Health Sciences Research News



University of the Witwatersrand

September 2013

EDITORIAL

It is September and the long awaited spring has arrived. Spirits are lifted and it seems like everyone is energized for the last push to the summer holidays. This month, Witsies again received numerous awards. Two highly distinguished researchers in the Faculty were promoted, a Health Sciences article was published in *The Lancet* and the School of Therapeutic Sciences hosted a very successful Research Day. It is a pleasure to report on all these achievements!

On the 4th October the Faculty Research Office will be hosting a lecture by Professor Janusz Paweska on the History of Filoviruses (Ebola, Marburg, etc.) which promises to be fascinating. We hope to see you there. Have a lovely, summery and productive October.

Suretha Erasmus

ERRATUM: Apologies. On page 5 of the August Health Sciences Research News: Associate Professor Yahya Choonara was omitted from the list of researchers awarded at the Research Awards Dinner in July 2013.

LATEST RESEARCH NEWS

Professor Glenda Gray awarded the Outstanding African Scientist Award

Congratulations once again, to **Professor Glenda Gray** for being selected as winner of the **2013 European & Developing Countries Clinical Trials Partnership (EDCTP) Award for an Outstanding African Scientist**. This is awarded to senior researchers who have made outstanding achievements in their field and who are recognised research leaders in Africa working on HIV/AIDS, tuberculosis and malaria. The award will be officially bestowed upon Professor Gray at the seventh EDCTP Forum in Dakar, Senegal on 23 October 2013. Well done Glenda!



Congratulations to Professor Judith Bruce

Professor Judy Bruce (Head of the School of Therapeutic Sciences) was inducted as a **Fellow of the Academy of Nursing in South Africa (ANSA)** in recognition of her National and International contribution to nursing education and scholarship. She was inaugurated at the Annual Nursing Education Conference (ANEC) during a glittering gala event at the Birchwood Hotel and Conference Centre, on the 3rd of September 2013. Congratulations Judith!







Two new Readers / Associate Professors in the School of Pathology

Dr Bavesh Kana, Head of the Wits University node of the DST/NRF Centre of Excellence for Biomedical TB Research was recently promoted to **Reader/Associate Professor in the School of Pathology**. He completed his PhD degree and Postdoctoral Fellowship in the Molecular Mycobacteriology Research Unit in the Faculty of Health Sciences, University of the Witwatersrand. Dr Kana also holds an appointment as an Early Career Scientist of the Howard Hughes Medical Institute. He has worked in several US institutions including the University of Pennsylvania, Texas A&M University, the Public Health Research Institute and Harvard Medical School.



The Faculty Research

Office invites you to

Professor Paweska's

lecture :

NATURAL HISTORY

OF FILOVIRUSES:

CURRENT KNOWLEDGE

AND

FUTURE RESEARCH

Friday, 4 October

12:45 for 13:00 - 14:00

Adler Museum of Medicine

RSVP by Monday 30 Sept to suretha.erasmus@wits.ac.za

He holds an NRF C3 rating, the Friedel Sellschop Research Award and the prestigious MRC Career Development Award. In June 2012, Dr Kana was selected as one of the "Mail & Guardian 200 Young South Africans". The selection was based on outstanding contributions each young South African has made in their respective fields and to society in general.

His research is aimed at the identification and validation of novel drug targets for tuberculosis (TB). He and his colleagues study important metabolic pathways in *Mycobacterium tuberculosis*, the causative agent of TB, and their relationship to virulence and human disease. Congratulations on your appointment, Professor Kana!



Professor Janusz Paweska graduated as veterinarian in 1982 at the Faculty of Veterinary Medicine, Wroclaw University of Environmental and Life Sciences, Poland where he also obtained his Doctor of Veterinary Science and Doctor Habilitatus degrees. From 1991-2001 he worked at the Onderstepoort Veterinary Institute where from 1999 to 2001 he was the Assistant Director, Head of the Department of Virology, and a designated expert of the World Organization for Animal Health for bluetongue and African horse sickness. In 2001 he became Head of the Special Pathogens Unit of the National Institute for Communicable Diseases, National Health Laboratory Service (NICD/NHLS) and managed the only maximum biosafety facility (BSL-

4) on the African continent.

