiropterologica**, 13(2), pp 411–417.
- Saag P, Mänd R, Tilgar V, Kilgas P, Mägi M, Rasmann E: 2011. Plumage bacterial load is related to species, sex, biometrics and fledging success in co-occurring cavity-beeding passerines. In **Acta Ornithologica**, 46(2), pp 191–201.
- Storm JJ, Boyles JG: 2011. Body temperature and body mass of hibernating little brown bats *Myotis lucifugus* in hibernacula affected by white-nose syndrome. In Acta Theriologica, 56, pp 123–127.
- Lewis AS, Dippenaar-Schoeman AS: 2011. A revision of the spider genus Sylligma in the Afrotropical Region (Araneae, Thomsidae). In African Entomology, 19(1), pp 119–132.
- Holm E, Perissinotto R: 2011. New descriptions and revisions of southern African Cetoniinae (Coleoptera: Scarabaeidae).I. In African Entomology, 19(1), pp 88–95.
- Human H, Pirk CWW, Crewe RM, Dietemann V: 2011. The honeybee disease American foulbrood – an African perspective. In **African Entomology**, 19(3), pp 551–557.
- Grainger M, Van Aarde RJ: 2011. The resilience of the medicinal plant community of rehabilitating coastal dune forests, KwaZulu-Natal, South Africa. In **African Journal of Ecology**, 50, pp 120–123.
- Yetman C, Ferguson JWH: 2011. Spawning and nonbreeding activity of adult giant bullfrogs (*Pyxicephalus adspersus*). In African Journal of Herpetology: Journal of the Herpetological Association of South Africa, 60(1), pp 13–29.
- Meÿer M, Best PB, Anderson-Reade MD, Cliff G, Dudley SFJ, Kirkman SP: 2011. Trends and interventions in large whale entanglement along the South African coast. In **African**

#### Journal of Marine Science, 33(3), pp 429-439.

- Reisinger R, De Bruyn PJN, Tosh C, Oosthuizen WC, Mufanadzo NT, Bester MN: 2011. Prey and seasonal abundance of killer whales at sub-Antarctic Marion Island. In African Journal of Marine Science, 33(1), pp 99–105.
- Penry GS, Penry GS, Cockcroft VG, Hammond PS: 2011. Seasonal fluctuations in occurrence of inshore Bryde's whales in Plettenberg Bay, South Africa, with notes on feeding events and multi-species associations. In African Journal of Marine Science, 33(3), pp 403–414.
- Pistorius PA, De Bruyn PJN, Bester MN: 2011. Population dynamics of southern elephant seals: a synthesis of three decades of demographic research at Marion Island. In African Journal of Marine Science, 33(3), pp 523–534.
- Photopoulou T, Best PB, Hammond PS, Findlay KP: 2011. Movement patterns of coastal bottlenose dolphins in the presence of a fast-flowing, prevailing current: shore-based observations at Cape Vidal, South Africa. In African Journal of Marine Science, 33(3), pp 393–401.
- Findlay KP, Best PB, Meÿer M: 2011. Migrations of humpback whales past Cape Vidal, South Africa, and an estimate of the population increase rate (1988-2002). In African Journal of Marine Science, 33(3), pp 375–392.
- Barendse J, Best PB, Thornton M, Elwen SH, Rosenbaum HC, Carvalho I, Pomilla C, Collins TJQ, Meÿer M, Leeney RH: 2011. Transit station or destination? Attendance patterns, movements, and abundance estimate of humpback whales off west South Africa from photographic and genotypic matching. In African Journal of Marine Science, 33(3), pp 353–373.
- Bester MN, De Bruyn PJN, Oosthuizen WC, Tosh C, McIntyre T, Reisinger R, Postma M, Van der Merwe DS, Wege M: 2011. The Marine Mammal Programme at the Prince Edward Islands: 38 years of research. In African Journal of Marine Science, 33(3), pp 511–521.
- Hofmeyr-Juritz L, Best PB: 2011. Acoustic behaviour of southern right whales in relation to numbers of whales present in Walker Bay, South Africa. In African Journal of Marine Science, 33(3), pp 415–427.
- Elwen SH, Thornton M, Kirkman SP, Pistorius PA, Weir C: 2011. The first African Marine Mammal Colloquium, South Africa, May 2010. In **African Journal of Marine Science**, 33(3), pp 349–351.
- Elwen SH, Findlay KP, Kiszka J, Weir A: 2011. Cetacean research in the southern African subregion: a review of previous



Prof Jolanda Roux won the Distinguished Young Women in Science Award in the Life, Natural and Engineering Sciences category for her research focusing on the health of trees, particularly diseases caused by fungi and their insect associates. Her research interests focus strongly on fungi and bacteria that result in the disease and death of their woody hosts. She is a professor in the Department of Microbiology and Plant Pathology, a member of the Management Committee of FABI and Manager of field and extension services of the Tree Protection Cooperative Programme (TPCP). She has published more than 100 papers on her research and has successfully supervised six PhD and 14 MSc students.

studies and current knowledge. In African Journal of Marine Science, 33(3), pp 469–493.

- Zanre R, Bester MN: 2011. Vagrant Subantarctic fur seal in the Mayumba National Park, Gabon. In **African Zoology**, 46(1), pp 185–187.
- Sichilima AM, Bennett NC, Faulkes CG: 2011. Field evidence for colony size and aseasonality of breeding in Ansell's molerat, Fukomys anselli (Rodentia: Bathyergidae). In African Zoology, 46(2), pp 334–339.
- De Vries JL, Pirk CWW, Bateman PW, Cameron EZ, Dalerum FD: 2011. Extension of the diet of an extreme foraging specialist,

the aardwolf (Proteles cristata). In **African Zoology**, 46(1), pp 194–196.

- Robertson MP, Harris KR, Coetzee JA, Foxcroft LC, Dippenaar-Schoeman AS, Van Rensburg BJ: 2011. Assessing local scale impacts of Opuntia stricta (Cactaceae) invasion on beetle and spider diversity in Kruger National Park, South Africa. In African Zoology, 46(2), pp 205–223.
- Postma M, Wege M, Bester MN, Van der Merwe DS, De Bruyn PJN: 2011. Inshore occurrence of southern right whales (Eubalaena australis) at Subantarctic Marion Island. In African Zoology, 46(1), pp 188–193.
- Nicolson SW: 2011. Bee food; the chemistry and nutritional value of nectar, pollen and mixtures of the two. In African Zoology, 46(2), pp 197–204.
- Le Grange A, Van der Merwe M, Bester MN: 2011. Reproductive strategy of the Egyptian free-tailed bat, Tadarida aegyptiaca, from a subtropical latituDe (25°) in South Africa. In **African Zoology**, 46(1), pp 169–175.
- Chaplot V, Brown J, Dlamini P, Eustice T, Janeau JL, Jewitt G, Lorentz S, Martin L, Nontokozo-Mchunu C, Oakes E, Poswojewski P, Revil S, Rumpel C, Zondi N: 2011. Rainfall simulation to identify the storm-scale mechanisms of gully bank retreat. In Agricultural Water Management, 98, pp 1704–1710.
- LaBeaud AD, Cross PC, Getz WM, Glinka A, King CH: 2011. Rift Valley Fever Virus infection in African buffalo (Syncerus caffer) herds in rural South Africa: Evidence of interepidemic transmission. In American Journal of Tropical Medicine And Hygiene, 84(4), pp 641–646.
- Verburgt L, Ferreira M, Ferguson JWH: 2011. Male field cricket song reflects age, allowing females to prefer young males. In Animal Behaviour, 81, pp 19–29.
- De Bruyn PJN, Tosh C, Bester MN, Cameron EZ, McIntyre T, Wilkinson IS: 2011. Sex at sea: alternative mating system in an extremely polygynous mammal. In Animal Behaviour, 82, pp 445–451.
- Greve M, Chown SL, Van Rensburg BJ, Dallimer M, Gaston KJ: 2011. The ecological effectiveness of protected areas: a case study for South African birds. In **Animal Conservation**, 14, pp 295–305.
- Oosthuizen WC, Bester MN, Tosh C, Guinet C, Besson D, De Bruyn PJN: 2011. Dispersal and dispersion of southern elephant seals in the Kerguelen province, Southern Ocean. In Antarctic Science, 23(6), pp 567–577.

Grobler G, Bastos AD, Chimimba CT, Chimimba CT, Chown SL:

2011. Inter-island dispersal of flightlessBothrometropus huntleyi (Coleoptera: Curculionidae) from the sub-Antarctic Prince Edward Island archipelago. In **Antarctic Science**, 23(3), pp 225–234.

- Grobler G, Bastos AD, Treasure AM, Chown SL: 2011. Cryptic species, biogeographic complexity and the evolutionary history of the Ectemnorhinus group in the sub-Antarctic, including a description of Bothrometropus huntleyi, n. sp. In Antarctic Science, 23(3), pp 211–224.
- Hartel S, Wossler TC, Wossler TC, Moltzer GJ, Crewe RM, Moritz RFA, Neumann P: 2011. Pheromone-mediated reproductive dominance hierarchies among pseudo-clonal honeybee workers (Apis mellifera capensis). In Apidologie, 42(5), pp 659–668.
- Reisinger R, De Bruyn PJN, Bester MN: 2011. Abundance estimates of killer whales at subantarctic Marion Island. In Aquatic Biology, 12, pp 177–185.
- Leeney RH, Carslake D, Elwen SH: 2011. Using static acoustic monitoring to describe echolocation behaviour of Heaviside's dolphins (Cephalorhynchus heavisidii) in Namibia. In Aquatic Mammals, 37(2), pp 151–160.
- Strumpher WP, Scholtz CH: 2011. New species of Trogidae (Coleoptera: Scarabaeoidea) from Australia. In Australian Journal of Entomology, 50, pp 139–143.
- Bryant G, Bateman PW, Fleming PA: 2011. Tantalising tongues: male carpet pythons (Morelia spilota) use chemosensory information to differentiate among females. In **Australian Journal of Zoology**, 59, pp 1–7.
- Bateman PW, Fleming PA: 2011. Failure to launch? The influence of limb autotomy on the escape behavior of a semi-aquatic grasshopperParoxya atlantica (Acrididae). In **Behavioral Ecology**, 22, pp 763–768.
- Robin FA, Moritz RFA, Lattorff HMG, Crous K, Hepburn HR: 2011. Social parasitism of queens and workers in the Cape honeybee (Apis mellifera capensis). In Behavioral Ecology and Sociobiology, 65, pp 735–740.
- Musundire R, Chabi-Olaye A, Löhr B, Krüger K: 2011. Diversity of agromyzidae and associated hymenopteran parasitoid species in the afrotropical region: implications for biological control. In **Biocontrol**, 56, pp 1–9.
- Engelbrecht I, Prendini L: 2011. Assessing the taxonomic resolution of southern African trapdoor spiders (Araneae : Ctenizidae; Cyrtaucheniidae; Idiopidae) and implications for their conservation. In **Biodiversity and Conservation**, 20, pp 3101–3116.

- Young K, Van Aarde RJ: 2011. Science and elephant management decisions in South Africa. In **Biological Conservation**, 144, pp 876–885.
- Thorn M, Green M, Bateman PW, Waite S, Scott DM: 2011. Brown hyaenas on roads: estimating carnivore occupancy and abundance using spatially auto-correlated sign survey replicates. In **Biological Conservation**, 144(6), pp 1799–1807.
- Bateman PW, Fleming PA: 2011. Frequency of tail loss reflects variation in predation levels, predator efficiency, and the behaviour of three populations of brown anoles. In **Biological Journal of the Linnean Society**, 103, pp 648–656.
- Kamath PL, Getz WM: 2011. Adaptive molecular evolution of the Major Histocompatibility Complex genes, DRA and DQA, in the genus Equus. In **BMC Evolutionary Biology**, 11, p. 128.
- Bastos AD, Nair CH, Taylor PJ, Brettschneider H, Kirsten F, Mostert ME, von Maltitz E, Lamb JM, Van Hooft P, Belmain S, Contrafatto G, Downs S, Chimimba CT: 2011. Genetic monitoring detects an overlooked cryptic species and reveals the diversity and distribution of three invasive Rattus congeners in South Africa. In **BMC Genetics**, 12, p. 26.
- Bhagwandin A, Gravett N, Lyamin OI, Oosthuizen MK, Bennett NC, Siegel JM, Manger PR: 2011. Sleep and wake in rhythmic vs arrhythmic chronotypes of a microphthalmic species of African mole-rat (Fukomys mechowii). In **Brain Behavior and Evolution**, 78, pp 162–183.
- Krüger K, De Klerk A, Douglas N, Joubert J, Pietersen G, Stiller M: 2011.Aster yellows phytoplasma in grapevines: identification of vectors in South Africa. In Bulletin Of Insectology, 64, pp S137–S138.
- Weirauch C, Forero D, Jacobs DH: 2011. On the evolution of raptorial legs – an insect example (Hemiptera: Reduviidae: Phymatinae). In Cladistics – The International Journal of the Willi Hennig Society, 27, pp 138–149.
- Bray T, Bennett NC, Bloomer P: 2011. Low levels of polymorphism at novel microsatellite loci developed for bathyergid mole-rats from South Africa. In Conservation Genetics Resources, 3(2), pp 221–224.
- Thompson GD, Robertson MP, Robertson MP, Webber BL, Richardson DM, Le Roux JJ, Wilson JRU: 2011. Predicting the subspecific identity of invasive species using distribution models: Acacia saligna as an example. In **Diversity and Distributions**, 17, pp 1001–1014.

- Richardson DM, Carruthers J, Hui C, Impson FAC, Miller JT, Robertson MP, Robertson MP, Rouget M, Le Roux JJ, Wilson JRU: 2011. Human-mediated introductions of Australian acacias – a global experiment in biogeography. In **Diversity and Distributions**, 17, pp 771–787.
- Hui C, Richardson DM, Robertson MP, Wilson JRU, Yates CJ: 2011. Macroecology meets invasion ecology: linking the native distributions of Australian acacias to invasiveness. In Diversity and Distributions, 17, pp 872–883.
- Garnas JR, Houston DR, Ayres MP, Evans C: 2011. Disease ontogeny overshadows effects of climate and species interaction on population dynamics in a non native forest disease complex. In **Ecography**, 34, pp 001–010.
- Cumming GS, Caron A, Abolnik C, Catolli G, Bruinzeel L, Burger CE, Cecchettin K, Chiweshe N, Mochotlhoane B, Mutumi GL, Ndlovu M: 2011. The ecology of Influenza A-viruses in wild birds in southern Africa. In **Ecohealth**, 8, pp 4–13.
- Boettiger AN, Wittmeyer G, Starfield R, Volrath F, Douglas-Hamilton I, Getz WM: 2011. Inferring ecological and behavioral drivers of African elephant movement using a linear filtering approach. In **Ecology**, 92(8), pp 1648–1657.
- Carvalheiro LG, Veldtman R, Shenkute AG, Tesfay GB, Pirk CWW, Donaldson JS, Nicolson SW: 2011. Natural and within-farmland biodiversity enhances crop productivity. In **Ecology Letters**, 14, pp 251–259.
- Garibaldi LA, Steffan-Dewenter I, Kremen C, Morales JM, Bommarco R, Cunningham SA, Carvalheiro LG, Chacoff NP, Dudenhoffer JH, Greenleaf SS, Holzschuh A, Isaacs R, Krewenka K: 2011. Stability of pollination services decreases with isolation from natural areas despite honey bee visits. In **Ecology Letters**, 14, pp 1062–1072.
- Jori F, Roger M, Baldet T, Delecolle JC, Sauzier J, Jaumally MR, Roger F: 2011. Orbiviruses in Rusa Deer, Mauritius, 2007. In **Emerging Infectious Diseases**, 17(2), pp 312–313.
- Etter EMC, Seck I, Grosbois V, Jori F, Blanco E, Vial L, Akakpo AJ, Bada-Alhambedji R, Kone P, Roger FL: 2011. Seroprevalence of African Swine Fever in Senegal, 2006. In **Emerging Infectious Diseases**, 17(1), pp 49–54.
- Köhler A, Verburgt L, Fleming PA, McWhorter TJ, Nicolson SW: 2011. Interruptions in nectar availability: responses of White-bellied Sunbirds (Cinnyris talatala) and Brown Honeyeaters (Lichmera indistincta). In **Emu**, 111, pp 252– 258.

Aubrey DP, Boyles JG, Krysinsky LS, Teskey RO: 2011. Spatial

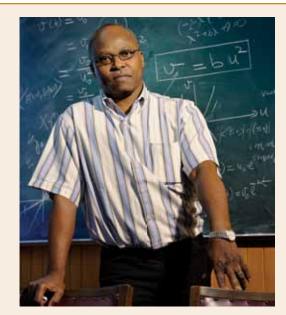
and temporal patterns of xylem sap pH derived from stems and twigs of Populus deltoides L. In **Environmental and Experimental Botany**, 71, pp 376–381.

- Zengeya TA, Booth AJ, Bastos AD, Chimimba CT: 2011. Trophic interrelationships between the exotic Nile tilapia, Oreochromis niloticus and indigenous tilapiine cichlids in a subtropical African river system (Limpopo River, South Africa). In **Environmental Biology of Fishes**, 92, pp 479– 489.
- April V, Robertson MP, Simelane DO: 2011. Interaction between Uroplata girardi (Coleoptera: Chrysomelidae) and Ophiomyia camarae (Diptera: Agromyzidae) on their shared host Lantana camara Verbenaceae). In Environmental Entomology, 40(5), pp 1123–1130.
- Huth-Schwartz A, Leon A, Vandame R, Moritz RFA, Kraus FB: 2011. Workers dominate male production in the neotropical bumblebee Bombus wilmattae (Hymenoptera: Apidae). In Frontiers In Zoology, 8(13), pp 1–6.
- Ncube H, Duncan P, Grange S, Cameron EZ, Barnier F, Ganswindt A: 2011. Pattern of faecal 20-oxopregnane and oestrogen concentrations during pregnancy in wild plains zebra mares. In **General and Comparative Endocrinology**, 172, pp 358–362.
- Köhler A, Sadowska J, Olszewska J, Trzeciak P, Berger-Tal O, Tracy CR: 2011. Staying warm or moist? Operative temperature and thermal preferences of common frogs (Rana temporaria), and effects on locomotion. In Herpetological Journal, 21(1), pp 17–26.
- Symes CT, Symes CT, McKechnie AE, McKechnie AE, Nicolson SW, Woodborne SM: 2011. The nutritional significance of a winter-flowering succulent for opportunistic avian nectarivores. In Ibis, 153, pp 110–121.
- Zheng HQ, Hu FL, Pirk CWW: 2011. Errors in comb building behaviour in Apis cerana cerana that result in entrapped workers. In **Insectes Sociaux**, 58, pp 413–415.
- Sole CL, Wirta H, Forgie SA, Scholtz CH: 2011. Origin of Madagascan Scarabaeini dung beetles (Coleoptera: Scarabaeidae): dispersal from Africa. In Insect Systematics & Evolution, 42, pp 29–40.
- Strumpher WP, Scholtz CH: 2011. Description of a new, possibly extinct, species of flightless Trox F. (Coleoptera: Trogidae) from South Africa. In Insect Systematics & Evolution, 42, pp 337–348.
- Deschodt CM, Davis ALV, Scholtz CH: 2011. New dung beetle (Coleoptera: Scarabaeidae: Scarabaeinae) taxa from arid

south-western Africa. In Insect Systematics & Evolution, 42(3), pp 277–294.

- Willis CKR, Menzies AK, Boyles JG, Wojciechowski MS: 2011. Evaporative water loss is a plausible explanation for mortality of bats from white-nose syndrome. In **Integrative and Comparative Biology**, 51(3), pp 364–373.
- Boyles JG, Seebacker F, Smit B, McKechnie AE: 2011. Adaptive thermoregulation in endotherms may alter responses to climate change. In **Integrative and Comparative Biology**, 51(5), pp 676–690.
- McKechnie AE, Mzilikazi N: 2011. Heterothermy in Afrotropical mammals and birds: a review. In **Integrative and Comparative Biology**, 51(3), pp 349–363.
- Bennett NC: 2011. Teasing apart socially-induced infertility in non-reproductive female Damaraland mole-rats, Fukomys damarensis (Rodentia: Bathyergidae). In Integrative Zoology, 6, pp 311–320.
- Mlambo S, Sole CL, Scholtz CH: 2011. Phylogeny of the African ball-rolling dung beetle genus Epirinus Reiche (Coleoptera: Scarabaeidae: Scarabaeinae). In Invertebrate Systematics, 25, pp 197–207.
- Smit B, Boyles JG, Brigham RM, McKechnie AE: 2011. Torpor in dark times: patterns of heterothermy are associated with the lunar cycle in a nocturnal bird. In **Journal of Biological Rhythms**, 26(3), pp 241–248.
- Bhagwandin A, Fuxe K, Bennett NC, Manger PR: 2011. Distribution of orexinergic neurons and their terminal networks in the brains of two species of African mole rats. In **Journal of Chemical Neuroanatomy**, 41, pp 32–42.
- George JT, Veldhuis JD, Roseweir AK, Newton CL, Faccenda E, Millar RP, Millar RP, Anderson RA: 2011. Kisspeptin – 10 is a potent stimulator of LH and increases pulse frequency in men. In Journal of Clinical Endocrinology and Metabolism, 96(8), pp E1228–E1236.
- Pirk CWW, Crous K, Duangphakdee O, Radloff SE, Hepburn HR: 2011. Economics of comb wax salvage by the red dwarf honeybee, Apis florea. In Journal of Comparative Physiology B-Biochemical Systemic and Environmental Physiology, 181, pp 353–359.
- Garnas JR, Ayres MP, Liebhold A, Evans C: 2011. Subcontinental impacts of an invasive tree disease on forest structure and dynamics. In **Journal of Ecology**, 99, pp 532–541.
- Wege M, Bester MN, Van der Merwe DS, Postma M: 2011. Oedipus complex in an Antarctic fur seal pup? In Journal of Ethology, 29, pp 505–507.

# Prof Jean Lubuma



Prof Jean Lubuma is Head of the Department of Mathematics and Applied Mathematics. His research interests include the numerical analysis of differential equations, with the emphasis on differential models that occur in engineering and applied sciences. He also focuses on the mathematical epidemiology of infectious diseases of humans. Over the past decade he has made many significant contributions on the theory of non-standard finite difference methods, as well as the design of several innovative numerical schemes that replicate the dynamics of the continuous models. He has participated extensively at major international conferences, either as keynote speaker, session chairperson, or organiser of symposiums.

- White AM, Cameron EZ: 2011. Evidence of helping behavior in a free-ranging population of communally breeding warthogs. In **Journal of Ethology**, 29, pp 419–425.
- Neumann P, Hartel S, Kryger P, Crewe RM, Moritz RFA: 2011. Reproductive division of labour and the lytoky result in sympatric barriers to gene flow in honeybees (Apis mellifera L.). In **Journal of Evolutionary Biology**, 24, pp 286–294.
- Yetman C, Ferguson JWH: 2011. Conservation implications of spatial habitat use by adult giant bullfrogs (Pyxicephalus

adspersus). In Journal of Herpetology, 45(1), pp 56-62.

- Jarosch A, Moritz RFA: 2011. Systemic RNA-interference in the honeybee Apis mellifera: tissue dependent uptake of fluorescent siRNA after intra-abdominal application observed by laser-scanning microscopy. In **Journal of Insect Physiology**, 57, pp 851–857.
- Holter P, Scholtz CH: 2011. Re-establishment of biting mouthparts in desert-living dung beetles (Scarabaeidae: Scarabaeinae) feeding on plant litter – old structures reacquired or new ones evolved? In Journal of Morphology, 272, pp 1007–1016.
- Zengeya TA, Decru E, Vreven E: 2011. Revalidation of Hepsetus cuvieri (Castelnau, 1861) (Characiformes: Hepsetidae) from the Quanza, Zambezi and southern part of the Congo ichthyofaunal provinces. In Journal of Natural History, 45(27–28), pp 1723–1744.
- Wakelin J, McKechnie AE, Woodborne S: 2011. Stable isotope analysis of migratory connectivity in a threatened intra-African migrant, the Blue Swallow (Hirundo atrocaerulea). In Journal of Ornithology, 152, pp 171–177.
- Harrison A, Bown KJ, Horak IG, Horak IG: 2011. Detection of Anaplasma bovis in an undescribed tick species collected from the eastern rock sengi Elephantulus myurus. In **Journal of Parasitology**, 97(6), pp 1012–1016.
- Boyles JG, Smit B, McKechnie AE: 2011. Does use of the torpor cut-off method to analyze variation in body temperature cause more problems than it solves? In **Journal of Thermal Biology**, 36, pp 373–379.
- Joubert KE, Serfontein T, Scantlebury M, Manjerovic ME, Bateman PW, Bennett NC, Waterman J: 2011. Determination of an optimal dose of medetomidine-ketaminebuprenorphine for anaesthesia in the Cape ground squirrel (Xerus inauris). In Journal of the South African Veterinary Association, 82(2), pp 94–96.
- White AM, Cameron EZ: 2011. Fitness consequences of maternal rearing strategies in warthogs: influence of a group size and composition. In **Journal of Zoology**, 285, pp 77–84.
- Bateman PW, Fleming PA: 2011. Who are you looking at? Hadeda ibises use direction of gaze, head orientation and approach speed in their risk assessment of a potential predator. In **Journal of Zoology**, 285, pp 316–323.
- Faulkes CG, Bennett NC, Cotterill FPD, Stanley W, Mgode GF, Verheyen E: 2011. Phylogeography and cryptic diversity of the solitary-dwelling silvery mole-rat, genus Heliophobius

# Prof Namrita Lall



Prof Namrita Lall completed her PhD at the University of Pretoria in 2001 and is a member of the Department of Plant Science (Medicinal Plant Science). She has published 64 peer-reviewed articles and two book chapters, and has registered one international and one national patent. She was awarded the DST Women in Science Award for 2011 in recognition of her research on bioprospecting from traditional knowledge on medicinal plants and has, since 1997, initiated research projects on tuberculosis, diabetes and cancer. She has scientifically validated the use of South African plants for various purposes, such as medicines and cosmetics.

(Family: Bathyergidae). In Journal of Zoology, 285, pp 324–338.

- Van der Merwe I, Oosthuizen MK, Chimimba CT, Bennett NC: 2011. Circadian rhythms of locomotor activity in the reddish grey musk shrew (Eulipotyphla: Soricidae) from South Africa. In **Journal of Zoology**, 284(1), pp 124–132.
- Viljoen H, Bennett NC, Lutermann H: 2011. Life history traits, but not season, affect the febrile response to a lipopolysaccharride challenge in highveld mole-rats. In **Journal of Zoology**, 285, pp 222–229.

- Reisinger R, De Bruyn PJN, Bester MN: 2011. Predatory impact of killer whales on pinniped and penguin populations at the Subantarctic Prince Edward Islands: fact and fiction. In Journal of Zoology, 285, pp 1–10.
- Maputla N, Dempster ER, Raman J, Ferguson JWH: 2011. Strong hyrid viability between two widely divergent chromosomal forms of the pouched mouse. In **Journal of Zoology**, 285, pp 180–187.
- Dippenaar-Schoeman AS, Hamer M, Haddad CR: 2011. Spiders (Arachnida: Araneae) of the Mkambati Nature Reserve, Eastern Cape, South Africa. In **Koedoe**, 53(1058), pp 1–10.
- McGeoch MA, Sithole H, Samways MJ, Simaika JP, Pryke JS, Picker M, Uys C, Armstrong AJ, Dippenaar-Schoeman AS, Engelbrecht IA, Braschler B, Hamer M: 2011. Conservation and monitoring of invertebrates in terrestrial protected areas. In **Koedoe**, 53(2), pp 1–13.
- Dippenaar-Schoeman AS, Hamer M, Haddad CR: 2011. Spiders (Arachnida: Araneae) of the vegetation layer of the Mkambati Nature Reserve, Eastern Cape, South Africa. In Koedoe, 53 (1), pp 1–10.
- McIntyre T, Bornemann H, Plötz J, Tosh C, Bester MN: 2011. Water column use and forage strategies of female southern elephant seals from Marion Island. In **Marine Biology**, 158, pp 2125–2139.
- Miller CA, Reeb D, Best PB, Knowlton AR, Brown MW, Moore MJ: 2011. Blubber thickness in right whales Eubalaena glacialis and Eubalaena australis related with reproduction, life history status and prey abundance. In Marine Ecology-Progress Series, 438, pp 267–283.
- McIntyre T, Ansorge IJ, Bornemann H, Plötz J, Tosh C, Bester MN: 2011. Elephant seal dive behaviour is influenced by ocean temperature: implications for climate change impacts on an ocean predator. In Marine Ecology-Progress Series, 441, pp 257–272.
- Mate BR, Best PB, Lagerquist BA, Winsor MH: 2011. Coastal, offshore and migratory movements of South African right whales revealed by satellite telemetry. In **Marine Mammal Science**, 27(3), pp 455–476.
- Bates MF, Pietersen DW, Measey GJ: 2011. New amphisbaenian records for the Northern Cape, South Africa. In Navorsinge van die Nasionale Museum Bloemfontein, 26(3), pp 61–72.
- Bhagwandin A, Gravett N, Hemingway J, Oosthuizen MK, Bennett NC, Siegel JM, Manger PR: 2011. Orexinergic neuron numbers in three species of African mole-rats with rhythmic

and arrhythmic chronotypes. In **Neuroscience**, 199, pp 153–165.

- Horak IG, Horak IG, Welman S, Hallam SL, Lutermann H, Mzilikazi N: 2011. Ticks of four-toed elephant shrews and Southern African hedgehogs. In Onderstepoort Journal of Veterinary Research, 78(1), pp 1–3.
- Thorn M, Green M, Keith M, Marnewick K, Bateman PW, Cameron EZ, Scott DM: 2011. Large-scale distribution patterns of carnivores in northern South Africa: implications for conservation and monitoring. In **Oryx**, 45(4), pp 579–586.
- Lindsey PA, Romanach S, Matema S, Matema C, Mupamhadzi I, Muvengwi J: 2011. Dynamics and underlying causes of illegal bushmeat trade in Zimbabwe. In **Oryx**, 45(1), pp 84–95.
- Lindsey PA, Romanach S, Tambling CJ, Chartier K, Groom RJ: 2011. Ecological and financial impacts of illegal bushmeat trade in Zimbabwe. In **Oryx**, 45(1), pp 96–111.
- Lindsey PA, Tambling CJ, Brummer R, Davies-Mostert HT, Hayward MW, Marnewick K, Parker D: 2011. Minimum prey and area requirements of the cheetah Acinonyx jubatus: implications for reintroduction and management of the species in South Africa. In **Oryx**, 45(4), pp 587–599.
- Dacke M, Byrne M, Baird E, Scholtz CH, Warrant EJ: 2011. How dim is dim? Precision of the celestial compass in moonlight and sunlight. In Philosophical Transactions of the Royal Society of London Series B-Biological Sciences, 366, pp 697–702.
- Boyles JG, Smit B, McKechnie AE: 2011. A new comparative metric for estimating heterothermy in endotherms. In **Physiological and Biochemical Zoology**, 84(1), pp 115–123.
- Lebesa L, Khan ZR, Hassanali A, Pickett JA, Bruce TJA, Skellern M, Krüger K: 2011. Responses of the blister beetle Hycleus apicicornis to visual stimuli. In **Physiological Entomology**, 36, pp 220–229.
- Streicher S, Boyles JG, Oosthuizen MK, Bennett NC: 2011. Body temperature patterns and rhythmicity in free-ranging subterranean Damaraland mole-rats, Fukomys damarensis. In **Plos One**, 6(10), p e26346.
- Trimble M, Van Aarde RJ: 2011. Decline of birds in a human modified coastal dune forest landscape in South Africa. In **Plos One**, 6(1), p e16176.
- Trimble M, Van Aarde RJ, Ferreira SM, Norgaard CF, Fourie J, Lee CL, Moss CJ: 2011. Age determination by back length

for African savanna elephants: Extending age assessment techniques for aerial-based surveys. In **Plos One**, 6(10), p e26614.

