

Lucky number: FHS boasts 14 PhDs at December 2010 grad



Prof Sue Kidson, Deputy Dean: Postgraduate Education and Adri Winckler, Postgraduate Student Administration Manager congratulate Ryan Benjamin, Paula Melariri, Rory Rickard, Marcia Watkins, Joanna Evans, Loraine Townsend and Bryony Dobson, at a doctoral candidate cocktail function that took place on Monday, 20 December 2010. The candidates received their PhDs at graduation the following day.

Tahira wins 2010 PHASA conference poster prize



A poster presentation of Tahira Kootbodien's Masters in Public Health thesis, entitled "*The association of impulsivity and psychiatric symptoms with organophosphate pesticide exposure amongst South African farm workers*", won a prize at the recent Public Health Association of South Africa (PHASA) Conference.

Tahira explains: "The aim of the study was to assess whether low dose long term organophosphate pesticide (OP) exposure causes psychological or psychiatric impairment in farm

workers in the Western Cape, South Africa. The objectives were to evaluate the validity of the questionnaires used in this analysis and to test three models hypothesised as possible causal pathways between organophosphate exposure and depression, impulsivity and suicide."

Findings revealed that OP pesticide exposure in male farm workers was negatively associated with depression, but there was no association between organophosphate pesticide exposure in female farm

workers and depression. There was also no association between organophosphate pesticide exposure in both adult male and female farm workers and impulsive behaviour.

She added that while the data from this study showed of long-term OP exposure did not have a negative impact, older age, female gender and lower socio-economic status in farm workers were highlighted being high-risk for the development of depression and should be targeted for public health interventions.

DEANERY CORNER: Professor Marian Jacobs

As we take leave of 2010, it is time to reflect on the events that shaped our year, to celebrate our achievements and to prepare to meet the challenges of the coming year.

On a sad note, we have taken leave of emeriti, staff and students who passed away during the course of the year: Emeritus Professors Kirsch and Viljoen, Professors Alan Flisher and Cas Motala, Dr Johann Steyn and the youngest – a student who was only in his 1st year of study. Each left a mark on his chosen profession and each will be remembered for his particular contribution to, and relationship with, the Faculty.

On a happier note, the Soccer World Cup engendered a wonderful spirit of pride and celebration, which permeated every corner of our country and our Faculty. For those few weeks, rank and file was put aside, with Vuvuzelas blown in our corridors, our flag adorning our spaces and

our cars, and the fan walk becoming a new opportunity for crossing barriers.

In spite of potentially disruptive changes in term-times and examinations, and in the spirit of celebration and pride in our national capacity, the Faculty has also done us proud by maintaining the high standard of academic practice which has been the hallmark of our tradition over many decades.

Efforts to review and revitalise our teaching and learning have been energised by renewed commitment to social accountability; and our research programmes continue to produce publications, policies and practitioners of excellence. We have worked closely with the public health sector to address challenges of governance, stewardship and resourcing, and ended the year with the signing of the joint agreement clearly in sight. Our success in attract both staff and grants on an internationally competitive basis has been

outstanding, and our transformation agenda continues to focus not only on demographic change, but also on culture, potential and practice.

We ended the year having garnered many awards and with much change – retirements of seven academic staff and the imminent arrival of several others. Among these, Professor Hussey steps down as Director of the IIDMM, after a successful and productive 5-year tenure, which is acknowledged with much appreciation.

On balance, our scorecard for 2010 was rated "A" and in acknowledgement, I thank you for continuing to make this the most fulfilling place to work. In 2011, we will start planning for our centenary celebrations in 2012. We will also launch a campaign to ensure that each part of the Faculty is "Fit for the Future". But for now – happy holidays, and my very best wishes for a wonderful 2011!

First Electrophysiology Fellow appointed

Cardiologist Dr Neil Hendricks of the Division of Cardiology has been appointed as UCT and Groote Schuur Hospital's first Life Healthcare Electrophysiology Fellow.

The fellowship paves a path for the training of cardiologists to diagnose electrophysiological conditions of the heart, and perform surgery on local patients suffering from such diseases. Electrophysiology, the fastest growing area of cardiology worldwide, relates to rhythmic disorders of the heart, or arrhythmia, a group of conditions characterized by abnormal electrical activity in the heart.