Professor Paweska is currently Head of the Center for Emerging and Zoonotic Diseases at the NICD/NHLS, Regional Director of the Global Virus Network, Deputy Director of the Southern Center for Infectious Diseases Surveillance and Extraordinary Professor at the University of Pretoria. He was a senior researcher in the School of Pathology, Faculty of Health Sciences and has recently been promoted to a Reader/Associate Professorship in the School of Pathology.

He is an NRF B2 rated scientist and has authored or co-authored more than 345 publications, including 121 articles published in peer reviewed journals and eight book chapters. His field of interest is in viral diagnostics with the focus on development and validation of novel techniques for rapid pathogen detection and discovery, epidemiology and ecology of arboviruses and viral haemorrhagic fevers, and virus-host interactions.

Professor Paweska has been a part of international research expeditions and international

outbreak response missions, including the investigations, controlling and diagnosis of Ebola, Marburg disease and Rift Valley fever. During a highly fatal nosocomial outbreak of a viral haemorrhagic fever in Johannesburg in 2008 he led the discovery of a new Old World Arenavirus which he named Lujo virus. Congratulations to Professor Paweska on his appointment.

LATEST RESEARCH FINDINGS

How linear growth and relative weight gain during infancy and childhood are related to health and human capital outcomes in young adults

The COHORTS consortium, which includes the South African Birth to Twenty cohort, recently published an article in *The Lancet* authored by **Professor Linda Adair** (Honorary Wits Professor) and **Professor Shane Norris**, and **Dr Lisa Micklesfield** from the MRC/Wits Developmental Pathways for Health Research Unit (DPHRU). Fast weight gain and linear growth in children in low-income and middle-income countries have been associated with improved survival and enhanced cognitive development, but may also increase the risk of obesity and related adult cardiometabolic diseases.

The COHORTS group investigated how linear growth and relative weight gain during infancy and childhood are related to health and human capital outcomes in young adults. Data from 8362 participants concluded that interventions in countries of low and middle income which aimed to optimise birthweight and linear growth during the first 2 years of life are likely to result in significant gains in adult height and human capital (for example: more years of completed schooling) and give some protection from adult chronic disease risk factors, with few adverse trade-offs. These findings have noteworthy policy implications around the importance of the first 1000 days of life (pregnancy and the two years of infancy) as an important window of opportunity to optimise child growth and development to improve later adult outcomes.

"These findings have noteworthy policy implications"

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Adair LS, Fall CH, Osmond C, Stein AD, Martorell R, Ramirez-Zea M, Sachdev SD, Dahly DL, Bas I, Norris SA, Micklesfield LM, Hallal P, Victora C. (2013). Disentangling how relative weight gain and linear growth during early life relate to adult health and human capital in low and middle income countries: findings from five birth cohort studies. <u>The Lancet,</u> <u>Aug 10; 382(9891):525-34</u>

Phospholipid synthesis in the malaria parasite: not a simple story

Malaria is a devastating disease affecting millions of people, with Plasmodium falciparum being the most lethal parasite infecting humans. The development of drug resistance poses a major threat to existing anti-malaria treatments. Therefore elucidating the biology of the parasite is vital in identifying novel targets to develop new therapies to combat the disease. During every 48-hour blood-stage replication cycle within the human host, a single parasite can produce up to 32 progeny. This extensive proliferation implies that parasites require substantial amounts of lipid precursors for membrane biogenesis. Glycerol kinase is a highly conserved enzyme that functions at the interface of lipid synthesis and carbohydrate metabolism. To evaluate the role of the P. falciparum glycerol kinase orthologue the gene was disrupted and the development of glycerol kinase knockout parasites monitored over one blood-stage replication cycle. Their growth was significantly reduced to 56.5 ± 1.8% when compared to wild type parasites and glycerol incorporation into the major phospholipids of the

parasite membrane was reduced by a similar amount. These findings indicate that *P. falciparum* parasites require glycerol kinase for optimal growth and that they utilise exogenous glycerol as an alternative carbon source for phospholipid biogenesis, despite the lack of the enzyme. These studies provide new insight into *P. falciparum* glycerolipid metabolism and the complex interplay between pathogen and host.



Naidoo K and Coetzer T.L. (2013) Reduced glycerol incorporation into phospholipids contributes to impaired intra-erythrocytic growth of glycerol kinase knockout *Plasmodium falciparum parasites*. <u>*Biochimica et Biophysica Acta*</u>, 1830, 5326–5334.