- Viljoen H, Bennett NC, Ueckermann EA, Lutermann H: 2011. The role of host traits, season and group size on parasite burdens in a cooperative mammal. In **Plos One**, 6(11), p e27003.
- Jewell O, Wcisel MA, Gennari E, Towner AV, Bester MN, Johnson RL, Singh S: 2011. Effects of Smart Position Only Tag deployment on white sharks Carcharodon carcharias in South Africa. In **Plos One**, 6(11), p e27242.
- Aplin KP, Suzuki H, Chinen AA, Chesser RT, Ten Have J, Donnellan SC, Austin J, Frost A, Gonzalez JP, Bastos AD, Catzeflis F, Soubrier J, Fang YP: 2011. Multiple geographic origins of commensalism and complex dispersal history of Black Rats. In **Plos One**, 6(11), p e26357.
- Jori F, Brahmbhatt D, Fosgate GT, Thompson PN, Budke C, Ward MP, Ferguson K, Gummow B: 2011. A questionnairebased evaluation of the veterinary cordon fence separating wildlife and livestock along the boundary of the Kruger National Park, South Africa. In Preventive Veterinary Medicine, 100, pp 210–220.
- Newton CL, Whay AM, McArdle CA, Zhang M, Van Koppen CJ, Van de Lagemaat R, Segaloff DL, Millar RP, Millar RP: 2011. Rescue of expression and signaling of human luteinizing hormone G protein-coupled receptor mutants with an allosterically binding small-molecule agonist. In **Proceedings of the National Academy of Sciences of the United States of America**, 108(17), pp 7172–7176.
- Jarosch A, Stolle E, Crewe RM, Moritz RFA: 2011. Alternative splicing of a single transcription factor drives selfish reproductive behavior in honeybee workers (Apis mellifera). In Proceedings of the National Academy of Sciences of the United States of America, 108(37), pp 15282–15287.
- Grainger M, Van Aarde RJ, Wassenaar TD: 2011. Landscape composition influences the restoration of subtropical coastal dune forest. In **Restoration Ecology**, 19(101), pp 111–120.
- Boyles JG, Cryan PM, McCracken GF, Kunz TH: 2011. Economic importance of bats in agriculture. **Science**, 332, pp 41–42.
- Dietemann V, Human H, Pirk CWW, Crewe RM: 2011. Should we be worried about African honeybees? In **South African Bee Journal**, 83(2), pp 78–79.
- Trethowan PD, Robertson MP, McConnachie AJ: 2011. Ecological niche modelling of an invasive alien plant and its potential

biological control agents. In South African Journal of Botany, 77, pp 137–146.

- Sakai M, Karczmarski L, Morisaka T, Thornton M: 2011. Reactions of Heaviside's dolphins to tagging attempts using remotely-deployed suction-cup tags. In South African Journal of Wildlife Research, 41(1), pp 134–138.
- Elwen SH, Leeney RH: 2011. Interactions between leatherback turtles and killer whales in Namibian waters, including possible predation. In **South African Journal of Wildlife Research**, 41(2), pp 205–209.
- McIntyre T, Postma M, Van der Merwe DS, Wege M, Bester MN: 2011. Hitchhiking goose barnacles and their potential implications on the functioning of animal-borne instruments. In **South African Journal of Wildlife Research**, 41(2), pp 218–223.
- Mertz EM, Bester MN: 2011. Vagrant southern elephant seal and human disturbance in Mossel Bay, South Africa. In **South African Journal of Wildlife Research**, 41(2), pp 224–228.
- Foord SH, Dippenaar-Schoeman AS, Haddad CR, Lotz LN, Lyle R: 2011. The faunistic diversity of spiders (Arachnida: Araneae) of the Savanna Biome in South Africa. In **Transactions of the Royal Society of South Africa**, 66(3), pp 170–201.
- Ravaomanana J, Jori F, Vial L, Perez-Sanchez R, Blanco E, Michaud V, Roger F: 2011. Assessment of interactions between African swine fever virus, bushpigs (Otamochoerus larvatus),Ornithodoros moubata ticks and domestic pigs in north-western Madagascar. In **Transboundary and Emerging Diseases**, 58(3), pp 247–254.
- Tanga MC, Ngundu WI, Tchouassi PD: 2011. Daily survival and human blood index of major malaria vectors associated with oil palm cultivation in Cameroon and their role in malaria transmission. In **Tropical Medicine & International Health**, 16(4), pp 447–457.
- Abu Samra N, Jori F, Samie A, Thompson PN: 2011. The prevalence of Cryptosporidium spp. oocysts in wild mammals in the Kruger National Park, South Africa. In **Veterinary Parasitology**, 175, pp 155–159.
- Venter GJ, Labuschagne K, Boikanyo SNB, Morey L, Snyman MG: 2011. The repellent effect of organic fatty acids on Culicoides midges as determined with suction light traps in South Africa. In **Veterinary Parasitology**, 181, pp 365–369.
- Taylor PJ, Lavrenchenko A, Carleton MD, Verheyen E, Bennett NC, Oosthuizen CJ, Maree S: 2011. Specific limits and emerging diversity patterns in East African populations of

laminate-toothed rats, genus Otomys (Muridae: Murinae: Otomyini): a revision of the Otomys typus complex. In **Zootaxa**, 3024, pp 1–66.

LaPolla JS, Hawkes PG, Fisher BL: 2011. Monograph of Nylanderia (Hymenoptera: Formicidae) of the World, Part I: Nyanderia in the Afrotropics. In **Zootaxa**, 3110, pp 10–36.

#### Chapters in books

- Pirk CWW, Sole CL, Crewe RM: 2011. Pheromones. In Honeybees of Asia, Springer Verlag, pp 207–215.
- Hepburn HR, Pirk CWW, Radloff SE: 2011. Energetic aspects of flight. In **Honeybees of Asia**, Springer Verlag, pp 293–313.
- Sole CL, Pirk CWW: 2011. Genetic considerations. In Honeybees of Asia, Springer Verlag, pp 95–109.

# Physics

- Salagaram T, Chetty N: 2011. Enhancing the understanding of entropy through computation. In American Journal of **Physics**, 79(11), pp 1127–1132.
- Ngom BD, Chaker M, Manyala NI, Lo B, Maaza M, Beye AC: 2011. Temperature-dependent growth mode of W-doped ZnO nanostructures. In **Applied Surface Science**, 257(14), pp 6226–6232.
- Dejene FB, Ali A, Swart HC, Botha R, Roro KT, Coetsee L, Biggs MM: 2011. Optical properties of ZnO nanoparticles synthesized by varying the sodium hydroxide to zinc acetate molar ratios using a Sol-Gel process. In **Central European Journal of Physics**, 9(5), pp 1321–1326.
- Chetty N: 2011. New modalities for scientific engagement in Africa the case for computational physics. In **Computer Physics Communications**, 182(9), pp 2065–2070.
- Ngom BD, Sakho O, Ndiaye S, Bartali R, Diallo A, Gaye MB, Bady S, Manyala NI, Maaza M, Beye AC: 2011. Photoninduced tunable and reversible wettability of pulsed laser deposited W-doped ZnO nanorods. In **European Physical Journal-Applied Physics**, 55(2), pp 20501.1–5.
- Mtangi W, Auret FD, Janse Van Rensburg PJ, Coelho SMM, Legodi MJ, Nel JM, Meyer WE, Chawanda A: 2011. A comparative study of the electrical properties of Pd/ZnO Schottky contacts fabricated using electron beam

deposition and resistive/thermal evaporation techniques. Journal of Applied Physics, 110(9).

- Mamor M, Pipeleers B, Auret FD, Vantomme A: 2011. Defect production in strained p-type Si1-xGex by Er implantation. Journal of Applied Physics, 109(1), p 013715.
- Prinsloo LC, Tournie A, Colomban P: 2011. A Raman spectroscopic study of glass trade beads excavated at Mapungubwe hill and K2, two archaeological sites in southern Africa, raises questions about the last occupation date of the hill. In Journal of Archaeological Science, 38(12), pp 3264–3277.
- Friedland E, Van der Berg NG, Malherbe JB, Hancke JJ, Barry J, Wendler E, Wesch W: 2011. Investigation of silver and iodine transport through silicon carbide layers prepared for nuclear fuel element cladding. In Journal of Nuclear Materials, 410(1–3), pp 24–31.
- Rakitianski SA, Elander N: 2011. Multi-channel analog of the effective-range expansion. In **Journal of Physics A-Mathematical and Theoretical**, 44(11), pp 1–21.
- Ngom BD, Lafane S, Dioum A, Manyala NI, Abdelli-Messaci S, Kerdja RT, Madjoe R, Nemutudi R, Maaza M, Beye AC: 2011. The influence of plasma dynamics on the growth of Sm0.55Nd0.45NiO3 solid solution during pulsed laser deposition. In Journal of Physics and Chemistry of Solids, 72(11), pp 1218–1224.
- Prinsloo LC, Colomban P, Brink DJ, Meiklejohn I: 2011. A Raman spectroscopic study of the igneous rocks on Marion Island: a possible terrestrial analogue for the geology on Mars. In Journal of Raman Spectroscopy, 42(4), pp 626–632.
- Tournie A, Prinsloo LC, Paris C, Colomban P, Smith B: 2011. The first in situ Raman spectroscopic study of San rock art in South Africa: procedures and preliminary results. In **Journal of Raman Spectroscopy**, 42(3), pp 399–406.
- Auret FD, Meyer WE, Diale MW, Janse van Rensburg PJ, Song S, Temst K, Vantomme A: 2011. Electrical characterization of metastable defects introduced in GaN by eu-ion implantation. In **Materials Science Forum**, 679(680), pp 804–807.
- Nyamhere C, Das AGM, Auret FD, Chawanda A, Pineda-Vargas CA, Venter A: 2011. Deep Level Transient Spectroscopy study of defects introduced in antimony doped Ge by 2 MeV proton irradiation. In **Physica B-Condensed Matter**, 406(15–16), pp 3056–3059.
- Obodo KO, Andrew RC, Chetty N: 2011. Modification of the band offset in boronitrene. In **Physical Review B**, 84(15), pp 155308-1–155308-7.

- Ngwenya TB, Ukpong M, Chetty N: 2011. Defect states of complexes involving a vacancy on the boron site in boronitrene. In **Physical Review B**, 84(24), pp 1–12.
- Forthaus MK, Hearne GR, Manyala NI, Heyer O, Brand RA, Khomskii DI, Lorenz T, Abd-Elmeguid MM: 2011. Pressureinduced quantum phase transition in  $Fe_{1-x}Co_xSi$  (x = 0.1,0.2). In **Physical Review B**, 83(8), pp 085101.1–10.

#### Papers published

Brink DJ, Van der Berg NG, Prinsloo LC: 2011. Multi-color reflection from chiral thin-film stacks. In Proceedings of SPIE - Nanophototonic Materials VIII, (1), Society of Photo-Optical Instrumentation Engineers. pp 80940G1– G8.

# Genetics

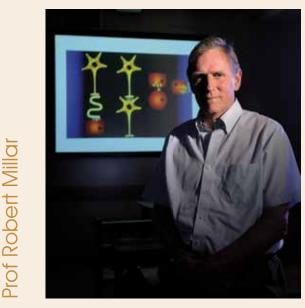
- Roux CZ: 2011. A family of protein growth curves with extension to other chemical body components together with application to animal nutrition and improvement. In **Animal**, 5(3), pp 439–449.
- Six DL, Wingfield MJ: 2011. The role of phytopathogenicity in bark beetle-fungus symbioses: a challenge to the classic paradigm. In **Annual Review of Entomology**, 56, pp 255–272.
- De Wet J, Bihon Legesse W, Preisig O, Wingfield BD, Wingfield MJ: 2011. Characterization of a novel dsRNA element in the pine endophytic fungus Diplodia scrobiculata. In **Archives of Virology**, 156, pp 1199–1208.
- Stassen L, Huismans H, Theron J: 2011. Membrane permeabilization of the African horse sickness virus VP5 protein is mediated by two N terminal amphipathic x helices. In Archives of Virology, 156, pp 711–715.
- Bihon Legesse W, Burgess T, Slippers B, Wingfield MJ, Wingfield BD: 2011. Distribution of Diplodia pinea and its genotypic diversity within asymptomatic Pinus patula trees. In Australasian Plant Pathology, 40, pp 540–548.
- Chen SF, Barnes I, Chungu D, Roux J, Wingfield MJ, Xie YJ, Zhou XD: 2011. High population diversity and increasing importance of the Eucalyptus stem canker pathogen, Teratosphaeria zuluensis, in South China. In Australasian Plant Pathology, 40, pp 407–415.

- Cortinas MN, Barnes I, Wingfield BD, Wingfield MJ: 2011. Unexpected genetic diversity revealed in the Eucalyptus canker pathogen Teratosphaeria gauchensis. In Australasian Plant Pathology, 40, pp 497–503.
- Pegg GS, Carnegie AJ, Wingfield MJ, Drenth A: 2011. Variable resistance to Quambalaria pitereka in spotted gum reveal opportunities for disease screening. In Australasian Plant Pathology, 40, pp 76-86.
- Zhou XD, Wingfield MJ: 2011. Eucalypt diseases and their management in China. In Australasian Plant Pathology, 40, pp 339-345.
- Pegg GS, Shuey LS, Carnegie AJ, Wingfield MJ, Drenth A: 2011. Potential gains through slecting for resistance in spotted gum to Quambalaria pitereka. In Australasian Plant Pathology, 40, pp 197-206.
- Mlonyeni XOM, Wingfield BD, Wingfield MJ, Ahumada R, Klasmer P, Leal I, De Groot P, Slippers B: 2011. Extreme homozygosity in Southern Hemisphere populations of Deladenus siricidicola, a biological control agent of Sirex noctilio. In Biological Control, 59, pp 348-353.
- Hussey SG, Mizrachi E, Spokevicius AV, Bossinger G, Berger DK, Myburg AA: 2011. SND2 a NAC transcription factor gene, regulates genes involved in secondary cell wall development in Arabidopsis fibres and increases fibre cell area in Eucalyptus. In BMC Plant Biology, 11, p. 173.
- 2011. Lycopodiophyta: Klopper AW, Klopper RR: Selaginellaceae Selaginella Nivea, a new Lycophyte record for South Africa, with notes on its habitat. In Bothalia, 41(2), pp 321–323.
- Bray T, Bennett NC, Bloomer P: 2011. Low levels of polymorphism at novel microsatellite loci developed for bathyergid mole-rats from South Africa. In Conservation Genetics Resources, 3(2), pp 221–224.
- Wingfield MJ, Roux J, Wingfield BD: 2011. Insect pests and pathogens of Australian acacias grown as non-natives - an experiment in biogeography with far-reaching consequences. In Diversity and Distributions, 17, pp 968–977.
- Lu M, Wingfield MJ, Gillette N, Sun J-H: 2011. Do novel genotypes drive the success of an invasive bark beetlefungus complex? Implications for potential reinvasion. In Ecology, 92(11), pp 2013–2019.
- Piskur B, Pavlic D, Slippers B, Ogris N, Maresi G, Wingfield MJ, Jurc D: 2011. Diversity and pathogenicity of Botryosphaeriaceae on declining Ostrya carpinifolia in

Prof Robert Millar serves as the Director of the Mammal Research Institute. His team was the first to clone the GnRH receptor. This advancement contributed greatly to the development of GnRH analogues, which make up a billion-dollar market for the treatment of infertility, prostate cancer and other illnesses. He is editor in chief of Neuroendocrinology and has received several international awards.

Slovenia and Italy following extreme weather conditions. In European Journal of Forest Research, 130, pp 235–249.

- Moleleki N, Wingfield MJ, Wingfield BD, Preisig O: 2011. Effect of Diaporthe RNA virus 1 (DRV1) on growth and pathogenicity of different Diaporthe species. In European Journal of Plant Pathology, 131, pp 261–268.
- Andjic V, Dell B, Barber P, Hardy G, Wingfield MJ, Burgess TI: 2011. Plants for planting; indirect evidence for the movement of a serious forest pathogen, Teratosphaeria destructans, in Asia. In European Journal of Plant Pathology, 131, pp 49-58.
- Grobler JP, Rushworth I, Brink JS, Bloomer P, Kotze A, Reilly B, Vrahimis S: 2011. Management of hybridization in an endemic species: decision making in the face of imperfect information in the case of the black wildebeest - Connochaetes gnou. In European Journal of Wildlife Research, 57, pp 997–1006.



- Wayne ML, Pienaar J, Telonis-Scott M, Sylvestre L-S, Nuzhdin SV, McIntyre LM: 2011. Expression of defense genes in Drosophila evolves under a different selective regime from expression of other genes. In **Evolution**, 65(4), pp 1068–1078.
- Nelson RM, Greeff JM: 2011. Evolutionarily stable mixed mating in a variety of genetic systems. In **Evolutionary Ecology**, 25, pp 291–306.
- Heath RN, Roux J, Slippers B, Drenth A, Pennycook SR, Wingfield BD, Wingfield MJ: 2011. Occurrence and pathogenicity of Neofusicoccum parvum and N. mangiferae on ornamental Tibouchina species. In Forest Pathology, 41, pp 48–51.
- Bihon Legesse W, Slippers B, Burgess T, Wingfield MJ, Wingfield BD: 2011. Diplodia scrobiculata found in the southern hemisphere. In Forest Pathology, 41, pp 175–181.
- Barnes I, Kirisits T, Wingfield MJ, Wingfield BD: 2011. Needle blight of pine caused by two species of Dothistroma in Hungary. In **Forest Pathology**, 41, pp 361–369.
- Bihon Legesse W, Slippers B, Burgess T, Wingfield MJ, Wingfield BD: 2011. Sources of Diplodia pinea endophytic infections in Pinus patula and P. radiata seedlings in South Africa. In **Forest Pathology**, 41, pp 370–375.
- BegouDe BAD, Slippers B, Wingfield MJ, Roux J: 2011. The pathogenic potential of endophytic Botryosphaeriaceous fungi on Terminalia species in Cameroon. In **Forest Pathology**, 41, pp 281–292.
- Luchi N, Pratesi N, Pazzagli M, Capretti P, Scala A, Slippers B, Pinzani P: 2011. High-resolution melting analysis: a new molecular approach for the early detection of Diplodia pinea in Austrian pine. In **Fungal Biology**, 115 (8), pp 715–723.
- Bergeron J, Leal I, Foord B, Ross G, Davis C, Slippers B, De Groot P, Hamelin RC: 2011. Putative origin of clonal lineages of Amylostereum areolatum, the fungal symbiont associated with Sirex noctilio, retrieved from Pinus sylvestris, in eastern Canada. In Fungal Biology, 115(8), pp 750–758.
- De Vos L, Van der Nest MA, Van der Merwe NA, Myburg AA, Wingfield MJ, Wingfield BD: 2011. Genetic analysis of growth, morphology and pathogenicity in the F<sub>1</sub> progeny of an interspecific cross between Fusarium circinatum and Fusarium subglutinans. In **Fungal Biology**, 115, pp 902–908.
- Roets F, Wingfield MJ, Wingfield BD, Dreyer LL: 2011. Mites are the most common vectors of the fungus Gondwanamyces proteae in Protea infrictescences. In **Fungal Biology**, 115, pp 343–350.

- Van Wyk M, Wingfield BD, Wingfield MJ: 2011. Four new Ceratocystis spp. Associated with wounds on Eucalyptus, Schizolobium and Terminalia trees in Ecuador. In Fungal Diversity, 46, pp 111–131.
- Hunter GC, Crous PW, Carnegie AJ, Burgess TI, Wingfield MJ: 2011. Mycosphaerella and Teratosphaeria diseases of Eucalyptus; easily confused and with serious consequences. In **Fungal Diversity**, 50, pp 145–166.
- Martin SH, Wingfield BD, Wingfield MJ, Steenkamp ET: 2011. Structure and evolution of the Fusarium mating type locus: new insights from the Gubberella fujikuroi complex. In **Fungal Genetics and Biology**, 48, pp 731–740.
- Van der Nest MA, Steenkamp ET, Slippers B, Mongae A, Van Zyl K, Stenlid J, Wingfield MJ, Wingfield BD: 2011. Gene expression associated with vegetative incompatibility in Amylostereum areolatum. In Fungal Genetics and Biology, 48, pp 1034–1043.
- Antoniou AC, Kartsonaki C, Sinilnikova OM, Soucy P, McGuffog L, Healey S, Lee A, Peterlongo P, Manoukian S, Jansen Van Rensburg E, Sluiter MD, Cattaneo E, Barile M: 2011. Common alleles at 6q25.1 and 1p11.2 are associated with breast cancer risk for BRCA1 and BRCA2 mutation carriers. In Human Molecular Genetics, 20(16), pp 3304–3321.
- Von der Heyden S, Bowie RCK, Prochazka K, Bloomer P, Crane NL, Bernardi G: 2011. Phylogeographic patterns and cryptic speciation across oceanographic barriers in South African intertidal fishes. In Journal of Evolutionary Biology, 24, pp 2505–2519.
- Nelson RM, Greeff JM: 2011. Sex ratio dependent dispersal when sex ratios vary between patches. In **Journal of Theoretical Biology**, 290, pp 81–87.
- Martin SH, Wingfield BD, Wingfield MJ, Steenkamp ET: 2011. Causes and Consequences of Variability in Peptide Mating Pheromones of Ascomycete Fungi. In **Molecular Biology and Evolution**, 28(7), pp 1987–2003.
- Boissin E, Stohr S, Chenuil A: 2011. Did vicariance and adaptation drive cryptic speciation and evolution of brooding in Ophioderma longicauda (Echinodermata: Ophiuroidea), a common Atlanto-Mediterranean ophiuroid? In Molecular Ecology, 2, pp 4737–4755.
- Steane DA, Nicolle D, Sansaloni CP, Petroli CD, Carling J,
   Kilian A, Myburg AA, Grattapaglia D, Vaillancourt RE: 2011.
   Population genetic analysis and phylogeny reconstruction
   in Eucalyptus (Myrtaceae) using high-throughput,

genome-wide genotyping. In **Molecular Phylogenetics** and **Evolution**, 59, pp 206–224.

- Baumgartner K, Coetzee MPA, Hoffmeister D: 2011. Secrets of the subterranean pathosystem of Armillaria. In **Molecular Plant Pathology**, 12(6), pp 515–534.
- Mehl JWM, Slippers B, Roux J, Wingfield MJ: 2011. Botryosphaeriaceae associated with Pterocarpus angolensis (kiaat) in South Africa. In **Mycologia**, 103(3), pp 534–553.
- Perez CA, Wingfield MJ, Altier NA, Simeto S, Blanchette RA: 2011. Puccinia psidii infecting cultivated Eucalyptusand native myrtaceae in Uruguay. In Mycological Progress, 10, pp 273–282.
- Grobbelaar JW, De Beer ZW, Bloomer P, Wingfield MJ, Zhou XD, Wingfield BD: 2011. Discovery of Ophiostoma tsotsi on Eucalyptus wood chips in China. In **Mycoscience**, 52, pp 111–118.
- Van Wyk M, Wingfield BD, Al-Adawi AO, Rossetto CJ, Fumiko Ito M, Wingfield MJ: 2011. Two new Ceratocystis species associated with mango disease in Brazil. In Mycotaxon, 117, pp 381–404.
- Hawksworth DL, Crous PW, Redhead SA, Reynolds DR, Samson RA, Seifert KA, Taylor JW, Wingfield MJ, Abaci O, Aime C, Asan A, Slippers B, De Beer ZW: 2011. 2. The Amsterdam Declaration on fungal nomenclature. In **Mycotaxon**, 116, pp 491–500.
- Oh E, Wingfield BD, Wingfield MJ, Roux J: 2011. First report of Phytophthora cinnamomiassociated with stem cankers of Quercus cerrisin South Africa. In **New Disease Reports**, 24, p. 11.
- Mizrachi E, Mansfield S, Myburg AA: 2011. Cellulose factories: advancing bioenergy production from forest trees. In **New Phytologist**, pp 1–9.
- Ahmed MZ, De Barro PJ, Greeff JM, Ren SX, Naveed M, Qiu BL: 2011. Genetic identity of the Bemisia tabaci species complex and association with high cotton leaf curl disease (CLCuD) incidence in Pakistan. In **Pest Management Science**, 67, pp 307–317.
- Mahomed W, Van den Berg N: 2011. EST sequencing and gene expression profiling of defence-related genes from Persea americana infected with Phytophthora cinnamoni. In **Plant Biology**, 11(167), pp 1–14.
- Carmichael DJ, Rey MEC, Naidoo S, Cook G, Van Heerden SW: 2011. First Report of Pepino mosaic virus Infecting Tomato in South Africa. In **Plant Disease**, 95(6), pp 767–767.
- Coetzer N, Myburg AA, Berger DK: 2011. Maize microarray annotation database. In **Plant Methods**, 7(31), pp 1–10.

- Pegg GS, Shuey LS, Carnegie AJ, Wingfield MJ, Drenth A: 2011. Variability in aggressiveness of Quambalaria pitereka isolates. In **Plant Pathology**, 60, pp 1107–1117.
- Pegg GS, Nahrung H, Carnegie AJ, Wingfield MJ, Drenth A: 2011. Spread and development of quambalaria shoot blight in spotted gum plantations. In **Plant Pathology**, 60, pp 1096–1106.
- Chen SF, Pavlic D, Roux J, Slippers B, Xie YJ, Wingfield MJ, Zhou XD: 2011. Characterization of Botryosphaeriaceae from plantation-grown Eucalyptus species in South China. In **Plant Pathology**, 60, pp 739–751.
- Yurkov A, Kemler M, Begerow D: 2011. Species accumulation curves and incidence-based species richness estimators to appraise the diversity of cultivable yeasts from beech forest soils. In **Plos One**, 6(8), p e23671.
- Coetzee MPA, Bloomer P, Wingfield MJ, Wingfield BD: 2011. Paleogene Radiation of a Plant Pathogenic Mushroom. In **Plos One**, 6(12), pp 1–8.
- De Barro P, Ahmed MZ: 2011. Genetic Networking of the Bemisia tabaci Cryptic Species Complex Reveals Pattern of Biological Invasions. In **Plos One**, 6(10), p e25579.
- Uyeda JC, Hansen TF, Arnold SJ, Pienaar J: 2011. The millionyear wait for macroevolutionary bursts. In **Proceedings of the National Academy of Sciences of the United States of America**, Aug, pp 1–6.
- Tarigan M, Roux J, Van Wyk M, Tjahjono B, Wingfield MJ: 2011. A new wilt and die-back disease of Acacia mangium associated with Ceratocystis manginecans and C. acaciivora sp. nov.in Indonesia. In South African Journal of Botany, 77, pp 292–304.
- Wingfield BD: 2011. Can we improve postgraduate degree throughput rates? In **South African Journal of Science**, 107(11/12), pp 1–2.
- Slippers B, Majozi T, Nelwamondo FV, Steenkamp CM, Van Heerden E, Wright CY: 2011. Internet access constrains science development and training at South African universities. In **South African Journal of Science**, 107(7/8), p 1.
- Eatwell KA, Verryn SD, Roux CZ, Geerthsen PJM: 2011. A comparison of collinearity mitigation techniques used in predicting BLUP breeding values and genetic gains over generations. In Southern Forests: A Journal of Forest Science (Southern Hemisphere Forestry Journal), 73(3/4), pp 155–163.

Tarigan M, Wingfield MJ, Van Wyk M, Tjahjono B, Roux J: 2011.

Pruning quality affects infection of Acacia mangium and A. crassicarpa by Ceratocystis acaciivora and Lasiodiplodia theobromae. In Southern Forests: A Journal of Forest Science (Southern Hemisphere Forestry Journal), 73(3/4), pp 187–191.

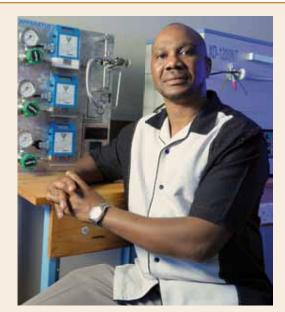
- Coetzee MPA, Wingfield BD, Golani GD, Tjahjono B, Gafur A, Wingfield MJ: 2011. A single dominant Ganoderma species is responsible for root rot of Acacia mangium and Eucalyptus in Sumatra. In **Southern Forests: A Journal of Forest Science (Southern Hemisphere Forestry Journal)**, 73(3/4), pp 175–180.
- Six DL, Poulsen M, Hansen AK, Wingfield MJ, Roux J, Eggleton P, Slippers B, Paine TD: 2011. Anthropogenic effects on interaction outcomes: examples from insectmicrobial symbioses in forest and savanna ecosystems. In Symbiosis, 53, pp 101–121.
- Rutkowska DA, Meyer QC, Maree FF, Vosloo W, Fick WC, Huismans H: 2011. The use of soluble African horse sickness viral protein 7 as an antigen delivery and presentation system. In **Virus Research**, 156, pp 35–48.
- Taylor PJ, Lavrenchenko A, Carleton MD, Verheyen E, Bennett NC, Oosthuizen CJ, Maree S: 2011. Specific limits and emerging diversity patterns in East African populations of laminate-toothed rats, genus Otomys (Muridae: Murinae: Otomyini): a revision of the Otomys typus complex. In **Zootaxa**, 3024, pp 1–66.

#### Chapters in books

Wingfield MJ, Slippers B, Roux J, Wingfield BD: 2011. Fifty years of tree pest and pathogen invasions, increasingly threatening world forests. In Fifty years of Invasion Ecology. The Legacy of Charles Elton, Blackwell Publishing Ltd, pp 89–99.

# Geography, Geoinformatics and Meteorology

- Sivakumar V, Sivakumar V, Prasanth PV, Kishore P, Bencherif H, Keckhut P: 2011. Rayleigh LIDAR and satellite (HALOE, SABER, CHAMP and COSMIC) measurements of stratosphere-mesosphere temperature over a southern sub-tropical site, Reunion (20.8° S; 55.5° E): climatology and comparison study. In **Annales Geophysicae**, 29, pp 649–662.
- Hall KJ, Meiklejohn KI, Bumby AJ: 2011. Marion Island volcanism and glaciation. In Antarctic Science, 23(2), pp 155–163.
- Le Roux PC, Boelhouwers J, Davis JK, Haussmann NS, Jantze EJ, Meiklejohn KI: 2011. Spatial Association of Lemming Burrows with Landforms in the Swedish Subarctic Mountains: Implications for Periglacial Feature Stability. In Arctic, Antarctic and Alpine Research, 43(2), pp 223–228.
- Hall KJ: 2011. Natural building stone composed of lighttransmissive minerals: impacts on thermal gradients, weathering and microbial colonization. A preliminary study, tentative interpretations, and future directions. In Environmental Earth Sciences, 62(2), pp 289–297.
- Hall KJ, Thorn C: 2011. The historical legacy of spatial scales in freeze-thaw weathering: Misrepresentation and resulting misdirection. In **Geomorphology**, 130, pp 83–90.
- Sivakumar V, Sivakumar V, Bencherif H, Bèngue N, Thompson AM: 2011. Tropopause Characteristics and Variability from 11 yr of SHADOZ Observations in the Southern Tropics and Subtropics. In Journal of Applied Meteorology And Climatology, 50, pp 1403–1416.
- Breetzke GD, Eksteen S, Pretorius E: 2011. Paper-Based GIS: A Practical Answer to the Implementation of GIS Education into Resource-Poor Schools in South Africa. In **Journal of Geography**, 110(4), pp 148–157.
- Tshiala MF, Olwoch JM, Engelbrecht FA: 2011. Analysis of Temperature Trends over Limpopo Province, South Africa. In Journal of Geography and Geology, 3(1), pp 13–21.
- Nsubuga FN, Olwoch JM, Rautenbach CJDW: 2011. Climatic Trends at Namulonge in Uganda: 1947–2009. In **Journal of Geography and Geology**, 3(1), pp 119–131.



Prof Ncholu Manyala is a member of the Department of Physics. He is also the Deputy Chair of the SARChI Chair in Carbon Technology and Materials in the Institute of Applied Materials. His research interests are materials science synthesis, characterisation, and optical and physical measurements. He has developed a new line of research within the Chair in Carbon Technology and Materials dealing with graphene. His work has produced two publications in *Nature* and one in *Nature Materials*. He is a founding member of the African Laser Centre and a council member of the Nano-Sciences for African Network.

- Tesfaye M, Sivakumar V, Sivakumar V, Botai OJ, TsiDu GM: 2011. Aerosol climatology over South Africa based on 10 years of Multiangle Imaging Spectroradiometer data. In Journal of Geophysical Research-Atmospheres, 116, pp 1–17.
- Moeletsi ME, Walker S, Landman WA: 2011. ENSO and implications on rainfall characteristics with reference to maize production in the Free State Province of South Africa. In **Physics and Chemistry of the Earth**, 36, pp 715–726.
- Botai MC, Combrinck WL: 2011. Investigating the accuracy of gravity field models using satellite laser ranging data. In **South African Journal of Geology**, 114 (3–4), pp 535–540.

