

FACULTYNews



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FACULTY OF HEALTH SCIENCES

UNIVERSITY OF CAPE TOWN

Winning research

Young medical researchers were honoured for their outstanding output at the first Best Publication Awards held by UCT's School of Medicine on 26 July.

Opening the ceremony, deputy dean Professor Greg Hussey said that he hoped the awards would become a regular event, and will encourage and retain young researchers at the faculty.

"We have many researchers out there, but we don't always know what they're doing," said Hussey. "We need to develop strategies to recognise their work, and keep them with us."

Guest speaker at the event was former UCT deputy vice-chancellor, Professor Wieland Gevers, who spoke on the need for consilience, meaning the unity of knowledge, in approaching medical research.

"There are almost no new ideas under the sun, so researchers can't be too focused in their readings. They should be more openminded and read around their topic to generate new ideas."

Gevers also advised young researchers to avoid predicting their futures.

"You have no idea what the next ten years will bring, so you should never dwell on the idea that you won't be able to make an enormous contribution to science.

"But," he added, "it's vitally important to $\;$



remember that great effort is essential in creating new opportunities."

The 21 entries were divided into three categories, namely basic, public health and clinical sciences. Winner of the public health science category was Rory Leisegang for his paper, Early and Late Direct Costs in a Southern African Antiretroviral Treatment Programme: A retrospective cohort analysis.

Taking the clinical science award was Dr

Graeme Meintjies for his work, titled *Novel Relationship Between Tuberculosis Immune Reconstruction Inflammatory Syndrome and Antitubercular Drug Resistence.*

The basic science award was jointly won by Nazma Mansoor and Dr Thomas Scriba for their paper, HIV-1 Infection in Infants Severely Impairs the Immune Response Induced by Bacille Calmette- Guérin Vaccine.

- Daily News

For a full list of nominated publications, please turn to page 4!

Wishing all of our Muslim readers a Ramadaan Mubarak!

And we wish our Jewish readers a good year as they celebrate Rosh Hashanah!

A visit from Sir George

Sir George Alleyne, Chancellor of the University of the West Indies. visited the Faculty on 20 July 2010. His visit included some time with Prof Bongani Mayosi, who took the opportunity to show Sir George around. They are photographed in the Bill Hoffenberg Seminar Room in the Department of Medicine.



Publication of the month—Revitalising Clinical Research in SA

Revitalising Clinical Research in South Africa—A Study on Clinical Research and Related Training in South Africa offers a review of the state of clinical research in the country and also proposes solutions to the problems facing clinical researchers-and research entitiesin South Africa

The study was initiated by the Academy of Science of South Africa (ASSAf), to raise awareness of the value of good scientific research to

South Africa at top levels of government and academia. It was emphasized that this should include raising awareness of the benefits of having clinical research units at universities, hospitals and research institutions in order to retain research scientists in the



The concept of the study was proposed by **Emeritus Professor** Wieland Gevers and Professor Jimmy Volmink, along with former ASSAf staff member, Ms Rudzani Ramaite The ASSAf Council approved the study and Prof Bongani Mayosi was appointed

chair of the 13-member study, the

other committee members were: Professors Ames Dhai, Peter Folb, Wieland Gevers, Gregory Hussey, Letticia Moja, Jack Moodley, Daniel Ncayiyana, William Pick, Jimmy Volmink, Doctors Nonhlanhla Madela-Mntla and Nandi Siegfried, and Ms Maureen Kirkman.

The report recognizes that good clinical research is crucial for the development of the country and recommends ways in which it can be revitalized and promoted.

Second Hamilton Naki Scholarship from United Therapeutics to be awarded

On Friday, 30 July 2010, the Faculty of Health Sciences played host to Dr Louis Sullivan, a member of the board of directors of United Therapeutics, the organization that funds the Hamilton Naki Scholarship.

