



PROF DHIRO GIHWALA

FACULTY OF HEALTH & WELLNESS SCIENCES

DEAN'S REPORT

Since the reconfiguration of the faculty in 2005, our staff and students have continued on their quest towards research excellence, building on the tradition of conducting quality research as they had done in the past. In the year under review, our researchers contributed to an increased number of postgraduate completions, refereed publications and generated research income. The research scope covered both fundamental and applied research and there are signs that our research is not only helping to inform our undergraduate teaching programmes but also providing new career opportunities for our graduates. It can be concluded that our diverse, yet related research activities in the faculty, form a rich tapestry of various facets of health and health-education investigations within the context of a university of technology.

Over 60 percent of the academic staff in the faculty have research qualifications while a number of others are engaged with their own postgraduate studies which will

further enhance the research profile of the faculty. It is encouraging to note that the majority of the staff who obtained master's degrees in 2008 intend pursuing doctoral studies.

Our research programmes had over 40 master's and six doctoral research degree students drawn from a number of countries abroad, particularly from the rest of the African continent. As in the past, students were offered the opportunity to do oral presentations at national and regional conferences and symposia and these were of customary high quality.

The year saw the completion of the Oxidative Stress Centre which is becoming the flagship laboratory-based research unit in the faculty. The Centre has done leading research work in the oxidative properties of red palm oil and indigenous herbal teas and their relationship to health promotion and disease prevention. Collaborative interest was shown by various international and national researchers. Formal linkages were established with the University of Szegrib in Hungary, the University

of Bergen in Denmark, Rutgers in New York and the University of Mauritius. These relationships have led to exchanges between scientists from those institutions and our faculty. Besides our on-going association with other universities in the region, a relationship was rekindled with iThemba Laboratories where unique studies were conducted on trace element absorption and distribution in the cells of murine organs treated with anti-oxidants.

The prevalence of tuberculosis in the Western Cape region and the high incidence of diabetes led to significant research in these areas. Epidemiological studies associated with health studies affecting local communities were undertaken accompanied by laboratory-based pathological investigations. These studies have relevance to interventionist health strategies. Community-based research also took the form of developing an instrument to measure the role of community health workers. In addition to this study, the nursing division of the faculty continued to focus on HIV/Aids research. The faculty also used unique research methodologies to conduct a

community-based disaster risk assessment for the Cape Winelands region of the Western Cape.

As a faculty continually striving for optimal student development, and conscious of the fact that students need to be exposed to relevant learning opportunities, important investigations were done in the area of literacy studies of science texts, language factors affecting student learning, and the appropriateness of curricula related to practice. These investigations were of particular significance in the context of our mission to provide educational services to students from the African continent, many of whom are not English first-language speakers.

The year has been a productive one. Our research success comes about as a direct result of planning, hard work and effective research leadership, and the faculty researchers are to be congratulated for their efforts in these areas.

CONFERENCE FUNDING

APPLICANT	ALLOCATION (rands)
Esterhuysen J	15 255
Khan S	11 125
Matsha T	17 983
TOTAL	44 363

INDUSTRY FUNDING

RESEARCHER	FUNDER	PROJECT	ALLOCATION (rands)
Christopher L Naidoo N	Cape Winelands District Municipality	Community-based disaster risk assessment	503 700
Marnewick J	SA Sugar Association	Postprandial oxidative stress in normal lipemic individuals: effect of antioxidant-containing food	90 000
Marnewick J	SA Rooibos Council	Effects of rooibos consumption on patients at risk of coronary heart disease	206 500
TOTAL			800 200



**NRF FUNDING**

RESEARCHER	PROGRAMME	NRF	CPUT	ALLOCATION (rands)
Marnewick JL	Focus	20 000	20 000	40 000
Van Rooyen J	ISL	104 796	-	104 796
Botha T	Thuthuka	88 200	96 400	184 600
Khan S	Thuthuka	230 500	161 000	391 500
TOTAL				720 896

UNIVERSITY RESEARCH FUNDING

RESEARCHER	TITLE	ALLOCATION (rands)
Brooks NL	An investigation of the role of palm juice on the antioxidant capacity and apoptosis of Sertoli and Leydig cells and An investigation of organic hydroperoxides and a red palm oil supplemented diet on spermatogenesis, sperm function and sperm apoptosis	75 000
Esterhuyse AJ Van Rooyen J	The effect of dietary supplementation of fat-soluble antioxidants and water-soluble antioxidants on cardiac function and enzyme systems in rat hearts with or without metabolic syndrome	75 000
Marnewick JL	<i>In vivo</i> modulation of tumour promotion by indigenous herbal teas using an ultraviolet-induced mouse skin cancer model	75 000
Matsha T	The role of viral factors and membrane fatty acids in the loss of membrane integrity in multiple sclerosis patients	75 000
TOTAL		300 000

NRF RATED RESEARCHERS**Promising young researcher (Y rating)****Dr Jeanine Marnewick***marnewickj@cput.ac.za*

Dr Jeanine Marnewick is leader of the South African Herbal Research Thrust, a research niche area within the Oxidative Stress Research Centre. Her research focuses on the effect of indigenous herbals, such as rooibos, on certain disease conditions where oxidative stress plays an important role, and their relationship to health promotion and disease prevention. She recently completed a human intervention study to determine the impact of rooibos on oxidative stress and the wellbeing of adults at risk of developing heart disease. Core to her research is to substantiate scientifically anecdotal health claims about traditional herbal teas and medicinal plants in order to make more specific recommendations regarding their use in health promotion. She also acts as consultant to the rooibos industry in South Africa as well as abroad.

Research institutes, centres and units

OXIDATIVE STRESS RESEARCH CENTRE

Dr Jeanine Marnewick

marnewickj@cput.ac.za

The Oxidative Stress Research Centre contributes to existing knowledge regarding the role of oxidative stress in health and disease development through high-quality research. It comprises various research thrusts:

- Experimental Biology Research
- South African Medicinal Plant Research
- Obesity and Chronic Diseases of Lifestyle Research
- Bio- and Inorganic Materials Research
- Analytical Laboratory Services

These research thrusts were previously independent units until they merged in 2007. The thrusts address specific health and industry needs where oxidative stress occurs. Specific health problems include obesity, diabetes, heart disease, cancer and HIV/Aids, all of which are prevalent in South African communities.

EYECARE CLINIC

The Eyecare Clinic provides low-cost eyecare to historically disadvantaged rural and urban communities. Each clinic contains modern diagnostic equipment and serves as a regular and valuable training environment for CPUT students. Data gathered from the clinic is used for research purposes.

New professors appointed



Professor
Dhiro Gihwala



Associate Professor
Tania Botha



Associate
Professor
Penelope Engel-
Hills



Associate Professor
Johan Esterhuyse



Associate Professor
Sehaam Khan



Conference papers

Botha T

Non-tuberculous mycobacteria recovered from human samples in the Western Cape, South Africa
TB Conference
Durban
1 – 4 July 2008

Brittle W, Hesseling A, Marais B, Schaaf S, Kidd M, Wasserman E & **Botha T**
Improved mycobacterial yield and reduced time to detection in paediatric samples using a nutrient broth growth supplement
TB Conference
Durban
1 – 4 July 2008

Clarke M

Community health workers in South Africa: where in this maze do we find ourselves?
Organization for Social Science Research in Eastern and Southern Africa
Bellville
3 – 4 March 2008

Clarke M

Investigating an approach to developing a surveillance system for measuring the impact of community health worker programmes
Organization for Social Science Research in Eastern and Southern Africa
Bellville
3 – 4 March 2008

Davison G

Dendritic cells, T-lymphocytes and their possible role in the treatment of lymphoma and other haematological malignancies
13th Biennial Congress of the South African Lymphoma Study Group
Cape Town
4 – 7 October 2008

Davison G, Novitzky N & Mohamed R (**merit award**)
T-cell function and its role in the pathogenesis of myelodysplastic syndromes
48th Annual Congress of the Federation of South African Societies of Pathology
Cape Town
19 – 21 July 2008

Engel-Hills P

Learning about professionalism from students
15th International Society of Radiographers and Radiological Technologists (ISRRT) Congress
Durban
23 – 27 April 2008

Engel-Hills P, Garraway J, Jacobs C, Volbrecht T & Winberg C

Working for a degree: work-integrated learning in the HEQF
Higher Education Learning and Teaching Association of Southern Africa (HELTASA) and South African Association for Research and Development in Higher Education (SAARDHE): Higher Education as a Social

Space

Grahamstown
30 November – 3 December 2008

Esterhuyse AJ, Bester DJ, Du Toit EF, Truter EJ & Van Rooyen J

Dietary red palm oil supplementation offers cardioprotection against ischaemia/reperfusion injury: possible cellular mechanisms involved
7th Conference of the International Society for Free Radical Research Africa
Reduit, Mauritius
14 – 17 July 2008

Gihwala D

Universities of Technology - their role in South Africa's development
XIII IOSTE Symposium: The Use of Science & Technology for Peace and Sustainable Development
Kusadasi, Turkey
21 – 26 September 2008

Hassan MS, Erasmus RT, Matsha T & Esterhuyse J

Oxidative stress, insulin resistance and metabolic complications in patients on antiretroviral therapy: amelioration through L-carnitine and palm oil supplementation
7th Conference of the International Society for Free Radical Research Africa
Reduit, Mauritius
14 – 17 July 2008

**Hikuam CW, Botha T,
Rautenbach F
& Marnewick JL**

Antioxidant and antimicrobial activities of indigenous medicinal plant extracts
7th Indigenous Plant Use Forum
Graaff Reinet, South Africa
7 – 10 July 2008

**Jackson V, Palse A, Khan S,
Odendaal J & Khan W**

Identification of metal-tolerant organisms isolated from the Plankenburg River in the Western Cape, South Africa
Cape Biotech Forum
Cape Town
1 – 2 December 2008

Jowell ME

Approach to dispensing spectacles for children
Clinical Review Seminar
Durban
22 June 2008

Jowell ME

Fitting a successful multifocal Vision 2008
Johannesburg
11 – 14 July 2008

Jowell ME

The skin and the spectacle frame
Vision 2008
Johannesburg
11 – 14 July 2008

Kruger C, Botha T, Beyers N, Van Helden PD & Pheiffer C
Non-tuberculosis mycobacteria recovered from human samples in the Western Cape, South Africa
TB Conference
Durban

1 – 4 July 2008

**Macharia M, Marnewick JL
& Rautenbach F**

Does rooibos modulate parameters of oxidative stress status in humans at risk of coronary heart disease?
7th Indigenous Plant Use Forum
Graaff Reinet, South Africa
7 – 10 July 2008

Marnewick JL

Health-promoting properties of rooibos
World Tea Expo
Las Vegas, NV
30 May – 1 June 2008

Marnewick JL

Rooibos power!
Food Ingredients Africa
Symposium - Africa! Unique Challenges and Solutions for the Global Food Ingredient Industry
Cape Town
22 – 23 January 2008

Marnewick JL

Rooibos: the South African success story!
7th Indigenous Plant Use Forum
Graaff Reinet, South Africa
7 – 10 July 2008

Marnewick JL

Rooibos and honeybush: unique South African herbal beverages with chemopreventive activities
6th Pan African Environmental Mutagen Society Conference (PAEMS 2008)
Cape Town
2 – 5 November 2008