- Combrinck WL: 2011. Testing the general relativity theory through the estimation of PPN parameters? and β using satellite laser ranging data. In **South African Journal of Geology**, 114 (3–4), pp 549–560.
- Botai OJ, Combrinck WL, Sivakumar V: 2011. Inferences of a-stable distribution of the underlying noise components in geodetic data. In **South African Journal of Geology**, 114 (3–4), pp 541–548.
- Nickola M, Botha RC, Esau I, Djolov G, Combrinck WL: 2011. Site characterisation: astronomical seeing from a turbulenceresolving model. In **South African Journal of Geology**, 114(3–4), pp 581–584.
- Eksteen S, Breetzke GD: 2011. Predicting the abundance of African horse sickness vectors in South Africa using GIS and artificial neural networks. In **South African Journal of Science**, 107(7/8), pp 1–8.
- Engelbrecht FA, Landman WA, Engelbrecht CJ, Landman S, Bopape MM, Roux B, McGregor JL, Thatcher M: 2011. Multi-scale climate modelling over Southern Africa using a variable-resolution global model. In **Water SA**, 37(5), pp 647–658.
- De Villiers M, Van Heerden J: 2011. Nashi dust storm over the United Arab Emirates. In **Weather**, 66(3), pp 79–81.

#### Papers published

- Griffith DJ, Horlent M, Ibañez G, Lysko MD, Lubbe M, Mudau AE, Torrusio S, Sivakumar V, Vhengani LM: 2011. Vicarious calibration campaign in Argentina for radiometric calibration of a multispectural imager onboard Sumbandila satellite. In 2011 IEEE International Geoscience & Remote Sensing Symposium, (3), IEEE, pp 993–996.
- Sivakumar V, Sharma A, Bollig C: 2011. Retrieval of atmospheric boundary layer height by CSIRNLC Mobile Lidar, Pretoria (25.5° S; 28.2° E), South Africa. In 2011 IEEE International Geoscience & Remote Sensing Symposium, (7), IEEE, pp 4115–4118.
- Coetzee SM, Cox S, Herring J: 2011. Configuration management of a system of interdependent standards. In **7th International Conference on Standardization and Innovation in Information Technology**, (1), IEEE, pp 47–58.
- Ditsela J, Coetzee SM, Cooper A: 2011. Proposed criteria for the evaluation of an address assignment scheme in Botswana. In **AfricaGEO Developing Geomatics for Africa**, (1), AfricaGeo, pp 1–9.
- Ture K, Tsidu GM, Sivakumar V: 2011. Stratospheric Ozone Transboundary Transport to Upper Troposphere North

Africa. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (c), South Africa Society for Atmospheric Science, pp 33–34.

- Tesfaye M, Tsidu GM, Sivakumar V, Botai OJ: 2011. Effective Single Scattering Albedo Estimation using Regional Climate Model. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (j), South Africa Society for Atmospheric Science, pp 53–54.
- Luhunga P, Djolov G, Sivakumar V: 2011. A study of stable atmospheric boundary layer haracterization over Highveld region of South Africa. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (I), South Africa Society for Atmospheric Science, pp 63–64.
- Sivakumar V, Sharma A, Chiloane K, Naidoo S, Lynch E: 2011. CSIR NLC – mobile lidar observatiion of cirrus cloud. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (m), South Africa Society for Atmospheric Science, pp 71–72.
- Dyson LL: 2011. The variability of sounding derived parameters during very wet and very dry months over Gauteng. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (g), South Africa Society for Atmospheric Science, pp 43–44.
- Stander J, Dyson LL: 2011. Synoptic overview of significant snowfall over South Africa. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (b), South Africa Society for Atmospheric Science, pp 31–32.
- Van Schalkwyk L, Dyson LL: 2011. Fog Forecasting Diaries on the Cape Flats: Climatology Results. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (n), South Africa Society for Atmospheric Science, pp 73–74.
- Mahlangu KA, Botai OJ: 2011. Analysis of Mid-Latitude Tropopause Structure and Variability from Radiosonde and Radio Occultation Data. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (e), South Africa Society for Atmospheric Science, pp 37–38.

Turner K, Dyson LL, Landman S, Engelbrecth C: 2011.

Verification of a short range multi-model ensamble rainfall forecase and the contribution of NCEP rainfall in the skill of the ensamble. In **South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean**, (d), South Africa Society for Atmospheric Science, pp 35–36.

- Lazenby M, Landman WA, De Witt DG: 2011. Seasonal maximum temperature prediction skill over Southern Africa: 1- vs 2-tiered forecasting systems. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (k), South Africa Society for Atmospheric Science, pp 55–56.
- Thaele C, Malherbe J: 2011. Determining the synoptic conditions that favour landfall of tropical cyclones over southern Africa with the aid of self-organizing maps. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (a), South Africa Society for Atmospheric Science, pp 19–20.
- Simpson L, Botai OJ, De Coning E, Sivakumar V: 2011. Comparing lightning polarity and cloud microphysical properties over regions of high ground flash density in South Africa. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (f), South Africa Society for Atmospheric Science, pp 41–42.
- Matooane M, Garland RM, Engelbrecht FA, Wright C, Olwoch JM, Bopape MJ: 2011. Climate Change and Human Health: Oppressive Temperatures in Southern Africa. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (h), South Africa Society for Atmospheric Science, pp 49–50.
- Bopape MJ, Engelbrecht FA: 2011. Introducing a moisture scheme to a nonhydrostatic sigma coordinate model. In South African Society for Atmospheric Sciences 27th Annual Conference: The Interdependent Atmosphere, Land and Ocean, (i), South Africa Society for Atmospheric Science, pp 51–52.

#### Research and technical/policy output

Coetzee SM: Technical Report: 2011. Review summary of ISO 19160, Addressing ISO 19160, Addressing.

# Geology

#### Journal articles

- Götz A, Lenhardt N: 2011. The Anisian carbonate ramp system of Central Europe (Per-Tethys Basin): sequences and reservoir characteristics. In Acta Geologica Polonica, 61(1), pp 59–70.
- Raju PVS, Babu EVSS, Merkle RKW: 2011. New data on the mineralogy of chromite from the Nuggihalli Schist Belt, Western Dharwar Craton, Karnataka, India: Petrogenetic Implications. In Acta Geologica Sinica-English Edition, 85, pp 107–115.
- Singh M, Kijko A, Van den Berg L: 2011. Seismic risk ranking for large dams in South Africa. In **Acta Geophysica**, 59(1), pp 72–90.
- Kijko A, Singh M: 2011. Statistical Tools for Maximum Possible Earthquake Magnitude Estimation. In **Acta Geophysica**, 59(4), pp 674–700.
- Hall KJ, Meiklejohn KI, Bumby AJ: 2011. Marion Island volcanism and glaciation. In **Antarctic Science**, 23(2), pp 155–163.
- Koleine M, Van Rooy JL: 2011. Falling rock hazard index: a case study from the Marun Dam and power plant, southwestern Iran. In **Bulletin of Engineering Geology and the Environment**, 70(2), pp 279–290.
- Theart HFJ, Ghavami-Riabi R, Mouri H, Gräser PPH: 2011. Applying the box plot to the recognition of footwall alteration zones related to VMS deposits in a high-grade metamorphic terrain, South Africa, a lithogeochemical exploration application. In **Chemie Der Erde-Geochemistry**, 71, pp 143–154.
- Gorbushina AA, Kempe A, Rodenacker K, Jütting U, Altermann W, Stark RW, Heckl WM, Krumbein WE: 2011. Quantitative 3-dimensional Image Analysis of Mineral Surface Modifications – chemical, mechanical and biological. In **Geomicrobiology Journal**, 28, pp 172–184.
- Eriksson PG, Rigby M, Bandopadhyay PC, Steenkamp NC: 2011. The Kaapvaal Craton, South Africa: no evidence for a supercontinent affinity prior to 2.0 Ga? In International Geology Review, 53(11–12), pp 1312–1330.
- Grantham G, Manhica ADST, Armstrong RA, Kruger FJ, Loubser M: 2011. New SHRIMP, Rb/Sr and Sm/Nd isotope and whole rock chemical data from central Mozambique and western Dronning Maud Land, Antarctica: Implications for the nature of the eastern margin of the Kalahari Craton

and the amalgamation of Gondwana. In **Journal of African Earth Sciences**, 59, pp 74–100.

- Li N, Frei M, Altermann W: 2011. Textural and knowledgebased lithological classification of remote sensing data in Southwestern Prieska sub-basin, Transvaal Supergroup, South Africa. In **Journal of African Earth Sciences**, 60, pp 237–246.
- Rigby M, Armstrong RA: 2011. SHRIMP dating of titanite from metasyenites in the Central Zone of the Limpopo Belt, South Africa. In **Journal of African Earth Sciences**, 59, pp 149–154.
- Kundu A, Goswami B, Eriksson PG, Chakraborty A: 2011. Palaeoseismicity in relation to basin tectonics as revealed from soft-sediment deformation structures of the Lower Triassic Panchet formation, Raniganj basin (Damodar valley), eastern India. In Journal of Earth System Sciences, 120(1), pp 167–181.
- Tsapanos TM, Koravos GC, Zygouri V, Tsapanos MT, Kortsari AN, Kijko A, Kalogiro EE: 2011. Deterministic seismic hazard analysis for the city of Corinth-central Greece. In **Journal of the Balkan Geophysical Society**, 14(1), pp 1–14.
- Kundu A, Matin A, Mukul M, Eriksson PG: 2011. Sedimentary facies and soft-sediment deformation structures in the late Miocene-Pliocene Middle Siwalik subgroup, Eastern Himalaya, Darjiling District, India. In Journal of the Geological Society of India, 78, pp 321–336.
- Lenhardt N, Götz A: 2011. Volcanic settings and their reservoir potential: An outcrop analog study on the Miocene Tepoztlan Formation, Central Mexico. In Journal of Volcanology and Geothermal Research, 204, pp 66–75.
- Eriksson PG, Lenhardt N, Wright DT, Mazumder R, Bumby AJ: 2011. Late Neoarchaean-Palaeoproterozoic supracrustal basin-fills of the Kaapvaal craton: Relevance of the supercontinent cycle, the "Great Oxidation Event" and "Snowball Earth"? In **Marine and Petroleum Geology**, 28, pp 1385–1401.
- Merkle RKW, Malitch KN, Gräser PPH, Badanina IY: 2011. Native osmium from the Guli Massif, Northern Siberia, Russia. In **Mineralogy and Petrology**, 104(1–2), pp 115– 127.
- Pistorius PC, De Villiers JPR, Gräser PPH, Venter A: 2011. Partial slag solidification within ilmenite smelter. In **Mineral Processing and Extractive Metallurgy Review**, 120(4), pp 211–217.

- Singh M, Kijko A, Durrheim R: 2011. First-order regional seismotectonic model for South Africa. In Natural Hazards, 59, pp 383–400.
- Heidarzadeh M, Kijko A: 2011. A probabilistic tsunami hazard assessment for the Makran subduction zone at the northwestern Indian Ocean. In **Natural Hazards**, 56(Aug), pp 577–593.
- Dippenaar MA: 2011. How we lose ground when earth scientist become territorial: Defining "Soil". In **Natural Resources Research**, 21(1), pp 137–142.
- Rigby M, Basson IJ, Kramers JD, Gräser PPH, Mavimbela PK: 2011. The structural, metamorphic and temporal evolution of the country rocks surrounding Venetia Mine, Limpopo Belt, South Africa: Evidence for a single palaeoproterozoic tectono-metamorphic event with implications for tectonic model. In **Precambrian Research**, 186, pp 51–69.
- Sarkar S, Samanta P, Altermann W: 2011. Setulfs, modern and ancient: Formative mechanism, preservation bias and palaeoenvironmental implications. In Sedimentary Geology, 238, pp 71–78.
- Sarkar S, Bose PK, Eriksson PG: 2011. Neoproterozoic tsunamiite: Upper Bhander Sandstone, Central India. In Sedimentary Geology, 238, pp 181–190.
- Lenhardt N, Hornung J, Hinderer M, Böhnel H, Torres-Alvarado IS, Trauth N: 2011. Build-up and depositional dynamics of an arc front volcaniclastic complex: the Miocene Tepoztlan Formation (Transmexican Volcanic Belt, Central Mexico). In Sedimentology, 58, pp 785–823.
- Potgieter JH, Delport DJ, Verryn SMC, Potgieter-Vermaak SS: 2011.Chloride-binding effect of blast furnace slag in cement pastes containing added chlorides. In **South African Journal of Chemistry Suid-Afrikaanse Tydskrif Vir Chemie**, 63, pp 108–114.
- Van Wyk Y, Witthueser K: 2011. A forced-gradient tracer test on the Hansrivier Dyke: Beaufort West, South Africa. In Water SA, 37(4), pp 437–443.

# Consumer Science

#### Journal articles

Karpova E, Lee JY, Jacobs BM, Andrew A: 2011. Preparing students for careers in the global apparel industry: Experiential learning in a Virtual Multinational Team-Based Collaborative Project. In **Clothing and Textiles Research** Journal, 29(4), pp 298–313.

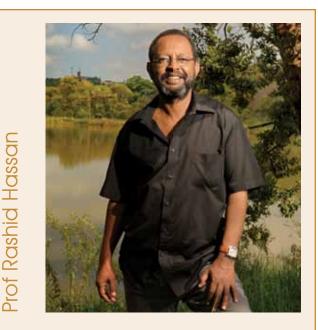
- Khumalo TP, Schonfeldt HC, Vermeulen H: 2011. Consumer acceptability and perceptions of maize meal in Giyani, South Africa. In Development Southern Africa, 28(2), pp 271–281.
- Sonnenberg N, Erasmus AC, Donoghue S: 2011. Significance of environmental sustainability issues in consumers' choice of major household appliances in South Africa. In International Journal of Consumer Studies, 35(2), pp 153–163.
- Erasmus AC, Grabowski A: 2011. Female customers' expectation of the service offering and their perception of the service quality in an emerging clothing market. In **International Journal of Consumer Studies**, 35(1), pp 1–11.
- Njagi RK, Zwane PE: 2011. Variation in measurements across different brands of same style ladies' pants in Swaziland. In International Journal of Fashion Design, Technology and Education, 4(1), pp 51–57.
- Kwinda PC, Van der Spuy HH, Viljoen AT: 2011. Application of a food-based dietary guideline as nutrition strategy in créches to enhance vitamin A consumption. In Journal of Family Ecology and Consumer Sciences/Tydskrif vir Gesinsekologie en Verbruikerswetenskappe, 39, pp 56–67.
- Spies N, Erasmus AC: 2011. Residents' reflection on tenure in security estates in SouthAfrica. In Journal of Family Ecology and Consumer Sciences/Tydskrif vir Gesinsekologie en Verbruikerswetenskappe, 39, pp 19–32.
- Erasmus AC, Donoghue S, Sonnenberg N: 2011. The pertinence of status factors in consumers' consideration of major household appliances. In Journal of Family Ecology and Consumer Sciences/Tydskrif vir Gesinsekologie en Verbruikerswetenskappe, 39, pp 47–55.
- Smith M, De Klerk HM, Fletcher L: 2011. Professional women's evaluation of the quality of career wear. In Journal of Family Ecology and Consumer Sciences/Tydskrif vir Gesinsekologie en Verbruikerswetenskappe, 39, pp 33–46.
- Donoghue S, Erasmus AC, Sonnenberg N: 2011. Consumers in an emerging market's consideration of status factors when judging major household appliances. In **Nurture: Research Journal for Human Civilization**, Online.

# Agricultural Economics, Extension and Rural Development

#### Journal articles

- Banda B, Hassan RM: 2011. Inter-fuel substitution and dynamic adjustment in input demand: Implications for deforestation and carbon emission in Malawi. In African Journal of Agricultural and Resource Economics, 6(1), pp 54–69.
- Aye GC, Mungatana ED: 2011. Technological innovation and efficiency in the Nigerian Maize sector: Parametric stochastic and non-parameteric distance function approaches. In **Agrekon**, 50(4), pp 1–24.
- Labuschagne A, Louw A, Ndanga L: 2011. A consumerorientated study of the South African Beef Supply chain. In Agrekon, 50(1), pp 71–88.
- Jagwe J, Machethe CL: 2011. Effects of transaction costs on choice of selling point: A case of smallholder banana growers in the Great Lakes region of Central Africa. In **Agrekon**, 50(3), pp 109–123.
- Kirsten JF: 2011. Agricultural economics scholarship in South Africa at the crossroads: It is time for a national institute of food, agricultural and resource economics? In **Agrekon**, 50(3), pp 124–144.
- Liebenberg F, Pardey PG, Kahn M: 2011. South African agricultural R&D investments: Sources, structure and trends, 1910–2007. In **Agrekon**, 50(2), pp 1–26.
- Gebrehiwet YF, Meyer FH, Kirsten JF: 2011. Integrating agricultural input expenditure into a partial equilibrium model of the South African agricultural sector. In **Agrekon**, 50(2), pp 83–101.
- Liebenberg F, Pardey PG: 2011. South African agriculture R&D: Policies and public institutions, 1880–2007.In **Agrekon**, 50(1), pp 1–15.
- Bienabe E, Vermeulen H, Bramley C: 2011. The food "quality turn" in South Africa: An initial exploration of its implications for small-scale farmers' market access. In Agrekon, 50(1), pp 36–52.
- Hassan RM, Thurlow J: 2011. Macro-micro feedback links of water management in South Africa: CGE analyses of selected policy regimes. In **Agricultural Economics**, 42, pp 235–247.

Funke T, Klein P: 2011. Analyzing gouvernment decision making



Prof Rashid Hassan is Director of the Centre for Environmental Economics and Policy in Africa (CEEPA). He is a member of several national and international advisory boards and committees, and is the founding chief editor of the African Journal of Agriculture and Resource Economics. Over the last eight years, he has contributed greatly to areas of scientific knowledge and literature in the field of natural and environmental resource economics and policy analysis. His papers have received more than 600 citations.

in the South African biofuels industry: a game theoretic approach. In **BioFuels Journal**, 2(3), pp 345–354.

- Akpalu W, Hassan RM, Ringler C: 2011. Climate variability and maize yield in the Limpopo region of South Africa: Results from GME and MELE methods. In **Climate and Development**, 3(114–122), p. 22.
- Khumalo TP, Schonfeldt HC, Vermeulen H: 2011. Consumer acceptability and perceptions of maize meal in Giyani, South Africa. In **Development Southern Africa**, 28(2), pp 271–281.
- Bienabe E, Vermeulen H: 2011. Improving smallholders' market participation: Insights from business scheme for maize in Limpopo Province, South Africa. In **Development Southern Africa**, 28(4), pp 493–507.

Faria M, Mabaya E, Jordaan DDP: 2011. Markets for marama

beans in southern Africa: Linking sustainable products with sustainable livelihoods. In **Development Southern Africa**, 24(4), pp 477–492.

- Hassan RM, Birungi J: 2011. Social capital and poverty in Uganda. In **Development Southern Africa**, 28(1), pp 19–37.
- Zuwarimwe J, Kirsten JF: 2011. Social networks and rural non-farm enterprise development and implication for poverty reduction among rural households in Zimbabwe. Educational Research, 2(3), pp 1031–1042.
- Deressa T, Hassan RM, Ringler C: 2011. Perception of and adaption to climate change by farmers in the Nile basin of Ethiopia. In **Journal of Agricultural Science**, 149(8), pp 23–31.
- Schönfeldt HC, Pretorius B: 2011. The nutrient content of five traditional South African dark green leafy vegetables A prelimanry study. In Journal of Food Composition and Analysis, 24(Apr), pp 1141–1146.
- Ngwenya H, Hagmann J: 2011. Making innovation systems work in practice: experiences in integrating innovation, social learning and knowledge in innovation platforms. In Knowledge Management for Development, 7(1), pp 109–124.
- Hartmann J, Ngwenya H: 2011. Making innovation systems work in practice: experiences in integrating innovation, social learning and knowlegde in innovation platforms. In Knowledge Management for Development, 7(1), pp 109–124.
- Schonfeldt HC, Strydom PE: 2011. Effects of age and cut on cooking loss, juiciness and flavour of South African Beef. In **Meat Science**, 87, pp 180–190.
- Cumsille P, Flanagan CA, Martinez ML, Ngomane T: 2011. Youth Civic Development: Theorizing a Domain With Evidence From Different Cultural Contexts. In **New Directions for Child and Adolescent Development**, 134(Winter), pp 95–109.
- Sartorius K, Sartorius B, Tollman S, Schatz Enid, Kirsten JF, Collinson Mark: 2011. Rural poverty dynamics and refugee communities in South Africa: A spatial-temporaal model. In Population Space and Place, DOI:10.1002(psp697), Online.
- Bourblanc M: 2011. Des Instruments Émancipés. In Revue Française De Science Politique, 61(6), pp 1073–1096.
- Stevens JB, Ntai PJ: 2011. The role of Extension support to irrigation farmers in Lesotho. In South African Journal of Agricultural Extension/Suid-Afrikaanse Tydskrif vir Landbouvoorligting, 39(2), pp 104–112.

- Terblanché SE: 2011. Mentorship a key success factor in sustainable Land Reform Projects in South Africa. In South African Journal of Agricultural Extension/Suid-Afrikaanse Tydskrif vir Landbouvoorligting, 39(1), pp 55–74.
- Hawkins H, Malgas R, Bienabe E: 2011. Ecotypes of wild rooibos (Aspalathus linearis (Burm. F) Dahlg., Fabaceae) are ecologically distinct. In South African Journal of Botany, 77, pp 360–370.
- Abiodun A, Ajetomobi J, Hassan RM: 2011. Impacts of Climate Change on Rice Agriculture in Nigeria. In **Tropical and Subtropical Agroecosystems**, 14(613–622), p 9.
- Juana JS, Strzepek KM, Kirsten JF: 2011. Market efficiency and welfare analysis of inter-sectoral water allocation in South Africa. In **Water Policy**, 13(2), pp 220–231.

#### Chapters in books

- Bourblanc M: 2011. The European Union and global environmental governance. In **The European Union and Global Governance – A Handbook**, Routledge, pp 131–139.
- Schreiner B, Hassan RM: 2011. Lessons and Conclusions. In Transforming Water Management in South Africa, Designing and Implementing a New Policy Framework, Springer, pp 271–276.
- De Lange M, Van Rooyen J, Hassan RM: 2011. Water Resource Situation, Strategies and Allocation Regimes in South Africa. In Transforming Water Management in South Africa, Designing and Implementing a New Policy Framework, Springer, pp 19–32.

#### Research and technical/policy output

- Alemu T, Bryan E, Hassan RM, Hillesland Mary, Ringler C: Policy Document: 2011. How can African Agriculture Adapt to Climate Change? Insights from Ethiopia and South Africa. For: International Food Policy Research institute.
- Anseeuw W, Freguin-Gresh S, Bienabe E, Banda BM, Derembwe
   A: Policy Document: 2011. Assessment of Agricultural
   Contracts for Market Access in South Africa a Smallholders'
   Perspective. For: National Agricultural Marketing Council.
- Anseeuw W, Banda K, Bienabe E, Derembwe A, Freguin-Gresh
   S: Technical Report: 2011. Assessment of Agricultural
   Contracts for Market Access in South Africa. For: National
   Agricultural Marketing Counsil.
- Anseeuw W, Bienabe E, Freguin-Gresh S: Technical Report: 2011. L'agricultural contractuelle: De nouveaux partnariats pour le dévloppement?

- Chiduza C, Dladla R, Mnkeni PNS, Modi AT, MonDe N, Stevens JB, Van der Stoep I: Technical Report: 2011. Best Management Practices for Smallholder Farming on Two Irrigation Schemes in the Eastern Cape and KwaZulu-Natal Through Participatory Adaptive Research. For: Water Research Commission.
- Stevens JB, Van Heerden PS: Technical Report: 2011. A Conceptual Framework of a possible curriculum for training of Extensionists and Advisors in Irrigation Management. For: Water Research Commission.
- Stevens JB, Stirzaker RJ: Technical Report: 2011. Wetting Front Detector Transfer of Technology. For: Water Research Commission.

# Microbiology and Plant Pathology

- Gumbo JR, Gumbo JR, Cloete TE, Cloete TE: 2011. Light and electron microscope assessment of the lytic activity of Bacillus on Microcystis aeruginosa. In African Journal of Biotechnology, 10(41), pp 8054–8063.
- Tekere M, Lotter A, Olivier J, Jonker N, Venter SN: 2011. Metagenomic analysis of bacterial diversity of Siloam hot water spring, Limpopo, South Africa. In African Journal of Biotechnology, 10(78), pp 18005–18012.
- De Wet J, Bihon Legesse W, Preisig O, Wingfield BD, Wingfield MJ: 2011. Characterization of a novel dsRNA element in the pine endophytic fungus Diplodia scrobiculata. In **Archives of Virology**, 156, pp 1199–1208.
- Stassen L, Huismans H, Theron J: 2011. Membrane permeabilization of the African horse sickness virus VP5 protein is mediated by two N terminal amphipathic x helices. In Archives of Virology, 156, pp 711–715.
- Coutinho TA, Brady CL, Van der Vaart M, Venter SN, Telechea N, Rolfo M, Perez C, Wingfield MJ: 2011. A new shoot and stem disease of Eucalyptus species caused by Erwinia psidii. In **Australasian Plant Pathology**, 40, pp 55–60.
- Chen SF, Barnes I, Chungu D, Roux J, Wingfield MJ, Xie YJ, Zhou XD: 2011. High population diversity and increasing importance of the Eucalyptus stem canker pathogen, Teratosphaeria zuluensis, in South China. In Australasian Plant Pathology, 40, pp 407–415.

- Kamgan Nkuekam G, De Beer ZW, Wingfield MJ, Mohammed C, Carnegie AJ, Pegg GS, Roux J: 2011. Ophiostoma species (Ophiostomatales, Ascomycota), including two new taxa on eucalypts in Australia. In Australian Journal of Botany, 59, pp 283–297.
- De Maayer P, Venter SN, Kamber Tim, Duffy B, Coutinho TA, Smits THM: 2011. Comparative genomics of the type VI secretion systems of Pantoea and Erwinia species reveals the presence of putative effector islands that may be translocated by the VgrG and Hcp proteins. In **BMC Genomics**, 12, p 576.
- Krüger K, De Klerk A, Douglas N, Joubert J, Pietersen G, Stiller M: 2011. Aster yellows phytoplasma in grapevines: identification of vectors in South Africa. In Bulletin Of Insectology, 64, pp S137–S138.
- Osman MS, Sivakumar D, Korsten L: 2011. Effect of biocontrol agent Bacillus amyloliquefaciens and 1-methyl cyclopropene on the control of postharvest dieseases and maintenance of fruit quality. In **Crop Protection**, 30, pp 173–178.
- Wingfield MJ, Roux J, Wingfield BD: 2011. Insect pests and pathogens of Australian acacias grown as non-natives an experiment in biogeography with far-reaching consequences. In **Diversity and Distributions**, 17, pp 968–977.
- Yousaf S, Afzal M, Reichenauer TG, Brady CL, Sessitsch A: 2011. Hydrocarbon degradation, plant colonization and gene expression of alkane degradation genes by endophytic Enterobacter ludwigii strains. In **Environmental Pollution**, 159, pp 2675–2683.
- Piskur B, Pavlic D, Slippers B, Ogris N, Maresi G, Wingfield MJ, Jurc D: 2011. Diversity and pathogenicity of Botryosphaeriaceae on declining Ostrya carpinifolia in Slovenia and Italy following extreme weather conditions. In European Journal of Forest Research, 130, pp 235–249.
- Heath RN, Roux J, Slippers B, Drenth A, Pennycook SR, Wingfield BD, Wingfield MJ: 2011. Occurrence and pathogenicity of Neofusicoccum parvum and N. mangiferae on ornamental Tibouchina species. In Forest Pathology, 41, pp 48–51.
- Begoude BAD, Slippers B, Wingfield MJ, Roux J: 2011. The pathogenic potential of endophytic Botryosphaeriaceous fungi on Terminalia species in Cameroon. In **Forest Pathology**, 41, pp 281–292.
- Iturritxa E, Ganley RJ, Wright J, Heppe E, Steenkamp ET, Gordon TR, Wingfield MJ: 2011. A genetically homogenous population of Fusarium circinatum causes pitch canker of Pinus radiata in the Basque Country, Spain. In **Fungal Biology**, 115, pp 288–295.

- Hunter GC, Crous PW, Carnegie AJ, Burgess TI, Wingfield MJ: 2011. Mycosphaerella and Teratosphaeria diseases of Eucalyptus; easily confused and with serious consequences. In **Fungal Diversity**, 50, pp 145–166.
- Martin SH, Wingfield BD, Wingfield MJ, Steenkamp ET: 2011. Structure and evolution of the Fusarium mating type locus: New insights from the Gubberella fujikuroi complex. In **Fungal Genetics and Biology**, 48, pp 731–740.
- Van der Nest MA, Steenkamp ET, Slippers B, Mongae A, Van Zyl K, Stenlid J, Wingfield MJ, Wingfield BD: 2011. Gene expression associated with vegetative incompatibility in Amylostereum areolatum. In Fungal Genetics and Biology, 48, pp 1034–1043.
- Coetzee B, Schols HA, Wolfaardt F: 2011. Determination of pectin content of eucalyptus wood. In **Holzforschung**, 65, pp 327–331.
- Fourie G, Steenkamp ET, Ploetz RC, Gordon TR, Viljoen A: 2011. Current status of the taxonomic position of Fusarium oxysporum formae specialis cubense within the Fusarium oxysporum complex. In **Infection Genetics And Evolution**, 11(3), pp 533–542.
- Brady CL, Goszczynska T, Venter SN, Cleenwerck I, De Vos P, Gitaitis RD, Coutinho TA: 2011. Pantoea allii sp. nov., isolated from onion plants and seed. In International Journal of Systematic and Evolutionary Microbiology, 61, pp 932–937.
- Cassidy D, Goszczynska T, Burnet J, Hirschauer U, Gebeyehu S, Sileshi GW, Korsten L: 2011. Determination of the status of the etiological agent of American foulbrood, Paenibacillus larvae, in Swaziland. In **Journal of Apicultural Research**, 50(4), pp 284–291.
- Maree FF, Blignaut B, Esterhuysen JJ, De Beer TAP, Theron J, O' Neill HG, Rieder E: 2011. Preticting antigenic sites on the foot and mouth disease viru capsid of the South African Territories types using virus neutralization data. In **Journal of General Virology**, 92, pp 2297–2309.
- Blignaut B, Visser N, Theron J, Rieder E, Maree FF: 2011. Custom engineered chimeric foot-and-mouth disease vaccine elicits protective immune responses in pigs. In Journal of General Virology, 92, pp 849–859.
- Sivakumar D, Van Deventer F, Terry LA, Polanta GA, Korsten L: 2011. Combination of 1-methylcyclopropene treatment and controlled atmosphere storage retains overall fruit quality and bioactive compounds in mango. In **Journal of the Science of Food and Agriculture**, 92(4), pp 1–10.
- Coertse J, Nel LH, Sabeta C, Weyer J, Grobler A, Walters J,

Markotter W: 2011. A case study of rabies diagnosis from formalin-fixed brain material. In Journal of the South African Veterinary Association, 82(4), pp 250–253.