Dr Sullivan, who is a former US Secretary of Health and Human Services, and was instrumental in the formation of the Morehouse College School of Medicine, came to the

Faculty to meet with the first Hamilton Naki scholar, Moses Matlhadisa, who is currently in the fifth year of his MBChB. Dr Sullivan also took the opportunity to announce that United Therapeutics will be funding a second UCT medical student.

He explained that the CEO of United Therapeutics had seen an article on Hamilton Naki in Newsweek in

2005 and this had prompted the organization to establish this scholarship. Another nudge came from a remarkable coincidence in the USA, a few decades earlier than Hamilton Naki's significant work with Christiaan Barnard.

Dr Louis Sullivan.

"Vivian Thomas had enrolled in college, with the intention of becoming a doctor, when the Great Depression began and forced him to seek employment," said Dr Sullivan. "He found a job as a laboratory assistant with Dr Alfred Blalock at Vanderbilt University in Tennessee

Thomas moved with Dr Blalock to Johns Hopkins in 1941. Some years later, Dr Blalock was approached by a paediatrician, Dr Helen Taussig, to find a way to treat "blue babies" children born with congenital heart defects, who usually died in infancy. The solution was to increase blood flow to the lungs, and Dr Blalock realized that he and Vivian Thomas had already found a potential solution in a procedure called the anastomosis, or joining of the subclavian to the pulmonary artery. This had been developed for an entirely different

purpose, but they set about proving that it would work for blue babies - with a similarity to the preparation for the first heart transplant, Vivien Thomas used dogs to practice and perfect the procedure. He convinced Dr Blalock to perform the first procedure in 1944 - even though Vivien Thomas knew he was not allowed to operate on patients at that time, he followed Dr Blalock's instructions and came to

> help him. News of the groundbreaking operation spread across the world, greatly enhancing the reputation of Johns Hopkins and Dr Blalock. Vivien remained largely unacknowledged. He trained many young surgeons in the 1940s. "Even if you'd never seen surgery before, you could do it,



because Vivien could make it look so simple," renowned surgeon, Denton Cooley told Washingtonian magazine in 1989. In spite of this, Vivien Thomas was not well paid, and sometimes had to take extra work as a bartender, often at Dr Blalock's parties.

He eventually rose to the position of director of Surgical Research Laboratories at Johns Hopkins, but had to abandon his dream of returning to medical school to complete his studies. In 1976, Johns Hopkins University presented Vivien Thomas with an honorary doctorate. However, because of certain restrictions, he received an Honorary Doctor of Laws, rather than a medical doctorate. He was also appointed to the faculty of Johns Hopkins Medical School as Instructor of Surgery.

The uncanny parallels between the life of Vivien Thomas in the USA, and that of Hamilton Naki some 20 years later in South Africa, have contributed towards a successful partnership between United Therapeutics and the Faculty of Health Sciences at the University of Cape Town.

Face-to-face conferencing via video

Did you know that the Health Sciences Faculty has a fully operating videoconferencing system? Do you need to speak on the telephone to other people both nationally or internationally but would like to see the other party as well?

The Health Sciences IT section has successfully conducted videoconference sessions with groups in Sao Paulo - Brazil, Grenoble -France, New York - USA and Geneva -Switzerland amongst others, where people at Health sciences campus could have meetings, discussions and share information on Powerpoint presentations with the other parties. We have even conducted a session where a UCT Lecturer participated in a PHD examination of a student in New Zealand. In spite of the 11-hour difference the examiner was able to ask questions of the student and share documentation with the other examiners in New Zealand. The quality was of a good enough standard for us to see the student sweating in the studio in New Zealand!

We can do videoconferencing via IP to most institutions overseas and locally, so if there is a need for this, contact ernie.dudley@uct.ac.za or paul.rossouw@uct.ac.za (Tel: 021 406 6652).

TB team receives AIDS Journal award

Congratulations to Stephen Lawn, Landon Myer, Linda-Gail Bekker and Robin Wood. Their article, Tuberculosis-associated immune reconstitution disease: incidence, risk factors and impact in an antiretroviral treatment service in South Africa, was lauded as the most cited article in the AIDS Journal for 2009.