Marnewick JL,

Van der Westhuizen FH & Gelderblom WCA
Modulation of fumonisin B1-induced liver cancer promotion in male Fischer rats by indigenous herbal beverages, rooibos (*Aspalanthus linearis*) and honeybush (*Cyclopia intermedia*)
7th Conference of the Society for Free Radical Research Africa
Reduit, Mauritius
14 – 17 July 2008

Matsha T

Clinical audit (keynote address)
28th World Congress of Biomedical Laboratory Science
New Delhi, India
24 – 28 August 2008

Matsha T, Hassan MS, Bhata A, Yako Y, Fanampe B, Somers A & Erasmus RT
Metabolic syndrome in 10 – 16 year-old learners: comparison of NCEP ATPIII and IDF criteria
48th Annual Conference of the Federation of South African Societies of Pathologists (FSASP)
Cape Town
19 – 21 July 2008

Matsha T, Hassan MS, Bhata A, Yako Y, Fanampe B, Somers A & Erasmus RT
Prevalence of metabolic syndrome in 8 – 18 year-old learners residing in the peri-urban/rural and urban communities of the Western Cape, South Africa
28th World Congress of Biomedical Laboratory Science
New Delhi, India
24 – 28 August 2008



Matsha T, Van Rensburg S, Hon D & Erasmus RT
Decreased total anti-oxidant levels in patients with oesophageal squamous cell carcinoma from a high-risk region of South Africa with low serum folate and iron levels
28th World Congress of Biomedical Laboratory Science
New Delhi, India
24 – 28 August 2008

Mburu SW, Rautenbach F & Marnewick JL
Antioxidant activity of South African wines and other beverages
7th Indigenous Plant Use Forum
Graaff Reinet, South Africa
7 – 10 July 2008

Mugabo P, **Hassan MS**, Maritz P & Slaughter R
Acute pharmacokinetics of first-line anti-tuberculosis drugs in patients with pulmonary tuberculosis and in patients co-infected with pulmonary tuberculosis and HIV
13th Annual Congress of the Belgian Society of Internal Medicine
Brussels, Belgium
5 – 6 December 2008

Pause A, Jackson V, Khan S & Khan W
Molecular identification of bacterial pollutants from the Plankenburg and Berg Rivers in the Western Cape, South Africa
Cape Biotech Forum
Somerset West
1 – 2 December 2008

Petrova A, Marnewick JL, Rautenbach F & Davids L
Modulation of UVB-induced oxidative stress and inflammation by extracts of honeybush in SKH1 mouse skin
7th Indigenous Plant Use Forum
Graaff Reinet, South Africa
7 – 10 July 2008

Sissing L, Gamielien K, **Marnewick JL** & Gelderblom WCA
Modulation of N-methylbenzyl nitrosamine-induced oesophageal papillomas in rats by *Sutherlandia frutescens*
Indigenous Plant Use Forum
Graaff Reinet, South Africa
7 – 10 July 2008

Smith W, **Van Rooyen J**, Lochner A & Du Toit E
The PPAR α agonist, K-111, reduces myocardial ischaemia/reperfusion injury in a rodent model of the metabolic syndrome
XXVIIth European Section Meeting of the International Society for Heart Research
Athens, Greece
28 – 31 May

Truter EJ
Oxidative stress research at the Cape Peninsula University of Technology
7th Conference of the International Society for Free Radical Research Africa
Reduit, Mauritius
14 – 17 July 2008

Williams K, Cerf M, Muller C, Louw J, **Esterhuysen J & Van Rooyen J**
Developmental programming effects on organ development and glucokinase immunostaining in the neonatal rat and brain liver
Microscopy Society of Southern Africa
Gaborone, Botswana
22 – 25 July 2008

Windvogel SL, Joubert E, **Marnewick JL** & Gelderblom WCA
Effects of chronic exposure to rooibos and honeybush on the antioxidant activity in rat liver and kidney
7th Indigenous Plant Use Forum
Graaff Reinet, South Africa
7 – 10 July 2008

Wright J
Teacher agency in the radiography curriculum: aligning workplace and academic discourses regarding (especially) written literacy
Higher Education Learning and Teaching Association of Southern Africa (HELTASA) and South African Association for Research and Development in Higher Education (SAARDHE): Higher Education as a Social Space
Grahamstown
30 November – 3 December 2008

Conference posters

Aboua YG, Du Plessis SS & Brooks N

The impact of organic hydroperoxides on spermatogenesis and sperm function
CPUT Celebrating Research Day
Bellville
28 November 2008

Aboua YG, Brooks N & Du Plessis SS

The impact of superoxide, some commercially available anti-oxidants and red palm oil on sperm motility, viability and intracellular superoxide levels
5th European Congress of Andrology
Rome, Italy
26 – 28 November 2008

Abrahams R, Davison S, Fielding B, Tobin M & Khan S
Functional analysis of the nucleocapsid structural protein VP1054 of *Trichoplusia ni* single enveloped nucleopolyhedrovirus
International Union of Microbiological Societies (IUMS)
Istanbul, Turkey
5 – 15 August 2008

Behardien L, Khan S & Khan W

Enumeration of the bacterial contamination in a spring water distribution system, Western Cape, South Africa
International Union of Microbiological Societies (IUMS)
Istanbul, Turkey
5 – 15 August 2008

Bester DJ, Kupai K, Esterhuysen AJ, Chont T, Ferdinandy P & Van Rooyen J (third prize in student category)

Dietary red palm oil supplementation reduces infarct size in the isolated perfused rat heart: a possible role for matrix-metalloproteinase 2
CPUT Celebrating Research Day
Bellville
28 November 2008

Brittle W, Pajnczyk K, Bosman M, Kidd M, Marais BJ, Hesseling AC, Schaaf HS, Wasserman E & Botha T

Improved mycobacterial yield and reduced time-to-detection in paediatric samples using a nutrient broth growth supplement
CPUT Celebrating Research Day
Bellville
28 November 2008

Clarke M, Friedman I, MacDonald F, Aucamp M & Schoeman H

Developing a surveillance system for measuring the impact of community health worker programmes
CPUT Celebrating Research Day
Bellville
28 November 2008

Clarke M, Schoeman H, Friedman I, Macdonald F & Aucamp M

Developing a surveillance system for measuring the

impact of community health worker programmes
4th Public Health Association of South Africa (PHASA) Conference
Cape Town
2 – 4 June 2008

Dunn A

HIV-positive mothers and death of their children less than two years of age in Khayelitsha district
CPUT Celebrating Research Day
Bellville
28 November 2008

Esterhuysen AJ, Bester DJ, Du Toit EF, Engelbrecht AM, Truter EJ & Van Rooyen J

Targeting cellular mechanisms with natural antioxidants from red palm oil in order to enhance cardioprotection
2nd World Conference on Magic Bullets (EHRlich II)
Nuremberg, Germany
2 – 4 October 2008

Fanampe B, Hassan MS, Yako Y, Erasmus RT & Matsha T

Prevalence of metabolic syndrome, overweight and obesity in 8 – 18 year-old learners residing in the peri-urban/rural and urban communities of the Western Cape, South Africa
20th International Congress of Clinical Chemistry and Laboratory Medicine and XXXVth Brazilian Congress of Clinical



Analysis and VIIth Brazilian Congress of Clinical Cytology Forteleza, Brazil
28 September – 2 October 2008

Fanampe B, Hassan MS, Yako Y, Erasmus RT & Matsha T
Single nucleotide polymorphisms in the ecto-nucleotide pyrophosphatase phosphodiesterase 1 (ENPP1) gene in coloured obese learners from the Western Cape, South Africa
CPUT Celebrating Research Day Bellville
28 November 2008

Francisco NM, Benadé AJS, Rautenbach F & Marnewick JL
The effect of sucrose ingestion on postprandial oxidative stress in normal lipemic individuals after a standardised fat meal with rooibos intervention
CPUT Celebrating Research Day Bellville
28 November 2008

Gihwala D & Mars JA
Use of ICP-MS analytical technique to determine the effect of Malaysian red palm oil on the trace element absorption of murine organs
CPUT Celebrating Research Day Bellville
28 November 2008

Hikuum CW, Rautenbach F, Botha T & Marnewick JL
Antioxidant and anti-bacterial activities of selected indigenous

medicinal plant extracts
CPUT Celebrating Research Day Bellville
28 November 2008

Hon GM, Hassan MS, Van Rensburg SJ, Abel S, Marais De W, Van Jaarsveld P, Smuts CM, Henning F, Erasmus RT & Matsha T
Erythrocyte membrane fatty acids in patients with multiple sclerosis
7th Conference of the International Society for Free Radical Research Africa
Reduit, Mauritius
14 – 17 July 2008

Hon GM, Hassan MS, Van Rensburg SJ, Abel S, Marais De W, Van Jaarsveld P, Smuts CM, Henning F, Erasmus RT & Matsha T
Erythrocyte membrane fatty acids in patients with multiple sclerosis
48th Annual Conference of the Federation of South African Societies of Pathologists (FSASP)
Cape Town
19 – 21 July 2008

Hon GM, Hassan MS, Van Rensburg SJ, Abel S, Marais De W, Van Jaarsveld P, Smuts CM, Henning F, Erasmus RT & Matsha T
Erythrocyte membrane fatty acids in patients with multiple sclerosis
CPUT Celebrating Research Day

Bellville
28 November 2008

Khan S, Fielding B, Tan T, Chou C-F, Shuo S, Lim S-G, Hong W & Tan Y-J
Overexpression of severe acute respiratory syndrome coronavirus 3b protein induces simultaneous apoptosis and necrosis *in vitro* E6 cells
International Union of Microbiological Societies (IUMS)
Istanbul, Turkey
5 – 15 August 2008

Kruger C, Botha T, Van Helden P & Pheiffer C
Non-tuberculosis mycobacteria recovered from human samples in the Western Cape, South Africa
CPUT Celebrating Research Day Bellville
28 November 2008

Macharia M, Rautenbach F & Marnewick JL
Does rooibos modulate parameters of oxidative stress in humans at risk of coronary heart disease?
CPUT Celebrating Research Day Bellville
28 November 2008

Mars JA & Gihwala D
Parameterisation of cross sections for the reactions $^{14}\text{N}(\text{P},\text{P}')^{14}\text{N}$
CPUT Celebrating Research Day Bellville
28 November 2008

Matsha T, Abrahams F, Soita D, Hassan MS
& Erasmus RT

The association of fat distribution and components of metabolic syndrome in the mixed ancestry population of South Africa
CPUT Celebrating Research Day
Bellville
28 November 2008

Matsha T, Abrahams F, Soita D, Hassan MS
& Erasmus RT

The association of fat distribution and components of metabolic syndrome in the mixed ancestry population of South Africa
MRC Research Day
Cape Town
16 – 17 October 2008

Matsha T, Fanampe B, Hassan MS, Yako Y
& Erasmus RT

Prevalence of metabolic syndrome, overweight and obesity in 8 – 18 year-old learners residing in the peri-urban/rural and urban communities of the Western Cape, South Africa
CPUT Celebrating Research Day
Bellville
28 November 2008

Matsha T, Hassan MS, Bhata A, Yako Y, Fanampe B, Somers A, Hoffmann M, Mohammed Z & Erasmus RT
Metabolic syndrome in 10 – 16 year-old learners from the Western Cape, South Africa:

comparison of the NCEP ATP III and IDF criteria
CPUT Celebrating Research Day
Bellville
28 November 2008