- Martin SH, Wingfield BD, Wingfield MJ, Steenkamp ET: 2011. Causes and Consequences of Variability in Peptide Mating Pheromones of Ascomycete Fungi. In **Molecular Biology and Evolution**, 28(7), pp 1987–2003.
- Chen SF, Gryzenhout M, Roux J, Xie YJ, Wingfield MJ, Zhou XD: 2011. Novel species of Celoporthe from Eucalyptus and Syzygium trees in China and Indonesia. In **Mycologia**, 103(6), pp 1384–1410.
- Mehl JWM, Slippers B, Roux J, Wingfield MJ: 2011. Botryosphaeriaceae associated with Pterocarpus angolensis (kiaat) in South Africa. In **Mycologia**, 103(3), pp 534–553.
- Vermeulen M, Gryzenhout M, Wingfield MJ, Roux J: 2011. New records of the Cryphonectriaceae from Souhtern Africa including Latruncellus aurorae gen. sp. nov. In Mycologia, 103(3), pp 554–569.
- Grobbelaar JW, De Beer ZW, Bloomer P, Wingfield MJ, Zhou XD, Wingfield BD: 2011. Discovery of Ophiostoma tsotsi on Eucalyptus wood chips in China. In **Mycoscience**, 52, pp 111–118.
- Oh E, Wingfield BD, Wingfield MJ, Roux J: 2011. First report of Phytophthora cinnamomiassociated with stem cankers of Quercus cerrisin South Africa. In **New Disease Reports**, 24, p 11.
- Crous PW, Crous P W, Summerell B A, Swart L, Denman S, Taylor J, Bezuidenhout CM, Palm ME, Marincowitz S, Groenewald JZ: 2011. Fungal pathogens of Proteaceae. In Persoonia, 27, pp 20–45.
- Chen SF, Lombard L, Roux J, Xie YJ, Wingfield MJ, Zhou XD: 2011. Novel species of Calonectria associated with Eucalyptus leaf blight in Southeast China. In **Persoonia**, 26, pp 1–12.
- Gumbo J, Cloete TE: 2011. The mechanism of Microcystis aeruginosa death upon exposure to Bacillus mycoides. In **Physics and Chemistry of the Earth**, 36, pp 881–886.
- Belgrove A, Steinberg C, Viljoen A: 2011. Evaluation of Nonpathogenic Fusarium oxysporum and Pseudomonas fluorescens for Panama Disease Control. In Plant Disease, 95, pp 951–959.
- Van Vuuren SP, Cook G, Pietersen G: 2011. Lack of Evidence for Seed Transmission of 'Candidatus Liberibacter africanus' Associated with Greening (Huanglongbing) in Citrus in South Africa. In **Plant Disease**, 95(8), p 1026.
- Pitsi B, Marais C, Wairuri C: 2011. First Report of Alternaria

alternata Causing Leaf Blight of Potatoes in South Afirca. In **Plant Disease**, 95(3), p 363.

- Chen SF, Pavlic D, Roux J, Slippers B, Xie YJ, Wingfield MJ, Zhou XD: 2011. Characterization of Botryosphaeriaceae from plantation-grown Eucalyptus species in South China. In **Plant Pathology**, 60, pp 739–751.
- Kalombo L, Moolman F S, Hall AN, Mamvura CI, Thantsha M S: 2011. Characterisation of the Poly-(Vinylpyrrolidone)-Poly-(Vinylacetate-Co-Crotonic Acid) (PVP:PVAc-CA) Interpolymer Complex Matrix Microparticles Encapsulating a Bifodobacterium Lactis Bb12 Probiotic Strain. In **Probiotics and Antimicrobial Proteins**, 3, pp 97–102.
- Tarigan M, Roux J, Van Wyk M, Tjahjono B, Wingfield MJ: 2011. A new wilt and die-back disease of Acacia mangium associated with Ceratocystis manginecans and C. acaciivora sp. nov.in Indonesia. In South African Journal of Botany, 77, pp 292–304.
- Van Eeden C, Markotter W, Nel LH: 2011. Molecular phylogeny of Duvenhage virus. In **South African Journal of Science**, 107(11/12), pp 1–5.
- Tarigan M, Wingfield MJ, Van Wyk M, Tjahjono B, Roux J: 2011. Pruning quality affects infection of Acacia mangium and A. crassicarpa by Ceratocystis acaciivora and Lasiodiplodia theobromae. In **Southern Forests: A Journal of Forest Science (Southern Hemisphere Forestry Journal)**, 73(3/4), pp 187–191.
- Van der Linde JA, Six DL, Wingfield MJ, Roux J: 2011. Lasiodiplodia species associated with dying Euphorbia ingens in South Africa. In Southern Forests: A Journal of Forest Science (Southern Hemisphere Forestry Journal), 73(3/4), pp 165–173.
- Mitchell R G, Steenkamp ET, Coutinho TA, Wingfield MJ: 2011. The pitch canker fungus, Fusarium circinatum: implications for South African forestry. In **Southern Forests: A Journal of Forest Science (Southern Hemisphere Forestry Journal)**, 73(1), pp 1–13.
- Six DL, Poulsen M, Hansen AK, Wingfield MJ, Roux J, Eggleton P, Slippers B, Paine TD: 2011. Anthropogenic effects on interaction outcomes: examples from insect-microbial symbioses in forest and savanna ecosystems. In Symbiosis, 53, pp 101–121.
- Madoroba E, Steenkamp ET, Theron J, Scheirlinck I, Cloete TE, Huys G: 2011. Diversity and dynamics of bacterial populations during spontaneous sorghum

fermentations used to produce ting a South African food. In **Systematic and Applied Microbiology**, 34, pp 227–234.

- Mekbib SB, Regnier TJC, Korsten L: 2011. Efficacy and mode of action of yeast antagonists for control of Penicillium digitatum in oranges. In **Tropical Plant Pathology**, 36(4), pp 233–240.
- Kuzmin IV, Turmelle AS, Agwanda B, Markotter W, Niezgoda M, Breiman RF, Rupprecht CE: 2011. Commerson's Leaf-Nosed Bat (Hipposideros commersonni) is the Likely Reservoir of Shimoni Bat Virus. In Vector-Borne and Zoonotic Diseases, 11(11), pp 1465–1470.
- Lembo T, Attlan M, Bourhy H, Cleaveland S, Costa P, De Balogh K, Dodet B, Fooks AR, Hiby E, Leanes F, Meslin FX, Miranda ME, Muller T, Nel LH, Rupprecht C E, Tordo N, Tumpey A, Wandeler A, Briggs DJ: 2011. Renewed Global Partnerships and Redesigned Roadmaps for Rabies Prevention and Control. In Veterinary Medicine International, pp 1–18.
- Maree FF, Blignaut B, Aschenbrenner L, Burrage L, Rieder E: 2011. Analysis of SAT1 type foot-and-mouth disease virus capsid proteins: Influence of receptor usage on the properties of virus particles. In **Virus Research**, 155(2), pp 462–472.
- Weyer J, Szmyd-Potapczuk A, Blumberg LH, Leman PA, Markotter W, Swanepoel R, Paweska J, Nel LH: 2011.
  Epidemiology of human rabies in South Africa, 1983–2007.
  In Virus Research, 155, pp 283–290.
- Thantsha M S, Guest J, Mputle I: 2011. Comparison of different methods for release of Bifidobacterium longum Bb46 from poly vinylpyrrolidone poly vinylacetateco crotonic acid interpolymer complex matrix and the effect of grinding on the microparticles. In **World Journal of Microbiology** & Biotechnology, 27, pp 2443–2448.

#### Chapters in books

Wingfield MJ, Slippers B, Roux J, Wingfield BD: 2011. Fifty years of tree pest and pathogen invasions, increasingly threatening world forest. In Fifty years of Invasion Ecology. The Legacy of Charles Elton, Blackwell Publishing Ltd, pp 89–99.

# Laboratory for Microscopy and Microanalysis

#### Journal articles

- Koorts AM, Levay PF, Hall AN, Van der Merwe CF, Becker PJ, Viljoen M: 2011. Expression of the H-subunit and L-subunit of ferritin in bone marrow macrophages and cells of the erythron during cellular immune activation. In **Blood Cells Molecules and Diseases**, 47, pp 50–55.
- Potgieter M, Pretorius E, Van der Merwe CF, Beukes M, Vieira WA, Auer REJ, Auer M, Meyer S: 2011. Histological assessment of SJL/J mice treated with the antioxidants coenzyme Q10 and reveratrol, Micron, In Histological assessment of SJL/J mice treated with the antioxidants coenzyme Q10 and reveratrol, 42, pp 275–282.
- Kalombo L, Moolman F S, Hall AN, Mamvura CI, Thantsha MS: 2011. Characterisation of the Poly-(Vinylpyrrolidone)-Poly-(Vinylacetate-Co-Crotonic Acid) (PVP:PVAc-CA) Interpolymer Complex Matrix Microparticles Encapsulating a Bifodobacterium Lactis Bb12 Probiotic Strain. In Probiotics and Antimicrobial Proteins, 3, pp 97–102.

# Plant Production and Soil Science

#### Journal articles

- Nzanza B, Marais D, Soundy P: 2011. Response of tomato (Solanum lycopersicum L.) to nursery inoculation with Trichoderma harzianum and arbuscular mycorrhizal fungi under field conditions. In Acta Agriculturae Scandinavica Section B-Soil and Plant Science, Jul, pp 1–8.
- Afiukwa CA, Kunert KJ, Vorster BJ, Cullis CA, Ubi BE: 2011. Microsatellite association with seed protein content and flowering time in Nigerian cowpea cultivars. In African Journal of Biotechnology, 10(79), pp 18057–18064.
- Nzanza B, Marais D, Soundy P: 2011. Tomato (Solanum lycopersicum L.) seedling growth and development as influenced by Trichoderma harzianum and arbuscular mycorrhizal fungi. In African Journal of Microbiology Research, 5(4), pp 425–431.

- Swanepoel P, Botha PR, Truter WF, Surridge AKJ: 2011. The effect of soil carbon on symbiotic nitrogen fixation and symbiotic Rhizobium populations in soil with Trifolium repens as host plant. In African Journal of Range and Forage Science, 28(3), pp 121–127.
- Swanepoel P, Botha PR, Truter WF, Surridge AKJ: 2011. Nodulation potential of four Trifolium repens cultivars under field conditions. In **African Journal of Range and Forage Science**, 28(2), pp 51–56.
- Franke AC, Steyn JM, Ranger KS, Haverkort A: 2011. Developing environmental principles, criteria, indicators and norms for potato production through field surveys and modelling. Agricultural Systems. In Agricultural Systems, 104(Jan), pp 297–306.
- Fessehazion MK, Stirzaker RJ, Annandale JG, Everson CS, Everson CS: 2011. Improving nitrogen and irrigation water use efficiency through adaptive management: a case study using annual ryegrass. In Agriculture Ecosystems & Environment, 141, pp 350–358.
- Muhl QE, Du Toit ES, Robbertse PJ: 2011. Adaptability of Moringa oleifera Lam. (Horseradish) tree seedlings to three temperature regimes. In American Journal of Plant Sciences, 2, pp 776–780.
- Muhl QE, Du Toit ES, Robbertse PJ: 2011. Moringa oleifera (Horseradish Tree) leaf adaptation temperature regimes. In American Journal of Plant Sciences, 2, pp 776–780.
- Van der Laan M, Miles N: 2011. Nutrition of the South African sugar crop: current status and long-term trends. In International Sugar Journal, 113(1356), pp 894–899.
- Reinhardt CF, Tesfamichael NA: 2011. Nitrogen in combination with Desmodium intortum effectively suppress Striga asiatica in a sorghum-Desmodium intercropping system.
  In Journal of Agriculture and Rural Development in the Tropics and Subtropics, 112(1), pp 19–28.
- Syampungani S, Geldenhuys C, Chirwa PW: 2011. Miombo Woodland utilization and management, and impact perception among stakeholders in Zambia: a call for policy change in Southern Africa. In Journal of Natural Resources Policy Research, 3(2), pp 163–181.
- Van Zyl WH, Chimphango AFA, Den Haan R, Görgens JF, Chirwa PW: 2011. Next generation cellulosic ethanol technologies and their contribution to a sustainable Africa. In Journal of the Royal Society Interface, 1(2), pp 196–211.

Landry J, Chirwa PW: 2011. Analysis of the potential socio-

economic impact of establishing plantation forestry on rural communities in Sanga district, Niassa province, Mozambique. In **Land Use Policy**, 28, pp 542–551.

- Araya HT, Soundy P, Steyn JM: 2011. Liming improves herbage yield, essential oil yield and nutrient uptake of rose-scented geranium (Pelargonium capitatum x P. Radens) on acidic soils. In New Zealand Journal of Crop and Horticultural Science, 39(3), pp 175–186.
- Van der Laan M, Miles N, Annandale JG, Du Preez CC: 2011. Identification of opportunities for improved nitrogen management in sugarcane cropping systems using the newly developed Canegro-N model. In **Nutrient Cycling in Agroecosystems**, 90, pp 391–404.
- Viswanathan A, Kuriakose B, Bharadwaj S, Thomas G: 2011. Expression of Aprotinin in Anther Causes Male Sterility in Tobacco var Petit havana. In **Plant Molecular Biology**, 29, pp 825-834.
- Haverkort A, Hiller JG: 2011. Cool farm tool Potato: model description and performance of four production systems. In **Potato Research**, 54(Dec), pp 355–369.
- Van der Vyver C, Vorster BJ, Kunert KJ, Cullis CA: 2011. Analysis of radiation-induced genome alterations in Vigna unguiculata (L.) Walp. In Research and Reports in Biology, 2, Dovepress, pp 89–99.
- Ambali A, Chirwa PW, Chamdimba O, Van Zyl WH: 2011. A review of sustainable development of bioenergy in Africa: an outlook for the future bioenergy industry. In **Scientific Research And Essays**, 6(8), pp 1697–1708.
- Muhl QE, Du Toit ES, Robbertse PJ: 2011. Temperature effect on seed germination and seedling growth of Moringa oleifera Lam. In **Seed Science and Technology**, 39, pp 208–213.
- Robbertse PJ, Du Toit ES, Cloete M: 2011. Gender expression and inflorenscence structure of Pappea capensis Eckl. and Zeyh. (Sapindaceae). In **South African Journal of Botany**, 77, pp 425–429.
- Paterson DG, Barnard RO: 2011. Beneficial effect of palm geotextile on inter-rill erosion in South African soils: field trials. In South African Journal of Plant and Soil/ Suid-Afrikaanse Tydskrif vir Plant en Grond, 28(3), pp 190–197.
- Van der Laan M, Stirzaker RJ, Annandale JG, Bristow KL, Du Preez CC: 2011. Interpretation of electrical conductivity measurements from ceramic suction cups, wetting front detectors and ECH20-TE sensors. In **South African Journal of Plant and Soil/ Suid-Afrikaanse Tydskrif vir Plant en Grond**, 28(4), p 244.

- Paterson DG, Buhmann C, Pienaar GME, Barnard RO: 2011. Beneficial effect of palm geotextiles on inter-rill erosion in South African soils and mine dam tailings: a rainfall simulator study. In South African Journal of Plant and Soil/Suid-Afrikaanse Tydskrif vir Plant en Grond, 28(3), pp 181–189.
- Annandale JG, Stirzaker RJ, Singels A, Van der Laan M, Laker MC: 2011. Irrigation scheduling research: South African experiences and future prospects. In **Water SA**, 37(5), pp 751–763.

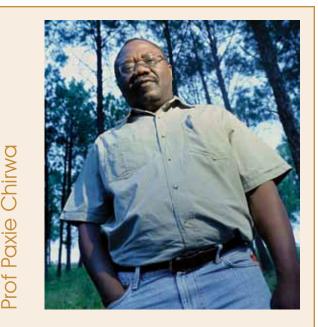
#### Chapters in books

- Chirwa PW, Quinion A: 2011. Impact of soil fertility replenishment agroforestry technology adoption on the livelihoods and food security of smallholder farmers in central and southern Malawi. In **Crop Production Technologies**, Intech, pp 53–72.
- Syampungani S, Chirwa PW: 2011. Miombo Woodland productivity: the potential contribution to carbon sequestration and payment for Environmental Services in East and Southern Africa. In Woodlands: Ecology, Management and Conservation, Nova Science Publishers, Inc, pp 186–201.

# Plant Science

- Trytsman M, Van Wyk AE, Masemola EL: 2011. Systematics, diversity and forage value of indigenous legumes of South Africa, Lesotho and Swaziland. In African Journal of Biotechnology, 10(63), pp 13773–13779.
- Afiukwa CA, Kunert KJ, Vorster BJ, Cullis CA, Ubi BE: 2011. Microsatellite association with seed protein content and flowering time in Nigerian cowpea cultivars. In African Journal of Biotechnology, 10(79), pp 18057–18064.
- Van der Merwe H, Van Rooyen MW: 2011. Life form and species diversity on abandoned croplands, Roggeveld, South Africa.
   In African Journal of Range and Forage Science, 28(2), pp 99–110.
- Dreber N, Oldeland J, Van Rooyen MW: 2011. Species, functional groups and community structure in seed banks of the arid Nama Karoo: Grazing impacts and implications for rangeland restoration. In **Agriculture Ecosystems & Environment**, 141, pp 399–409.

- Smith GF, Roux JP, Raven P, Figueiredo E: 2011. African herbaria support transformation on the continent. In **Annals of the Missouri Botanical Garden**, 98(2), pp 272–276.
- Victor JE, Smith GF: 2011. The conservation imperative and setting plant taxonomic research priorities in South Africa. In **Biodiversity and Conservation**, 20, pp 1501–1505.
- Van der Merwe H, Van Rooyen MW: 2011. Species-area relationships in the Hantam-Tanqua-Roggeveld, Succulent Karoo, South Africa. In Biodiversity and Conservation, 20, pp 1183–1201.
- Hussey SG, Mizrachi E, Spokevicius AV, Bossinger G, Berger DK, Myburg AA: 2011. SND2 a NAC transcription factor gene, regulates genes involved in secondary cell wall development in Arabidopsis fibres and increases fibre cell area in Eucalyptus. In **BMC Plant Biology**, 11, p 173.
- Roux JP: 2011. The genus Cyrtomium (Pteridophyta: Dryopteridaceae) in Africa and Madagascar. In Botanical Journal of the Linnean Society, 167(4), pp 449–465.
- Crouch NR, Smith GF: 2011. Informing and influencing the interface between biodiversity science and biodiversity policy in South Africa. In **Botanical Journal of the Linnean Society**, 166, pp 301–309.
- Figueiredo E, Paiva J, Stevart T, Oliveira F, Smith GF: 2011. Annotated catalogue of the flowering plants of Sao Tomé en Principe. In **Bothalia**, 41(1), pp 41–82.
- Crouch NR, Smith GF: 2011. Agavaceae. Furcraea Foetida: An invading alien in South Africa. In **Bothalia**, 41(1), pp 196–199.
- Jordaan M, Van Wyk AE, Maurin O: 2011. A conspectus of Combretum (Combretaceae) in southern Africa, with taxonomic and nomenclatural notes on species and sections. In **Bothalia**, 41(1), pp 135–160.
- Jordaan M, Van Wyk AE, Maurin O: 2011. Generic status of Quisqualis (Combretaceae), with notes on the taxonomy and distribution of Q. parviflora. In **Bothalia**, 41(1), pp 161–169.
- Vosa CG, Siebert SJ, Van Wyk AE: 2011. Alliaceae: micromorphology and cytology of Prototulbaghia siebertii, with notes on its taxonomic significance. In **Bothalia**, 41(2), pp 311–314.
- Klopper RR, Van Wyk AE: 2011. Pteridophyta-Sinopteridaceae. A new subspecies of Cheilanthes deltoidea from Gauteng and Limpopo, South Africa. In **Bothalia**, 41(1), pp 204–207.
- Crouch NR, Smith GF, Styles D: 2011. Asphodelaceae: Alooideae.Casteria croucheri subsp. Pondoensis, a new cremnophyte from Pondoland, South Africa. In **Bothalia**, 41(1), pp 183–185.



Prof Paxie Chirwa holds the South African Forestry Company (SAFCOL) Forestry Chair and is also the Director of the Postgraduate Forest Programme. He is a forestry scientist specialising in agroforestry tree crop interaction and socio-ecological research. He has co-authored many articles in peerreviewed journals and has supervised many postgraduate students, including those from the SADC region, Gabon, the USA and Canada. He has published full-length conference papers and has been involved in many conference presentations with fellow researchers at both local and international conferences. He is a member of the Southern African Institute of Forestry.

- De Sousa F, Figueiredo E, Smith GF: 2011. Vitaceae. A new and an overlooked record of Cyphostemma in Angola. In **Bothalia**, 41(2), pp 294–295.
- Klopper AW, Klopper RR: 2011. Lycopodiophyta: Selaginellaceae Selaginella Nivea, a new Lycophyte record for South Africa, with notes on its habitat. In **Bothalia**, 41(2), pp 321–323.
- Crouch NR, Smith GF: 2011. Aloe sharoniae N.R. Crouch & Gideon F.Sm. (Asphodelaceae): species rank for a leptoaloe from southern africa. In **Bradleya**, 29, pp 115–120.
- Figueiredo E, Smith GF: 2011. Who's in a name: eponymy of the name Aloe thompsoniae Groenew, with notes on naming species after people. In **Bradleya**, 29, pp 121–124.

- Smith GF, Figueiredo E: 2011. Argave americana L. (subsp. americana) var. expansa Jacobi Gentry (Agavaceae) naturalized in South Africa. In **Bradleya**, 29, pp 67–72.
- Smith GF, Walker C, Figueiredo E: 2011. What's in the name: an update on epithets used in Aloe L. (Asphodelaceae). In **Bradleya**, 29, pp 179–181.
- Smith GF, Figueiredo E: 2011. Provenance of the material on which the name Aloe mendesii Reynolds (Asphodelaceae), a cliff-dwelling species from Angola, is based. In Bradleya, 29, pp 61–66.
- Smith GF, Figueiredo E, Boatwright JS, Crouch NR: 2011. South Africa's ongoing Opuntia Mill. (Cactaceae) problem: the case of Opuntia microdasys (Lehm.) Pfeiff. In Bradleya, 29, pp 73–78.
- De Sousa F, Figueiredo E, Smith GF: 2011. The genus Cyphostemma (Planch.) Alston (Vitaceae) in Angola. In **Bradleya**, 29, pp 79–92.
- Klopper RR, Grace OM, Smith GF, Figueiredo E: 2011. Reinstatement of Aloe graciliflora Groenew. (Asphodelaceae: Alooideae), a maculate aloe from north-east South Africa. In **Bradleya**, 29, pp 125–130.
- Smith GF, Figueiredo E: 2011. Sedum album: a mainstay of European succulents. In **Cactus and Succulent Journal**, 81.
- Smith GF, Figueiredo E: 2011. Aloe palmiformis an endemic krantz aloe from Angola. In **Cactus and Succulent Journal**, 83(1), pp 22–27.
- Smith GF: 2011. Portulacaceae in South Africa, with Reference toAnacampseros decapitata, a Recently Described Miniature Succulent Plant Species. In Cactus and Succulent Journal, 83(4), pp 163–168.
- Smith GF, Figueiredo E: 2011. Umbilicus rupestris: an interesting member of the Crassulaceae in Portugal. In **Cactus and Succulent Journal**, 83(5), pp 232–235.
- Foxcroft LC, Jarosik V, Pysek P, Richardson DM, Rouget M: 2011. Protected-area boundaries as filters of plant invasions. In **Conservation Biology**, 5(2), pp 400–405.
- Richardson DM, Carruthers J, Hui C, Impson FAC, Miller JT, Robertson MP, Robertson MP, Rouget M, Le Roux JJ, Wilson JRU: 2011. Human-mediated introductions of Australian acacias – a global experiment in biogeography. In **Diversity and Distributions**, 17, pp 771–787.
- Van Wilgen BW, Dyer C, Hoffmann J H, Ivey P, le Maitre D, Moore JL, Richardson DM, Rouget M, Wannenburgh A, Wilson JRU: 2011. National-scale strategic approaches

for managing introduced plants: insights from Australian acacias in South Africa. In **Diversity and Distributions**, 17, pp 1060–1075.

- Gaugris JY, Van Rooyen MW: 2011. The effect of herbivores and humans on the Sand Forest species of Maputaland, northern KwaZulu-Natal, South Africa. In **Ecological Research**, 26, pp 365–376.
- Mbaveng AT, Kuete V, Mapunya MB, Beng VP, Nkengfack AE, Meyer JJM, Lall N: 2011. Evaluation of four Cameroonian medicinal plants for anticancer, antigonorrheal and antireverse transcriptase activities. In **Environmental Toxicology and Pharmacology**, 32, pp 162–167.
- Smith GF, Crouch NR, Klopper RR, Condy G: 2011. Aloe neilcrouchii Asphodelaceae: Alooideae. In Flowering Plants of Africa, 62, pp 10–15.
- Vosa CG, Van Wyk AE, Siebert SJ, Condy G: 2011. Prototulbaghia siebertii (Plate 2264) (Alliaceae). In Flowering Plants of Africa, 62, pp 22–28.
- Van Jaarsveld EJ, Van Wyk AE, Loedolff J: 2011. Jensenobotrya lossowiana (Plate 2270) (Mesembryanthemaceae). In **Flowering Plants of Africa**, 62, pp 64–69.
- Coetzer LA, Van Wyk AE, Buitendag E: 2011. Tylosema fassoglense (Plate 2271) (Fabaceae: Caesalpinioideae). In **Flowering Plants of Africa**, 62, pp 70–79.
- Van Jaarsveld EJ, Swanepoel W, Van Wyk AE, Thomas V: 2011. Plumbago hunsbergensis (Plate 2273) (Plumbaginaceae). In **Flowering Plants of Africa**, 62, pp 88–93.
- Naidoo S, Fouche-Weich J, Law PJ, Denby KJ, Marco Y, Berger DK: 2011. A Eucalyptus bacterial wilt isolate from South Africa is pathogenic on Arabidopsis and manipulates host defences. In **Forest Pathology**, 41, pp 101–113.
- O Farrell PJ, De Lange WJ, le Maitre D, Reyers B, Blignaut JN, Milton SJ, Atkinson D, Egoh B, Maherry A, Colvin C, Cowling RM: 2011. The possibilities and pitfalls presented by a pragmatic approach to ecosystem service valuation in an arid biodiversity hotspot. In Journal of Arid Environments, 75, pp 612–623.
- Naude Y, Van Rooyen MW, Rohwer ER: 2011. Evidence for a geochemical origin of the mysterious circles in the Pro-Namib desert. In **Journal of Arid Environments**, 75(Jan), pp 446–456.
- Egoh BN, Reyers B, Rouget M, Richardson DM: 2011. Identifying priority areas for ecosystem service management in South African grasslands. In **Journal of Environmental Management**, 92, pp 1642–1650.

- Le Roux K, Hussein AA, Lall N: 2011. In vitro Chemo-preventative activity of Crotalaria agariflora subspeciesagatiflora Schweinf. In **Journal of Ethnopharmacology**, (138), pp 748–755.
- Deutschlander MS, Lall N, Van De Venter M, Hussein AA: 2011. Hypoglycemic evaluation of a new triterpene and other compounds isolated from Euclea undulata Thunb. Var. myrtina (Ebenaceae) root bark. In Journal of Ethnopharmacology, 133, pp 1091–1095.
- Lemaire B, Robbrecht E, Van Wyk AE, Van Oevelen S, Verstraete B, Prinsen E, Smets E, Dessein S: 2011. Identification, origin and evolution of leaf nodulating symbionts of Sericanthe (Rubiaceae). In Journal of Microbiology, 49(6), pp 935–941.
- Van der Merwe H, Van Rooyen MW: 2011. Guiding conservation efforts in the Hantam-Tanqua-Roggeveld (South Africa) using diversity parameters. In **Koedoe**, 53(1), pp 1–9.
- Lagabrielle E, Rouget M, Le Bourgeois T, Payet K, Payet K, Durieux L, Baret S, Dupont J, Strasberg D: 2011. Integrating conservation, restoration and land-use planning in islands – an illustrative case study in Reunion Island (Western Indian Ocean). In Landscape and Urban Planning, 101, pp 120–130.
- Becker J, Van der Merwe M, Van Brummelen AC, Pillay P, Crampton B, Mmutlane EM, Parkinson C, Van Heerden FR, Crouch NR, smith P, Mancama D, Maharaj V: 2011. In vitro anti-plasmodial activity of Dicoma anomala subsp gerrardii (Asteraceae): identification of its main active constituent, structure-activity relationship studies and gene expression profiling. In **Malaria Journal**, 10(295), Online.
- Nkobole N, Houghton PJ, Hussein AA, Lall N: 2011. Antidiabetic Activity of terminalia sericea Constituents. In **Natural Product Communications**, 6(11), pp 1585–1588.
- Kuete V, Azebaze AGB, Mbaveng AT, Nguemfo EL, Tshikalange TE, Chalard P, Nkengfack AE: 2011. Antioxidant, antitumor and antimicrobial activities of the crude extract and compounds of the root bark of Allanblackia floribunda. In Pharmaceutical Biology, 49(1), pp 57–65.
- Mapunya MB, Hussein AA, Rodriguez B, Lall N: 2011. Tyrosinase activity of Greyia flanaganii (Bolus) constituents. In **Phytomedicine**, 18, pp 1006–1012.
- Prins A, Mukubi JM, Pellny TK, Verrier P, Beyene G, Lopes MS, Emami K, Treumann A, Lelarge-Trouverie C, Noctor G, Kunert KJ, Kerchev P, Foyer CH: 2011. Acclimation to high CO<sub>2</sub> in maize is related to water status and dependent on

leaf rank. In Plant Cell and Environment, 34, pp 314–331.

- Coetzer N, Myburg AA, Berger DK: 2011. Maize microarray annotation database. In **Plant Methods**, 7(31), pp 1–10.
- Davies TJ, Smith GF, Bellstedt DU, Boatwright JS, Bytebier B, Cowling RM, Forest F, Harmon LJ, Muasya M, Schrire BD, Steenkamp Y, Van der Bank M, Savolainen V: 2011. Extinction Risk and Diversification are linked in a Plant Biodiversity Hotspot. In **PLoS Biology**, 9(5), pp 1–9.
- Verstraete B, Van Elst D, Steyn H, Van Wyk AE, Lemaire B, Smets E, Dessein S: 2011. Endophytic Bacteria in toxic South African plants: Identification, Phylogeny and Possible Involvement in Gousiekte. In Plos One, 6(4), pp 1–7.
- Jarosik V, Pysek P, Foxcroft LC, Richardson DM, Rouget M, MacFayden S: 2011. Predicting Incursion of plant Invaders into Kruger National Park, South Africa: the Interplay of General Drivers and Species-Specific Factors. In **Plos One**, 6(12), pp 1–12.
- Van der Vyver C, Vorster BJ, Kunert KJ, Cullis CA: 2011. Analysis of radiation-induced genome alterations in Vigna unguiculata (L.) Walp. In Research and Reports in Biology, (2), Dovepress, pp 89–99.
- O'Kennedy MM, Crampton B, Lorito M, Chakauya E, Breese WA, Burger JT, Botha FC: 2011. Expression of a beta-1,3-glucanase from a biocontrol fungus in transgenic pearl millet. In **South African Journal of Botany**, 77, pp 335–345.
- Swanepoel W: 2011. Commiphora buruxa (Burseraceae), a new species from southern Namibia. In **South African** Journal of Botany, 77(3), pp 608–612.
- Swanepoel W, Kolberg H: 2011. Abrus kaokoensis (Leguminosae-Papilionoideae-Abreae), a new species from Namibia. In South African Journal of Botany, 77(3), pp 613–617.
- Maurin O, Van Wyk AE, Jordaan M, Van der Bank M: 2011. A new species of Combretum section Ciliatipetala (Combretaceae) from southern Africa, with a key to the regional members of the section. In **South African Journal of Botany**, 77(1), pp 105–111.
- Van der Merwe H, Van Rooyen MW: 2011. Vegetation trends following fire in the Roggeveld, Mountain Renosterveld, South Africa. In South African Journal of Botany, 77, pp 127–136.
- Van der Merwe H, Van Rooyen MW: 2011. Life form spectra in the Hantam-Tanqua-Roggeveld, South Africa. In **South African Journal of Botany**, 77, pp 371–380.

Kunert KJ: 2011. How effective and safe is Bt-maize in South

Africa? In **South African Journal of Science**, 107(9/10), Online.

- Erasto P, Mbwambo ZH, Nondo RSO, Lall N, Labuschagne A: 2011. Antimycobacterial, antioxidant activity and toxicity of extracts from the roots of Rauvolfia vomitoria and R.caffra. In **Spatula DD**, 1(2), pp 73–80.
- Smith GF, Figueiredo E: 2011. Conserving Acacia Mill. With a conserved type: What happened in Melbourne? In Taxon, 60(5), pp 1504–1506.
- Smith GF, Figueiredo E: 2011. Responsible species description: a change of attituDe is needed to facilitate and improve access to biological material. In **Taxon**, 60(6), pp 1549–1551.
- Smith GF, Figueiredo E, Moore G: 2011. Who amends the International CoDe of botanical Nomenclature? A response to Applequist & al. (2010). In **Taxon**, 60(1), pp 213–215.
- Moore G, Smith GF, Figueiredo E, Demissew S, Lewis G, Schrire BD, Rico L, Van Wyk AE, Luckow M, Kiesling R, Mario Sousa S: 2011. The Acacia controversy resulting from minority rule at the Vienna Nomenclature Section: Much more than arcane arguments and complex technicalities. In Taxon, 60(3), pp 852–857.
- Smith GF, Figueiredo E, Moore G: 2011. English and Latin as alternative languages for validating the names of organisms covered by the International Code of Nomenclature for algae, fungi, and plants: The final chapter? In **Taxon**, 60(5), pp 1502–1503.