Each year, at the International AIDS conference, the journal highlights the most cited articles in AIDS, this time during 2009, choosing an original Basic Science, Clinical Science, and Epidemiology & Social paper.

The group received a modest monetary award and commemorative certificate.

From left: Moses Matlhadisa, Assoc, Prof Gonda Perez and

Turning the tide in the fight against lung diseases in children

Lung illnesses are the main cause of deaths and of morbidity amongst children globally. Among these, childhood pneumonia, tuberculosis and asthma predominate. And African children bear the major brunt of this burden, which is largely preventable or treatable.

If the picture Professor Heather Zar, head of the Department of Paediatrics and Child Health and director of the School of Child and Adolescent Health, painted of the current state of child lung health in Africa at times appeared gloomy, she was at pains to point out that medical scientists and clinicians have made impressive strides to turn the tide.

But in the face of these challenges, as Zar stressed in her lecture, *Child Lung Health in Africa: Challenges and opportunities*, delivered on 28 July, clinicians and scientists have developed a score of tools and treatments to prevent or better treat these illnesses.

Specialists and sub-specialists working in an academic centre can have a real impact on health care at all levels, far beyond that of a tertiary centre, said Zar. And some of these innovations have been rolled out across the globe.

In childhood pneumonia, Zar and colleagues have developed better ways to identify the causes of pneumonia, so improving diagnosis, treatment and use of preventative strategies. They have pioneered techniques for testing mucus from a child's chest and from the nose. These samples can then be tested for the causes of pneumonia, using new and better laboratory tests.

Such studies have shown that bacteria



especially *Streptococcus pneumoniae* and tuberculosis are very important causes of pneumonia in children. They've also shown that Pneumocystis pneumonia (PCP), a form of pneumonia occurring in people with weakened immune systems, is very common in HIV-infected infants. This is important as PCP can be effectively prevented by using a cheap and widely available antibiotic, cotrimoxazole, reported Zar.

Cotrimoxazole now features as a recommended standard prophylactic against PCP in HIV-infected people across the world. Recently Zar and colleagues have also shown that in HIV-infected children, cotrimoxazole, when taken daily, is highly effective for preventing other forms of pneumonia such as those due to

bacteria

More recently Zar and colleagues have shown that use of isoniazid, INH, a cheap and available drug for TB is very effective for preventing TB in HIV-infected children. Published in the *British Medical Journal*, this research showed that INH reduced mortality by more than 60% and TB by more than 70%. These are exciting findings that may offer a potentially important public health intervention in areas of high HIV and TB prevalence such as South Africa.

For asthma treatment, they have developed and produced a low-cost spacer - using a plastic cooldrink bottle - that is fitted onto an asthma pump to enable inhaled therapy. This is as effective as commercially available spacers. This bottle spacer is also now used globally. In so doing, says Zar, they have empowered caregivers and children.

As Emeritus Professor Kit Vaughan pointed out in his closing words, Zar has been widely hailed as an outstanding and original researcher.

"Her research has been driven by the huge burden of paediatric illnesses - with associated mortality and morbidity - and she has highlighted the need for improved diagnostic, therapeutic and preventative strategies," said Vaughan. "As Heather has illustrated this evening, the need for these strategies is especially acute in resource-constrained environments such as those we face here in South Africa."

- Morgan Morris

Vodacom funds SATVI tank

A new liquid nitrogen tank with a capacity to store 36 400 vials of blood products in temperatures as low as -195 degrees Celsius was donated to UCT's South African Tuberculosis Vaccine Initiative (SATVI) by the Vodacom Foundation.

One of the leading TB vaccine research organisations in the world and based in UCT's Institute of Infectious Disease and Molecular Medicine, SATVI is set to expand its capacity to store blood samples from people who take part in its research.