Mburu S, Marnewick JL & Rautenbach F

Antioxidant activity of South African wines and other beverages
CPUT Celebrating Research Day
Bellville
28 November 2008

Mobo MP, Madiehe AM,
Matsha T & Hassan MS

Gestational protein supplementation requirements for *in utero* obesity-induced programming
48th Annual Conference of the Federation of South African Societies of Pathologists (FSASP)
Cape Town
19 – 21 July 2008

Mobo MP, Madiehe AM,
Matsha T & Hassan MS

Gestational protein supplementation requirements for *in utero* obesity-induced programming
CPUT Celebrating Research Day
Bellville
28 November 2008

Odendaal L, Engelbrecht AM, Du Toit EF & Van Rooyen J
The effect of red palm oil on the functional recovery and the PHD/Akt pathway in the ischaemic/reperfused isolated rat heart

CPUT Celebrating Research Day
Bellville
28 November 2008

Paulse A, Jackson V, Neethling JH, Bester AA & Khan W

Bioremediation of bacterial pollution in the Berg River and metal contamination in the Plankenburg River, Western Cape, South Africa
International Union of Microbiological Societies (IUMS)
Istanbul, Turkey
5 – 15 August 2008

Paulse A, Jackson V, Khan S & Khan W

Evaluation of the contamination levels of three rivers in the Western Cape, South Africa, by means of flow cytometric analysis and epifluorescence microscopy
BIO-08, Incorporating South African Society for Microbiology Biennial Congress
Grahamstown
21 – 25 January 2008

Paulse A, Jackson V, Khan S & Khan W

Molecular identification of bacterial pollutants from the Plankenburg and Berg Rivers in the Western Cape, South Africa
Cape Biotech Forum
Somerset West
1 – 2 December 2008



**Petrova A, Davids L,
Rautenbach GS
& Marnewick JL**

Honeybush extracts inhibit
DMBA-initiated UVB-promoted
skin tumours in SKH-1 mice
CPUT Celebrating Research Day
Bellville
28 November 2008

**Petrova A, Davids L,
Rautenbach GS
& Marnewick JL**

Modulation of oxidative stress
in the skin by extracts of
honeybush on the acute and
chronic effects of UVB
6th Pan African Environmental
Mutagen Society Conference
(PAEMS 2008)
Cape Town
2 – 5 November 2008

**Pineda C, Mars JA
& Gihwala D**

Determination of Se in
Malaysian red palm oil and other
off-the-shelf vegetable oils by
various analytical techniques
and dissolution procedures
CPUT Celebrating Research Day
Bellville
28 November 2008

**Soita JD, Hassan MS,
Matsha T & Erasmus RT**

High prevalence of diabetes and
impaired glucose tolerance in
the Bellville South community
of Cape Town, South Africa
48th Annual Conference of the
Federation of South African
Societies of Pathologists
(FSASP)

Cape Town
19 – 21 July 2008

**Soita JD, Hassan MS,
Matsha T & Erasmus RT**

High prevalence of diabetes and
impaired glucose tolerance in
the Bellville South community
of Cape Town, South Africa
CPUT Celebrating Research Day
Bellville
28 November 2008

**Solomon W, Meehan K,
Slabbert JP, Crompton NEA
& Gihwala D**

The Leukocyte Apoptosis
Assay: standard curve study of
a healthy Western Cape
population
CPUT Celebrating Research Day
Bellville
28 November 2008

**Thamahane E, Esterhuyse AJ,
Engelbrecht AM**

& Van Rooyen J
Red palm oil feeding period
influences protection against
ischaemia/reperfusion in the
isolated rat heart
CPUT Celebrating Research Day
Bellville
28 November 2008

**Tobin M, Abrahams R,
Khan W & Khan S**

Identification and functional
analysis of the *iap* genes of a
South African isolate of
Trichoplusia ni single
nucleopolyhedrovirus
International Union of
Microbiological Societies (IUMS)

Istanbul, Turkey
5 – 15 August 2008

Vember H

Integrating HIV/Aids into a
communication model at
Peninsula Technikon, now Cape
Peninsula University of
Technology
CPUT Celebrating Research Day
Bellville
28 November 2008

**Yako Y, Hassan MS, Bhata A,
Fanampe B, Somers A,
Erasmus RT & Matsha T**

Comparison of the NCEP ATP
III and IDF criteria in the
identification of metabolic
syndrome in 10 – 16 year-old
learners from the Western
Cape, South Africa
20th International Congress of
Clinical Chemistry and
Laboratory Medicine and XXXVth
Brazilian Congress of Clinical
Analysis and VIIth Brazilian
Congress of Clinical Cytology
Fortaleza, Brazil
28 September – 2 October
2008

**Yako Y, Hassan MS,
Erasmus RT, Hoffman M,
Fanampe B & Matsha T**

Sequence variants in the
melanocortin receptors (MC4R
and MC3R) genes in obese and
overweight youth from Western
Cape, South Africa
CPUT Celebrating Research Day
Bellville
28 November 2008

Journal articles (DoE subsidised)

Clark M, Dick J & Lewin S
Community health workers in South Africa: where in this maze do we find ourselves?
South African Medical Journal, 98(2);261-281, 2008

Dambuza I, Allie N, Fick L, Johnston N, Fremond C, **Mitchell J**, Quesniaux VFJ, Ryffel B & Jacobs M
Efficacy of membrane TNF mediated host resistance is dependent on mycobacterial virulence
Tuberculosis, 88:221-234, 2008

Hattingh Z, Walsh CM, Bester CJ & **Oguntibeju OO**
Evaluation of energy and macronutrient intake of black women in Bloemfontein: a cross-sectional study
African Journal of Biotechnology, 7(22):4019-4024, 2008

Kocsis GF, Pipis J, Fekete V, Kovacs-Simon A, **Odendaal L**, Molnar E, Giricz Z, Janaky T, **Van Rooyen J**, Csont T & Ferdinandy P
Lovastatin interferes with the infarct size-limiting effect of ischemic preconditioning and postconditioning in rat hearts
American Journal of Physiology – Heart and Circulatory Physiology, 294:H2406-H2409, 2008

Le Roux MR, **Khan S** & Valentine AJ
Organic acid accumulation may inhibit N₂ fixation in phosphorus-stressed lupin nodules
New Phytologist, 177:956-964, 2008

Oguntibeju OO
The biochemical, physiological and therapeutic roles of ascorbic acid
African Journal of Biotechnology, 7(25):4700-4705, 2008

Oni MO & **Oguntibeju OO**
Clinical and diagnostic importance of proteinuria: a review
African Journal of Biotechnology, 7(18):3160-3127, 2008

Orisatoki RO, Jayaraj AD & **Oguntibeju OO**
Substance abuse among students at a Caribbean university
Medical Technology SA, 22(1):9-12, 2008

Phillips KC & Clarke-Farr PC
Practitioners' opinions on the presentation of ocular pathology and ametropia in patients wearing ready-made reading spectacles
The South African Optometrist, 67(3):125-135, 2008

Tattersall ASM, Clarke M & Marais S
Management and control of agri-chemical pesticides: any progress?
Occupational Health Southern Africa: 10-15, March/April 2008

Van Rooyen J, Esterhuysen AJ, Engelbrecht A-M & Du Toit EF
Health benefits of a natural carotenoid rich oil: a proposed mechanism of protection against ischaemia/reperfusion injury
Asia Pacific Journal of Clinical Nutrition, 17(S1):316-319, 2008



Journal articles (not DoE subsidised)

Bosman M

Retroperitoneal synovial sarcoma
The South African Radiographer, 46(1):8-9, April 2008

Govender Y

Neurofibromatosis type two with associated spinal schwannomas
The South African Radiographer, 46(1):10-11, April 2008

Hattingh Z, Walsh CM, Veldman FJ, Bester CJ & **Oguntibeju OO**
Anthropometric and biochemical profiles of black South African women
African Journal of Biomedical Research, 11:161-172, 2008

Hoffman M, Ascot-Evans BH, Yako Y, **Matsha T** & Erasmus RT
Maturity onset diabetes of the young (MODY) in South Africa: database, clinical features,

biochemistry and genetics
Journal of Endocrinology, Metabolism & Diabetes of South Africa, 13:33, 2008

Jano N

Recurrent pituitary macroadenoma with rapid growth
The South African Radiographer, 46(1):12-13, April 2008

Lekaota OE

Intraosseous meningioma
The South African Radiographer, 46(1):17-18, April 2008

Mugabo P, **Hassan MS**, Maritz P & Slaughter R
Acute pharmacokinetics of first-line anti-tuberculosis drugs in patients with pulmonary tuberculosis and in patients co-infected with pulmonary tuberculosis and HIV
Acta Clinica Belgica, 63(6):330, 2008 (abstract)

Rotimi OO & **Oguntibeju OO**

Knowledge and attitudes of students in a Caribbean medical school towards HIV/Aids
African Journal of Biomedical Research, 11:137-143, 2008

Schroeder A

Follicular thyroid cancer causing intra and extra-cranial masses
The South African Radiographer, 46(1):19-20, April 2008

Smith W, **Van Rooyen J**, Lochner A & Du Toit E
The PPAR α agonist, K-111, reduces myocardial ischaemia/reperfusion injury in a rodent model of the metabolic syndrome
Journal of Molecular and Cellular Cardiology, 44(4):728 (Abstract no. 40)

Postgraduate degrees conferred

DTech: Biomedical Technology

Jackson V

Investigation into the metal contamination of three rivers in the Western Cape, South Africa, and the subsequent application

of a bioreactor system as remediation technology
Supervisors: Prof W Khan & Dr J Odendaal

Paulse A

Investigation into the bacterial pollution in three Western Cape rivers, South Africa, and the application of bioremediation strategies as clean-up technology

Supervisors: Prof W Khan & Prof S Khan

MTech: Biomedical Technology

Brittle W

The optimisation of laboratory cultivation in childhood mycobacterial disease in South Africa

Supervisors: Prof A Botha & Prof E Wasserman

Govender T

Antimicrobial activity of epithelia from selected frog species of the south Western Cape, South Africa

Supervisors: Dr A Dawood, Prof J Esterhuyse & Dr D Katerere

Macharia M

Modulation of oxidative stress biomarkers by rooibos in adults at risk of developing cardiovascular disease

Supervisors: Dr JL Marnewick & Prof J Esterhuyse

MTech: Radiography

Venter D

Three-dimensional thinking in radiography

Supervisors: Ms M von Aulock, Prof C Winberg & Dr A de Villiers

Wyrley-Birch BD (cum laude)

Professional communication practices of radiotherapists in the workplace and classroom in higher education in the Western Cape, South Africa

Supervisors: Prof P Engel-Hills, Prof C Jacobs & Prof T van der Geest

Postgraduate degrees obtained by staff members

PhD

Rhodes University

Wright J

The role of discourse in the constitution of radiographic knowledge: a critical realist account





PROF JOHANNES CRONJÉ

FACULTY OF INFORMATICS & DESIGN

DEAN'S REPORT

2008 saw the integration of the e-Innovation Academy into the Faculty of Informatics & Design. This new addition to our staff complement incorporated much needed research and supervision capacity. It also enabled us to establish the PRP – a postgraduate research programme whereby our master's and doctoral students meet regularly on a weekly basis to discuss various issues related to their progress. The programme was so successful that students from other faculties and even other universities joined us too. We used these sessions to invite guest speakers and guest researchers, and generally to work towards the establishment of a community of scholars. The experience gained from the presentation of the PRP will be published in a scholarly journal in 2009.