#### Books

Van Wyk AE, Van den Berg E, Palgrave MC, Jordaan M: 2011. Dictionary of names for southern African trees. Briza Publications, p 956.

#### Chapters in books

- Mapunya MB, Lall N: 2011. Melanin and its role in hyperpigmentation – current knowledge and future trends in research. In **Breakthroughs in Melanoma Research**, Intech, pp 217–234.
- Binneman B, Lall N: 2011. Phytopharmacological research for the treatment of cancer. In **Herbal Drugs**, New Central Book Agency, pp 34–61.
- Mativandlela SPN, Lall N: 2011. The antiquity and history of medical plants and tuberculosis. In **Herbal Drugs**, New Central Book Agency (P) Ltd, 8/1 Chintamoni Das Lane, Kolkata 700 009, pp 62–90.

- Boatwright JS, Smith GF, Zimmermann HG, Jaca TP, Motloung RF, Malotsha TD: 2011. Biology and impact of invasive succulent plants. In **Naturalised and invasive succulents** of southern Africa, Abc Taxa, pp 2–12.
- Smith GF: 2011. Invasive succulent plants. Agavaceae Dumort. In Naturalised and invasive succulents of southern Africa, Abc Taxa, pp 34-63.

# Centre for Nutrition

#### Journal articles

- Serrem CA, De Kock HL, Oelofse A, Taylor JRN: 2011. Rat bioassay of the protein nutritional quality of soy-fortified sorghum biscuits for supplementary feeding of school-age children. In Journal of the Science of Food and Agriculture, 91, pp 1814–1821.
- Palic D, Modika KY, Oelofse A, Morey L, Coetzee SE: 2011. The protein dispersibility index in the quality control of heat-treated full-fat soybeans : an inter-laboratory study. In **South African Journal of Animal Science**, 41(4), pp 413–419.

# Postgraduate School of Agriculture and Rural Development

- Anseeuw W, Ducastel A: 2011. La libéralisation agricole post-apartheid en Afrique du Sud. Nouveaux modéles de production et d'investissement. In Afrique Contemporaine, 1(237), pp 57–70.
- Badenhorst PJ, Olivier NJJ: 2011. Host communities and competing applications for prospecting rights in terms of the Mineral and Petroleum Resources Development Act 28 of 2002. In **De Jure**, 44(1), pp 126–148.
- Anseeuw W, Freguin-Gresh S: 2011. Contract farming and private norms in South Africa: Trends and issues for smallholders. In **Farm Policy Journal**, 8(3), p 13.
- Olivier NJJ, Williams C: 2011. Wary Holdings (Pty) Ltd v Stalwo (Pty) Ltd & another (Trustees of the Hoogekraal Highlands Trust & SAFAMCO Enterprises (Pty) Ltd (amicus curiae); Minister of Agriculture & Land Affairs (intervening) [2008]

JOL 22099 (CC). In Journal for Juridical Science/Tydskrif Vir Regswetenskap, 35(2), pp 99–128.

- Chilonda P, Govereh J, Jayne TS, Malawo E, Rugube L: 2011. Methodological guidelines for tracking public agricultural expenditure wirh illustrations from Zambia. In Journal of Development and Agricultural Economics, 3(5), pp 210–221.
- Olivier NJJ, Williams C: 2011. State liability for Final Court Orders Sounding in Money: at Long Last Alignment with the Constitution. In **Obiter**, 32(3), pp 489–520.
- Du Plessis W, Pienaar J, Olivier NJJ: 2011. Land matters and rural development: 2010. In **Southern African Public Law** (SAPL), 26(1), pp 292–318.
- Du Plessis W, Pienaar J, Olivier NJJ: 2011. Onrus en Geweld: 2010. In Southern African Public Law, 26(1), pp 279–291.
- Pienaar J, Olivier NJJ, Du Plessis W: 2011. Land Matters and rural development: 2011. In **Southern African Public Law**, 26(2), pp 522–563.
- Du Plessis W, Pienaar J, Olivier NJJ: 2011. Onrus en Geweld: 2011. In Southern African Public Law, 26(2), pp 508–520.
- Ducastel A, Anseeuw W: 2011. Le <<pre>croduction grabbing>>
  et la transnationalisation De l'agriculture (sud-) africaine.
  In Transcontinentales, 10(11), pp 2–14.

#### Chapters in books

Rugube L, Matshe Inno: 2011. Economy and Livelihoods in Africa. In Africa in Focus: Governance in the 21st Century, HSRC Press, pp 179–187.

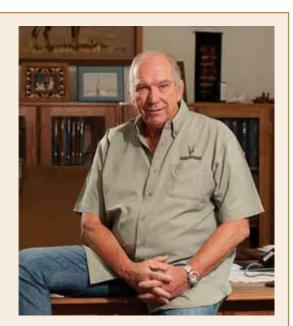
#### Research and technical/policy output

- Anseeuw W, Freguin-Gresh S, Bienabe E, Banda BM, Derembwe A: Policy Document: 2011. Assessment of Agricultural Contracts for Market Access in South Africa – a Smallholders' Perspective. For: National Agricultural Marketing Council.
- Anseeuw W, Banda K, Bienabe E, Derembwe A, Freguin-Gresh S: Technical Report: 2011. Assessment of Agricultural Contracts for Market Access in South Africa. For: National Agricultural Marketing Counsil.
- Alden C, Anseeuw W: Policy Document: 2011. From Freedom Charter to cautious Land reform – The politics of Land in South Africa. For: **University of Pretoria**.
- Anseeuw W, Bienabe E, Freguin-Gresh S: Technical Report: 2011. L'agricultural contractuelle: De nouveaux partnariats pour le dévloppement?

# Statistics

- Mogotsi IC, Boon JA, Fletcher L: 2011. Modelling the relationships between knowledge sharing, organizational citizenship, job satisfaction and organizational commitment among school teachers in Botswana. In African Journal of Library Archives And Information Science, 21(1), pp 41–58.
- Grant CC, Van Rensburg DCJ, Strydom N, Viljoen M: 2011. Importance of tachogram length and period of recording during noninvasive investigation of the autonomic nervous system. In **Annals Of Noninvasive Electrocardiology**, 16(2), pp 131–139.
- Bekker A, Roux JJJ, Ehlers R, Arashi M: 2011. Bimatrix variate beta type IV distribution: relation to Wilks's statistic and bimatrix variate Kummer-beta type IV distribution. In Communications in Statistics-Theory and Methods, 40(23), pp 4165–4178.
- Graham MA, Chakraborti S, Human SW: 2011. A nonparametric exponentially weighted moving average signed-rank chart for monitoring location. In **Computational Statistics & Data Analysis**, 55(8), pp 2490–2503.
- Human SW, Kritzinger P, Chakraborti S: 2011. Robustness of the EWMA control chart for individual observations. In Journal of Applied Statistics, 38(10), pp 2071–2087.
- Maree JG, Mutshaeni HN, Engelbrecht JC, Sommerville JEM: 2011. An analysis of factors influencing Grade 12 results. In Journal of Educational Studies, 10(1), pp 122–143.
- Smith M, De Klerk HM, Fletcher L: 2011. Professional women's evaluation of the quality of career wear. In Journal of Family Ecology and Consumer Sciences/Tydskrif vir Gesinsekologie en Verbruikerswetenskappe, 39, pp 33–46.
- Ijabadeniyi T, Debusho LK, Van der Linde MJ, Buys EM: 2011. Irrigation water as a potential preharvest source of bacterial contamination of vegetables. In Journal of Food Safety, 31, pp 452–461.
- Bekker A, Roux JJJ, Arashi M: 2011. Exact nonnull distribution of Wilks' statistic: the ratio and product of independent components. In Journal of Multivariate Analysis, 102, pp 619–628.
- Phiri LL, Debusho LK, Mashegoane S: 2011. Psychosocial Correlates of Smoking Behaviour Among Students at a

# Prof Wouter van Hoven



Prof Wouter van Hoven specialises in wildlife management and holds a Marsh Professorship at the University of Vermont, USA. He is a founder of the Noah's Ark Project in Africa, an organisation that repopulates large animals in areas devastated by drought, war or poachers, and EcoLife Expeditions, an experiential hands-on studyabroad provider. He has authored more than 100 scientific publications, reports and chapters, and has guest-lectured many courses internationally. He has presented papers at over 40 international meetings, appeared on televised documentaries and has participated in more than 200 community outreach and consultancy projects.

Historically Black University. In Journal of Psychology in Africa, 21(3), pp 447–450.

- Debusho LK, Haines LM: 2011. D- and V-optimal population designs for the quadratic regression model with a random intercept term. In **Journal of Statistical Planning and inference**, 141, pp 889–898.
- Christie J, Schwan EV, Bodenstein LE, Sommerville JEM, Van der Merwe LL: 2011. The sensitivity of direct faecal examination, direct faecal flotation, modified centrifugal faecal flotation and centrifugal sedimentation/flotation in the diagnosis of canine spirocercosis. In Journal of the South African Veterinary Association, 82(2), pp 71–75.

- Bekker A, Roux JJJ, Arashi M: 2011. Wishart ratios with dependent structure: New members of the bimatrix beta type IV. In Linear Algebra and its Applications, 435, pp 3243–3260.
- Sibanda MM, Focke WW, Labuschagne FJW, Moyo L, Nhlapo NS, Maity A, Muiambo HF, Masinga Junior PH, Crowther NAS, Coetzee M, Brindley GAW: 2011. Degradation of insecticides used for indoor spraying in malaria control and possible solutions. In **Malaria Journal**, 10(307), pp 1–12.
- Graham MA, Chakraborti S, Human SW: 2011. A nonparametric EWMA sign chart for location based on individual measurements. In **Quality Engineering**, 23(3), pp 227–241.
- Van Heerden J, Lockhat ZI, Bam DA, Fletcher L, Sommerville JEM: 2011. PACS: Do clinical users benefit from it as a training adjunct? In SA Journal of Radiology, Jun/Jun, pp 38–41.
- Grobbelaar CJ, Du Plessis T, Steffens FE, van der Linde MJ: 2011. Analysis of wear-related failures in long-term follow-up of crosslinkde polyethylene hip sockets. In **SA Orthopaedic Journal**, 10(1), pp 58–65.
- Grobbelaar CJ, Du Plessis T, Steffens FE, van der Linde MJ: 2011. Long-term evaluation of polyethylene wear in total hip replacement: a statistical analysis of the association between the degree of wear versus pain, interface change, osteolysis and implant failure. In **SA Orthopaedic Journal**, 10(1), pp 49–55.
- Fourie J, Smit CF: 2011. Cervical microleakage in Class II opensandwich restorations:an in vitro study. In **South African Dental Journal**, 66(7), pp 320–324.
- Jacobs R, Bekker A, Human SW: 2011. 'n Nuwe ontwikkeling tot die bivariate betaveld. In **South African Journal for Science and Technology**, 30(1), p 103/2.
- Maree JG, Fletcher L, Sommerville JEM: 2011. Predicting success among prospective disadvantaged students in natural scientific fields. In **South African Journal of Higher Education**, 25(6), pp 1125–1139.
- Mogotsi IC, Boon JA, Fletcher L: 2011. Knowledge sharing behaviour and demographic variables amongst secondary school teachers in and around Gaborone, Botswana. In **South African Journal of Information Management**, 13(1), pp 1–6.
- Yadavalli VSS, Labeodan MMO, Udayabaskaran S: 2011. A stochastic point process model of incubation period of a HIV infected individual. In **South African Statistical Journal**, 45(2), pp 293–314.

- Bodvin LJS, Bekker A, Roux JJJ: 2011. Shannon Entropy as a Measure of Certainty in a Bayesian Calibration Framework with Bivariate Beta Priors. In **South African Statistical Journal**, 45(2), pp 171–204.
- Matthews GB, Crowther NAS: 2011. A maximum likelihood estimation procedure for binary data from crossover studies. In **South African Statistical Journal**, 45, pp 231–248.
- Dhliwayo S, Van Vuuren JJ, Fletcher L: 2011. The practice of strategic planning and corporate entrepreneurship in South African public companies. In **Southern Journal of Entrepreneurship**, 4(2), pp 46–67.
- Adamski K, Human SW, Bekker A: 2011. A generalized multivariate beta distribution: control charting when the measurements are from an exponential distribution. In **Statistical Papers**, Oct, pp 1–20.

#### Papers published

- Pretorius S, Steyn HDV, Jordaan JC: 2011. Project management success versus project management maturity in engineering and the built environment: an African perspective. In 1st International Conference on Industrial Engineering, Systems Engineering and Engineering Management for Sustainable Global Development – ISEM 2011 Conference Proceedings, Southern African Institute for Industrial Engineering, pp 52-1–52-14.
- Fabris-Rotelli I: 2011. The Discrete Pulse Transform for Images with Entropy-Based Feature Detection. In **Proceedings of the 22nd Annual Symposium of the Pattern Recognition Association of South Africa**, IAPR, pp 43–48.

#### Research and technical/policy output

- Louw EM, Crowther NAS: Technical Report: 2011. Romania two year odds model. For: **ING Europe**.
- Louw EM, Crowther NAS: Technical Report: 2011. Czech republic two year odds model. For: **ING Europe**.
- Louw EM, Crowther NAS: Technical Report: 2011. Slovakia: two year odds model. For: **ING Europe**.

# Animal and Wildlife Sciences

#### Journal articles

- Shenkute B, Hassen A, Ebro A, Asafa T, Amen N: 2011. Identification of potential untapped herbaceous flora in the mid rift valley of Ethiopia and their nutritive value. In African Journal of Agricultural Research, 6(17), pp 4153–4158.
- Pambu-Gollah R, Webb EC, Mohale L: 2011. Differences in Milk Yield and Composition of Different Goat Breeds Raised in the Same Environment in South Africa. In Agricultural Journal, 6(5), pp 237.
- Golzar Adabi SH, Cooper RG, Kamali MA, Hajibabaei A: 2011. The influence of inclusions of vitamin E and corn oil on semen traits of Japanese Quail (Coturnix Japonica). In Animal Reproduction Science, 123, pp 119–125.
- Hayward MW, Hayward MW: 2011. Using the IUCN Red List to determine effective conservation strategies. In **Biodiversity and Conservation**, 20, pp 2563–2573.
- Gaugris JY, Van Rooyen MW: 2011. The effect of herbivores and humans on the Sand Forest species of Maputaland, northern KwaZulu-Natal, South Africa. In **Ecological Research**, 26, pp 365–376.
- Hayward MW, Kowalczyk R, Krasinski ZA, Dackiewicz J, Krasinska M, Cornulier T: 2011. Restoration and intensive management have no effect on evolutionary strategies. In Endangered Species Research, 15(8), pp 53–61.
- Nasr J, Kheiri F, Solati A, Hajibabaei A: 2011. The efficiency of energy and protein of broiler chickens fed on diets with different lysine concentrations. In **Journal of Animal and Veterinary Advances**, 10(18), pp 2394–2397.
- Golzar Adabi SH, Ahbab M, Fani AR, Hajibabaei A, Ceylan N, Cooper RG: 2011. Egg yolk fatty acid profile of avian species influence on human nutrition. In Journal of Animal Physiology and Animal Nutrition, pp 1–12.
- Schönfeldt HC, Hall NG: 2011. Determining iron bioavailability with a constant heme iron value. In **Journal of Food Composition and Analysis**, 24, pp 738–740.
- Sainsbury J, Schönfeldt HC, Van Heerden SM: 2011. The nutritient composition of South African mutton. In Journal of Food Composition and Analysis, 24, pp 720–726.

Gibson N, Schönfeldt HC, Pretorius B: 2011. Development of a

rapid assessment method for the prediction of the glycemic index. In **Journal of Food Composition and Analysis**, 24, pp 750–754.

- Schönfeldt HC, Strydom PE: 2011. Effect of age and cut on tenderness of South African beef. In **Meat Science**, 87, pp 206–218.
- Strydom PE, Hope-Jones M, Frylinck L, Webb EC: 2011. The effects of a beta-agonist treatment, Vitamin D3 supplementation and electrical stimulation on meat quality of feedlot steers. In Meat Science, 89, pp 462–468.
- Abraham S, Somers MJ, Chown SL: 2011. Seasonal, altitudinal and host plant-related variation in the abundance of aphids (Insecta, Hemiptera) on sub-Antarctic Marion Island. In **Polar Biology**, pp 513–520.
- Visser C, Van Marle-Köster E, Bovenhuis H, Crooijmans RPMA: 2011. QTL for mohair traits in South African Angora goats. In **Small Ruminant Research**, 100(1), pp 8–14.
- Visser C, Van Marle-Köster E, Friedrich H: 2011. Parentage verification of South African Angora goats, using microsatellite markers. In South African Journal of Animal Science, 41(3), pp 250–255.
- Henning PH, Erasmus LJ, Meissner HH, Horn CH: 2011. The effect of dosing Megasphaera elsdenii NCIMB 41125 (Me) on lactation performance of multiparous Holstein cows. In South African Journal of Animal Science, 41(2), pp 150–160.
- Simela L, Webb EC, Bosman MJC: 2011. Live animal and carcass characteristics of South African indigenous goats. In **South African Journal of Animal Science**, 41(1), pp 1–15.
- Schönfeldt HC, Van Heerden SM, Sainsbury J, Gibson N: 2011. Nutrient content of uncooked and cooked meat from South African classes A2 lamb and C2 mutton. In South African Journal of Animal Science, 41(2), pp 141–145.
- Van Heerden I, Schönfeldt HC: 2011. The lack of food intake data and the consequences thereof. In **South African Journal of Clinical Nutrition**, 24(1), pp 10–18.
- Houser AM, Gusset M, Bragg CJ, Boast L, Somers MJ: 2011. Pre-Release Hunting Training and Post-Release Monitoring are Key Components in the Rehabilitation of Orphaned Large Felids. In **South African Journal of Wildlife Research**, 41(1), pp 11–20.
- Booth KK, Webb EC: 2011. Effect of Blockage of the Ducts of the Vomeronasal Organ on LH Plasma Levels during the "Whitten Effect" in Does. In Veterinary Medicine International, pp 1–8.

Botha H, Van Hoven W, Guillette LJ: 2011. The decline of the Nile crocodile population in Loskop Dam, Olifants River, South Africa. In **Water SA**, 37(1), pp 103–108.

#### Research and technical/policy output

De Jager C, Swemmer A, Aneck-Hahn NH, Van Zijl MC, Van Wyk S, Bornman MS, Barnhoorn IEJ, Jonker ML, Van Vuren JHJ, Burger AEC: Technical Report: 2011. Endocrine Disrupting Chemical activty and health effects of identified veterinary growth stimulants in surface and groundwater. For: **WRC**, Water Research Commission.

# Insurance and Actuarial Science

#### Journal articles

Du Plessis HLM: 2011. The divergent approaches of English and South African courts, when considering actuarial expert testimony in the matter of an award for damages for future loss of earnings after a damage-causing event. In Annals of Actuarial Science.

# Food Science

- Salawu SO, Ogundare AO, Ola-Salawu BB, Akindahunsi AA: 2011. Antimicrobial activities of phenolic containing extracts of some tropical vegetables. In African Journal of Pharmacy and Pharmacology, 5(4), pp 486–492.
- Tabit F, Buys EM: 2011. Incidence and survival of Bacillus sporothermodurans during processing of UHT milk. In **British Food Journal**, 113(Apr), pp 505–518.
- AwadElkareem AM, Taylor JRN: 2011. Protein quality and physical characteristics ofKisra (fermented sorghum pancake-like flatbread) made from tannin and non-tannin sorghum cultivars. In **Cereal Chemistry**, 88(4), pp 344–348.
- Chiremba C, Rooney LW, Taylor JRN: 2011. Relationships between simple grain quality parameters for the estimation of sorghum and maize hardness in commercial hybrid cultivars. In **Cereal Chemistry**, 8(6), pp 570–575.
- Anyango JO, De Kock HL, Taylor JRN: 2011. Impact of cowpea addition on the protein digestibility corrected amino acid

score and other protein quallity parameters of traditional African foods made from non-tannin and tannin sorghum. In **Food Chemistry**, 124, pp 775–780.

- Kinnear M, De Kock HL: 2011. Would repeated consumption of sports drinks with different acidulants lead to hedonic adjustment? In Food Quality and Preference, 22, pp 340–345.
- Serrum CA, De Kock HL, Taylor JRN: 2011. Nutritional quality, sensory quality and consumer acceptability of sorghum and bread wheat biscuits fortified with defatted soy flour. In International Journal of Food Science and Technology, 46, pp 74–83.
- Anyango JO, Taylor J, Taylor JRN: 2011. Improvement in water stability and other related functional properties of thin cast kafirin protein films. In **Journal of Agricultural and Food Chemistry**, 59, pp 1267–1282.
- da Silva LS, da Silva LS, Taylor J, Taylor JRN: 2011. Transgenic sorghum with altered kafirin synthesis: Kafirin solubility, polymerization and protein digestion. In Journal of Agricultural and Food Chemistry, 59, pp 9265–9270.
- Taylor J, Taylor JRN: 2011. Protein biofortified sorghum: Effect of processing into traditional African foods on their protein quality. In **Journal of Agricultural and Food Chemistry**, 59, pp 2386–2392.
- Adebowale Abdu, Emmambux MN, Beukes M, Taylor JRN: 2011. Fractionation and characterization of teff proteins. In **Journal of Cereal Science**, 54, pp 380–386.
- Da Silva LS, Jung R, Zhao Z-Y, Glassman K, Taylor J, Taylor JRN: 2011. Effect of suppressing the synthesis of different kafirin sub-classes on grain endosperm texture, protein body structure and protein nutritional quality in improved sorghum lines. In Journal of Cereal Science, 54, pp 160–167.
- D'Silva TV, Taylor JRN, Emmambux MN: 2011. Enhancement of the pasting properties of teff and maize starches through wet-heat processing with added stearic acid. In **Journal of Cereal Science**, 53, pp 192–197.
- Sainsbury J, Schönfeldt HC, Van Heerden SM: 2011. The nutritient composition of South African mutton. In Journal of Food Composition and Analysis, 24, pp 720–726.
- Ijabadeniyi OA, Minnaar A, Buys EM: 2011. Effect of attachment time followed by chlorine washing on the survival of inoculated listeria monocytogenes on tomatoes and spinach. In Journal of Food Quality, 34, pp 133–141.

Ijabadeniyi T, Debusho LK, Van der Linde MJ, Buys EM: 2011.

Irrigation water as a potential preharvest source of bacterial contamination of vegetables. In **Journal of Food Safety**, 31, pp 452–461.

- Mugode L, Portillo OR, Hays DB, Rooney LW, Taylor JRN: 2011. Influence of high protein digestibility sorghums on free amino nitrogen (FAN) production during malting and mashing. In Journal of the Institute of Brewing, 117(3), pp 422–426.
- Serrem CA, De Kock HL, Oelofse A, Taylor JRN: 2011. Rat bioassay of the protein nutritional quality of soy-fortified sorghum biscuits for supplementary feeding of school-age children. In Journal of the Science of Food and Agriculture, 91, pp 1814–1821.
- Buchner S, Kinnear M, Crouch IJ, Taylor J, Minnaar A: 2011. Effect of kafirin protein coating on sensory quality and shelf-life of "Pacham's Triumph" pears during ripening. In Journal of the Science of Food and Agriculture, 91, pp 2814–2820.
- Anyango JO, De Kock HL, Taylor JRN: 2011. Evaluation of the functional quality of cowpea-fortified traditional African sorghum foods using instrumental and descriptive sensory analysis. In LWT-Food Science and Technology, 44, pp 2126–2133.
- Amonsou E, Taylor JRN, Minnaar A: 2011. Microstructure of protein bodies in marama bean species. In LWT-Food Science and Technology, 44, pp 42–47.
- Schönfeldt HC, Van Heerden SM, Sainsbury J, Gibson N: 2011. Nutrient content of uncooked and cooked meat from South African classes A2 lamb and C2 mutton. In **South African Journal of Animal Science**, 41(2), pp 141–145.
- Chingwaru W, DuoDu KG, Van Zyl Y, Schoeman CJ, Majinda RT, Yeboah SO, Jackson J, Kapewangolo PT, Kandawa-Schultz M, Minnaar A, Cencic A: 2011. Antibacterial and anticandidal activity of Tylosema esculentum (marama) extracts. In **South African Journal of Science**, 107(3/4), pp 1–11.

# Mathematics and Applied Mathematics

#### Journal articles

Van der Walt JH: 2011. Solutions of smooth nonlinear partial differential equations. In **Abstract And Applied Analysis**, (ID 658936), pp 37.



Prof Debra Meyer is a member of the Department of Biochemistry. Her research focus is HIV/Aids, particularly the development of novel less toxic drugs, synthetic antigens as vaccine leads and metabonomics as a means of monitoring disease progression. Her research group published the first paper on biofluid NMR, distinguishing HIV/Aids samples from uninfected material, and along with collaborators, developed a gold-based drug that can inhibit HIV-1 reverse transcriptase and protease. She has received numerous national and international research awards and her publications include chapters in books, more than 25 articles in ISI-rated journals and a number of technical reports.

- Van der Walt JH: 2011. Singularities in space-time foam algebras. In **Applicable Analysis**, 90(11), pp 1763–1774.
- Sango M, Woukeng Feudjio JL: 2011. Stochastic two-scale convergence of an integral functional. in Asymptotic Analysis, 73, pp 97–123.
- Sango M, Woukeng Feudjio JL: 2011. Stochastic  $\Sigma$ -convergence and applications. In **Dynamics Of Partial Differential Equations**, 8(4), pp 261–310.
- Chapwanya M, Clark CD, Fowler AC: 2011. Numerical computations of a theoretical model of a ribbed moraine

formation. In **Earth Surface Processes and Landforms**, 36, pp 1105–1112.

- Imran M, Malik MT, Garba SM: 2011. Deterministic model for the role of antivirals in controlling the spread of the H1N1 influenza pandemic. In Electronic Journal of Differential Equations, 155, pp 1–21.
- Driver KA, Jooste AS, Jordaan KH: 2011. Stieltjes interlacing of zeros of Jacobi polynomials from different sequences. In Electronic Transactions on Numerical Analysis, 38, pp 317–326.
- Driver KA, Jordaan KH: 2011. Stieltjes interlacing of zeros of Laguerre polynomials from different sequences. In Indagationes Mathematicae-New Series, 21, pp 204–211.
- Van der Walt JH: 2011. The order convergence structure. In Indagationes Mathematicae-New Series, 21, pp 138–155.
- Harding AF, Engelbrecht JC, Verwey A: 2011. Implementing Supplemental Instruction (SI) for a large group in mathematics. In International Journal of Mathematical Education in Science and Technology, 42(7), pp 847–856.
- Dominici DE, Driver KA, Jordaan KH: 2011. Polynomial solutions of differential-difference equations. In **Journal of Approximation Theory**, 163, pp 41–48.
- Pretorius LM, Swanepoel KJ: 2011. Embedding a Latin square with transversal into a projective space. In **Journal of Combinatorial Theory Series A**, 118, pp 1674–1683.
- Deugoue G, Djoko Kamdem J: 2011. On the time discretization for the globally modified three dimensional Navier-Stokes equations. In **Journal of Computational and Applied Mathematics**, 235, pp 2015–2029.
- Anguelov R, Lubuma JM-S, Shillor M: 2011. Topological dynamic consistency of non-standard finite difference schemes for dynamical systems. In Journal of Difference Equations and Applications, 17(12), pp 1769–1791.
- Maree JG, Mutshaeni HN, Engelbrecht JC, Sommerville JEM: 2011. An analysis of factors influencing Grade 12 results. In Journal of Educational Studies, 10(1), pp 122–143.
- Deugoue G, Sango M: 2011. Weak solutions to stochastic 3D Navier-Stokes-  $\alpha$  model of turbulence:  $\alpha$ -Asymptotic behavior. In **Journal of Mathematical Analysis and Applications**, 384, pp 49–62.
- Goranko V, Kellerman R: 2011. Classes and theories of trees associated with a class of linear orders. In **Logic Journal of the IGPL**, 19(1), pp 217–232.

Garba SM, Gumel A, Lubuma JM-S: 2011. Dynamically-

consistent non-standard finite difference method for an epidemic model. In **Mathematical and Computer Modelling**, 53, pp 131–150.

- Djoko Kamdem J: 2011. On the time discrete approximation of Brinkman-Forchheimer equations. In **Mathematical Methods in the Applied Sciences**, 34, pp 1487–1498.
- Sauer N: 2011. The dynamic piston problem in classical nonlinear acoustics. In Mathematical Models & Methods in Applied Sciences, 21(1), pp 149–167.
- Ntumba PP, Anyaegbunam AC: 2011. A-transvections and Witt's theorem in symplectic A-modules. In **Mediterranean** Journal of Mathematics, 8, pp 509–524.
- Sango M, Svanstedt N, Woukeng Feudjio JL: 2011. Generalized Besicovitch spaces and applications to deterministic homogenization. In Nonlinear Analysis-Theory Methods & Applications, 74, pp 351–379.
- Beardon AF, Driver KA, Jordaan KH: 2011. Zeros of polynomials embedded in a orthogonal sequence. In **Numerical Algorithms**, 57, pp 399–403.
- Khrennikov A, Van der Walt JH: 2011. On topological extensions of Archimedean and non-Archimedean rings. In p-Adic Numbers, Ultrametric Analysis and Applications, 3(4), pp 326–333.
- Winstanley HF, Chapwanya M, McGuinness MJ, Fowler AC: 2011. A polymer-solvent model of biofilm growth. In Proceedings of the Royal Society of London Series A-Mathematical Physical and Engineering Sciences, 467, pp 1449–1467.
- Engelbrecht JC, Harding AF, Phiri PA: 2011. Are OBE-trained learners ready for university mathematics? (2010 publication). In **Pythagoras: Journal of the Association for Mathematics Education of South Africa**, pp 3–13.
- Padayachee P, Boshoff HH, Olivier W, Harding AF: 2011. A blended learning Grade 12 intervention using DVD technology to enhance the teaching and learning of mathematics. In Pythagoras: Journal of the Association for Mathematics Education of South Africa, 32(1), pp 19–26.
- Kufakunesu R: 2011. The density process of the minimal entropy martingale measure in a stochastic volatility market. A PDE approach. In Quaestiones Mathematicae, 34, pp 147–174.
- Maepa SM: 2011. RNP and Lewis RNP for all 14 natural tensor norms of Grotendieck. In **Quaestiones Mathematicae**, 34, pp 85–91.

- Ntumba PP: 2011. Complexification in A-modules. In **Rendiconti del Circolo Matematico di Palermo**, 60, pp 173–180.
- Broere I, Broere I, Heidema J: 2011. Constructing an abundance of Rado graphs. In **Utilitas Mathematica**, 84(Mar), pp 139–152.

#### Chapters in books

Padayachee P, Harding AF: 2011. Towards alleviating the post-apartheid education crisis in South Africa. In Blended Learning across Disciplines: Models for Implementation, Information Science Reference (imprint of IGI Global), pp 112–131.

#### Papers published

- Ackermann ER, Grobler TL, Van Zyl AJ, Steenkamp KC, Olivier JC: 2011. Minimum error land cover separability analysis and classification of MODIS time series data. In 2011 IEEE International Geoscience & Remote Sensing Symposium, IEEE, pp 2999–3002.
- Lubuma JM-S, Mureithi EW, Terefe YA: 2011. Analysis and dynamically consistent numerical schemes for the SIS model and related reaction diffusion equation. In AIP Conference Proceedings: 3rd International Conference on Application of Mathematics in Technical and Natural Sciences, American Institute of Physics, pp 168–175.
- Anguelov R, Dumont Y, Lubuma JM-S: 2011. Mathematical Modeling of Sterile Insect Technology for Control of Anopheles Mosquito. In AIP Conference Proceedings: 3rd International Conference on Application of Mathematics in Technical and Natural Sciences, American Institute of Physics, pp 155–161.
- Grobler TL, Ackermann ER, Olivier JC, Van Zyl AJ: 2011. Systematic Luby Transform Codes as Incremental Redundancy Scheme. In **IEEE Africon 2011**, IEEE, pp 1–5.
- Ackermann ER, Grobler TL, Van Zyl AJ, Olivier JC: 2011. Belief Propagation for Nonlinear Block Codes. In IEEE Africon 2011, IEEE, pp 1-6.