"These diseases require a range of interventions, from pacemakers to implanted defibrillators, and the establishment of this fellowship is a first step towards training a number of cardiologists in South Africa, who would, otherwise, have to be taught abroad," Hendricks explained.

Up to now, such programmes have only been offered overseas, an arrangement that often seduced cardiologists to remain abroad upon completion, and thus contributing to the country's brain drain.

Under the tutelage of Professor Andrzej Okreglicki, who trained in the US and the UK before returning to Cape Town to share his expertise, Hendricks will spend two years honing his skills in electrophysiology.

Hendricks added that, in addition to his clinical work, he will also be undertaking research on arrhythmogenic right ventricular cardiomyopathy, and teach both undergraduate and postgraduate students.

Life Healthcare has provided R1.2 million over two years for the fellowship, with the balance coming from the Facilities Board of Groote Schuur Hospital.

Peter Scott, general manager of Life Healthcare, noted that the fellowship aims to secure the sustainability of healthcare in South Africa.



Professor Bongani Mayosi is the first to congratulate Dr Neil Hendricks.

"In order to ensure that medical expertise remains in South Africa, a substantial part of the fellowship agreement is that the incumbent agrees to either work in a South African government facility, or Life private hospital, for a period of two years after the end of the programme," Scott said.

And that's no problem for Hendricks, who was quick to confirm that his future plans involve a South African academic institution and a lot of research and teaching.

EVD booklet provides invaluable training for ICU nurses

A chance conversation in an Intensive Care Unit (ICU) has resulted in the development of a handbook for the management and care of patients with an external ventricular drain (EVD).

Dr Simon Sandler, who is currently on a fellowship at the Division of Neurosurgery, and Una Kyriacos of the Division of Nursing and Midwifery, collaborated to write a guide to manage and care for patients with an EVD. The device is used to drain cerebrospinal fluid from the ventricles of the brain to an external drainage bag and is a common form of treatment for patients with Hydrocephalus, commonly called water on the brain.

A function to celebrate the launch of the handbook was held at Groote Schuur Hospital on Monday, 6 December 2010 and was sponsored by Baroque Medical, who also sponsored the printing of the booklet. Professor Graham Fieggan, head of the Division of Neurosurgery expressed his thanks to Dr Sandler and Mrs Kyriacos for their work on the booklet and explained that "it is an educational tool for new nurses coming into the ICU." He went on to thank Gaby Kay of Baroque Medical for the support and financial assistance that had been provided by the company.

Dr Sandler thanked the team involved in the production of the booklet, and explained that "the checklist developed during the production of the booklet will be allocated to every patient in the ICU with a drain, to be completed twice a day." He added that there is currently nothing like it available in South Africa.



Professor Graham Fieggan, Dr Simon Sandler, Gaby Kay and Una Kyriacos with the external ventricular drain handbook.

Mrs Kyriacos said that her goal in producing the booklet was to contribute to patient safety and that the booklet would be presented at an upcoming nursing workshop.

It was also announced that Baroque Medical would be distributing the booklets to facilities around the country, and that a visiting neurosurgeon from Kenya would also return with copies of the booklets for use in that country.

Well known UCT professor dies



Professor John Viljoen (MBChB 1958) died on 27 November 2010, following major surgery.

John was an outstanding doctor and an internationally recognized anaesthetist. He interned at Groote Schuur Hospital and trained in anaesthetics in London.

He excelled in this role and was offered a Graduate Fellowship at the Cleveland Clinic in the USA in 1966. He was appointed to the staff in 1967 and by 1973, he was the Chairman of Anaesthetics. During this time, he was the lead anaesthetist in their pioneering work on coronary artery bypass in cardiac surgery.

In 1976, he moved to Los Angeles, firstly as Chief of Anaesthetics at the VA Department, and then as Professor and Chairman of Anaesthetics at the University of Southern California. This was a post he held until retirement in 1993. He was then appointed as the first incumbent of the second chair of Anaesthetics at UCT, which was a post he held until his final retirement at the end of 2000.

Once he had retired officially, he continued to maintain a keen interest in the Department, both in sessional and locum positions when required.