The faculty also continued building research capacity by presenting a very successful training day, during which Prof Kobus Maree from the University of Pretoria presented a workshop on socially responsible research. We also

established support groups for staff who are currently engaged in their masters's and doctoral studies.

The co-hosting of the 10th Annual Conference on World Wide Web Applications allowed many students and staff the opportunity to present papers or posters at a highly respected international conference. Some of these are

now being developed into journal articles.

We also published, in book form, the best research articles of our BTech students.

It is clear that the Faculty of Informatics and Design is beginning to build steadily towards a culture of research and scholarship.

CONFERENCE FUNDING

APPLICANT	ALLOCATION (rands)
M'Rithaa MK	4 300
Van Niekerk J	8 308
TOTAL	12 608

NRF FUNDING

RESEARCHER	PROGRAMME	NRF	CPUT	ALLOCATION (rands)
Khan G	IRDP	24 000	16 000	40 000
Pather S	IRDP	15 000	10 000	25 000
Van Brakel P	IRDP	125 000	10 000	135 000
Van der Merwe WJP	IRDP	75 000	10 000	85 000
Warden SC	IRDP	48 000	12 000	60 000
Weideman M	IRDP	219 000	49 333	268 333
Ngindana M	Thuthuka	34 800	69 600	104 400
TOTAL				717 733

UNIVERSITY RESEARCH FUNDING

RESEARCHER	TITLE	ALLOCATION (rands)
M'Rithaa MK	University design strategies in Cape Town	31 100
Motjoloane IM	Investigating the use of ICT-based interventions to promote social cohesion among local communities	22 000
Parker MB	Citizen empowerment: a data quality framework for small to medium medical practices	38 400
Uys CS	Defining pre-qualification success factors for the social appropriation of ICT	37 400
TOTAL		128 900

NRF RATED RESEARCHERS Established researchers (C rating)

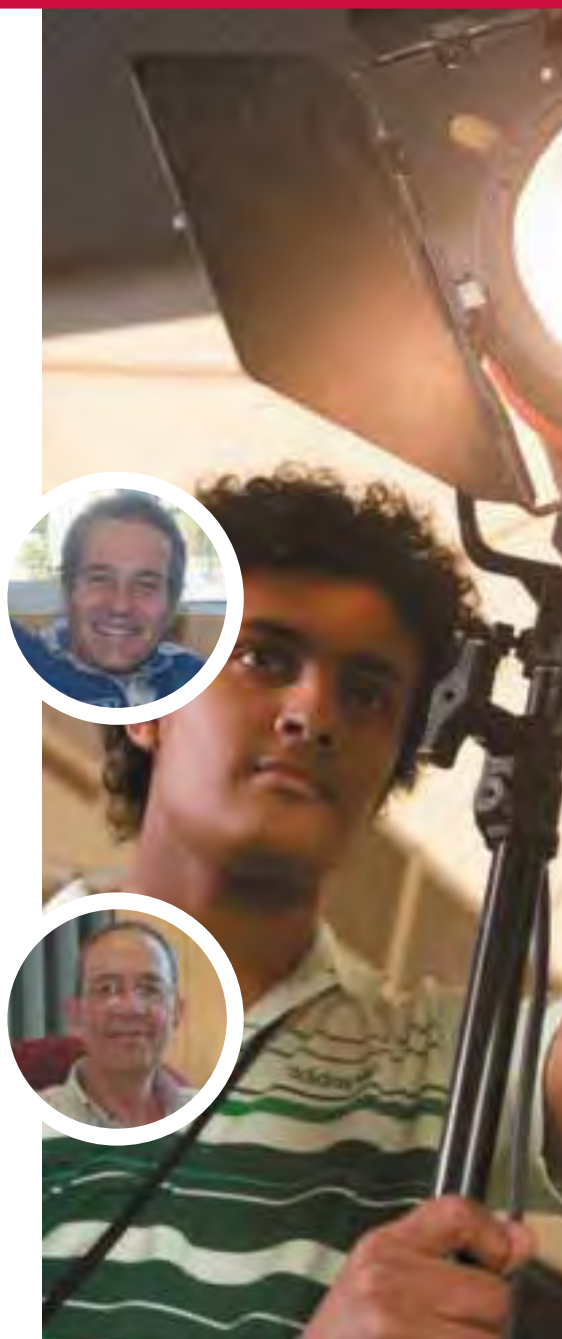
Prof Johannes Cronjé cronjej@cput.ac.za

Prof Johannes Cronjé specialises in virtual learning communities. He is one of the first South Africans to have taught courses online, and has published extensively on his experience as a facilitator of online learning. He has supervised more than 30 doctoral and 100 master's candidates. In 2007, he concentrated on intercultural communication in online learning communities, specifically relating to students in Sudan and South Africa.

Prof Cronjé was named the top ICT educator in Africa at the 10th Annual African ICT Achievers Awards in Johannesburg in November 2008.

Prof Pieter van Brakel vanbrakelp@cput.ac.za

Prof Pieter van Brakel serves as Head of the Research Support Office in the Faculty of Informatics and Design, and holds an NRF grant for the programme "Virtual Communities of Practice". This area of research investigates how information technology helps support academic information and knowledge exchange between geographically distant researchers. He has supervised six doctoral and 27 master's candidates, and has published 62 articles in Department of Education accredited journals. In 1999, he initiated the electronic-only and DoE-accredited *South African Journal of Information Management*, and has been its editor since then (<http://www.sajim.co.za>). He has also organised the multi-disciplinary Annual Conference on World Wide Web Applications for the last 11 years (<http://www.zaw3.co.za>).





NRF research niche areas

ICT IN E-BUSINESS, E-GOVERNMENT AND COMMUNITY ENGAGEMENT FOR SHARED GROWTH

Prof Melius Weideman

melius@gmail.com

The focus of this research niche area is on the appropriation of information and communications technology (ICT) within business, government and communities. There are currently four active projects in progress: Virtual Communities of Practice (Prof Pieter van Brakel), e-Service Quality (Prof Shaun Pather), e-Commerce Adoption (Dr Stuart Warden), and Crawler Visibility and Human Usability (Prof Melius Weideman).

Research institutes, centres and units

CISCO REGIONAL NETWORK ACADEMY

A Bernhard Heyer

heyerb@cput.ac.za

The Cisco Regional Network Academy is responsible for signing up, training-the-trainers and mentoring Cisco Local Academies (LAs) in the Western and Northern Cape region. It comprises a comprehensive international e-learning programme that provides students with Internet technology skills that form the foundation on which e-Commerce, the Global Village, and the Knowledge Society are built. It delivers web-based content, online assessment, student performance tracking, hands-on-labs, instructor training and support, and preparation for industry standard certification. The programmes are academic in nature and give students a broad and solid foundation, aiding understanding of general concepts.

ICT ACADEMY

The newly established ICT Academy promotes innovative education and training in information and communication technologies, with particular focus on Internet technology skills which link the knowledge society to the global village. Innovative ways are found to integrate the e-learning theoretical knowledge with practical equipment to maximise experiential learning. The Academy is linked to a new research area in computer network optimisation. New courses geared to industry needs are developed. The ICT Academy focuses on basic and advanced COMNET education, which is linked closely to business, government and community needs. The ICT Academy is also a Cisco Network Academy, and ICDL Training and Testing Centre, as well as a Pearson/VUE Certification Centre.

New professors appointed



Professor Melius Weideman



Associate Professor
Bennett Alexander



Associate Professor
Shaun Pather

Books/chapters

Cronjé J

Lessons from Africa
Adelsberger HH, Kinshuk,
Pawlowski JM & Sampson D
(eds)
Handbook on Information
Technologies for Education and
Training. 2nd ed.
Heidelberg: Springer Verlag,
2008, pp 423 – 438
ISBN 978-3-540-74154-1

Conference papers

Bechan N

Stakeholder relationship
management with a focus on
customers in a consumer
market
South African Communication
Association: SACOMM
Conference 2008:
Communicating in a Global
Village
Muldersdrift, Gauteng
17 – 19 September 2008

Coleman L

Hearing student voices:
considering alternative ways of

assessing students' self-
reflective abilities in higher
education
Higher Education Close-up
Conference (HECU4)
Cape Town
26 – 28 June 2008

Deyi S, Thole A, Simon E

& Ngcobo S
Promoting the multilingual
classroom: why the significance
of multilingualism in higher
education?
Higher Education Teaching and
Learning Association of

Southern African (HELTASA)
Foundation Conversations
Cape Town
1 – 2 October 2007

Korpela M, De la Harpe R & Luukkonen I

Depicting the landscape around
information flows:
methodological propositions
SIG GlobDev Workshop
Paris, France
13 December 2008



Mitrovic Z & Bytheway A

Awareness of the Internet-based small business development services in Cape Town
WWW 2008: 10th Annual Conference on World Wide Web Applications
Cape Town
3 – 5 September 2008

Ruhode E & Owei V

Diffusing connected government applications in a developing country context: the case of Zimbabwe
ICT for Africa 2008
Yaounde, Cameroon
18 – 21 December 2008

Van der Merwe J

Undisciplined
Higher Education Information

and Communication Technology Association (HEICTA) Research Colloquium
Cape Town
15 March 2008

Van Niekerk J & M'Rithaa M

Rhyme and reasons of ethical design practices
Cumulus International Association of Universities and Colleges of Art, Design and Media: Design and Research
Saint-Etienne, France
20 – 23 November 2008

Vlok A

Experiential training: the impact of the WOW factor
The First CGU-WACE Joint International Symposium & WACE's Seventh International Symposium on Work Integrated

Learning: Challenging Higher Education: Developing Enterprising Graduates for a Changing World of Work
Madrid, Spain
3 – 5 December 2008

Volbrecht T, Coleman L, Maree M & Scholtz D

Weaving in the Web: investigating connections among agency, structure and community/ies in using personal development planning through e-portfolios to promote collaborative staff development
Higher Education Close-up Conference (HECU4)
Cape Town
26 – 28 June 2008

Conference posters**Barnes J**

Communities of support
CPUT Celebrating Research Day
Bellville
28 November 2008

Bedi D & Warden S

Information security in the hospitality industry: policies and measures in the online environment
CPUT Celebrating Research Day
Bellville
28 November 2008

Cilliers MJ & Parker MB

Mobile phones and teenagers: a match made in heaven?
WWW 2008: 10th Annual Conference on World Wide Web Applications

Cape Town
3 – 5 September 2008

De la Harpe R

Organisational implications of data quality: a social perspective
CPUT Celebrating Research Day
Bellville
28 November 2008

Diab S & Van Brakel P

Impact of information dissemination by virtual communities of practice in an SMME environment
WWW 2008: 10th Annual Conference on World Wide Web Applications
Cape Town
3 – 5 September 2008

Diab S & Van Brakel P

Information dissemination in virtual communities of practice in an SMME environment
CPUT Celebrating Research Day
Bellville
28 November 2008

Francke E & Weideman M

South African business: missing a business opportunity by the omission of Web 2.0 features
CPUT Celebrating Research Day
Bellville
28 November 2008

Hill J

A developmental e-mentoring system for media students as a success facilitator
CPUT Celebrating Research Day