Prof Johan Buitendag Dean

# **4.8** Theology

The Faculty has a strong research culture with an inquiry-led and researchintensive approach. All the Faculty's personnel are active research staff, and with the exception of only one member, all academic staff members have at least one doctoral degree. The publication units in accredited journals for full-time personnel increased from 6.4 in 2010 to 7.7 in 2011. Of the 145.5 publication units published in accredited theological journals, almost 65% appeared in ISI Web of Science journals. Currently, seven people who are connected to the Faculty as staff members, emeriti or extraordinary professors hold NRF ratings. These are Prof Johannes van Oort (A), Prof Gert Steyn (B), Prof Dirk Human (C), Prof Jurie le Roux (C), Prof Hennie Pieterse (C), Prof Andries van Aarde (C) and Prof Cas Wepener (Y). Research and postgraduate studies form the two pillars of strength in the Faculty. In 2011, there was an increase in the number of research postgraduate degrees conferred by the Faculty since 2008. There was also a growth in the percentage of both master's and doctoral graduates in relation to the total postgraduate enrolments. To extend its research network, the Faculty continued to pursue international collaborations and cooperation alliances.

A variety of research themes link to UP's goal to strengthen the University's impact on economic and social development. This includes, inter alia, the role of the church and religion in poverty, apartheid, social cohesion and reconciliation, HIV/AIDS, personal

#### Research entities

#### Institutes

- Institute for Missiology and Ecumenical Research (IMER)
- NOVA Institute for Research and Development for the Prevention of Poverty

#### Centres

- Centre for Contextual Ministry
- Centre for Public Theology

trauma and child abuse, gender, power and sexuality, violence, as well as theology, culture and society. Both theological journals *HTS Theological Studies* and *Verbum et Ecclesia* contributed to aspects of transformation.

In the different academic departments, various research activities have taken place. In Church History and Church Polity, Prof Graham Duncan, in collaboration with P Denis (University of KwaZulu-Natal), published a book on the history of the Federal Theological Seminary of Southern Africa. In Practical Theology, Prof Hennie Pieterse analysed sermons on Matthew 25:31–46 in eight South African provinces. Prof Julian Müller focused on personal trauma and adult spirituality, religious identity and the interplay between rural, urban and virtual worlds, forgiveness, reconciliation, restitution and social cohesion, while Prof Cas Wepener investigated religious rituals and social capital formation, as well as worship in a network culture. Prof Yolanda Dreyer explored gender, power, sexuality and pastoral engagement and Prof Maake Masango undertook a book project on pastoral care and violence. Prof Johann Meylahn focused on practical philosophical theology, culture and society.

Quantitatively and qualitatively, it was a good year for lecturers in the Department of Dogmatics and Christian Ethics, with 16 articles published in accredited journals, and 10 contributions at international and national conferences. Prof Johan Buitendag published two articles and three chapters in books. Prof Danie Veldsman completed a contribution to the Festschrift of the Dutch scholar Bram van de Beek on his understanding of the theology-science dialogue. Dr Vuyani Vellum is doing research that is funded by the Research Development Programme (RDP) at Thabo Mbeki Village, focusing on identifying the life-giving resources in squalid conditions of poverty and informal settlement.

In a New Testament project, entitled "NTW Fokus", the Department hosted an international conference on mission and ethics, and collaborated with the Scriptorium Bible Focus Centre in a seminar on the theme *Christians and their bibles*. Prof Gert Steyn worked on the Old Testament quotations in the New Testament, Prof Ernest van Eck focused on the parables, while Prof Kobus Kok did research on the topic of mission and ethics. Dr Elijah Mahlangu concentrated on the reading of the Bible in Africa, and Prof McGlory Speckman did research on the biblical hermeneutics of development.

Two international congresses with the themes *Deuteronomy, Theology and Ethics*, and *Psalms and Suffering* were presented by the Department of Old Testament Studies. The ProPent and ProPsalms seminars are two international flagships for biblical exegesis at UP and are organised in collaboration with the Ludwig Maximilian University in Munich, Germany. Prof Alphonso Groenewald is writing an international commentary on the Book of Isaiah, Prof Piet Venter examined research themes on Second Temple literature, while Dr Sias Meyer focuses his research emphasis on Pentateuch studies.

In the Department of Religion and Missiology, Prof Nelus Niemandt published on the relationship between mission and power, and on the "legacy" of David Bosch. Prof Thias Kgatla worked on themes like the South African Council of Churches, unity in the Dutch Reformed family, as well as on African independent churches, while Dr Jaco Beyers conducted research on the origin of religion from the insights gathered at a new archaeological discovery in Turkey. Prof Attie van Niekerk was project leader of a South Africa-Netherlands Research Programme on Alternatives in Development (SANPAD) project, which resulted in a book, *The People's Power Project*, with Paul Hebinck of Wageningen of the Netherlands.

#### Prof Johan Buitendag

Dean: Theology Tel: 012 420 3157 Email: johan.buitendag@up.ac.za

# Faculty Research Output

# Systematic Theology and Christian Ethics

#### Journal articles

- Veldsman DP: 2011. Transcendence: What on earth are we talking about? In **Acta Theologica**, 14, pp 128–140.
- Veldsman DP: 2011. Wat op dees (van) aarde beteken die einde van tradisionele metafisiese taal oor God? In gesprek met die Nuwe-Testamentikus Andries Gideon van Aarde oor sy verstaan van 'n postsekulêre spiritualiteit. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–6.
- Buitendag J: 2011. 'Epistemology models ontology' In gesprek met John Polkinghorne. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–9.
- Van Rooyen JCW: 2011. Dignity, religion and freedom of expression in South Africa. In HTS Theological Studies/ Teologiese Studies, 67(1), pp 1–6.
- Buitendag J, Van Wyk T: 2011. Die NHKA op reis na inklusiwiteit I: Die anatomie Van 'n gefragmenteerde/ eskatologiese ekklesiologie. In HTS Theological Studies/ Teologiese Studies, 67(3), pp 1–8.
- Van Wyk T, Buitendag J: 2011. Die NHKA op reis na inklusiwiteit II: 'n Holistiese teo-antropologie as voorwaarde vir ekklesiologie. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–10.
- Körtner U: 2011. Human dignity and biomedical ethics from a Christian theological perspective. In **HTS Theological Studies/Teologiese Studies**, 67(3), pp 1–8.
- Veldsman DP: 2011. The iconic significance of the Psalms as a literary genre for speaking about God: A phenomenological perspective. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–6.
- Fourie W: 2011. Can we still be Reformed? A reflection on the Reformed tradition and South Africa's modernity. In **NGTT: Ned Geref Teologiese Tydskrif**, 52(3/4), pp 364–372.
- Compaan Auke: 2011. Icon, love and the possibility of the other. In NGTT: Ned Geref Teologiese Tydskrif, 52 (3/4), pp 355–363.

- Kessler V: 2011. Providing Criticism without Causing Pain: Lessons from the Book of Proverbs. In **The South African Baptist Journal of Theology**, 20, pp 106–118.
- Wimberly EP: 2011. Unnoticed and unloved: The indigenous storyteller and public theology in a postcolonial age. **Verbum et Ecclesia**, 32(2), pp 1–9.
- Marais SJL: 2011. Die koningkryk van God as sistematiesteologiese kategorie in die werk van J.A. Heyns. In **Verbum et Ecclesia**, 32(1), pp 1–9.
- Suderman A: 2011. Overcoming modernity's individualism: Becoming a community of peace in the face of violence. In **Verbum et Ecclesia**, 32(2), pp 1–7.
- Fourie W: 2011. Het kerke 'n publieke rol in 'n pluralistiese Suid-Afrika? In **Verbum et Ecclesia**, 32(1), pp 1–6.
- Pretorius M: 2011. Sound: Conceivably the creative language of God, holding all of creation in concert. In **Verbum et Ecclesia**, 32(1), pp 1–7.

# Science of Religion and Missiology

#### Journal articles

- Beyers J: 2011. Religion, civil society and conflict: What is it that religion does for and to society? In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–8.
- Smith TJ: 2011. A dialigue about the South African "here and now" with the legacies of the early church fathers as interlocutors. In NGTT: Ned Geref Teologiese Tydskrif, 52 (3/4), pp 489–496.
- Kgatla ST: 2011. On a bumpy road: historical survey of (unity) talks between the Dutch Reformed Church in Africa and the Dutch Reformed Church before 1994. In **Studia Historiae Ecclesiasticae: Journal of the Church History Society of Southern Africa**, 37(2), pp 207–224.
- Henry D: 2011. A vision for the sending of the Church in Botswana. In **Verbum et Ecclesia**, 32(1), pp 1–8.
- Niemandt CJP: 2011. 'Mission and Power' The relevance of the Edinburgh 2010 discussion in the theological engagement with violence. In **Verbum et Ecclesia**, 32(2), pp 1–7.

In the list of research outputs, in all cases the heading "Papers published" refers to papers in refereed, published conference proceedings, and the heading "Journal articles" refers to articles published in accredited, peer-reviewed, refereed specialist journals.

Smither E: 2011. Missão Integral [holistic mission or the 'whole Gospel'] applied: Brazilian evangelical models of holistic mission in the Arab-Muslim world. In Verbum et Ecclesia, 32(1), pp 1–11.

## Church History and Church Polity

#### Journal articles

- Dreyer WA: 2011. Journey from isolation. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–9.
- Duncan GA: 2011. Ever old and ever new, keep me travelling along with you: 21st Century Notae Ecclesiae specifically necessary for churches in southern Africa. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–8.
- Van Oort J: 2011. Augustinus' geschrift 'De stad van God' (de ciuitate dei): een introductie tot de belangrijkste themata. In HTS Theological Studies / Teologiese Studies, 67(1), pp 1–9.
- Van Oort J: 2011. The Holy Spirit and the Early Church: Doctrine and Confession. In HTS Theological Studies/ Teologiese Studies, 67(3), pp 1–8.
- Van der Merwe JM: 2011. *Kerk en Samelewing* 25 jaar later: Was die kool die sous werd? In NGTT: Ned Geref Teologiese Tydskrif, 52(3/4), pp 565–584.
- Ragwan R: 2011. The narrative of the Baptist Association of South Africa and its significance for the Indian Baptist Church in KwaZulu-Natal. In Studia Historiae Ecclesiasticae: Journal of the Church History Society of Southern Africa, 37(1), pp 121–134.
- Van der Merwe JM: 2011. Early church settlements in the ZAR: a comparison of parish life in the Dutch Reformed Church in Rustenburg and the Evangelical Lutheran Church of Southern Africa in Kroondal, 1840–1899. In **Studia Historiae Ecclesiasticae: Journal of the Church History Society of Southern Africa**, 37(1), pp 181–200.
- Duncan GA: 2011. The Church Unity Commission: South African ecumenical perspectives on ministry (1968–1983). In Studia Historiae Ecclesiasticae: Journal of the Church History Society of Southern Africa, 37(1), pp 19–38.
- Barnes R, Duncan GA: 2011. FF Bosworth: A historical analysis of his ministry development using social cognitive career theory. In **Verbum et Ecclesia**, 32(1), pp 1–8.

Van Oort J: 2011. Augustine's Manichaean Dilemma in Context. In Vigiliae Christianae, 65, pp 543–567.

#### Books

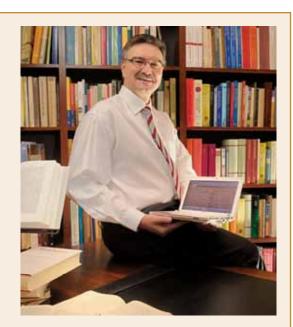
Denis P, Duncan GA: 2011. The native school that caused all the trouble. Cluster Publications, 319 pp.

## New Testament Studies

#### Journal articles

- Langenhoven H, Nortje E, Potgieter A, Steenkamp Y: 2011. The day of atonement as a hermeneutical key to the understanding of Christology in Hebrews. In Acta Patristica et Byzantina, 1(1), pp 85–97.
- Steyn GJ: 2011. Hebrew's Angelology in the light of early Jewish Apocalyptic Imagery. In Acta Patristica et Byzantina, 1(1), pp 143–164.
- Karrer M: 2011. The Angels of the Congregations in Revelation – textual history and interpretation. In Acta Patristica et Byzantina, 1(1), pp 57–84.
- Lee PB: 2011. The Arrival Motif of Malachi's Eschatological Figures in the Gospel of Luke. In Acta Patristica et Byzantina, 1(2), pp 189–204.
- Zimmerman R: 2011. Marriage, sexuality, and holiness: Aspects of marital ethics in the *Corpus Paulinum*. In Acta Theologica, 31(2), pp 363–393.
- Jackson GS: 2011. Seeing the world through the eyes of Andries van Aarde: Radical inclusivity. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–6.
- Verheyden J: 2011. A son in heaven, but no father on earth: A note in the margin of a 'Tale of Two Kings'. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–6.
- Brawley RL: 2011. Homeless in Galilee. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–6.
- Sim DC: 2011. The pacifist Jesus and the violent Jesus in the Gospel of Matthew. In HTS Theological Studies/ Teologiese Studies, 67(1), pp 1–6.
- Weaver DJ: 2011. 'Suffering Violence' and the kingdom of heaven (Mt 11:12): A Matthean manual for life in a time of war. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–12.
- Duling DC: 2011. Memory, collective memory, orality and the gospels. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–11.

Elliott J: 2011. Social-scientific criticism: Perspective, process



Prof Gert Steyn is Head of Department for New Testament Studies, and currently serves as president of the New Testament Society of South Africa (NTSSA). He is a member of the Studiorum Novi Testamenti Societas (by invitation only), as well as executive and founding member of the Association for the Study of the Septuagint in South Africa. He has edited five books, authored more than 50 publications and contributed more than 20 chapters in books.

and payoff. Evil eye accusation at Galatia as illustration of the method. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–10.

- Guijarro S: 2011. The Jesus of Paul: A contribution from the social sciences. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–6.
- Neufeld D: 2011. The socio-rhetorical force of 'truth talk' and lies: The case of 1 John. In **HTS Theological Studies/ Teologiese Studies**, 67(1), pp 1–10.
- Pilch JJ: 2011. Salt for the earthen oven revisited. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–5.
- Kloppenborg JS: 2011. Disaffiliation in associations and the aposunagogos of John. In HTS Theological Studies/ Teologiese Studies, 67(1), pp 1–16.
- Wainwright EM: 2011. On pilgrimage with biblical women in their land(s). In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–7.

- Weren W: 2011. The Pope's Jesus book and the Christologies of the gospels. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–6.
- Groenewald J: 2011. Show, tell and re-enact: The reason why the earliest followers of Jesus found the Eucharist meaningful. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–10.
- Cromhout M: 2011. Die vermyding Van etniese spanning en konflik in Suid-Afrika: Wat kan Paulus se ervaring ons leer?
  In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–8.
- Osiek C: 2011. How much do we really know about the lives of early Christ followers? In HTS Theological Studies/ Teologiese Studies, 67(1), pp 1–5.
- Carter W: 2011. Festivals, cultural intertextuality, and the Gospel of John's rhetoric of distance. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–7.
- Verhoef E: 2011. Christians reacted differently to non-Christian cults. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–7.
- Loba Mkole JC: 2011. Paul and Africa? In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–11.
- Schutte PJW: 2011. Post-modern spirituality: Experience, rather than explain. In HTS Theological Studies/ Teologiese Studies, 67(1), pp 1–6.
- Rosell S: 2011. John's Apocalypse: Dynamic word-images for a new world. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–5.
- Counet PC: 2011. Judas, the disciple who was known to the high priest: A deconstruction of the betrayal based on John 18:15. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–7.
- Ellens JH: 2011. God's health and human health: A proposal for the world of well-being. In HTS Theological Studies/ Teologiese Studies, 67(1), pp 1–6.
- Kok J: 2011. Mission and ethics in Galatians. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–10.
- Malan GJ: 2011. Does John 17:11b, 21–23 refer to church unity? In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–10.
- Steyn GJ: 2011. On Earth as it is in Heaven... The heavenly sanctuary motif in Hebrews 8:5 and its textual connection with the 'shadowy copy' [hupodeigmati kai skia] of LXX Exodus 25:40. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–6.

- Van Aarde AG, Dreyer TFJ: 2011. Die pendule subjektiwiteitobjektiwiteit in die teologie Van Theuns Dreyer – 'n dialoog.
  In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–11.
- Van Eck E: 2011. In the kingdom everybody has enough a social scientific and realistic reading of the parable of the lost sheep (Lk 15:4–6). In HTS Theological Studies/ Teologiese Studies, 67(3), pp 1–10.
- Van Aarde AG: 2011. Rudolf Bultmann: Sy mees invloedryke bydrae in die 20ste eeu: 'Urchristentum', 'Jesus', 'Johannes'kommentaar? In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–7.
- Van Eck E: 2011. Do not question my honour: A socialscientific reading of the parable of the minas (Lk 19:12b–24, 27). In HTS Theological Studies/ Teologiese Studies, 67 (3), pp 1-11.
- Crook S: 2011. Fictive-friendship and the Fourth Gospel. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–7.
- Loader WRG: 2011. Jesus and the law revisited. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–6.
- Loader JA: 2011. The beautiful infant and Israel's salvation. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–9.
- Häkkinen S: 2011. Do not worry in Kinywang'anga: Reading Matthew 6:25–34 in a Tanzanian village. In **HTSTheological Studies/Teologiese Studies**, 67(1), pp 1–7.
- Stewart E: 2011. I'm okay, you're not okay: Constancy of character and Paul's understanding of change in his own and Peter's behaviour. In HTS Theological Studies/ Teologiese Studies, 67(3), pp 1–8.
- Van Aarde AG: 2011. Regeneration and resurrection in Matthew – Peasants *in campo* hearing time signals from scribes. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–7.
- Molina CG, Van Eck E: 2011. Sfragis and its metaphorical testimonial presence in 2 Timothy 2:19. In HTSTheological Studies/Teologiese Studies, 67(3), pp 1–4.
- Le Roux E: 2011. Levitikus as agtergrond van Markus 5:25–34, geïnterpreteer in terme van eer-en-skaamte. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–8.
- Van Eck E: 2011. When neighbours are not neighbours: A social-scientific reading of the parable of the friend at midnight (Lk 11:5–8). In HTS Theological Studies/ Teologiese Studies, 67(1), pp 1–14.

- Van Aarde AG: 2011. Tekste, ko-tekste en kon-tekste van die leë graf in die Jesus tradisie. In **In die Skriflig**, 45(2), pp 329–359.
- Cromhout M: 2011. Resurrection in Paul as both Affirmation and Challenge to the Israelite Cycle of Meaning. In Neotestamentica: Journal of the New Testament Society of South Africa, 45(1), pp 29–48.
- Kok J: 2011. The Chaos of the Cross as the Fractal of life: The Birth of the Post Resurrection, Missional dimension in John. In Neotestamentica: Journal of the New Testament Society of South Africa, 45(1), pp 130–145.
- Mahlangu E: 2011. Karabo ya kereke mabapi le ditšhiwana le bana bao ba lego kotsing ka lebaka la HIV AIDS: Maikutlo a sedumedi sa ka pebeleng. In **Verbum et Ecclesia**, 32(1), pp 1–6.
- Smit G: 2011. Marturia [witness] in John 1-4: Towards an emerging, missional ecclesiology. In **Verbum et Ecclesia**, 32(1), pp 1–9.
- Hays CM: 2011. Resumption of Radicalism: Christian walth ethics in the second and third centuries. In Zeitschrift fur die Neutestamentliche Wissenschaft und die Kunde der Alteren Kirche, 102(3), pp 261–282.

#### Books

Steyn GJ: 2011. A Quest for the Assumed LXX Vorlage of the Explicit Quotations in Hebrews. Vandenhoeck&Ruprecht, p 458.

#### Papers published

- Frey J: 2011. New Testament Eschatology an Introduction: Classical Issues, Disputed Themes, and Current Perspectives. In Eschatology of the New Testament And Some Related Documents, (1), Mohr Siebeck, pp 3–34.
- Van Eck E: 2011. Eschatology and Kingdom in Mark. In Eschatology of the New Testament and Some Related Documents, (3), Mohr Siebeck, pp 64–90.
- Steyn GJ: 2011. The Eschatology of Hebrews as understood within a cultic setting. In Eschatology of the New Testament and some Related Documents, (4), Mohr Siebeck, pp 429–450.
- Frey J: 2011. Judgement on the Ungodly and the Parousia of Christ – Eschatology in Jude and 2 Peter. In Eschatology of the New Testament and some Related Documents, (5), Mohr Siebeck, pp 493–513.

Löhr H: 2011. The role of Eschatology in New Testament

Moral Thought – Some Introductory Observations. In Eschatology of the New Testament and some Related Documents, (6), Mohr Siebeck, pp 644–666.

Van Aarde AG: 2011. 'On Earth as it is in Heaven' – Matthew's Eschatology as the Kingdom of the Heavens that has come. In Eschatology of thr New Testament and Some Related Documents, (2), Mohr Siebeck, Tübingen, Germany, pp 35–63.

# Old Testament Studies

#### Journal articles

- De Villiers G: 2011. Andries Van Aarde A sideways glance: His theological and hermeneutical contribution to the South African scene. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–10.
- Le Roux JH: 2011. Andries Van Aarde as historical Jesus scholar. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–14.
- Le Roux JH: 2011. Andries Van Aarde's Matthew Interpretation. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–10.
- Venter PM: 2011. Congruent ethos in the Second Temple literature of the Old Testament. HTS Theological Studies/Teologiese Studies, 67(1), pp 1–13.
- Human DJ: 2011. 'Praise beyond Words': Psalm 150 as grand finale of the crescendo in the *Psalter*. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–10.
- Groenewald A: 2011. Isaiah 1:2–3, ethics and wisdom. Isaiah 1:2–3 and the Song of Moses (Dt 32): Is Isaiah a prophet like Moses? In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–6.
- Venter PM: 2011. The function of the Ammonite Achior in the book of Judith. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–9.
- Loader JA, Loader JA: 2011. What do the heavens declare? On the Old Testament motif of God's beauty in creation. In **HTS Theological Studies/Teologiese Studies**, 67(3), pp 1–8.
- Groenewald A: 2011. Isaiah 1: 4–9 as a post-exilic reflection. In Journal for Semitics/Tydskrif Vir Semitistiek, 20(1), pp 87–108.

- Meyer EE: 2011. Respect for animal life in the book of Leviticus. How green were the Priestly Authors? In Old Testament Essays (New Series): Journal of the Old Testament Society of South Africa, 24(1), pp 142–158.
- Erzberger J: 2011. 'I sought him, but found him not' (Song 5:6) – Public space in the song of songs. In Old Testament Essays (New Series): Journal of the Old Testament Society of South Africa, 24(2), pp 346–362.
- Usue E: 2011. Religion and national integration in Nigeria: A transcendental religious perspective. In **Theologia Viatorum: Journal of Theology and Religion in Africa**, 35(1), pp 61–76.
- Mtshiselwa N: 2011. A Biblical perspective and critique of homosexuality by the Xhosa culture. In **Theologia Viatorum: Journal of Theology and Religion in Africa**, 35(2), pp 273–301.
- Adamo DT: 2011. Africa and Africans in the Old Testament scheme of salvation. In **Theologia Viatorum: Journal of Theology and Religion in Africa**, 35(1), pp 137–166.
- Harold G: 2011. A Sociological Interpretation of Proverbs: The Wisdom of Care and Social Responsibility: A Challenge to the Evangelical Church. In **The South African Baptist Journal of Theology**, 20, pp 52–59.
- Begerau G: 2011. The Reading and Meaning of Ecclesiastes. In **The South African Baptist Journal of Theology**, 20, pp 60–68.
- Davis R: 2011. Why does Job Repent? In **The South African Baptist Journal of Theology**, 20, pp 128–132.
- Davis R, Harold G: 2011. Theodicy in Job: Ancient Word, Modern Reflections. In **The South African Baptist Journal of Theology**, 20, pp 139–157.
- Adamo DT: 2011. Christianity and the African traditional religion(s): the postcolonial round of engagement. In **Verbum et Ecclesia**, 32(1), pp 1–10.
- Kim JB: 2011. King Saul's mustering of all Israel (1Sm 11:6–7): an idealised leadership. Verbum et Ecclesia, 32(1), pp 1–7.
- Gillingham S: 2011. Theology amongst the sciences: a personal view from the University of Oxford. In Verbum et Ecclesia, 32(1), pp 1–8.
- Meyer EE: 2011. The role of the Old Testament in a violent world. In **Verbum et Ecclesia**, 32(2), pp 1–8.



Prof Yolanda Dreyer is the leader of a project on gender, power, sexuality and pastoral engagement. This research is a book project with the working title of Marriage, sexuality, gays and pastoral engagement. Themes include whether the Bible is good news for human sexuality, de-centre-ing sexual difference, the sanctity of marriage and its mythological origins, forms and models, prejudice, homophobia, heteronormativity, a root of hegemony and internalised homophobia, and an inclusive pastoral theological perspective. She delivered a guest lecture at the Otterbein University, Westerville, Ohio, USA in May 2011 and delivered the keynote address at the International Academy for Practical Theology in Amsterdam in June 2011.

## Reformed Theological College

#### Journal articles

Dreyer TFJ: 2011. 'Wat jy ook op die aarde mag bind, sal in die hemel gebonde wees, en wat jy ook op die aarde mag ontbind, sal in die hemel ontbonde wees' (Matt 16:19).
In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–4.

- Boshoff PB: 2011. Walter Schmithals: his contribution to the theological and historical interpretation of the New Testament. In **HTS Theological Studies/Teologiese Studies**, 67(1), pp 1–15.
- Van Wyk IWC: 2011. Finding a place for Jesus as healer in Reformed mission in Africa. In **HTS Theological Studies/ Teologiese Studies**, 67(1), pp 1–8.
- Ungerer AG, Nel M: 2011. Die verband tussen gemeentebouprosesse en missionale gemeenteontwikkeling. In HTS Theological Studies/Teologiese Studies, 67(2), pp 1–11.
- Dreyer WA: 2011. 'n Multidissiplinêre benadering tot Praktiese Ekklesiologie. In **HTS Theological Studies/Teologiese Studies**, 67(2), pp 1–9.
- Van Aarde AG, Dreyer TFJ: 2011. Die pendule subjektiwiteitobjektiwiteit in die teologie Van Theuns Dreyer – 'n dialoog.
  In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–11.
- Van der Merwe JC: 2011. Missionale gemeentes in die Nederduitsch Hervormde Kerk van Afrika – Teologies verantwoord. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–9.
- Van Wyk IWC: 2011. Wat is reformatoriese teologie? Nadenke na aanleiding Van 'n kerklike beswaarskrif. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–11.
- Dreyer WA: 2011. Histories-vergelykende ekklesiologie oppad na 'n omvattende Praktiese Ekklesiologie. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–8.
- Van Wyk WC: 2011. Aktuele Bybelinterpretasie in Suid-Afrika – 'n kort oorsig en toepassing. In **HTS Theological Studies/Teologiese Studies**, 67(3), pp 1–7.
- Denton RA, Denton RA: 2011. Benutting van vergifnis binne 'n pastorale gestaltterapeutiese intervensie. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–11.

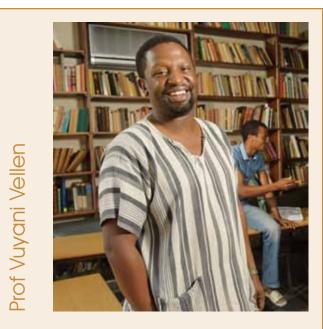
# Practical Theology

#### Journal articles

- Pieterse HJC: 2011. An open coding analytical model of sermons on poverty with Matthew 25:31–46 as sermon text. In Acta Theologica, 31(1), pp 95–112.
- Bons-Storm R: 2011. Back to basics: The 'Almighty Father' revisited. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–5.

- Dreyer Y: 2011. Gender critique on the narrator's androcentric point of view of women in Matthew's gospel. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–5.
- Müller JC: 2011. Postfoundational practical theology for a time of transition. In HTS Theological Studies/ Teologiese Studies, 67(1), pp 1–5.
- Masango MJ: 2011. Mentorship: A process of nurturing others. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–5.
- Ungerer AG, Nel M: 2011. Die verband tussen gemeentebouprosesse en missionale gemeenteontwikkeling. In HTS Theological Studies / Teologiese Studies, 67(2), pp 1–11.
- Mbaya HH: 2011. The socio-practical dimensions of *isitshisa* [burning of the heifer] in the Corinthian Church of South Africa. In **HTS Theological Studies/Teologiese Studies**, 67(2), pp 1–8.
- Muller BA, Wepener CJ: 2011. Applying grounded theory to data collected through participatory research on African Independent Churches' liturgical rituals: a comparative study. In HTS Theological Studies/Teologiese Studies, 67(2), pp 1–8.
- Dreyer Y: 2011. Women's spirituality and feminist theology: A hermeneutic of suspicion applied to 'patriarchal marriage'. In **HTS Theological Studies/Teologiese Studies**, 67(3), pp 1–5.
- Müller JC: 2011. (Outo)biografie as teologie. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–5.
- Pieterse HJC: 2011. A church with character and its social capital for projects amongst the poor. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–8.
- Delport H: 2011. Die Narratiewe terapie en die Gestalt terapie: 'n Vergelyking tussen 'n fenomenologiese eksistensiële benadering en 'n sosiaal konstruksionistiese beskouing tot terapie. In HTS Theological Studies/ Teologiese Studies, 67(3), pp 1–9.
- Bieringer R: 2011. The comforted comforter: The meaning of parakalêo or paraklesis terminology in 2 Corinthians. In HTS Theological Studies/Teologiese Studies, 67(1), pp 1–7.
- Nel M: 2011. Missionale integriteit en kontekstuele relevansie. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–9.

Osmer RR: 2011. Practical theology: A current international



Prof Vuyani Vellen is the Director of the Centre for Public Theology. He recently coedited the book *Prophet from the south*. This book celebrates the work of Allan Boesak as one of the eminent theologians in South Africa and the world. He has participated in a number of international conferences in which he also presented papers. In 2012 he was part of the conference that deliberated on the theme of a new financial and economic architecture in Saõ Paulo, Brazil, within the auspices of the World Council of Churches, the Council for World Mission and the World Communion of Reformed Churches.

perspective. In HTS Theological Studies/Teologiese Studies, 67(2), pp 1–7.

- August K, Müller JC: 2011. HIV and/or AIDS, migrant labour and the experience of God: a practical theological postfoundationalist approach. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–6.
- Moyo N, Müller JC: 2011. The influence of cultural practices on the HIV and AIDS pandemic in Zambia. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–5.
- Meylahn JA: 2011. Religion and modernity in a secular city: a public theology of *différance*. In **HTS Theological Studies/Teologiese Studies**, 67(3), pp 1–8.

- Müller R: 2011. Christianity and globalisation: an alternative ethical response. In HTS Theological Studies/Teologiese Studies, 67(3), pp 1–7.
- Ungerer A: 2011. 'n Prakties Teologiese ondersoek na die betrokkenheid van gemeentes in die gemeenskap waarbinne hul bestaan. In HTS Theological Studies/ Teologiese Studies, 67(3), pp 1–9.
- Loubser J, Müller JC: 2011. The use of metaphors in Narrative Research in exploring and describing experiences of adolescent male orphans affected by HIV and AIDS. In HTS Theological Studies/Teologiese Studies, 67(2), pp 1–9.
- Steyn TH, Masango MJ: 2011. The theology and praxis of practical theology in the context of the Faculty of Theology. In HTS Theological Studies/Teologiese Studies, 67(2), pp 1–7.
- Müller R: 2011. Inner interreligious dialogue in global Christianity – a consideration of case studies from Korea and Southern Africa. In **Ned Geref Teologiese Tydskrif**, 52(3/4), pp 441–452.
- Wepener CJ: 2011. Nuwe tendense buite-om die erediens van die 21ste eeu. 'n Beskrywende liturgie-historiese en hedendaagse verkenning. In **Ned Geref Teologiese Tydskrif**, 52(1/2), pp 257–271.
- Youn HK, Müller JC: 2011. A discussion about difficulties of university education for Korean missionary children. In **Ned Geref Teologiese Tydskrif**, 52(1/2), pp 272–284.
- Meylahn JA: 2011. Ecclesiology as doing theology in and with local communities but not of the empire. In **Studia Historiae Ecclesiasticae: Journal of the Church History Society of Southern Africa**, 37, pp 287–313.
- Boone ML, Müller JC: 2011. Ideology of 'neighbour': a theology of transformation from a theological - ethical interpretation of Leviticus 19. In Theologia Viatorum: Journal of Theology and Religion in Africa, 35(2), pp 302–3258.
- Zanekile N, Miller G: 2011. Giving and stewardship in border black Baptist Churches. In **The South African Baptist Journal of Theology**, 20, pp 262–279.
- Oberholzer G: 2011. Suid-Afrikaanse immigrasie na Australië: 'n Interdissiplinêre narratiewe studie. In **Tydskrif vir Geesteswetenskappe**, 51(3), pp 304–318.
- Van Tonder BJ: 2011. Prakties-teologiese riglyne vir die drie kategorieë Van visuele prediking. In **Verbum et Ecclesia**, 32(1), pp 1–11.