Vodacom officially handed over their donation to SATVI on 5 August, along with a data back-up system to ensure that valuable data is not lost.

Valued at R528 000, this is Vodacom's second large-scale contribution to SATVI. In 2005, the cellphone company contributed R2-million to fund SATVI's laboratory.

"Without a doubt, these new additions to our state-of-the-art laboratory will enhance SATVI's ability to conduct TB vaccine research to world class standards," said SATVI codirector, Associate Professor Willem Hanekom.

Mthobi Tyamzashe, chair of the Vodacom



Foundation, said: "As the largest dedicated TB vaccine research group in Africa, SATVI is playing an invaluable role in the fight to eradicate this disease. We trust the donation will enable the organisation to strengthen its important work."

SATVI is part of a global initiative to develop and test more effective vaccines against TB. It is currently conducting the most advanced study of a new TB vaccine in infants in the world, and is also the only site to be testing multiple new TB vaccines.

The 'improved' NHS

The British Medical Association has weighed in on the new Prime Minister David Cameron's health care proposals.

The Allergists voted to scratch it, but the Dermatologists advised not to make any rash moves. The Gastroenterologists had a sort of a gut feeling about it, but the neurologists thought the Administration had a lot of nerve.

The Obstetricians felt they were all labouring under a misconception.

Ophthalmologists considered the idea shortsighted. Pathologists yelled, "Over my dead body!" while the Paediatricians said, "Oh, grow up!"

The Psychiatrists thought the whole idea was madness, while the Radiologists could see right through it. Surgeons decided to wash their hands of the whole thing.

The ENT specialists wouldn't hear of it.

The Internists thought it was a bitter pill to swallow, and the Plastic Surgeons said, "This puts a whole new face on the matter ..."

The Podiatrists thought it was a step forward, but the Urologists were p****d off at the whole idea. The Anaesthesiologists thought the whole idea was a gas, and the Cardiologists didn't have the heart to say no.

In the end, the Proctologists won out, leaving the entire decision up to the ******* s in London.

With thanks to Brenda Klingenberg

BEST PUBLICATION AWARDS

Full Nominees List

(Winning entries marked in grey)

Roslynn Baatjies	European Respiratory Journal 2009, Vol 34, No 4, pp 825-833	Determinants of asthma phenotypes in supermarket bakery workers	Public Health Sciences
Susan Cleary	Health Economics E-published: 1 September 2009, www.interscience. wiley.com	Equity and Efficiency in HIV- Treatment in South Africa: The contribution of mathematical programming to priority setting	Public Health Sciences
Catherine Draper	Health Policy and Planning May 2009, Vol 24, Issue 5, pp 342-356	Mental health policy in South Africa: development process and content	Public Health Sciences
Mary-Ann Davies	South African Medical Journal October 2009, Vol 99, No 10, pp 730- 737	Outcomes of the South African National Antiretroviral Treatment Programme for children: The leDEA Southern Africa collaboration	Public Health Sciences
Gillian Ferguson	International Journal of Rehabilitation Research June 2009, Vol 32, No 2, pp 108-114	The prevalence of motor delay among HIV infected children living in Cape Town, South Africa	Public Health Sciences
Lisa Micklesfield	Obesity E-published: 17 September 2009 www.nature.com/oby	Dual-energy X-ray Absorbptiometry and Anthropometric Estimates of Visceral Fat in Black And White South African Women	Public Health Sciences
Anna Grimsrud	PLoS ONE E-published: 14 May 2009 www.plosone.org	The Association between Hypertension and Depression and Anxiety Disorders: Results from a Nationally-representative sample of South Africa	Public Health Sciences