Bellville
28 November 2008

Kaisara G & Pather Shaun
Evaluation of e-government websites: a *batho pele*-aligned approach for e-service quality measurement
CPUT Celebrating Research Day
Bellville
28 November 2008

Kritzinger W
A proposed synergistic framework for website usability and website visibility
CPUT Celebrating Research Day
Bellville
28 November 2008

Kritzinger W & Weideman M
A proposed synergistic framework for website usability and website visibility
WWW 2008: 10th Annual Conference on World Wide Web Applications
Cape Town
3 – 5 September 2008

Lewis M-T
An exploration of the interpretative frameworks of a multi-disciplinary interior design assessor panel
CPUT Celebrating Research Day
Bellville
28 November 2008

Minani D & Parker MB
Use of Facebook for social encouragement
WWW 2008: 10th Annual Conference on World Wide Web Applications
Cape Town
3 – 5 September 2008

Mitrovic Z
A theoretical framework for the adequacy of electronic small business development services
CPUT Celebrating Research Day
Bellville
28 November 2008

Mohsam F & Van Brakel P
Contribution of knowledge management to competitive advantage within SMMEs
CPUT Celebrating Research Day
Bellville
28 November 2008

Nomdoe H & Pather Shaun
An empirical evaluation of e-service quality in web-based systems: a multi-stakeholder approach
CPUT Celebrating Research Day
Bellville
28 November 2008

Ogbamichael HB & Van Brakel P
The efficiency of information and knowledge flow within virtual communities of practice
CPUT Celebrating Research Day
Bellville
28 November 2008

Pereira JP & Parker MB
Blogging: an alternative approach to empower citizens in communities with tension
WWW 2008: 10th Annual Conference on World Wide Web Applications
Cape Town
3 – 5 September 2008

Schwenke F & Weideman M
Mobile access channels – a comparison of characteristics
CPUT Celebrating Research Day

Bellville
28 November 2008

Strydom KG & Parker MB
Online gaming: the good, the bad and the ugly!
WWW 2008: 10th Annual Conference on World Wide Web Applications
Cape Town
3 – 5 September 2008

Visser E & Weideman M
SEO and stickiness: in search of successful fusion in website design
CPUT Celebrating Research Day
Bellville
28 November 2008

Visser E & Weideman M
SEO and stickiness: in search of successful fusion in website design
WWW 2008: 10th Annual Conference on World Wide Web Applications
Cape Town
3 – 5 September 2008

Weideman M
A user-oriented model to improve Internet searching success
CPUT Celebrating Research Day
Bellville
28 November 2008

Weideman M
Ranking of website elements with a negative effect on visibility to search engine crawlers
WWW 2008: 10th Annual Conference on World Wide Web Applications
Cape Town
3 – 5 September 2008



Conference proceedings

Cilliers MJ & Parker MB

The social impact of mobile phones on teenagers
Van Brakel PA (ed.)
WWW 2008: Proceedings of the 10th Annual Conference on World Wide Web Applications, Cape Town, 3 – 5 September 2008
Cape Town: CPUT, 2008.
13 pp electronic
ISBN 978-0-620-42642-8

Coleman L

Becoming a web designer: using intertextuality to understand student literacy practices in a web design discipline
Rust C (ed.)
Proceedings of the 15th International Symposium on Improving Student Learning, Trinity College, Dublin, Ireland, 3 – 5 September 2007
Oxford: Oxford Centre for Staff and Learning Development, 2008, pp 32 – 47
ISBN 978-1-873575-76-2

Cronjé JC

HTML – WWW revisited – ten years of research on web-based learning
Van Brakel PA (ed.)
WWW 2008: Proceedings of the 10th Annual Conference on World Wide Web Applications, Cape Town, 3 – 5 September 2008
Cape Town: CPUT, 2008. 12 pp electronic
ISBN 978-0-620-42642-8

De la Harpe R & Benjamin N

RFIP considerations for reducing waiting times in a community health centre in the Western Cape
Bada AO & Musa P (eds)
Proceedings of the International Federation for Information Processing (IFIP WG 9.4) – University of Pretoria Joint Workshop: Towards an ICT Research Agenda for African Development
Pretoria, 23 – 24 September 2008
Pretoria: IFIP: University of Pretoria, 2008, pp 229 – 242

Fakier MN & De la Harpe R

Best data administration practices for data migration: a literature study in the healthcare industry
Bada AO & Musa P (eds)
Proceedings of the International Federation for Information Processing (IFIP WG 9.4) – University of Pretoria Joint Workshop: Towards an ICT Research Agenda for African Development
Pretoria, 23 – 24 September 2008
Pretoria: IFIP: University of Pretoria, 2008, pp 17 – 35

Francke E & Weideman M

Web 2.0 features on South African business websites: missing a business opportunity?
Van Brakel PA (ed.)
WWW 2008: Proceedings of the 10th Annual Conference on

World Wide Web Applications, Cape Town, 3 – 5 September 2008
Cape Town: CPUT, 2008.
9 pp electronic
ISBN 978-0-620-42642-8

Kaisara G & Pather Shaun

Evaluation of e-government websites: a *batho pele*-aligned approach for e-service quality measurement
Van Brakel PA (ed.)
WWW 2008: Proceedings of the 10th Annual Conference on World Wide Web Applications, Cape Town, 3 – 5 September 2008
Cape Town: CPUT, 2008.
19 pp electronic
ISBN 978-0-620-42642-8

Kritzinger WT & Weideman M

Finding the synergy: search engine optimisation versus website usability
Van Brakel PA (ed.)
WWW 2008: Proceedings of the 10th Annual Conference on World Wide Web Applications, Cape Town, 3 – 5 September 2008
Cape Town: CPUT, 2008.
12 pp electronic
ISBN 978-0-620-42642-8

Minani D & Parker MB

A study about the use of Facebook for social encouragement among citizens within a community on the Cape Flats
Van Brakel PA (ed.)
WWW 2008: Proceedings of

the 10th Annual Conference on World Wide Web Applications, Cape Town, 3 – 5 September 2008
Cape Town: CPUT, 2008.
12 pp electronic
ISBN 978-0-620-42642-8

M'Rithaa M

Engaging change: an African perspective on designing for sustainability
Cipolla C & Peruccio PP (eds)
Changing the Change: An International Conference on the Role and Potential of Design Research in the Transition towards Sustainability
Turin, Italy, 10 – 12 July 2008
Turin: Allemandi Conference Press, 2008. 10pp electronic
ISBN 88-422-1670-4

M'Rithaa M, Verveckken B & Futerman R

Shifting trajectories: advancing cosmopolitan localism through participatory innovation
Cipolla C & Peruccio PP (eds)
Changing the Change: An International Conference on the Role and Potential of Design Research in the Transition towards Sustainability
Turin, Italy, 10 – 12 July 2008
Turin: Allemandi Conference Press, 2008. 10pp electronic
ISBN 88-422-1670-4

Mlitwa N & Birch D

Information security, access controls and the reliability of intrusion detection systems
Cunningham P & Cunningham M (eds)
IST-Africa 2008 Conference &

Exhibition, Windhoek, Namibia, 7 – 9 May 2008
Dublin: International Information Management Corporation, 2008. 13 pp electronic
ISBN 978-1-905824-07-6

Mlitwa N & Nonyane J

ICT access and use in rural schools in South Africa: a case study of the Mpumalanga Province
E/merge 2008 Online International Conference: Professionalising Practices, Cape Town, 7 – 18 July 2008: Proceedings. 16 pp electronic
ISBN 978-0-620-42519-3

Mlitwa N & Ockards M

Information security, access controls and the reliability of intrusion detection systems
Cunningham P & Cunningham M (eds)
IST-Africa 2008 Conference & Exhibition, Windhoek, Namibia, 7 – 9 May 2008
Dublin: International Information Management Corporation, 2008. 13 pp electronic
ISBN 978-1-905824-07-6

Mlitwa N & Tire TT

Availability of computers and computer-based educational programs in South African schools: a comparison between urban and rural schools in the Northern Cape Province
Van Brakel PA (ed.)
WWW 2008: Proceedings of the 10th Annual Conference on World Wide Web Applications, Cape Town, 3 – 5 September 2008

Cape Town: CPUT, 2008.
18 pp electronic
ISBN 978-0-620-42642-8

Parker MB & Pereira JP

Blogging as a change agent to empower citizens in communities with tension
Van Brakel PA (ed.)
WWW 2008: Proceedings of the 10th Annual Conference on World Wide Web Applications, Cape Town, 3 – 5 September 2008
Cape Town: CPUT, 2008.
19 pp electronic
ISBN 978-0-620-42642-8

Ruhode E, Owei V & Maumbe M

Arguing for the enhancement of public service efficiency and effectiveness through e-government: the case of Zimbabwe
Cunningham P & Cunningham M (eds)
IST-Africa 2008 Conference & Exhibition, Windhoek, Namibia, 7 – 9 May 2008
Dublin: International Information Management Corporation, 2008. 13 pp electronic
ISBN 978-1-905824-07-6

Schwenke F, Weideman M

& Janse van Rensburg J
Mobile access channel characteristics: a comparison of security dimensions
Van Brakel PA (ed.)
WWW 2008: Proceedings of the 10th Annual Conference on World Wide Web Applications, Cape Town, 3 – 5 September 2008



Cape Town: CPUT, 2008.
16 pp electronic
ISBN 978-0-620-42642-8

**Shivute M, Maumbe B
& Owei V**

The emerging ICT use patterns for health service delivery in Africa: evidence from rural and urban settings in Namibia
Cunningham P & Cunningham M (eds)
IST-Africa 2008 Conference & Exhibition, Windhoek, Namibia, 7 – 9 May 2008
Dublin: International Information Management Corporation, 2008. 13 pp electronic
ISBN 978-1-905824-07-6

Strydom KG & Parker MB

Virtual shadows: the impact of online games on the gaming community
Van Brakel PA (ed.)
WWW 2008: Proceedings of the 10th Annual Conference on World Wide Web Applications, Cape Town, 3 – 5 September 2008
Cape Town: CPUT, 2008. 14 pp electronic
ISBN 978-0-620-42642-8

**Tembo R, Owei V
& Maumbe B**

Models of information and communication technology (ICT) use in agriculture: case studies from developing countries
Bada AO & Musa P (eds)
Proceedings of the International Federation for Information Processing (IFIP WG 9.4) – University of Pretoria Joint

Workshop: Towards an ICT Research Agenda for African Development
Pretoria, 23 – 24 September 2008
Pretoria: IFIP: University of Pretoria, 2008, pp 53 – 71

**Tembo R, Owei V
& Maumbe M**

Towards a modelling framework for information and communication technology use in commercial agriculture: significant factors in South Africa
Cunningham P & Cunningham M (eds)
IST-Africa 2008 Conference & Exhibition, Windhoek, Namibia, 7 – 9 May 2008
Dublin: International Information Management Corporation, 2008. 13 pp electronic
ISBN 978-1-905824-07-6

Van der Merwe J

Changing a phenomenal change: reassembling the self through a new ethics of negotiation
Cipolla C & Peruccio PP (eds)
Changing the Change: An International Conference on the Role and Potential of Design Research in the Transition towards Sustainability
Turin, Italy, 10 – 12 July 2008
Turin: Allemandi Conference Press, 2008 electronic
ISBN 88-422-1670-4