- Meylahn JA: 2011. *Khora* table: an attempt at a vulnerable Time-Play-Space for a local practical theological voice seeking global harmonies and offering prophetic discord. In **Verbum et Ecclesia**, 32(1), pp 1–4.
- Calitz C: 2011. Liturgical singing as ritual symbol. In Verbum et Ecclesia, 32(1), pp 1–7.
- Meylahn JA: 2011. Seeking the *good* (peace) of the republic: The violence against and of difference in defining the public space. In **Verbum et Ecclesia**, 32(2), pp 1–10.
- Cooke FT: 2011. The pastor as model for peaceful existence. In Verbum et Ecclesia, 32(2), pp 1–6.



Prof Graham Duncan is Head of the Department of Church History and Church Polity. He has published 40 articles in accredited journals in the fields of church history, church polity and missiology. He has also published three books. He was born and raised in the Church of Scotland and was ordained a minister of the Bantu Presbyterian Church of South Africa in 1978. He served as a minister in the Reformed Presbyterian Church in Southern Africa in 1998 and 1999, and since then as a minister in the Uniting Presbyterian Church in Southern Africa. He was Moderator of the Presbytery of Tshwane from 2010 to 2012.



Prof Gerry Swan Dean

# 49 Veterinary Science

The research output of the Faculty again showed steady growth over the past year as measured by the subsidy units earned from the Department of Higher Education and Training for publications, which increased from 81.6 in 2010 to 82.8. The number of NRF-rated staff members also increased to 23 in 2011, representing an increase of 53% over the past three years. The Faculty of Veterinary Science has five departments, all of which contribute to the Faculty's research programme.

In the Department of Veterinary Tropical Diseases, considerable progress was made in developing diagnostics for tuberculosis in wildlife. An interferon gamma assay developed and optimised for rhinoceros showed high specificity when tested in the Kruger National Park. A similar lion-specific assay developed in collaboration with the University of Utrecht will be validated as a diagnostic test during 2012 and 2013. A study conducted in Swaziland revealed a high incidence of bovine tuberculosis and a

#### Research entities

#### Centres

- Centre of Veterinary Wildlife Studies
- Equine Research Centre (ERC)

high genetic diversity among isolates of *Mycobacterium bovis*, partially ascribed to the cattle trade in South Africa. The mechanical and transstadial transmission of lumpy skin disease virus by *Rhipicephalus appendiculatus* and *Amblyomma hebraeum* ticks were demonstrated for the first time, solving an old problem. It also established the capability of a European bluetongue virus serotype 8 strain to infect goat foetuses through the transplacental route.

The Department of Paraclinical Sciences actively pursued diagnostic investigations of disease outbreaks in wildlife throughout South Africa, inter alia, by building capacity in immunohistochemistry, a useful tool for the identification of target tissues or cells for infectious disease agents, and by developing cell culture systems for a variety of studies in order to reduce the number of animals required for experiments. Food safety is an important focus of the department, especially maximising the market access to safe food for underprivileged consumers. As aquatic animals respond with great sensitivity to changes in their environment, the Department is using the Nile crocodile and the sharptooth catfish as bio-indicators to assess water pollution that can severely affect the production of food from animal origin. South Africa has a huge diversity of plants, including poisonous plants affecting livestock. Both well-known and lesser known poisonings were investigated. The Phytomedicine Programme investigated the use of medicinal plants as treatment options for microbial and parasitic infections.

The Department of Production Animal Studies had a productive year, contributing 35 journal articles and a number of other outputs. Health aspects of food-producing animals were the dominant theme, with research ranging from traditional farm animals through to more exotic species, such as abalone. Epidemiology also featured strongly, enabling quantitative studies of animal disease, diagnostics and parasite control strategies, as well as transboundary disease control and zoonoses. Animal reproduction is another focus area, which includes reproductive monitoring, uterine immunology and reproductive interventions in domestic and game species. The ecology and adaptive physiology of the giraffe was the focus of three papers.

In the Department of Companion Animal Clinical Studies, four papers in the spirocercosis focus area on malignant transformation and diagnostic methods in spirocercosis were published in eminent international journals under the guidance of Prof Eran Dvir, who recently completed his PhD on the subject. Two papers published by the Babesiosis Study Group explored the serial haematological changes and the breed and gender predisposition in babesiosis – another strong research focus area of the Department. Dr Brighton Dzikiti published three papers on intravenous anaesthesia in goats in international journals and was awarded an Exceptional Young Researcher Award by the University. The Wildlife Study Group made great contributions to this newly developing field and published on muscle fibre types and the ultrasonographic appearance of the female reproductive tract in the African lion and on the detection of papillomavirus in African antelope and Cape mountain zebra.

Studies on the anatomy of ratite birds form one of the main research focus areas in the Department of Anatomy and Physiology. The incidence of sperm defects in these commercially important birds are investigated, as well as the comparative structure of the gonadally active and inactive testis and epididymis, and the role of the various epithelial cells of the epididymis. Small ruminant research includes the role of pheromones on offspring recognition through studies of the vomeronasal organ, as well as the identification of protozoa in their digestive tracts. The anatomy and diagnostic imaging of selected zoo animals is a new focus area. The mechanism of action of agents with anti-cancer and anti-angiogenic properties, as well as aspects of gastroenterology, cardiovascular physiology, medicinal plant extracts, angiogenesis and nanomedicine are studied in the Physiology section.

#### **Prof Gerry Swan**

Dean: Veterinary Science Tel: 012 529 8201 Email: gerry.swan@up.ac.za

# Faculty Research Output

## Veterinary Anatomy and Physiology

#### Journal articles

- Crole MR, Soley JT: 2011. Distribution and structure of glandular tissue in the oropharynx and proximal esophagus of the emu (*Dromaius novaehollandiae*). In Acta Zoologica, 92(Jul), pp 206–215.
- Kohn TA, Burroughs R, Hartman MJ, Noakes TD: 2011. Fiber type and metabolic characteristics of lion (*Panthera leo*), caracal (*Caracal caracal*) and human skeletal muscle. in Comparative Biochemistry and Physiology A-Molecular & Integrative Physiology, 159, pp 125–133.
- Van Dyk E, Bosman AM, Van Wilpe E, Williams JH, Bengis RG, Van Heerden J, Venter EH: 2011. Detection and characterisation of papillomavirus in skin lesions of giraffe and sable antelope in South Africa. In Journal of the South African Veterinary Association, 82(2), pp 80–85.
- Williams JH, Van Dyk E, Nel PJ, Lane E, Van Wilpe E, Bengis RG, De Klerk-Lorist LM, Van Heerden J: 2011. Pathology and immunohistochemistry of papillomavirus-associated cutaneous lesions in Cape mountain zebra, giraffe, sable antelope and African buffalo in South Africa. In Journal of the South African Veterinary Association, 82(2), pp 97–106.
- Zimmermann D, Anderson MD, Lane E, Van Wilpe E, Carulei O, Douglass N, Williamson AL, Kotze A: 2011. Avian Poxvirus Epizootic in a breeding population of lesser flamingos (*Phoenicopterus minor*) at Kamfers Dam, Kimberley, South Africa. In Journal of Wildlife Diseases, 47(4), pp 989–993.
- Lebopa CK, Boomker EA, Chimonyo M, Mokoboki HK: 2011. *In* sacco dry matter and crude protein degradation of woody plant species in Tswana and Boer goats. In Life Science Journal-Acta Zhengzhou University Overseas Edition, 8(S2), pp 81–90.
- Lebopa CK, Boomker EA, Chimonyo M, Mulugeta SD: 2011. Factors affecting the feeding behaviour of free ranging Tswana and Boer goats in the False Thonrveld of the

Eastern Cape, South Africa. In Life Science Journal-Acta Zhengzhou University Overseas Edition, 8(S2), pp 70–80.

- Booyse DG, Dehority BA: 2011. Rumen protozoa in South African sheep with a summary of the worldwide distribution of sheep protozoa. In **Onderstepoort Journal of Veterinary Research**, 78(1), pp 1–7.
- Tivane C, Rodrigues MN, Soley JT, Groenewald HB: 2011. Gross anatomical features of the oropharyngeal cavity of the ostrich (*Struthio camelus*). In **Pesquisa Veterinaria Brasileira**, 31(6), pp 543–550.
- Du Plessis L, Soley JT: 2011. Head-base bending and disjointed spermatozoa in the emu (*Dromaius novaehollandiae*): A morphological comparison of two closely related defects. In **Theriogenology**, 76, pp 1275–1283.
- Du Plessis L, Soley JT: 2011. Incidence, structure and morphological classification of abnormal sperm in the emu (*Dromaius novaehollandiae*). In Theriogenology, 75, pp 589–601.
- Booth KK, Webb EC: 2011. Effect of blockage of the ducts of the vomeronasal organ on LH plasma levels during the "Whitten Effect" in Does. In **Veterinary Medicine International**, 2011, pp 1–8.

## Companion Animal Clinical Studies

#### Journal articles

- Kohn TA, Burroughs R, Hartman MJ, Noakes TD: 2011. Fiber type and metabolic characteristics of lion (*Panthera leo*), caracal (*Caracal caracal*) and human skeletal muscle. In Comparative Biochemistry and Physiology A-Molecular & Integrative Physiology, 159, pp 125–133.
- Bernitz H, Bernitz Z, Steenkamp G, Blumenthal R, Stols GH: 2011. The individualisation of a dog bite mark: a case study highlighting the bite mark analysis, with emphasis on differences between dog and human bite marks. In International Journal of Legal Medicine, May, Online.

In the list of research outputs, in all cases the heading "Papers published" refers to papers in refereed, published conference proceedings, and the heading "Journal articles" refers to articles published in accredited, peer-reviewed, refereed specialist journals.

- Rubio-Martinez LM, Nykamp S, Trout D: 2011. What Is Your Diagnosis? In Journal of the American Veterinary Medical Association, 238(6), pp 695–696.
- Christie J, Schwan EV, Bodenstein LE, Sommerville JEM, Van der Merwe LL: 2011. The sensitivity of direct faecal examination, direct faecal flotation, modified centrifugal faecal flotation and centrifugal sedimentation/flotation in the diagnosis of canine spirocercosis. In Journal of the South African Veterinary Association, 82(2), pp 71–75.
- Kitshoff AM, McClure V, Lim CK, Kirberger RM: 2011. Bilateral multiple cystic kidney disease and renal cortical abscess in a Boerboel. In Journal of the South African Veterinary Association, 82(2), pp 120–124.
- Scheepers E, Leisewitz AL, Thompson PN, Christopher MM: 2011. Serial haematology results in transfused and nontransfused dogs naturally infected with *Babesia rossi*. In Journal of the South African Veterinary Association, 82(3), pp 136–143.
- Arnot LF, Veale DJH, Steyl JCA, Myburgh JG: 2011. Treatment rationale for dogs poisoned with aldicarb (carbamate pesticide). In **Journal of the South African Veterinary Association**, 82(4), pp 232–238.
- Hill JM, Leisewitz AL, Goddard A: 2011. The utility of uric acid assay in dogs as an indicatior of funcctional hepatic mass.
  In Journal of the South African Veterinary Association, 82(2), pp 86–93.

Furniss C, Carstens A, Van den Berg SS: 2011. Radiographic changes in Thoroughbred yearlings in South Africa. In Journal of the South African Veterinary Association, 82(4), pp 194–204.

- Pulker T, Carstens A, Williams JH: 2011. Antebacterial chondrodysplasia in New Zealand white rabbits (*Oryctolagus cuniculus*). In Journal of the South African Veterinary Association, 82(3), pp 176–178.
- Williams JH, Bester L, Venter LJ, Pretorius D, Greyling F: 2011. Barbiturate ingestion in three adult captive tigers (*Panthera tigris*) and concomitant fatal botulism of one. In Journal of the South African Veterinary Association, 82(4), pp 244–249.
- Schoeman JP, Kitshoff AM, Du Plessis CJ, Thompson PN: 2011. Serial plasma glucose changes in dogs suffering from severe dog bite wounds. In **Journal of the South African Veterinary Association**, 82(1), pp 41–46.

Joubert KE, Serfontein T, Scantlebury M, Manjerovic

ME, Bateman PW, Bennett NC, Waterman J: 2011. Determination of an optimal dose of medetomidineketamine-buprenorphine for anaesthesia in the Cape ground squirrel (*Xerus inauris*). In Journal of the South African Veterinary Association, 82(2), pp 94–96.

- Van Dyk E, Bosman AM, Van Wilpe E, Williams JH, Bengis RG, Van Heerden J, Venter EH: 2011. Detection and characterisation of papillomavirus in skin lesions of giraffe and sable antelope in South Africa. In Journal of the South African Veterinary Association, 82(2), pp 80–85.
- Williams JH, Van Dyk E, Nel PJ, Lane E, Van Wilpe E, Bengis RG, De Klerk-Lorist LM, Van Heerden J: 2011. Pathology and immunohistochemistry of papillomavirus-associated cutaneous lesions in Cape mountain zebra, giraffe, sable antelope and African buffalo in South Africa. In Journal of the South African Veterinary Association, 82(2), pp 97–106.
- Stander N, Kirberger RM: 2011. Diagnostic imaging of migrating kebab (sosatie) sticks – a review of 8 cases. In Journal of the South African Veterinary Association, 82(3), pp 160–165.
- Mukorera V, Dvir E, Van der Merwe LL, Goddard A: 2011. Serum C-reactive protein concentration in Benign and Malignant Canine Spirocercosis. In Journal of Veterinary Internal Medicine, 25(4), pp 963–971.
- Mellanby RJ, Handel IG, Clements DN, Bronsvoort BMD, Lengeling A, Schoeman JP: 2011. Breed and sex risk factors for Canine Babesiosis in South Africa. In Journal of Veterinary Internal Medicine, 779, pp 1–4.
- Dossin O, Rupassara SI, Weng HY, Williams DA, Garlick PJ, Schoeman JP: 2011. Effect of parvoviral enteritis on plasma citrulline concentration in dogs. In Journal of Veterinary Internal Medicine, 25, pp 215–221.
- Marais HJ, Page PC: 2011. Treatment of Equine sarcoid in seven Cape Mountain Zebra (*Equus Zebra Zebra*). In Journal of Wildlife Diseases, 47(4), pp 917–924.
- Dvir E, Schoeman JP, Clift SJ, McNeilly TN, Mellanby RJ: 2011. Immunohistochemical characterization of lymphocyte and myeloid cell infiltrates in spirocercosis-induced oesophageal nodules. In **Parasite Immunology**, 33, pp 545–553.
- Dzikiti TB, Stegmann GF, Dzikiti LN, Hellebrekers LJ: 2011. Effects of midazolam on isoflurane minimum alveolar concentration in goats. In **Small Ruminant Research**, 97, pp 104–109.

- Kirberger RM, Schulman ML, Hartman MJ: 2011. Ultrasonographic and laparoscopic evaluation of the reproductive tract of the captive female African lion (*Panthera leo*). In **Theriogenology**, 76, pp 810–818.
- Kruger K, Stegmann GF, Becker PJ: 2011. Preliminary investigation of concurrent administration of phenylbutazone and romifidine in healthy horses. In Veterinary Anaesthesia and Analgesia, 38, pp 505–509.
- Dzikiti TB, Stegmann GF, Cromarty AD, Dzikiti LN, Hellebrekers LJ: 2011. Effects of propofol on isoflurane minimum alveolar concentration and cardiovascular function in mechanically ventilated goats. In **Veterinary Anaesthesia and Analgesia**, 38, pp 44–53.
- Mukorera V, Van der Merwe LL, Lavy E, Aroch I, Dvir E: 2011. Serum alkaline phosphatase activity is not a marker for neoplastic transforamtion of esophageal nodules in canine spirocercosis. In **Veterinary Clinical Pathology**, 40(3), pp 389–392.
- Goddard A, Schoeman JP, Leisewitz AL, Nagel S, Aroch I: 2011. Clinicopathologic abnormalities associated with snake envenomation in domestic animals. In **Veterinary Clinical Pathology**, 40(3), pp 282–292.
- Nel S, Van Heerden MB, Steenkamp G, Van Heerden WFP, Boy SC: 2011. Immunohistochemical profile of Odontegenic Epithelium in developing dog teeth (*Canis familiars*). In Veterinary Pathology, 48(1), pp 276–282.
- Millward IR, Kirberger RM, Thompson PN: 2011. Comparative popliteal and mesenteric computed tomography lymphangiography of the canine thoracic duct. In **Veterinary Radiology & Ultrasound**, 52(3), pp 295–301.
- Blignaut DJC, Holm DE, Leask R, Stander N, Steyl JCA: 2011. Congenital reflex myoclonus in two Merino cross lambs in South Africa. In Veterinary Record, 169(26), pp 684–685.
- Dzikiti TB, Stegmann GF, Dzikiti LN, Hellebrekers LJ: 2011. Effects of fentanyl on isoflurane minimum alveolar concentration and cardiovascular function in mechanicallly ventilated goats. In **Veterinary Record**, 168(16), Online.

## Centre for Veterinary Wildlife Studies

#### Journal articles

Dion E, Van Schalkwyk L, Lambin EF: 2011. The landscape epidemiology of foot-and-mouth disease in South Africa: a spatially explicit multi-agent simulation. In **Ecological Modelling**, 222, pp 2059–2072.

## Paraclinical Sciences (Veterinary)

#### Journal articles

- Mogale MA, Lebelo SL, Shai LJ, Eloff JN: 2011. *Aloe arborescens* aqueous gel extract alters the activities of key hepatic enzymes and blood concentration of triglycerides, glucose and insulin in alloxan-induced diabetic rats. In **African Journal of Biotechnology**, 10(20), pp 4242–4248.
- Magano SR, Nchu F, Eloff JN: 2011. *In vitro* investigation of the repellent effects of the essential oil of *Lippia javanica* on adults of *Hyalomma marginatum rufipes*. In African Journal of Biotechnology, 10(44), pp 8970–8975.
- Ademola IO, Eloff JN: 2011. Anthelmintic efficacy of cashew (*Anarcadium occidentaleL.*) on *in vitro* susceptibility of the ova and larvae of *Haemonchus contortus*. In African Journal of Biotechnology, 10(47), pp 9700–9705.
- Eloff JN, Ntloedibe T, Van Brummelen R: 2011. A simplified but effective method for the quality control of medicinal plants by Planar Chromatography. In African Journal of Traditional Complementary and Alternative Medicines, 8, pp 1–12.
- Ademola IO, Eloff JN: 2011. In vitro anthelminitic effect of Anogeissus Leiocarpus (DC.) Guill. & Perr. Leaf extracts and fractions on developmental stages of Haemonchus Contortus. In African Journal of Traditional Complementary and Alternative Medicines, 8(2), pp 134–139.
- Bisi-Johnson MA, Obi CL, Hattori T, Oshima Y, Li S, Kambizi L, Eloff JN, Vasaikar D: 2011. Evaluation of the antibacterial and anticancer activities of some South African medicinal plants. In **Bmc Complementary And Alternative Medicine**, 11(14), pp 1–5.

- Oberholster PJ, Musee N, Botha AM, Chelule PK, Focke WW, Ashton PJ: 2011. Assessment of the effect of nanomaterials on sediment-dwelling invertebrate *chironomus tentans* larvae. In **Ecotoxicology and Environmental Safety**, 74(3), pp 416–423.
- Venter M, Human S, Van Niekerk S, Williams JH, Van Eeden C, Freeman F: 2011. Fatal neurological disease and abortion in mare infected with Lineage 1 West Nile Virus, South Africa. In Emerging Infectious Diseases, 17(8), pp 1534–1536.
- Stephenson JD, Mills A, Eksteen JJ, Milewski AV, Myburgh JG: 2011. Geochemistry of mineral licks at Loskop Dam Nature Reserve, Mpumalanga, South Africa. In Environmental Geochemistry and Health, 33, pp 49–53.
- Cenci-Goga BT, Rossitto PV, Sechi P, McCrindle CME, Cullor J S: 2011. Toxoplasma in animals, food, and humans: An old parasite of concern. In **Foodborne Pathogens And Disease**, 8(7), pp 751–762.
- Oberholster PJ, Botha AM: 2011. Dynamics of phytoplankton and phytobenthos in Lake Loskop (South Africa) and downstream irrigation canals. In **Fundamental And Applied Limnology**, 179(3), pp 169–178.
- Bwala DG, Fasina FO, Van Wyk A, Duncan NM: 2011. Effects of vaccination with lentogenic vaccine and challenge with virulent Newcastle Disease Virus on egg production in commercial and SPF chickens. In International Journal of Poultry Science, 10(2), pp 98–105.
- Kaikabo AA, Eloff JN: 2011. Antibacterial activity of two biflavonoids from *Garcinia livingstonei* leaves against *Mycobacterium smegmatis*. In Journal of Ethnopharmacology, 138, pp 253–255.
- Huchzermeyer KDA, Govender D, Pienaar DJ, Deacon AR: 2011. Steatitis in wild sharptooth catfish, *Clarias gariepinus* (Burchell), in the Olifants and Lower Letaba rivers in the Kruger National Park, South Africa. In Journal of Fish Diseases, 34, pp 489–498.
- Nana P, Maniania NK, Maranga RO, Boga HI, Kutima HL, Eloff JN: 2011. Compatibility between Calpurnia aurea leaf extract, attraction aggregation, and attachment pheromone and entomopathogenic fungus Metarhizium anisopliae on viability, growth, and virulence of the pathogen. In Journal of Pest Science, Online.
- Du Plessis E C, Prozesky L, Botha CJ: 2011. The pathology of acute *Nolletia gariepina* poisoning in cattle. In **Journal of the South African Veterinary Association**, 82(3), pp 144–149.

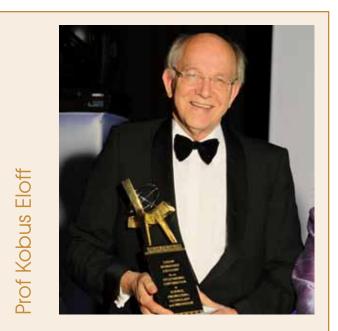


Dr Lindy McGaw is the deputy leader of the Phytomedicine Programme in the Department of Paraclinical Sciences. Her research involves biological activity and toxicity studies of South African plants and the active compounds that have been isolated from them. Current interests focus on antimycobacterial, cytotoxic and genotoxic effects of indigenous plants. Her research also concentrates on mechanisms of action, the use of plants in animal health, and the immune modulatory activity of plant preparations.

- Pypers AR, Holm DE, Williams JH: 2011. Fatal congenital anaplasmosis associated with Bovine Viral Diarrhoea Virus infection in crossbred calf. In Journal of the South African Veterinary Association, 82(3), pp 179–182.
- Arnot LF, Veale DJH, Steyl JCA, Myburgh JG: 2011. Treatment rationale for dogs poisoned with aldicarb (carbamate pesticide). In **Journal of the South African Veterinary Association**, 82(4), pp 232–238.
- Pulker T, Carstens A, Williams JH: 2011. Antebacterial chondrodysplasia in New Zealand white rabbits (*Oryctolagus cuniculus*). In Journal of the South African Veterinary Association, 82(3), pp 176–178.
- Williams JH, Bester L, Venter LJ, Pretorius D, Greyling F: 2011. Barbiturate ingestion in three adult captive tigers (*Panthera*

*tigris*) and concomitant fatal botulism of one. In **Journal** of the South African Veterinary Association, 82(4), pp 244–249.

- Joubert KE, Serfontein T, Scantlebury M, Manjerovic ME, Bateman PW, Bennett NC, Waterman J: 2011. Determination of an optimal dose of medetomidineketamine-buprenorphine for anaesthesia in the Cape ground squirrel (*Xerus inauris*). In Journal of the South African Veterinary Association, 82(2), pp 94–96.
- Van Dyk E, Bosman AM, Van Wilpe E, Williams JH, Bengis RG, Van Heerden J, Venter EH: 2011. Detection and characterisation of papillomavirus in skin lesions of giraffe and sable antelope in South Africa. In Journal of the South African Veterinary Association, 82(2), pp 80–85.
- Williams JH, Van Dyk E, Nel PJ, Lane E, Van Wilpe E, Bengis RG, De Klerk-Lorist LM, Van Heerden J: 2011. Pathology and immunohistochemistry of papillomavirus-associated cutaneous lesions in Cape mountain zebra, giraffe, sable antelope and African buffalo in South Africa. In Journal of the South African Veterinary Association, 82(2), pp 97–106.
- Le Roux-Pullen L, Lessing D: 2011. Should veterinarians consider acrylamide that potentially occurs in starchrich foodstuffs as a neurotoxin in dogs? In Journal of the South African Veterinary Association, 82(2), pp 129–130.
- Botha CJ, Steenkamp PA, Olivier A, Bekker LC: 2011. *Nicotiana* glauca poisoning in ostriches (*Struthio camelus*). In Journal of the South African Veterinary Association, 82(2), pp 116–119.
- Bwala DG, Duncan NM, Bisschop SPR: 2011. Uterine adenocarcinoma with transcoelomic metastases in breeder hens (*Gallus domesticus*). In Journal of the South African Veterinary Association, 82(1), pp 53–55.
- Naidoo V, Mompati KF, Duncan NM, Taggart MA: 2011. The Pied crow (*Corvus albus*) is insensitive to Diclofenac at concentrations present in carrion. In **Journal of Wildlife Diseases**, 47(4), pp 936–944.
- Aderogba MA, McGaw LJ, Bezabih M, Abegaz BM: 2011. Isolation and characterisation of novel antioxidant constituents of *Croton zambesicus* leaf extract. In Natural Product Research, 25(13), pp 1224–1233.
- Meiring T, Prozesky L, Du Preez ER, Verwoerd DJ: 2011. The diagnosis and prevalence of persistent infection with bovine viral diarrhoea virus in South African feedlot cattle. In **Onderstepoort Journal of Veterinary Research**, 78(1), pp 1–8.



Prof Kobus Eloff is Manager of the Phytomedicine Programme in the Department of Paraclinical Sciences. He has made significant contributions in several areas that are important to society. These include areas such as soil fertility, toxic plant and cyanobacteria metabolism and ecology, and the use of compounds from plants as medicines and biopesticides. He has a C3-rating from the NRF and is the former Director of Research of the National Botanical Institute. He is the recipient of both the gold medal of the South African Academy of Arts and Science and the gold medal of the Academy of Science of South Africa (ASSAf).

- Dvir E, Schoeman JP, Clift SJ, McNeilly TN, Mellanby RJ: 2011. Immunohistochemical characterization of lymphocyte and myeloid cell infiltrates in spirocercosis-induced oesophageal nodules. In **Parasite Immunology**, 33, pp 545–553.
- Munhenga G, Brooke BD, Chirwa TF, Hunt RH, Coetzee M, Govender D, Koekemoer L: 2011. Evaluating the potential of the sterile insect technique for malaria control: relative fitness and mating compatibility between laboratory colonized and a wild population of *Anopheles arabiensis* from the Kruger National Park, South Africa. In **Parasites** & Vectors, 4(208), pp 1–11.

- Ademola I, Eloff JN: 2011. Ovicidal and larvicidal activity of *Cassa alata* leaf acetone extract and fractions on *Haemonchus contortus: In vitro* studies. In **Pharmaceutical Biology**, 59(5), pp 539–544.
- Henton M, Eager H, Swan GE, Van Vuuren M: 2011. Part VI. Antibiotic management and resistance in livestock production. In **South African Medical Journal**, 101(8), pp 583–587.
- Ademola IO, Eloff JN: 2011. Anthelminthic activity of acetone extract and fractions of *Vernonia amygdaline* against *Haemonchus contortus* eggs and larvae. In **Tropical Animal Health and Production**, 43, pp 521–527.
- Nchu F, Nchu F, Githiori J, McGaw LJ, Eloff JN: 2011. Anthelmintic and cytotoxic activities of extracts of Markhamia obtusifolia Sprague (Bignoniaceae). In **Veterinary Parasitology**, 183, pp 184–188.
- Vatta AF, Kandu-Lelo C, Ademola IO, Eloff JN: 2011. Direct anthelmintic effects of *Cereus jamacaru* (Cactaceae) on trichostrongylid nematodes of sheep: *In vivo* studies. In **Veterinary Parasitology**, 180, pp 279–286.
- Maartens LH, Erasmus BJ, Clift SJ: 2011. Tissue tropism of African Horsesickness Virus in the chicken embryo demonstrated with the Avidin-Biotin Complex Immunoperoxidase method. In **Veterinary Pathology**, 48(6), pp 1085–1093.
- Blignaut DJC, Holm DE, Leask R, Stander N, Steyl JCA: 2011. Congenital reflex myoclonus in two Merino cross lambs in South Africa. In Veterinary Record, 169(26), pp 684–685.
- Botha H, Van Hoven W, Guillette LJ: 2011. The decline of the Nile crocodile population in Loskop Dam, Olifants River, South Africa. In **Water SA**, 37(1), pp 103–108.

### University of Pretoria Biomedical Research Centre

#### Journal articles

- Naidoo V, Wolter K, Espie I, Kotze A: 2011. Vulture rescue and rehabilitation in South Africa: an urban perspective. In Journal of the South African Veterinary Association, 82(1), pp 24–31.
- Naidoo V, Mompati KF, Duncan NM, Taggart MA: 2011. The Pied crow (*Corvus albus*) is insensitive to Diclofenac at

concentrations present in carrion. In **Journal of Wildlife Diseases**, 47(4), pp 936–944.

Potgieter M, Pretorius E, Van der Merwe CF, Beukes M, Vieira WA, Auer REJ, Auer M, Meyer S: 2011. Histological assessment of SJL/J mice treated with the antioxidants coenzyme Q10 and reveratrol, Micron, In Histological assessment of SJL/J mice treated with the antioxidants coenzyme Q10 and reveratrol, 42, pp 275–282.

# Production Animal Studies

#### Journal articles

- Stansfield FJ, Picton HM, Nöthling JO: 2011. Early primaryrather than primordial follicles constitute the main follicular reserve in the African elephant (*Loxodonta africana*). In **Animal Reproduction Science**, 123, pp 112– 118.
- Stansfield FJ, Nöthling JO, Ansari T: 2011. The distribution of small preantral follicles within the ovaries of prepubertal African elephants (*Loxodonta africana*). In Animal Reproduction Science, 129, pp 96–103.
- Heise A, Thompson PN, Gerber D: 2011. Influence of seminal plasma on fresh and post-thaw parameters of stallion epididymal spermatozoa. In **Animal Reproduction Science**, 123, pp 192–201.
- Mouton A, Gummow B: 2011. The occurrence of gut associated parasites in the South African abalone, *Haliotis midae* in Western Cape aquaculture facilities. In **Aquaculture**, 313, pp 1–6.
- Mitchell G, Skinner JD: 2011. Lung volumes in giraffes, Giraffa camelopardalis. In Comparative Biochemistry and Physiology B-Biochemistry & Molecular Biology, 158(Part A), pp 72–78.
- Cumming GS, Caron A, Abolnik C, Catolli G, Bruinzeel L, Burger CE, Cecchettin K, Chiweshe N, Mochotlhoane B, Mutumi GL, Ndlovu M: 2011. The ecology of Influenza A viruses in wild birds in southern Africa. In **Ecohealth**, 8, pp 4–13.
- Ncube H, Duncan P, Grange S, Cameron EZ, Barnier F, Ganswindt A: 2011. Pattern of faecal 20-oxopregnane and oestrogen concentrations during pregnancy in wild plains zebra mares. In **General and Comparative Endocrinology**, 172, pp 358–362.

# Dr Cindy Harper



Dr Cindy Harper is a genetics specialist and Head of the Veterinary Genetics Laboratory (VGL) at Onderstepoort. She joined the Equine Research Centre in 1999 and became involved in horse identification systems when the transition occurred from blood typing as the horse identification and parentage testing method to DNA typing. She has a passion for veterinary genetics and particularly the application of the latest technology and test methods to meet the needs of the veterinary profession and animal breeders. Currently she is involved with RhODIS, a DNA identification system used in the prosecution of rhino poachers.