Prof Viljoen was described by Emeritus Professor John Terblanche as being "so much larger than life, and always lived life to the full. We will always retain the many varied, cherished and wonderful memories and anecdotes of remarkable fun times we had with this very special person."

Tributes have poured in from both South Africa and abroad. Jill Key from Durban said: "He was such a character and will be sorely missed by all who knew and loved him."

Researchers gather in Greece

In October 2010, 42 researchers from around the world gathered in Hydra, Greece, for the first-ever World Cohort Integration Workshop, hosted by Hans-Olov Adami (Chair, Department of Epidemiology, HSPH) and sponsored by AFA Insurance in Sweden.

These researchers came from Mexico, India, Sweden, Iceland, the United States, and four countries in Africa, including Nigeria, Tanzania, Uganda, and from South Africa, our own Prof Raj Ramesar. Prof Ramesar had this to say about the gathering: "It was unusual for senior academics to give up more than a full academic week to be at a meeting like this. By the end of the meeting, it was obvious that this was a most unusual event, which was genuinely a departure from 'business as usual'; it was about a group of core people getting together, establishing ground rules of human and scientific interaction, in the interest of long term engagement. It would seem that the sense of 'family values' that has been established should actually be written up and framed as the frontispiece of the body of researchers. This international network has every potential of showing to the rest of the world how research should be done (highlighting sustainability and human values)."



Congrats ...

... to the academics who received the following ratings from the National Research Foundation:

- B-category:
 - B1: Prof Lucy Gilson
 - B3: Prof Mohamed Jeebhay
- C-category:
 - C1: Prof Mike Lambert
 - C1: Prof Edward Ojuka
 - C2: Prof Jennifer Jelsma
- Y-category:
 - Y2: Dr Christopher Colvin
 - Y2: Dr Catherine Draper



... to Dr. Keertan Dheda, Associate Professor of Respiratory Medicine, based within the Department of Medicine at the University of Cape Town, was the recipient of the 2010 Union Scientific Award. The International Union Against Tuberculosis and Lung Disease (IUATLD) is an international society that bestows an annual global award to a researcher under the age of 45 who has published significant work on tuberculosis and lung disease. He is photographed (above) receiving his award from Dr. Michael Kimerling of the Gates Foundation.

FHS distinguished teachers

Professor Roland Eastman and Professor Zephne van der Spuy, both from the Faculty of Health Sciences, were named as the recipients of UCT's 2010 Distinguished Teacher Awards.

So, as both indicated, their experiences of teaching are perhaps unlike that of most at the university - no large lecture halls crammed with students, for one. Rather, most of their teaching is done in small groups while doing rounds in hospital wards, cheek by jowl with students and patients.

Prof Van der Spuy, head of postgraduate education in the Department of Obstetrics and Gynaecology, describes teaching as one of the legs of the three-legged stool of medical training, going hand in hand with clinical work and research. "It is said that the best care of a patient comes through teaching, because as you teach you review and criticize, and so your treatment of the patient improves," she says.

Those sentiments are echoed by Prof Eastman, head of the Division of Neurology, when he talks of setting the tone and acting as a role model for students. "A large part of the work is clinical bedside teaching of the students - that's where a lot of the real learning is done, and that's the only way to teach people to be doctors," he says.

In medicine, the two agree, teaching, clinical work and research are inseparable. As deputy vice-chancellor Professor Thandabantu Nhlapo also highlighted in his toast at the Annual Distinguished Teachers Dinner on 1 December.



Prof Marian Jacobs congratulates Prof Zephne van der Spuy on her award.

"While tonight's award recipients have excelled in particular ways, they both show that teaching and research are not mutually exclusive; they must run in parallel in the university environment," Prof Nhlapo said.

Prof Nhlapo also noted that the two both hail from the health sciences, where, he said, the study of the disease can often overshadow the concern for the patient.

"What has set each [Eastman and Van der Spuy] apart, however, is the way they teach their students to care for the patient while learning about the disease."

Wishing our Christian readers a merry Christmas, and a prosperous New Year for all!

Please drive safely if you are travelling during the "silly season"!

Inaugural Lectures:

Mall mulls over magical mucus



Slippery and sticky, but sweet and satisfying...