Warden SC & Van Brakel PA

Taxonomy of an e-commerce adoption model for small, medium and micro enterprises:

a South African perspective
Van Brakel PA (ed.)
WWW 2008: Proceedings of the 10th Annual Conference on World Wide Web Applications, Cape Town, 3 – 5 September 2008
Cape Town: CPUT, 2008. 11 pp electronic
ISBN 978-0-620-42642-8

Zietsman E

How can information and communication technology reduce inefficiencies in the construction industry?
Verster JJP & Marx HJ (eds)
5th Postgraduate Conference on Construction Industry Development: Abstracts & Proceedings, Bloemfontein, 16 – 18 March 2008
Pretoria: The Construction Industry Development Board, 2008. 4pp CD-Rom
ISBN 0-86886-758-6

Zietsman E

ICT and construction: where are we?
Bada AO & Musa P (eds)
Proceedings of the International Federation for Information Processing (IFIP WG 9.4) – University of Pretoria Joint Workshop: Towards an ICT Research Agenda for African Development
Pretoria, 23 – 24 September 2008
Pretoria: IFIP: University of Pretoria, 2008, pp 253 – 260

Journal articles (DoE subsidised)

April GD & Pather Shaun

Evaluating service quality dimensions within e-commerce SMEs
Electronic Journal of Information Systems Evaluation, 11(3):109-124, 2008

Bechan N

Top determinants of corporate reputation management
Communicare: Journal for Communication Science in Southern Africa, 27(1&2):1-18, 2008

Cronjé JC & Fouche J

Alternatives in evaluating multimedia in secondary school science teaching
Computers in Education, 51(2):559-583, 2008

Dassah MO

Is there a hole in the bucket? Identifying drivers of public sector corruption, effects and instituting effective combative measures
Journal of Public Administration, 43(3.1):37-62, 2008

Dassah M & Uken E

State of evaluation globally
Journal of Public Administration, 43(2):174-188, 2008

Marks AM & Cronjé JC

Randomised items in computer-based tests: Russian roulette in assessment?
Educational Technology & Society, 11(4):41-50, 2008

Maumbe BM, Owei V

& Alexander H
Questioning the pace and pathway of e-government development in Africa: a case study of South Africa's Cape Gateway project
Government Information Quarterly, 25:757-777, 2008

Pather Shaun & Uys C

Using scale reduction techniques for improved quality of survey information
South African Journal of Information Management, 10(3):2008. 14pp electronic

Shivute MI, Maumbe BM & Owei VT

The use of information and communications technology for health service delivery in Namibia: perspectives of the health service providers
Journal of Telemedicine and Telecare, 14:285-289, 2008

Tapela TN

Managing tensions and forging creative synergies between indigenous and modern settlement planning concepts and practices: lessons for the design and planning for sustainable settlements and built-forms in southern Africa
Indilinga: African Journal of Indigenous Knowledge Systems, 6(2):102-116, 2007

Thomas H & Cronjé J

Computers in schools: implementing for sustainability. Why the truth is rarely pure and never simple
South African Journal of Higher Education, 21(6):761-782, 2007

Journal articles (not DoE subsidised)

Deyi S, Garraway J, Thole A, Morris E, Simon E & John J

Using personal development plans (PDP) to enhance learning at the university
Paradigms (15):17-23, 2008

Francke E & Weideman M

South African youth and mobile technology impact: the MXit phenomenon
Journal of Business and Management Dynamics, 1(1):81-94, 2007

Mlitwa N & Kachala Y

Data security measures in the IT industry: a balance between knowledge & action
Journal of Digital Forensics, Security and Law, 3(4):5-22, 2008



Pather Shaun & Strümpfer CS
Scale reduction techniques for email and web-based surveys
Journal of Business and Management Dynamics, 1(1):57-66, 2007

Tapela N
The African granary as a dying symbol of sustainable rural settlement: food security, livelihood sustainability and

environmental adaptability
Paradigms (15):24-38, 2008

Van der Merwe J
Ontologically shaping a designed future: design education as revelation
Journal of Design Research, 7(3):317-330, 2008

Volbrecht T, Coleman L, Maree M & Scholtz D
Weaving in the Web: investigating connections among agency, structure and community/ies in using personal development planning through e-portfolios to promote collaborative staff development
Paradigms (15):3-16, 2008

Postgraduate degrees conferred

DTech: Informatics
Mitrovic Z
ICT and small business development: the importance of government support and community development
Supervisor: Prof AJ Bytheway

DTech: Information Technology
De la Harpe M
The organisational implications of data quality: a social perspective
Supervisor: Prof D Roode

MTech: Design
Vlok AG
The impact of a changing South African fashion industry on fashion education
Supervisor: Mr JJ van der Merwe

MTech: Information Technology
Bere A
Assessment of database utilisation within e-commerce

for the SMME photo industry
Supervisor: Prof JA Watkins

Kamanga E
Small private medical practices' perspectives of their information needs
Supervisor: Ms M de la Harpe

Nomdoe HG
Evaluating web-based information systems' effectiveness: an e-service quality multi-stakeholder perspective
Supervisor: Prof S Pather

Wang Z
The design and implementation of a computer-controlled pneumatic device to replace the deadweight in standard exercise equipment
Supervisor: Prof B Alexander

MTech: Public Relations Management
Agang L
An investigation of the contribution of public relations

to an agricultural institution in Botswana
Supervisor: Dr N Bechan

Niemann LA
A framework for enterprise strategy development, conceptualising corporate communication's strategic contribution at the macro-organisation level
Supervisor: Ms B Steyn

Van Jaarsveld JP
The impact of change communication on the relationship between employee and organisation
Supervisor: Dr N Bechan

Postgraduate degrees co-supervised

DTech: Marketing

Onojaefe D

Business use of branding for e-commerce benefit
Supervisor: Prof AJ Bytheway

MTech: Business Information Systems

Kamish Y

The impact of security policies on e-commerce implementation in SMMEs
Supervisor: Prof A Bytheway

Pretorius ELR

The impact of e-business on the marketing function: problems and opportunities for SMMEs
Supervisor: Prof JA Watkins

Thembo R

ICT usage trends in commercial agriculture in the wine industry
Supervisor: Prof V Owei

MTech: Office Management and Technology

Adams Z

Competency requirements for the effective management of SMMEs
Supervisor: Prof JA Watkins

MTech: Quality

April MJ

Information and knowledge management as elements of intellectual capital and quality at ESKOM Western Cape
Supervisors: Mr P McLaren & Prof JA Watkins

Arderne M

Developing and implementing an information communication technology model for the Holy Cross Sisters School
Supervisors: Mr P McLaren & Prof JA Watkins

Arderne RJ

An approach to the improvement of the registration process at a university of technology
Supervisors: Mr P McLaren & Prof JA Watkins

Harris M

Quality assurance in higher education: a managerial perspective at a university of technology
Supervisors: Mr A Bester & Prof JA Watkins

Jaftha DV

South African National Accreditation System accreditation: a case study of a university of technology
Supervisors: Mr P McLaren & Prof JA Watkins

Jeptha ID

Throughput rate of nursing students in the Faculty of Health and Wellness Sciences at a university of technology
Supervisors: Mr P McLaren & Prof JA Watkins

Nabe MP

Organisational transformation using total quality management and ISO 900 at an engineering company
Supervisors: Mr A Bester & Prof JA Watkins

Valentine LZ

Food certification audits: a case study in the Western Cape, South Africa
Supervisors: Mr A Bester & Prof JA Watkins

Postgraduate degrees obtained by staff members

MSc: Electrical Engineering

University of Cape Town

Dunn S

A study of the SA SKA RFI measurement systems

MA

University of the Free State

Perold R

Beyond convenient solutions: strategies to maximise the benefits of social housing in peri-urban areas





COOPERATIVE EDUCATION

CONFERENCE FUNDING

APPLICANT	ALLOCATION (rands)
Koch A	24 480

Conference papers

Koch A

A management information system for work-integrated learning at tertiary institutions in South Africa
 WACE Asia-Pacific
 Conference: Work-Integrated Learning: Transforming Futures
 Sydney, Australia
 30 September – 3 October 2008

Koch A

A co-operative education management information system for tertiary institutions in South Africa
 South African Society for Co-operative Education (SASCE)
 International Conference: Co-operative Education @ Work
 Durban
 19 – 22 May 2008



FUNDANI CENTRE FOR HIGHER EDUCATION DEVELOPMENT

The Fundani Centre for Higher Education Development is a strategic unit which, under the direction of the CPUT Vision and Mission, as well as the Strategic Plan, serves the University as the site that initiates and facilitates higher education development through various strategic initiatives:

- Professional development of staff
- Curriculum review
- Extended programmes
- Student learning development
- Educational technology
- Research in learning and teaching which is achieved through collaboration with practitioners in higher education institutionally, nationally and internationally

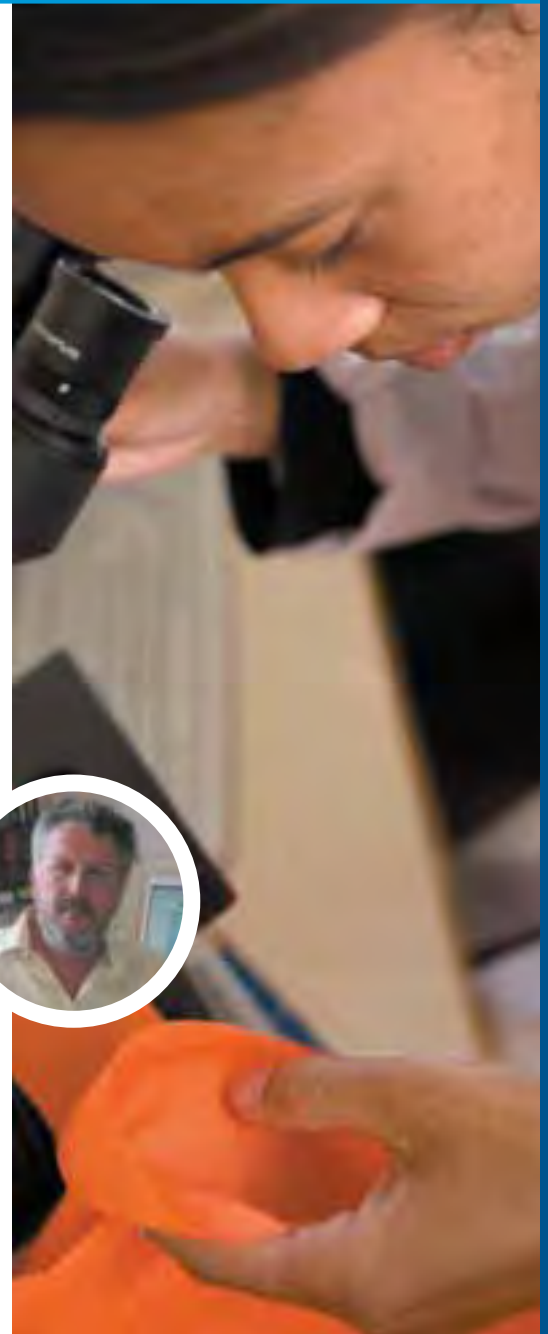
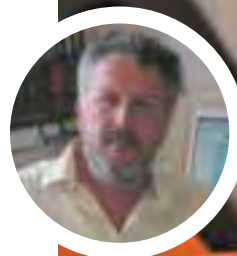
NRF FUNDING

RESEARCHER	PROGRAMME	NRF	CPUT	ALLOCATION (rands)
Winberg C	IRDP	165 000	30 000	195 000

NRF RATED RESEARCHERS Late entrants into research (L rating)

Dr James Garraway *garrawayj@cput.ac.za*

Dr James Garraway's main research theme explores the differences between knowledge as it is taught at the university and knowledge as it is practised at work. The aim of the research is to understand how knowledge can best be transferred between the two so that it looks both ways, to what is valued by work and to the sorts of subject knowledge and ways of thinking valued by the university. The target of the research is to improve curriculum development and, ultimately, the student learning experience. His sites of study are: university/work curriculum discussion forums (advisory committees); students engaged in experiential learning; and case studies or slices of life brought from work into the university. Activity theory provides the main conceptual and methodological approach to his research.