- Bwala DG, Fasina FO, Van Wyk A, Duncan NM: 2011. Effects of vaccination with lentogenic vaccine and challenge with virulent Newcastle Disease Virus on egg production in commercial and SPF chickens. In International Journal of Poultry Science, 10(2), pp 98–105.
- Uys JL, Lourens DC, Thompson PN: 2011. The effect of unrestricted milk feeding on the growth and health of Jersey calves. In **Journal of the South African Veterinary Association**, 82(1), pp 47–52.
- Pypers AR, Holm DE, Williams JH: 2011. Fatal congenital anaplasmosis associated with Bovine Viral Diarrhoea Virus infection in crossbred calf. In Journal of the South African Veterinary Association, 82(3), pp 179–182.

- Scheepers E, Leisewitz AL, Thompson PN, Christopher MM: 2011. Serial haematology results in transfused and non-transfused dogs naturally infected with *Babesia rossi*.
  In Journal of the South African Veterinary Association, 82(3), pp 136–143.
- Bath GF, Janse Van Rensburg A, Pettey KP, Van Vuuren M, KidanemariamA:2011.A literature review and investigation of staphylococcal necrotic dermatitis in sheep. In **Journal of the South African Veterinary Association**, 84(4), pp 227–231.
- Schoeman JP, Kitshoff AM, Du Plessis CJ, Thompson PN: 2011. Serial plasma glucose changes in dogs suffering from severe dog bite wounds. In **Journal of the South African Veterinary Association**, 82(1), pp 41–46.
- Bwala DG, Duncan NM, Bisschop SPR: 2011. Uterine adenocarcinoma with transcoelomic metastases in breeder hens (*Gallus domesticus*). In **Journal of the South African Veterinary Association**, 82(1), pp 53–55.
- Fasina FO, Rivas AL, Bisschop SPR, Stegeman AJ, Hernandez JA: 2011. Identification of risk factors associated with highly pathogenic avian influenza H5N1 virus infection in poultry farms, in Nigeria during the epidemic of 2006-2007. In Preventive Veterinary Medicine, 98, pp 204–208.
- Jori F, Brahmbhatt D, Fosgate GT, Thompson PN, Budke C, Ward MP, Ferguson K, Gummow B: 2011. A questionnairebased evaluation of the veterinary cordon fence separating wildlife and livestock along the boundary of the Kruger National Park, South Africa. In **Preventive Veterinary Medicine**, 100, pp 210–220.
- Sasidharan SP, Ludwig A, Harper CK, Moodley Y, Bertschinger HJ, Guthrie AJ: 2011. Comparative genetics of sarcoid tumour-affected and non-affected mountain zebra (Equus zebra) populations. In South African Journal of Wildlife Research, 41(1), pp 36–49.
- Kirberger RM, Schulman ML, Hartman MJ: 2011. Ultrasonographic and laparoscopic evaluation of the reproductive tract of the captive female African lion (*Panthera leo*). In Theriogenology, 76, pp 810–818.
- Adesiyun AA, Fosgate GT, Seebaransingh R, Brown G, Stoute S, Stewart-Johnson A: 2011. Virulence of *Brucella abortus* isolated from cattle and water buffalo. In **Tropical Animal Health and Production**, 43, pp 13–16.
- Fosgate GT, Diptee MD, Ramnanan A, Adesiyun AA: 2011. Brucellosis in domestic water bufallo (*Bubalus bubalis*) of Trinidad and Tobago with comparative epidemiology

to cattle. In **Tropical Animal Health and Production**, 43, pp 1479–1486.

- Bath GF: 2011. Non-pharmaceutical Control of Endoparasitic Infections in Sheep. In Veterinary Clinics of North America-Food Animal Practice, 27(1), pp 157–162.
- Reynecke D, Van Wyk JA, Gummow B, Dorny P, Boomker JDF: 2011. A stochastic model accommodating the FAMACHA © system for estimating worm burdens and associated risk factors in sheep naturally infected with *Haemonchus contortus*. In **Veterinary Parasitology**, 177, pp 231–241.
- Reynecke D, Van Wyk JA, Gummow B, Dorny P, Boomker JDF: 2011. Validation of the FAMACHA© eye colour chart using sensitivity/specificity analysis on two South African sheep farms. In **Veterinary Parasitology**, 177, pp 203–211.
- Reynecke D, Van Wyk JA, Gummow B, Dorny P, Boomker JDF: 2011. Application of ROC curve analysis to FAMACHA © evaluation of haemonchosis on two sheep farms in South African. In **Veterinary Parasitology**, 177, pp 224–230.
- Abu Samra N, Jori F, Samie A, Thompson PN: 2011. The prevalence of *Cryptosporidium* spp. oocysts in wild mammals in the Kruger National Park, South Africa. In **Veterinary Parasitology**, 175, pp 155–159.
- Millward IR, Kirberger RM, Thompson PN: 2011. Comparative popliteal and mesenteric computed tomography lymphangiography of the canine thoracic duct. In **Veterinary Radiology & Ultrasound**, 52(3), pp 295–301.
- Young BD, Levine JM, Porter BF, Chen-Allen AV, Rossmeisl JH, Platt SR, Kent M, Fosgate GT, Schatzberg SJ: 2011. Magnetic resonance imaging features of intracranial astrocytomas and oligodendrogliomas in dogs. In **Veterinary Radiology** & **Ultrasound**, 52(2), pp 132–141.
- Blignaut DJC, Holm DE, Leask R, Stander N, Steyl JCA: 2011. Congenital reflex myoclonus in two Merino cross lambs in South Africa. In Veterinary Record, 169(26), pp 684–685.
- Solomon P, Abolnik C, Joannis TM, Bisschop SPR: 2011. Virulent Newcastle Disease Virus in Nigeria: identification of a new clade of sub-lineage 5f from livebird markets. In **Virus Genes**, 42(1), Online.
- Lane EP, Miller S, Lobetti RG, Caldwell P, Bertschinger HJ, Burroughs REJ, Kotze A, Van Dyk A: 2011. In Effect of diet on the incidence of and mortality owing to gastritis and renal disease in captive cheetahs. In **Zoo Biology**, 30, pp 1–14.

## Equine Research Centre

#### Journal articles

- Crafford JE, Guthrie AJ, Van Vuuren M, Mertens PPC, Burroughs JN, Howell PG, Batten CA, Hamblin C: 2011. A competitive ELISA for the detection of group-specific antibody to equine encephalosis virus. In Journal of Virological Methods, 174, pp 60–64.
- Scheffer EG, Venter GJ, Joone C, Osterrieder N, Guthrie AJ: 2011. Use of real-time quantitative reverse transcription polymerase chain reaction for the detection of African horse sickness virus replication in Culicoides imicola. In **Onderstepoort Journal of Veterinary Research**, 78(1), pp 1–4.
- Sasidharan SP, Ludwig A, Harper CK, Moodley Y, Bertschinger HJ, Guthrie AJ: 2011. Comparative genetics of sarcoid tumour-affected and non-affected mountain zebra (*Equus zebra*) populations. In South African Journal of Wildlife Research, 41(1), pp 36–49.

## Veterinary Tropical Diseases

#### Journal articles

- Secka A, Grimm F, Marcotty T, Geysen D, Niang AM, Ngale V, Boutche L, Van Marck E, Geerts S: 2011. Old focus of cysticercosis in a senegalese village revisited after half a century. In Acta Tropica, 119, pp 199–202.
- Sixholo J, Van Wyngaardt W, Mashau C, Frischmuth J, Du Plessis DH, Fehrsen J: 2011. Improving the characteristics of a mycobacterial 16 kDa-specific chicken scFv. In **Biologicals**, 39, pp 110–116.
- Kik M, Nijhof AM, Balk JA, Jongejan F: 2011. Babesia sp.
   EU1 infection in a forest reindeer, the Netherlands. In
   Emerging Infectious Diseases, 17(5), pp 936–938.
- Rakabe MM, Van Wyngaardt W, Fehrsen J: 2011. Chicken single-chain antibody fragments directed against recombinant VP7 of bluetongue virus. In Food and Agricultural Immunology, 22(3), pp 283–295.
- Verfuurden B, Wempe E, Reinink P, Van Kooten P, Martens E, Gerritsen R, Vos J, Rutten VPMG, Leegwater PA: 2011. Severe combined immunodeficiency in Frisian water dogs caused

# Dr Brighton Dzikiti



Dr Brighton Dzikiti heads the Veterinary Anaesthesia Section in the Department of Companion Animal Clinical Studies. He is a member of the South African Veterinary Association and the Association of Veterinary Anaesthetists. He received an Exceptional Young Researcher Award from UP in 2012 and was a runner-up Young Researcher in the Faculty in 2011. He obtained a UP Research Development Programme grant for research in the field of total intravenous anaesthesia and analgesia in goats. He is involved in peer-review duties with a number of local and international journals and has presented scientific talks on various local and international platforms.

by a RAG1 mutation. In **Genes and Immunity**, 12(4), pp 310–313.

- Berg S, Garcia-Pelayo MC, Muller B, Hailu E, Asiimwe B, Kremer K, Dale J, Boniotti MB, Rodriguez S, Hilty M, Rigouts L, Firdessa R, Machado A, Michel AL: 2011. African 2, a Clonal Complex of *Mycobacterium bovis* Epidemiologically Important in East Africa. In Journal of Bacteriology, 193(3), pp 670–678.
- Maree FF, Blignaut B, Esterhuysen JJ, De Beer TAP, Theron J, O' Neill HG, Rieder E: 2011. Preticting antigenic sites on the foot and mouth disease viru capsid of the South

African Territories types using virus neutralization data. In **Journal of General Virology**, 92, pp 2297–2309.

- Apanaskevich DR, Horak IG, Horak IG, Matthee CA, Matthee S: 2011. A new species of *Ixodes* (Acari: Ixodidae) from South African mammals. In **Journal of Parasitology**, 97(3), pp 389–398.
- Harrison A, Bown KJ, Horak IG, Horak IG: 2011. Detection of *Anaplasma bovis* in an undescribed tick species collected from the eastern rock sengi *Elephantulus myurus*. In **Journal of Parasitology**, 97(6), pp 1012–1016.
- Christie J, Schwan EV, Bodenstein LE, Sommerville JEM, Van der Merwe LL: 2011. The sensitivity of direct faecal examination, direct faecal flotation, modified centrifugal faecal flotation and centrifugal sedimentation/flotation in the diagnosis of canine spirocercosis. In Journal of the South African Veterinary Association, 82(2), pp 71–75.
- Krecek RC, Penzhorn BL, De Waal DT, Peter RJ, Prichard R, Sumption D: 2011. Origin and history to date of the World Association for the Advancement of Veterinary Parasitology African foundation. In Journal of the South African Veterinary Association, 82(1), pp 6–7.
- Khan F, Vorster JH, Van Vuuren M, Mapham P: 2011. Evaluation of the effects of long-term storage of bovine ear notch samples on the ability of 2 diagnostic assays to identify calves persistently infected with bovine viral diarrhoea virus. In Journal of the South African Veterinary Association, 82(1), pp 18–23.
- Matos CA, Sitoe C, Afonso S, Banze J, Baptista J, Dias G, Rodrigues F, Atanasio A, Nhamusso A, Penrith ML, Willingham III AL: 2011. A pilot study of common health problems in smallholder pigs in Angonia and Boane districts, Mozambique. In Journal of the South African Veterinary Association, 82(3), pp 166–169.
- Govender D, Oosthuizen MC, Penzhorn BL: 2011. Piroplasm parasites of white rhinoceroses (*Ceratotherium simum* in the Kruger National Park, and their relation to anaemia. In Journal of the South African Veterinary Association, 82(1), pp 36–40.
- Bath GF, Janse van Rensburg A, Pettey KP, Van Vuuren M, Kidanemariam A: 2011. A literature review and investigation of staphylococcal necrotic dermatitis in sheep. In Journal of the South African Veterinary Association, 84(4), pp 227–231.
- Van Dyk E, Bosman AM, Van Wilpe E, Williams JH, Bengis RG, Van Heerden J, Venter EH: 2011. Detection

and characterisation of papillomavirus in skin lesions of giraffe and sable antelope in South Africa. In **Journal of the South African Veterinary Association**, 82(2), pp 80–85.

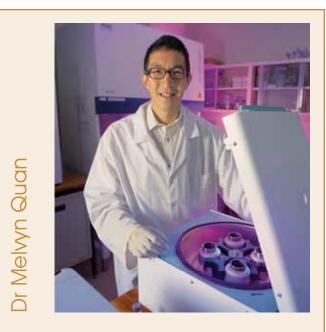
- Crafford JE, Guthrie AJ, Van Vuuren M, Mertens PPC, Burroughs JN, Howell PG, Batten CA, Hamblin C: 2011. A competitive ELISA for the detection of group-specific antibody to equine encephalosis virus. In Journal of Virological Methods, 174, pp 60–64.
- Kruitwagen HS, Arends B, Spee B, Brinkhof B, Van den Ingh T, Rutten VPMG, Penning LC, Roskams T, Rothuizen J: 2011. Recombinant hepatocyte growth factor treatment in a canine model of congenital liver hypoplasia. In Liver International , 31(7), pp 940–949.
- Hlokwe TM, Jenkins AO, Streicher EM, Venter EH, Cooper D, Godfroid J, Michel AL: 2011. Molecular characterisation of *Mycobacterium bovis* isolated from African buffaloes (*Syncerus caffer/I>*) in Hluhluwe-iMfolozi park in KwaZulu-Natal, South Africa. In **Onderstepoort Journal of Veterinary Research**, 78(1), pp 1–6.
- Spickett AM, GalliVan GJ, Horak IG, Horak IG: 2011. The dynamics of questing ticks collected for 164 consecutive months off the vegetation of two landscape zones in the Kruger National Park (1988-2002). Part II. Total ticks, *Rhipicephalus appendiculatus* and *Rhipicephalus zambeziensis*. In **Onderstepoort Journal of Veterinary Research**, 78(1), pp 1–9.
- Conradie Van Wyk I, Boomker JDF: 2011. Parasites of South African wildlife. XVIV. The prevalence of helminths in some common antelopes, warthogs and a bushpig in the Limpopo province, South Africa. In **Onderstepoort Journal of Veterinary Research**, 78(1), pp 1–11.
- Venter EH, Gerdes T, Wright I, Terblanche J: 2011. An investigation into the possibility of bluetongue virus transmission by transfer of infected ovine embryos. In **Onderstepoort Journal of Veterinary Research**, 78(17), pp 1–7.
- Horak IG, Horak IG, Welman S, Hallam SL, Lutermann H, Mzilikazi N: 2011. Ticks of four-toed elephant shrews and Southern African hedgehogs. In **Onderstepoort Journal of Veterinary Research**, 78(1), pp 1–3.
- Nyangiwe N, Goni S, Hervé-Claude LP, Ruddat I, Horak IG, Horak IG: 2011. Ticks on pastures and on two breeds of cattle in the Eastern Cape province, South Africa. In

**Onderstepoort Journal of Veterinary Research**, 78(1), pp 1–9.

- Gallivan GJ, Spickett A, Heyne H, Spickett AM, Horak IG: 2011. The dynamics of questing ticks collected for 164 consecutive months off the vegetation of two landscape zones in the Kruger national park (1988-2002). Part III. The less commonly collected species. In **Onderstepoort Journal of Veterinary Research**, 78(1), pp 1–9.
- Horak IG, Horak IG, Gallivan GJ, Spickett AM: 2011. The dynamics of questing ticks collected for 164 consecutive months off the vegetation of two landscape zones in the Kruger National Park (1988-2002). Part I.Total ticks, *Amblyomma hebraeum* and *Rhipicephalus decoloratus*. In **Onderstepoort Journal of Veterinary Research**, 78(1), pp 1–9.
- Nakao R, Magona JW, Zhou L, Jongejan F, Sugimoto C: 2011. Multi-locus sequence typing of *Ehrlichia ruminantium* strains from geographically diverse origins and collected in *Amblyomma variegatum* from Uganda. In **Parasites & Vectors**, 4(137), pp 1–9.
- Penzhorn BL: 2011. Why is Southern African canine babesiosis so virulent? An evolutionary perspective. In Parasites & Vectors, 4, pp 51–55.
- Pienaar R, Potgieter FT, Latif AA, Thekisoe OMM, Mans BJ: 2011. The Hybrid II assay: a sensitive and specific real-time hybridization assay for the diagnosis of *Theileria parva* infections in Cape buffalo (*Syncerus caffer*) and cattle. In **Parasitology**, 138, pp 1935–1944.
- Mans BJ, Pienaar R, Latif AA, Potgieter FT: 2011. Diversity in the 18S SSU rRNA V4 hyper-variable region of *Theileria* spp in Cape buffalo (*Syncerus caffer*) and cattle from southern Africa. In **Parasitology**, 138, pp 766–779.
- Pienaar R, Potgieter FT, Latif AA, Thekisoe OMM, Mans BJ: 2011. Mixed *Theileria* infection in free-ranging buffalo herds: implications for diagnosing Theileria parva infections in Cape buffalo (*Syncerus caffer*). In Parasitology, 138, pp 884–895.
- Chitanga S, Marcotty T, Namangala B, Van den Bossche P, Van den Abbeele J, Delespaux V: 2011. High prevalence of drug resistance in animal trypanosomes without a history of drug exposure. In **PLoS Neglected Tropical Diseases**, 5(12), Online.
- Vitouley HS, Mungube EO, Allegye-Cudjoe E, Diall O, Bocoum Z, Diarra B, Randolph TF, Bauer B, Clausen PH, Geysen D, Sidibe I, Bengaly Z, Van den Bossche P,

Delespaux V: 2011. Improved PCR-RFLP for the detection of Diminazene resistance in *Trypanosoma congolense* under field conditions using filter papers for sample storage. In **PLoS Neglected Tropical Diseases**, 5(7), Online.

- Mans BJ, De Klerk D, Pienaar R, Latif AA: 2011. *Nuttalliella namaqua*: a living fossil and closest relative to the ancestral tick lineage: Implications for the evolution of blood-feeding in ticks. In **Plos One**, 6(8), pp 1–11.
- Rich KM, Perry BD: 2011. The economic and poverty impacts of animal diseases in developing countries: New roles, new demands for economics and epidemiology. In **Preventive Veterinary Medicine**, 101(3–4), pp 133–147.
- Michel AL, Cooper D, Jooste J, De Klerk LM, Jolles A: 2011. Approaches towards optimising the gamma interferon assay for diagnosing *Mycrobacterium bovis* infection in African buffalo (*Syncerus caffer*). In **Preventive Veterinary Medicine**, 98, pp 142–151.
- Riley DG, Van Wyk JA: 2011. The effects of penalization of FAMACHA© scores of lambs treated for internal parasites on the estimation of genetic parameters and prediction of breeding values. In **Small Ruminant Research**, 99, pp 122–129.
- Adams HR, Van Vuuren M, Bosman AM, Kania S, Kennedy M: 2011. Detection and genetic analysis of feline immunodeficiency virus (FIVple) in southern African lions (*Panthera leo*). In South African Journal of Wildlife Research, 41(2), pp 173–180.
- Henton M, Eager H, Swan GE, Van Vuuren M: 2011. Part VI. Antibiotic management and resistance in livestock production. In **South African Medical Journal**, 101(8), pp 583–587.
- Rich KM, Perry BD: 2011. Whither Commodity-based Trade?. In Southern African Public Law, 29(3), pp 331–357.
- Penrith ML, Vosloo W, Mather C: 2011. Classical swine fever (Hog cholera): Review of aspects relevant to control. In **Transboundary and Emerging Diseases**, 58, pp 187–196.
- Santema W, Van Kooten P, Hoek A, Leeflang M, Overdijk M, Rutten VPMG, Koets AP: 2011. Hsp70 vaccinationinduced antibodies recognize B cell epitopes in the cell wall of *Mycobacterium avium* subspecies *paratuberculosis*. In Vaccine, 29, pp 1364–1373.
- Schlotter YM, Rutten VPMG, Riemers FM, Knol EF, Willemse T: 2011. Lesional skin in atopic dogs shows a mixed Type-1 and Type-2 immune responsiveness. In **Veterinary**



Dr Melvyn Quan is a member of the Department of Tropical Diseases. His research interests include recombinant vaccine development, molecular diagnostics, epidemiology, phylogeny and GIS. He has 10 publications and 15 papers in congress proceedings to his credit and is a member of the Royal College of Veterinary Surgeons in the United Kingdom, and the South African Veterinary Council.

#### Immunology and Immunopathology, 143, pp 20–26.

- Nguyen TKA, Wieland W, Santema W, Hoeboer J, Van Eeden W, Rutten VPMG, Koets AP, Van Rhijn I: 2011. Immune response of cattle immunized with a conjugate of the glycolipid glucose monomycolate and protein. In **Veterinary Immunology and Immunopathology**, 142, pp 265–270.
- Veenhof EZ, Knol EF, Schlotter YM, Vernooij JC, Rutten VPMG, Willemse T: 2011. Characterisation of T cell phenotypes, cytokines and transcription factors in the skin of dogs with cutaneous adverse food reactions. In **Veterinary Journal**, 187, pp 320–324.
- Lamien CE, Le Goff C, Silber R, Wallace DB, Gulyaz V, Tuppurainen ESM, Madani H, Caufour P, Adam T, Harrak ME, Luckins AG, Albina E, Diallo A: 2011. Use of the capripoxvirus homologue of vaccinia virus 30 kDa RNA polymerase subunit (RPO30) gene as a novel diagnostic

and genotyping target: development of a classical PCR method to differentiate goat poxvirus from sheep poxvirus. In **Veterinary Microbiology**, 149(1–2), pp 30–39.

- Jenkins AO, Cadmus SIB, Venter EH, Pourcel C, Hauk Y, Vergnaud G, Godfroid JXL: 2011. Molecular epidemiology of human and animal tuberculosis in Ibadan, Southwestern Nigeria. In **Veterinary Microbiology**, 151, pp 139–147.
- De Cramer KGM, Stylianides E, Van Vuuren M: 2011. Efficacy of vaccination at 4 and 6 weeks in the control of canine parvovirus. In **Veterinary Microbiology**, 149, pp 126–132.
- Van den Bossche P, Delespaux V: 2011. Options for the control of tsetse-transmitted livestock trypanosomosis.
   An epidemiological perspective. In Veterinary Parasitology, 181, pp 37–42.
- Reynecke D, Van Wyk JA, Gummow B, Dorny P, Boomker JDF: 2011. A stochastic model accommodating the FAMACHA© system for estimating worm burdens and associated risk factors in sheep naturally infected with *Haemonchus contortus*. In **Veterinary Parasitology**, 177, pp 231–241.
- Reynecke D, Van Wyk JA, Gummow B, Dorny P, Boomker JDF: 2011. Validation of the FAMACHA© eye colour chart using sensitivity/specificity analysis on two South African sheep farms. In **Veterinary Parasitology**, 177, pp 203–211.
- Reynecke D, Van Wyk JA, Gummow B, Dorny P, Boomker JDF: 2011. Application of ROC curve analysis to FAMACHA © evaluation of haemonchosis on two sheep farms in South African. In **Veterinary Parasitology**, 177, pp 224– 230.
- Jongejan F, Fourie JJ, Chester ST, Manavella C, Mallouk Y, Pollmeier MG, Baggott D: 2011. The prevention of transmission of *Babesia canis canis* by *Dermacentor reticulatus* ticks to dogs using a novel combination of fipronil, amitraz and (S)-methoprene. In Veterinary Parasitology, 179, pp 343–350.
- Van Wyk JA, Reynecke D: 2011. Blueprint for an automated specific decision support system for countering anthelmintic resistance in *Haemonchus* spp. at farm level. In **Veterinary Parasitology**, 177, pp 212–223.
- Sibeko KP, Collins NE, Oosthuizen MC, Troskie M, Potgieter FT, Coetzer JAW, Geysen D: 2011. Analyses of genes encoding Theileria parva p104 and Polymorphic

Immunodominant Molecule reveal evidence of the presence of cattle-type alleles in the South African T.parva population. In **Veterinary Parasitology**, 181, pp 120–130.

- Brothers PS, Collins NE, Oosthuizen MC, Bhoora R, Troskie M, Penzhorn BL: 2011. Occurrence of bloodborne tick-transmitted parasites in common tsessebe (*Damaliscus lunatus*) antelope in Northern Cape Province, South Africa. In **Veterinary Parasitology**, 183, pp 160–165.
- Chaisi ME, Sibeko KP, Collins NE, Potgieter FT, Oosthuizen MC: 2011. Identification of *Theileria parva* and *Theileria* sp. (buffalo) 18S rRNA gene sequence variants in the African Buffalo (*Syncerus caffer*) in southern Africa. In **Veterinary Parasitology**, 182, pp 150–162.
- Pfitzer S, Oosthuizen MC, Bosman AM, Vorster I, Penzhorn BL: 2011. Tick-borne blood parasites in nyala (*Tragelaphus angasii*, Gray 1849) from KwaZulu-Natal, South Africa. In **Veterinary Parasitology**, 176, pp 126–131.
- Santema W, Rutten VPMG, Koets AP: 2011. Bovine paratuberculosis: recent advances in vaccine development. **Veterinary Quarterly**, 31(4), pp 183–191.



Prof Nick Binedell Director

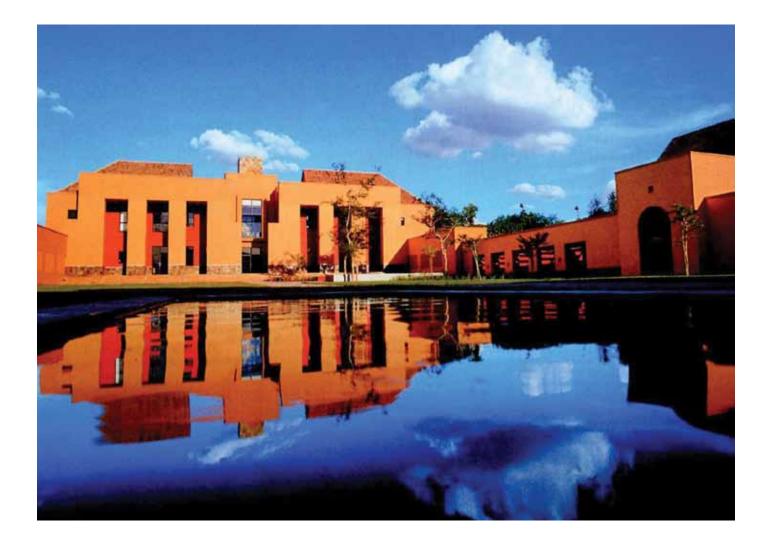
# **4.10** Gordon Institute of Business Science (GIBS)

The Gordon Institute of Business Science (GIBS) is rooted in the South African and African business communities and has been steadily increasing its research output since it was founded in 2000. In addition to the supervision of more than 200 MBA research reports in 2011, the Institute's staff members produced 16 journal articles (of which four were published internationally), and presented three papers at international conferences, including papers at the Academy of Management and Academy of International Management. GIBS is in the fortunate position of having direct access to high-level managers and professionals in most of South Africa's top companies and multinationals operating in Africa. This ensures that research themes are clearly rooted in the South African experience and GIBS's strategic focus on dynamic markets. Examples of this emphasis are reflected in five of the articles that focus on emerging markets. The second clear theme that is reflected in much of the research is GIBS's orientation as a general management business school, reflecting the cross-functional nature of general management and business leadership.

In maintaining its international ranking as one of the top 50 business schools in the world (as reflected in the rankings of the *Financial Times* of London) GIBS's staff members are encouraged to aim for publication in journals that are jointly listed on the influential list of the Association of Business Schools, those that are acknowledged in the *Financial Times* of London's ranking, as well as the list of the Department of Higher Education and Training.

**Prof Nick Binedell** 

Director: GIBS Tel: 011 771 4000 Email: binedelln@gibs.co.za



# Research Output

# Graduate School of Management

#### Journal articles

- Van Wyk R, Adonisi M: 2011. An eight-factor solution for the Corporate Entrepreneurship Assessment Instrument. African Journal of Business Management (AJBM), 5 (8) / Apr, pp 3047-3055.
- Rossouw J: 2011. Selective reflection on the Institutional Development of the South African Reserve Bank. **Economic history of developing regions**, 26 (1) / Jul, pp 3-20.
- Rossouw J, Padayachee V: 2011. Reflecting on 90 years of intermittent success: The experience of the South African Reserve Bank with inflation since 1920. Economic history of developing regions, 26 (1) / Jul, pp 53-72.
- Rossouw J, Breytenbach A: 2011. Identifying central banks with shareholding: A review of available literature. **Economic history of developing regions**, 26 (1) / Jul, pp 123-130.
- Barnard HC: 2011. Emerging multinationals benefiting from subsidiaries located in more developed countries: drivers for the sharing of capabilities. Innovation and Development, 1 (2) / Oct, pp 187-203.
- Muller C, Ward MJD: 2011. Active Share on the JSE. **Investment** Analysts Journal, 74 (2) / Sep, pp 17-26.
- Thaver K, Ward MJD: 2011. Abnormal Volume Traded as an Indicator of Insider Trading. Journal for Studies in Economics and Econometrics/ Studies in Ekonomie en Ekonometrie (SEE), 35 (1) / Mar, pp 1-20.
- Chipp K, Kleyn N, Manzi T: 2011. Catch up and keep up: relative deprivation and conspicuous consumption in emerging markets. Journal of International Consumer Marketing, 23 (2), pp 117-134.
- Goldman M: 2011. Post-Crisis Sports Marketing Business Model Shifts. **Managing global transitions**, 9 (2) / Summer, pp 171-184.
- Esterhuysen D, Ward MJD: 2011. The information content of the Financial Mail's 'Top Companies' announcements. **SA Journal of Accounting Research**, 25 (1) / Dec, pp 1-15.

- Scheepers CB, Shuping J: 2011. The effect of Human Resources Practices on Psychological contracts at an iron ore mining company in South Africa. SA Journal of Human Resource Management, 9 (1) / Aug, pp 1-19.
- Chatbury A, Beaty D, Kriek HS: 2011. Servant leadership, trust and implications for the "Base-of-the-Pyramid" segment in South frica. **South African Journal of Business Management**, 42 (4) / Dec, pp 57-61.
- Sutherland M, Wocke A: 2011. The symptoms of and consequences to selection errors in recruitment decisions. South African Journal of Business Management, 42 (4) / Dec, pp 23-32.
- Kohler M, Saville AD: 2011. Measuring the Impact of TraDe Finance on Country TraDe Flows: A South African Perspective. South African Journal of Economic and Management Sciences (SAJEMS), 14 (4) / Dec, pp 466-478.
- Richardson A, Cook J, Hofmeyr K: 2011. How leaders generate hope in their followers. **South African Journal of Labour Relations**, 35 (2), pp 47-66.
- Antonites AJ, Kliphuis W: 2011. An exploratory study on the potential value add of social networking to the entrepeneurial process. **Southern African Journal of Entrepreneurship and Small Business Management**, 4, pp 1-23.

#### Chapters in books

Kleyn N, Clark D: 2011. Why do they leave? Voluntary turnover of South African women executives. In Leadership, Gender and Organization, (11) / 2, Springer, pp 185-207.

In the list of research outputs, in all cases the heading "Papers published" refers to papers in refereed, published conference proceedings, and the heading "Journal articles" refers to articles published in accredited, peer-reviewed, refereed specialist journals.



# Acknowledgements

The University of Pretoria acknowledges the work of its researchers at different levels, as well as the efforts of various research teams in consolidating research at the University. The Department of Research and Innovation Support enjoys the cooperation it has with the various faculties, the Gordon Institute of Business Science and individual staff members, and is confident that this partnership will continue and yield an even greater research output. The University's Research Report 2011 is the product of the concerted effort of everyone involved.

#### A special word of thanks is due to the following individuals and entities, in particular:

- The deans of the University's nine faculties and the Director of its business school for stimulating an environment that is conducive to research.
- The chairpersons of the respective research committees for facilitating the various research structures in order to nurture research and the University's research agenda at faculty level.
- The individual researchers, who continue to perform research at the University of Pretoria and to publish their research findings in various media.
- The University's data capturers for ensuring that the many research articles, research awards and other achievements are recorded in the different departments for presentation in the Research Report.
- The University Library for the purposeful supplementation of the research information that has been captured.
- The staff of the Department of Research and Innovation Support for lending themselves to support research and innovation at the University and for coordinating the processes that led to the production of data on research at UP.
- The finance team for performing the accounting function and ensuring the reconciliation of research funds.

#### **Review Team:**

- Prof Stephanie Burton
- Dr Patricia Smit
- André van der Westhuysen
- Ntsatsi Mantsho

University of Pretoria Private Bag X20 Hatfield Pretoria 0028 South Africa Tel: +27 (0) 12 420 4111 www.up.ac.za