Rory Liesegang	PLoS Medicine E-published: 30 April 2009, www.plosmedicine. org	Early and Late Direct costs in a southern African Antiretroviral Treatment Programme: A Retrospective Cohort Analysis	Public Health Sciences
Thomas Scriba	Journal of Infectious Diseases E-published: 23 February 2009, www.journals.uchicago. edu/toc/jid	HIV-1 Infection in Infants Severely Impairs the Immune Response induced by Bacille Calmette- Guérin Vaccine	Basic Sciences
Nazma Mansoor	Journal of Infectious Diseases E-published: 23 February 2009, www.journals.uchicago. edu/toc/jid	HIV-1 Infection in Infants Severely Impairs the Immune Response induced by Bacille Calmette- Guérin Vaccine	Basic Sciences
Michael Posthumus	American Journal of Sports Medicine 2009, Vol 37, Issue 11, pp 2234-2240	The COL5A1 Gene is associated with Increased Risk of Anterior Cruciate ligament ruptures in Female participants	Basic Sciences
Wendy Burgers	Journal of Immunology 2009, Vol 182, pp 4751-4761	Association of HIV-Specific and Total CD ⁸ T Memory Phenotypes in Subtype C HIV-1 Infection with Viral Set Point	Basic Sciences
Dominique Pepper	Clinical Infectious Diseases E-published: 30 April 2009, www.journals.uchicago .edu/toc/cid/	Neurological Manifestations of Paradoxical Tuberculosis- Associated Immune Reconstruction Inflammatory Syndrome: A Case Study	Clinical Sciences
Graeme Meintjies	Clinical Infectious Diseases March 2009, Vol 48, Issue 5 pp677-679	Novel Relationship between Tuberculosis Immune Reconstruction Inflammatory Syndrome and Antitubercular Drug Resistance	Clinical Sciences
Pradeep Navsaria	Annals of Surgery April 2009, Vol 249, Issue 4, pp 653-656	Selective Nonoperative Management of Liver Gunshot injuries	Clinical Sciences

Richard van Zyl-Smit	American Journal of Respiratory and Critical Care Medicine 2009, Vol 180, pp 49- 58	Within-Subject Variability and Boosting of T-Cell Interferon -γ Responses after Tuberculin Skin Testing	Clinical Sciences
Zizipho Mbulawa	Journal of Infectious Diseases 2009, Vol 199, Issue 10, pp 1514-1524	Genital Human Papillomavirus Prevalence and Human Papillomavirus Concordance in Heterosexual Couples are Positively Associated with Human Immunodeficiency Virus	Clinical Sciences
Robert Lamberts	European Journal of Applied Physiology March 2009, Vol 105, Issue 5 pp 105-113	Changes in heart rate recovery after high-intensity training in well-trained cyclists	Clinical Sciences
Karen Cohen	Antiviral Therapy 2009, Vol 14, Issue 5, pp 679-695	Effect of rifampicin-based antitubercular therapy and the cytochrome P450 2B6 516>T polymorphism onefavirenz concentrations in adults in South Africa	Clinical Sciences
Stanzi Ie Roux	BMC Med E-published: 3 November 2009, www.biomedcentral. com	Adherence to isoniazid prophylaxis among HIV-infected children: a randomized controlled trial comparing two dosing schedules	Clinical Sciences
Lisa Roberts	Archives of Opthalmology April 2009, Vol 127, Issue 4, pp 549-554	Clinical Utility of the ABCR400 Microarray	Clinical Sciences
Julia Goedecke	Diabetes Care May 2009, Vol 32, Issue 5, pp 860-865	Insulin Response in Relation to Insulin Sensitivity	Clinical Sciences

Bidding a fond farewell:

At a recent Faculty Board meeting, it was announced that Miriam Hoosain, Senior HR Advisor in the Faculty has been asked to fill the position of acting HR director for the University, while a recruitment process is underway. We wish her every success in this exciting new chapter in her career.

It was also noted that Prof Roland Eastman (Neurology) and Dr David Nathan (Victoria Hospital) are retiring shortly, and that Prof Thahir Pillay is leaving the Faculty to take up a senior post at UKZN. We wish them well in these new chapters in their lives and look forward to hearing from them from time to time.