**Prof Chris Winberg***winbergc@cput.ac.za*

Prof Chris Winberg is leader of the NRF-funded Work-Integrated Learning Research Unit, and her research focuses on relationships and partnerships between higher education and its broader contexts. Current projects include: policy studies; education and workplace alignment studies, in particular a three-year study of physical environments in higher education; evaluations of programmes; language studies (including technical and professional writing); and multilingual practices in higher education and work.

NRF research niche area**WORK-INTEGRATED LEARNING RESEARCH UNIT (WILRU)****Prof Chris Winberg***winbergc@cput.ac.za*

The Work-Integrated Learning Research Unit (WILRU) has as its research focus the human, social, organisational, and work dimensions of knowledge production, knowledge movement and knowledge use within and across diverse contexts within the specific knowledge community of higher education. Current projects include ethnographic studies of engineers and radiographers at work and in academic environments, school-based practices, work-based higher degrees, higher education and community engagement, and vocational pedagogies.

Books/chapters

Deyi S. Gwyneth M
& Tokwe T
De Nobrega C (ed.)
Longman Multilingual Maths
Dictionary
Cape Town: Maskew Miller
Longman, 2008
978-0-636-08298-4

Deyi S. Manzezulu M
& Ngcoza K
Sutton K (ed.)
Longman Multilingual Science
Dictionary
Cape Town: Maskew Miller
Longman, 2007
ISBN 978-0-636-081-38-3

Conference papers

Deyi S
The role of African languages
(isiXhosa) in teaching and
learning
Higher Education Teaching and
Learning Association of

Southern African (HELTASA)
Foundation Conversations
Cape Town
1 – 2 October 2007

Deyi S
Using indigenous languages in
teaching mathematics-related
subjects in the extended
curriculum: does it enhance
conceptualisation?

Joint Annual Meeting of the Linguistics Society of South Africa (LSSA), South African Applied Linguistics Association (SAALA) and South African Association for Language Teaching (SAALT): Language in South Africa: Reconceptualising the Problems, Deepening Our Understanding
Potchefstroom
4 – 6 July 2007

Deyi S

Using students' home languages to enhance conceptualisation
Higher Education Teaching and Learning Association of Southern Africa (HELTASA) Conference
Bloemfontein
18 – 21 November 2007

Deyi S, Thole A, Simon E

& Ngcobo S
Promoting the multilingual classroom: why the significance of multilingualism in higher education?
Higher Education Teaching and Learning Association of

Southern African (HELTASA) Foundation Conversations
Cape Town
1 – 2 October 2007

Engel-Hills P, Garraway J, Jacobs C, Volbrecht T & Winberg C

Working for a degree: work-integrated learning in the HEQF
Higher Education Learning and Teaching Association of Southern Africa (HELTASA) and South African Association for Research and Development in Higher Education (SAARDHE): Higher Education as a Social Space
Grahamstown
30 November – 3 December 2008

Garraway J

Designing work-responsive curricula in the university: issues of boundary and boundary crossing
Activity2008 Symposium
Helsinki, Finland
12 – 14 March 2008

Volbrecht T, Coleman L, Maree M & Scholtz D

Weaving in the Web: investigating connections among agency, structure and community/ies in using personal development planning through e-portfolios to promote collaborative staff development
Higher Education Close-up Conference (HECU4)
Cape Town
26 – 28 June 2008

Winberg C, Adams A, Esbach J, Groenewald W, Lakay D, Muzondo I, Randall K, Goitseman S, Siyepu S & Veeran P

Day jobs/nightwork: academic staff studying towards higher degrees
Higher Education Learning and Teaching Association of Southern Africa (HELTASA) and South African Association for Research and Development in Higher Education (SAARDHE): Higher Education as a Social Space
Grahamstown
30 November – 3 December 2008

Conference proceedings

Garraway J

Knowledge boundaries and boundary-crossing in the design of work-responsive university curricula
Tchibozo G (ed.)
Proceedings of the Paris International Conference on Education, Economy and Society, Paris, 17 – 19 July 2008

Strasbourg, France: Analytrics, 2008, pp 61 – 74 (Volume 4)
ISBN 978-2-9533842-4-6

Siyepu SW

Reflecting on problems encountered by first-year engineering students in learning limits
Boshoff HH, Govender VG & Heymans L (eds)

Proceedings of the 14th Annual Congress of the Association for Mathematical Education of South Africa (AMESA): Mathematics: A Universal Language, Port Elizabeth, 30 June – 4 July 2008
Johannesburg: AMESA, 2008, pp 157 – 173 (Volume 1)
ISBN 978-0-620-41068-7



Journal articles (DoE subsidised)

Beute N, Van Aswegen ES & Winberg C

Avoiding plagiarism in contexts of development and change
IEEE Transactions on Education, 51(2):201-205, 2008

Modiba M & Nsibande R
Continuous assessment as a

self-initiated teacher development strategy in Swaziland: practice and challenges for effective implementation
Africa Education Review, 5(1):68-83, 2008

Winberg C

Teaching engineering/engineering teaching: interdisciplinary collaboration and the construction of academic identities
Teaching in Higher Education, 13(3):353-367, 2008

Journal articles (not DoE subsidised)

Deyi S

Ukusetyenziswa kolwimi lwesiXhosa ukufunda izifundo zezibalo
PRAESA Occasional Papers, (27):80, 2008

Deyi S, Garraway J, Thole A, Morris E, Simon E & John J
Using personal development plans (PDP) to enhance learning at the university
Paradigms (15):17-23, 2008

Deyi S, Simon E, Ngcobo S & Thole A

Promoting the multilingual classroom: why the significance in higher education?
Paradigms (14):10-20, 2007

Nsibande R & Garraway J
Professional development through reflective evaluation
Paradigms (15):52-68, 2008

Siyepu SW

Hands-on enquiry in the teaching of the tetrahedron in

mathematics with special reference to teacher education at the university
Paradigms (14):4-9, 2007

Volbrecht T, Coleman L, Maree M & Scholtz D

Weaving in the Web: investigating connections among agency, structure and community/ies in using personal development planning through e-portfolios to promote collaborative staff development
Paradigms (15):3-16, 2008



HIV/AIDS UNIT

HIV/AIDS UNIT

Dr Ashraf Mohammed

mohammedaa@cput.ac.za

The aim of the HIV/Aids Unit is to prevent, control and manage HIV/Aids among students and staff at CPUT and within the community.

Strategic objectives include:

- Incorporation of HIV/Aids, STI and TB awareness into curricula
- Student and staff training
- Awareness campaigns
- Men as Partners (MAP) student peer education programme
- Community outreach programmes
- Workplace programmes
- Volunteer counselling and testing
- Care and support/post-exposure prophylaxis
- Research

Conference papers

Mohammed A

Overview of the HIV/Aids Unit and its HIV/Aids programmes
IFLA Information Literacy Section & LIASA Pre-Conference: Training the Trainer in Information Literacy
Cape Town
4 – 6 October 2008

Mohammed A

Overview of the HIV/Aids Unit and milestones of HIV/Aids programmes
Humboldt Conference: Sustainable Development of Southern Africa
Cape Town
10 October 2008

Postgraduate degrees obtained

PhD: Public Health

University of Cape Town

Mohammed A

The efficacy of intermittent directly observed Isoniazid for preventing tuberculosis in HIV-infected adults with advanced disease





LIBRARY SERVICES

RESEARCH INFORMATION SUPPORT CENTRE (RISC)

The RISC units at Bellville and Cape Town libraries provide a supportive environment for postgraduate students and researchers. This dedicated and innovative initiative combines physical workspace with academic networking, where expert information support complements state-of-the-art facilities.

RISC is one of only a few such services in South African academic libraries.

While the Bellville facility is still at a formative stage, at Cape Town usage grew rapidly during the course of 2008, with the unit often full to capacity. Additionally, an increasing number of students are bringing their own laptops to the centre, which has full wireless connectivity.

Conference papers

Kleinveldt L & Moll M

The mahout on the elephant: how the knowledge management practices of the MJL Olivier Library (Wellington Campus) enrich the academic information services of the Cape Peninsula University of Technology
Library and Information Association of South Africa Conference
Cape Town
6 – 10 October 2008

Moll M

Enhanced library services through customer relationships
Library Management Forum
Johannesburg
21 – 22 August 2008

Johannesburg
7 – 8 May 2008

Moll M

Information literacy in the new curriculum
Library and Information Association of South Africa Conference
Cape Town
6 – 10 October 2008

Moll M

Enhanced user experiences through relationship management
Library and Information Management Forum

Conference posters

Kalam N & Proske R

Postgraduate research support at the library
CPUT Celebrating Research Day
Bellville
28 November 2008

OFFICE OF INTERNATIONAL AFFAIRS

CONFERENCE FUNDING

APPLICANT	ALLOCATION (rands)
Hodges M	20 678

Conference papers

Hodges M

Internationalisation in post-apartheid South Africa: development opportunities for five campuses

20th Annual EAIE (European Association for International Education) Conference
Antwerp, Belgium
10 – 13 September 2008

Conference proceedings

Braund M, Lubben F, Scholtz Z, Sadeck M & Hodges M

Developing argumentation in Grade 10 biology lessons in South Africa: implications for teachers' professional development

Hamman M, Reiss M, Boulter C & Tunnicliffe SD (eds)
Biology in Context: Learning and Teaching for the Twenty-first Century: A Selection of Papers Presented at the VIth Conference of European Researchers in Didactics of

Biology (ERIDOB), London, 11 – 15 September 2006
London: Institute of Education, University of London, 2008, pp 160 – 170
ISBN 978-0-85473-798-7

Journal articles (DoE subsidised)

Scholtz Z, Braud M, Hodges M, Koopman R & Lubben F

South African teachers' ability to argue: the emergence of inclusive argumentation
International Journal of Educational Development, 28(1):21-34, 2008





RESEARCH & TECHNOLOGY PROMOTION

CONFERENCE FUNDING

APPLICANT	ALLOCATION (rands)
Dawood A	6 277

NRF FUNDING

RESEARCHER	PROGRAMME	NRF	CPUT	ALLOCATION (rands)
Dawood A	Thuthuka	120 500	51 000	171 500
Hartley S	Thuthuka	62 500	45 000	107 500
TOTAL				279 000

Conference papers

Dawood A

Genetic variability between populations of the critically endangered micro frog *Microbatrachella capensis* 13th African Amphibian Working Group (AAWG) Arusha, Tanzania 12 – 13 April 2008

Dawood A

& Scheepers L

Developing research at CPUT – a newly constituted university of technology in South Africa: a case of publish or perish? Southern African Research & Innovation Management