With such a description, it's obvious that Professor Anwar Mall is passionate about his subject - a passion he shared in his inaugural lecture, *The Marvel of Mucus: Slippery, sticky substance so essential to life*, on 20 October.

Mall's career-spanning interest began with a chance visit to UCT, when he met the then-head of medical biochemistry, Emeritus Professor Wieland Gevers.

"It was an unplanned visit to the medical school during a holiday in the '70s and a chance meeting with Prof Gevers, a rare combination of a gifted mind and a caring

human being, which changed the course of my life."

This field of research was largely unexplored when Mall completed his master's thesis, titled *Physical and Chemical Changes in Porcine Gastric Mucus in the Normal and Ulcerated States*, under the mentorship of Gevers and Professor Rosemary Hickman.

"Prof Hickman, one of the most selfless human beings I have met, was kind, welcoming and patient, knowing all too well the difficulties of working with mucus, a very new research field in South Africa."

Mall remembers that while researching his PhD at the University of Newcastle-Upon-Tyne in the UK, there were no more than 25 mucus researchers in the world. Here, Mall completed his thesis, *Gastro-duodenal Mucus Isolation and Structure*, in the laboratory of Professor Adrian Allen, who formulated the first model of the mucin structure. This is the substance that gives mucus its slippery and sticky (and, to some, its sweet and satisfying) texture.

Mucin, a glycoprotein which comprises a mere one percent of mucus, is its strength, explains Mall. It's the magical ingredient that lends mucus the power to prevent your stomach from digesting itself.

"The hydrochloric acid that digests our food in our stomachs is so strong that it could burn a hole through your hand," says Mall. "But a constant coating of mucus on your stomach walls keeps the organ safe from its contents."

It's far more complex than that, of course. The mucus layer is thicker in some parts of the stomach to provide lubrication where needed, and it also works with dead cells to form a healing 'scab' over damaged tissue. In a sense, mucus is the body's Jack-of-all-trades, also protecting and lubricating many other organs such as the cervix and lungs.

Mall's enthusiasm extends to his teaching, where he is driven to inspire a sense of wonder in his students for everything around and within them.

"We are made up of atoms to form a consciousness - so how can we not be filled with wonder and awe at this life and existence?"

The dark side of saving children



An intensive care unit (ICU) is sacred ground for Professor Andrew Argent of UCT's Department of Child and Adolescent Health.

In his inaugural lecture on 24 November, Argent explained that the paediatric intensive care unit is sacred in the sense that it is a place of profound experience for many people; is not readily accessible to all who need it, and its raison d'être is often dealing with life and death issues.

Titled *Paediatric Critical Care - Working on sacred ground*, Argent's lecture took his audience into the heart of his work at the Red Cross War Memorial Children's Hospital (RCWMCH), and the challenges he and his team face on a

daily basis.

Argent notes that providing care to children with life-threatening illness or injury can be prohibitively expensive in poverty stricken areas. However, several workers in poorer countries have found innovative and cost-effective methods, using available resources, to provide such care. An example of this is training professional drivers in first aid, as they are often first at the scene in traffic accidents.

"There are several methods that can cheaply save thousands of lives," said Argent. "Often, simple reorganisation may save lives at minimal expense."

But Argent points out that although South Africa is in an income range that can afford intensive care, the infant-mortality rate is too high. This, he argues, means that we have to focus on ensuring the most cost-effective and efficient ways of caring for children who are critically ill.

"We have to ensure that these children have rapid access to effective early treatment, at the appropriate level in the health care system.

"The RCWMCH is a place of tough choices," added Argent. "We have to decide who gets the resources, such as beds. And in decision-making we have to work out why we do it, how we do it, and do it openly and transparently."

Despite these difficulties, the hospital's ICU maintains an extremely low mortality rate.

Argent says that an ICU's 'dark side' is a challenge for the people who work there.

"It's an environment that can have a strong impact on one personally. People struggle with death, with the emotional impact of severely ill children. They are often stressed and many feel underappreciated. This can result in depression and burn-out, which is a huge problem not only for the staff, but also because it may affect the quality of care received by the patients."

He added: "We owe it to our children to maintain these services. Our country can afford it, and we need to do everything we can to meet that commitment."