Association (SARIMA) Conference Stellenbosch 3 – 6 June 2008

Conference posters

Feldman F

Toads sharing secrets of migration: unravelling how endangered Western Leopard Toads, *Amietophrynus pantherinus*, survive in an urban

environment

Interfaces 2008: Linking Across Biome Boundaries: Arid Zone Ecology Forum and Fynbos Forum Oudtshoorn 3 – 7 August 2008

Feldman F & Measey JG

Toads sharing secrets of migration: unravelling how endangered Western Leopard Toads, *Amietophrynus pantherinus*, survive in an urban

environment
9th Conference of the
Herpetological Association
of Africa
Sterkfontein Nature Reserve,
Free State
26 – 30 November 2008

Govender T & Dawood A
Antimicrobial and antifungal
activity of epithelia from
selected frog species of the
south Western Cape of South
Africa
13th African Amphibian
Working Group (AAWG)
Arusha, Tanzania
12 – 13 April 2008

Govender T, Dawood A
& Katere DR
Antimicrobial and antifungal
activity of epithelia from
selected frog species of the
south Western Cape of
South Africa
2nd Pan African Medical
Mycology Conference
Cape Town
6 – 8 May 2008

Jacobs K
Determining the means of
ploidy of the African tetraploid
sand frog *Tomopterna tandyi*
9th Conference of the
Herpetological Association of
Africa

Sterkfontein Nature Reserve,
Free State
26 – 30 November 2008

Jacobs K, Dawood A
& Stam E
Determination of the parent
species of *Tomopterna tandyi*
13th African Amphibian
Working Group (AAWG)
Arusha, Tanzania
12 – 13 April 2008

Conference proceedings

Chimphango SBM,
Belane A, Naab JB,
Tanzubil PB, Asiwe JAN,
Ndakidemi PA,
Van Heerden PD
& **Dakora FD**
Multi-factor approach to
identifying cowpea genotypes
with superior symbiotic traits
and higher yield for Africa
Dakora FD, Chimphango SBM,
Valentine AJ, Elmerich C &
Newton WE (eds)
Biological Nitrogen Fixation:
Towards Poverty Alleviation
through Sustainable Agriculture:
Proceedings of the 15th
International Nitrogen Fixation
Congress and the 12th

International Conference of the
African Association for Biological
Nitrogen Fixation, Cape Town,
21 – 26 January 2007
Heidelberg: Springer Science
& Business Media, 2008,
pp 23 – 24
ISBN 978-1-4020-8251-1

Chimphango SBM,
Musil CF & **Dakora FD**
Potential effects of elevated
UV-B radiation on N₂-fixing
legumes in agricultural systems
Dakora FD, Chimphango SBM,
Valentine AJ, Elmerich C &
Newton WE (eds)
Biological Nitrogen Fixation:
Towards Poverty Alleviation

through Sustainable Agriculture:
Proceedings of the 15th
International Nitrogen Fixation
Congress and the 12th
International Conference of the
African Association for Biological
Nitrogen Fixation, Cape Town,
21 – 26 January 2007
Heidelberg: Springer Science
& Business Media, 2008,
p 131
ISBN 978-1-4020-8251-1

Dakora FD, Spriggs AC,
Ndakidemi PA & Belane A
Measuring N₂ fixation in
legumes using 15N natural
abundance: some
methodological problems



associated with choice of reference plants

Dakora FD, Chimphango SBM, Valentine AJ, Elmerich C & Newton WE (eds)

Biological Nitrogen Fixation: Towards Poverty Alleviation through Sustainable Agriculture: Proceedings of the 15th International Nitrogen Fixation Congress and the 12th International Conference of the African Association for Biological Nitrogen Fixation, Cape Town, 21 – 26 January 2007

Heidelberg: Springer Science & Business Media, 2008, pp 43 – 45
ISBN 978-1-4020-8251-1

Elliott GN, Chem WM, Bontemps C, **Dakora FD**, Young JPW, Sprint JI & James EK
Burkholderia tuberum effectively

nodulates *Cylopa* spp., but not *Aspalathus* spp.

Dakora FD, Chimphango SBM, Valentine AJ, Elmerich C & Newton WE (eds)

Biological Nitrogen Fixation: Towards Poverty Alleviation through Sustainable Agriculture: Proceedings of the 15th International Nitrogen Fixation Congress and the 12th International Conference of the African Association for Biological Nitrogen Fixation, Cape Town, 21 – 26 January 2007

Heidelberg: Springer Science & Business Media, 2008, pp 287 – 288
ISBN 978-1-4020-8251-1

Kanu S, Chimphango SBM, Sprent J & **Dakora FD**
African species belonging to the tribe *Psoraleae* produce ureides, a symbiotic trait

characteristic of the *Phaseoleae*
Dakora FD, Chimphango SBM, Valentine AJ, Elmerich C & Newton WE (eds)

Biological Nitrogen Fixation: Towards Poverty Alleviation through Sustainable Agriculture: Proceedings of the 15th International Nitrogen Fixation Congress and the 12th International Conference of the African Association for Biological Nitrogen Fixation, Cape Town, 21 – 26 January 2007

Heidelberg: Springer Science & Business Media, 2008, p 281
ISBN 978-1-4020-8251-1

Makoi JHJR, Chimphango SBM & **Dakora FD**
Symbiotic N nutrition and yield of cowpea genotypes under different plant densities and



cropping systems

Dakora FD, Chimphango SBM, Valentine AJ, Elmerich C & Newton WE (eds)

Biological Nitrogen Fixation: Towards Poverty Alleviation through Sustainable Agriculture: Proceedings of the 15th International Nitrogen Fixation Congress and the 12th International Conference of the African Association for Biological Nitrogen Fixation, Cape Town, 21 – 26 January 2007
Heidelberg: Springer Science & Business Media, 2008, p 117
ISBN 978-1-4020-8251-1

Naab JB, Chimphango SBM & **Dakora FD**

Estimates of N₂ fixation in cowpea grown in farmers' fields in the upper west region of Ghana
Dakora FD, Chimphango SBM, Valentine AJ, Elmerich C &

Newton WE (eds)

Biological Nitrogen Fixation: Towards Poverty Alleviation through Sustainable Agriculture: Proceedings of the 15th International Nitrogen Fixation Congress and the 12th International Conference of the African Association for Biological Nitrogen Fixation, Cape Town, 21 – 26 January 2007
Heidelberg: Springer Science & Business Media, 2008, p 109
ISBN 978-1-4020-8251-1

Pule-Meulenberg F,

Krasova-Wade T & **Dakora FD**
Ecophysiological studies of legumes in Botswana: types of bacterial strains from root nodules of cowpea (*Vigna unguiculata* L. Walp) and an assessment of the symbiotic status of grain legumes using

15N natural abundance

Dakora FD, Chimphango SBM, Valentine AJ, Elmerich C & Newton WE (eds)
Biological Nitrogen Fixation: Towards Poverty Alleviation through Sustainable Agriculture: Proceedings of the 15th International Nitrogen Fixation Congress and the 12th International Conference of the African Association for Biological Nitrogen Fixation, Cape Town, 21 – 26 January 2007
Heidelberg: Springer Science & Business Media, 2008, p 115 – 116
ISBN 978-1-4020-8251-1

Journal articles (DoE subsidised)

Beute N, Van Aswegen ES & Winberg C

Avoiding plagiarism in contexts of development and change
IEEE Transactions on Education, 51(2):201-205, 2008

Dassah M & Uken E

State of evaluation globally

Journal of Public Administration, 43(2):174-188, 2998

Makoi JHJR & Ndakidemi PA

Selected soil enzymes: examples of their potential roles in the ecosystem
African Journal of Biotechnology, 7(3):181-191, 2008

Milandri SG, Laubscher CP & Ndakidemi PA

Hydroponic culture of *Gladiolus tristis*: application of paclobutrazol for flowering and height control
African Journal of Biotechnology, 7(3):239-243, 2008





STUDENT AFFAIRS: STUDENT COUNSELLING

Conference papers

Hanning Y

Strategies for achieving wellbeing for non-clinical populations
29th Conference of the Southern African Association for Counselling and

Development (SAACDHE)
Durban
1 – 4 September 2008

**Van der Walt E
& Jacobs M**

Student awareness of learning

and non-academic risk factors which may impinge on the ability to learn
Higher Education Close-up Conference (HECU4)
Cape Town
26 – 28 June 2008

Conference posters

De Villiers AB

Positive psychology, emotional wellness and learner development
29th Conference of the Southern African Association for Counselling and Development (SAACDHE)

Durban
1 – 4 September 2008

**Petersen C,
Afrika-Mabuto N,
Sijula TF & Van der Walt E**
Career decision-making model for educators

29th Conference of the Southern African Association for Counselling and Development (SAACDHE)
Durban
1 – 4 September 2008

COMMUNITY WATER SUPPLY & SANITATION UNIT

COMMUNITY WATER SUPPLY AND SANITATION UNIT

Prof Alvin Lagardien

lagardiena@cput.ac.za

The Community Water Supply and Sanitation Unit is a nationally recognised, multi-disciplinary unit offering a range of development and collaboration opportunities to staff and students within a framework of commissioned projects based on sector, community and client needs.

The Unit promotes sustainable water services in accordance within VISION 21 and MDG principles. Projects address strategic approaches and institutional development for basic services delivery, sector training and capacity building, and appropriate water supply and sanitation technologies.

INDUSTRY FUNDING

FUNDER	PROJECT	AMOUNT (rands)
Water Research Commission	Guidelines for integration of community-based procurement for providing operation and maintenance for basic water and sanitation provision	333 660
Water Research Commission	An approach to reducing risks and hazards from human waste generated by informal settlements: community-based risk assessment with municipal partnership	587 800
Bloemwater	Development of HCD strategy for a water utility	100 000
TOTAL		1 021 460

Conference proceedings

Illing C & Lagardien A

Job creation opportunities for operation and maintenance of basic sanitation provision to informal settlements
 Proceedings of WISA 2008 Conference: The Confluence of the Water Industry, Sun City, 18 – 22 May 2008, 9pp CD-Rom
 ISBN 978-0-9802623-2-2

Proceedings of WISA 2008 Conference: The Confluence of the Water Industry, Sun City, 18 – 22 May 2008, 5pp CD-Rom
 ISBN 978-0-9802623-2-2

– 22 May 2008, 8pp CD-Rom
 ISBN 978-0-9802623-2-2

Rossouw E & Lagardien A
 Applying the new regulations on wastewater treatment works – case study: Breede Valley Municipality
 Proceedings of WISA 2008 Conference: The Confluence of the Water Industry, Sun City, 18

Zindoga CGW & Lagardien A

Participatory risk assessment as a basis for community engagement in basic service delivery to informal settlements
 Proceedings of WISA 2008 Conference: The Confluence of the Water Industry, Sun City, 18 – 22 May 2008, 7pp CD-Rom
 ISBN 978-0-9802623-2-2

Muanda C & Lagardien A

Investigating greywater disposal options in an informal settlement

Technical reports

Community risk assessment: Montagu and Ashton (Winelands District Municipality) March 2008

Disaster risk-monitor training: course design and implementation April 2008

Conceptual framework and O&M guidelines for basic services: process, participation and products November 2008

Operation and maintenance of basic water and sanitation services: technologies, tasks, procurement and management March 2008