Mitochondrial toxicities, body-fat abnormalities...

The success of controlling HIV-1 infection has led to significant complications. Toxicities related to the use of stavudine, which was part of first line therapy for HIV infection in South Africa and many other countries have been a major concern. Around 30% of patients switched to non-stavudine based regimens because of a peripheral neuropathy, symptomatic hyperlactataemia and lipoatrophy in a prospective analysis of 9040 HIV-1-infected adults initiated on HAART from 2004 to 2007 at the Themba Lethu Clinic at Helen Joseph Hospital.

In 2009, **Dr Colin Menezes**, a PhD student and his supervisors, **Professors Crowther**, **Raal** and **Sanne**, and **Dr Duarte**, undertook a prospective randomised controlled trial comparing standard and low dose stavudine with tenofovir. Sixty patients were randomised 1:1:1 to either standard (30-40 mg) or low dose stavudine (20-30 mg), or tenofovir (300 mg) each combined with lamivudine and efavirenz.

"Major findings prove an early association between mitochondrial depletion and stavudine therapy, and showed that tenofovir had a minimal effect"

Only two of eight adipocyte genes were significantly affected by stavudine when compared with tenofovir, but this was seen with the standard dose only. Mitochondrial toxicities occurred in both stavudine arms. Both stavudine arms increased fasting insulin and C-peptide levels with the higher stavudine dose also causing increased fasting glucose and Homeostasis Model Assessment (HOMA) levels. Whilst tenofovir had a more favourable effect on anthropometry and adipokines, both drugs caused lipid changes. All three arms had similar immunological and virological outcomes.

This highlights the occurrence of significant metabolic abnormalities with both drugs. Therefore, whilst supporting the new HAART guidelines which have evolved since 2004, with tenofovir currently being recommended as first line therapy, the possible increased cardiovascular risk with both drugs is a concern, although toxicity is lower in the low dose compared to the standard dose stavudine regimen with no attenuation of effectivity.

This work has resulted in three publications, the most recent having just been published in HIV Medicine.

Menezes C, Crowther N, Duarte R, Van Amsterdam D, Evans D, Dickens C, Dix-Peek T, Rassool M, Prinsloo A, Raal F, Sanne I. A randomized clinical trial comparing metabolic parameters after 48 weeks of standard- and low-dose stavudine therapy and tenofovir disoproxil fumarate therapy in HIV-infected South African patients. <u>HIV Med. 2013 Aug</u> 28. doi: 10.1111/hiv.12074. [Epub ahead of print]



FACULTY RESEARCH NEWS AND EVENTS

MMed Student wins Radiation Oncology Award

Dr Sudeshen Naidoo, an MMed student from the Department of Radiation Oncology was awarded the **Radiation Oncology Registrar Presentation Award** at the 16th National Congress of the South African Society of Clinical & Radiation Oncology (SASCRO) and the South African Society of Medical Oncology (SASMO) Congress held on 29 August to 1 September 2013 at the Champagne Sports Resort, Drakensberg.

He presented a poster of a retrospective review on the objective tumour response of patients with advanced liver cancer who were treated with radioembolization using Yttrium – 90 microsperes (trade name Therasphere). Dr Naidoo's prize includes a full sponsorship to attend a European conference of his choice. Well done Sudeshen!



School of Therapeutic Sciences Research Day

The School of Therapeutic Sciences held its third Biennial Research Day on the 10th September on the Wits Education Campus. This was hailed by most attendees as a very successful scholarly event. What was different to previous events was the attraction of a number of sponsors from the School's commercial and industry partners and the introduction of a new award for the "Emerging researcher" in Therapeutic Sciences.

As it has become customary to showcase specific disciplinary research, the day started off with a research symposium by the Occupational Therapy Department. The presentations covered educational research topics and community rehabilitation issues which improve the quality of life and enable productivity in individuals and communities. The rest of the day was packed with 20 oral presentations in the categories: Chronic Conditions, Health Education, Intervention and Care, and Health Assessment and Prevention. A further 23 posters contributed to the success of the Research Day, displaying the breadth of research being conducted in the School from laboratory-based pharmaceutics and malaria/cancer *in vitro* studies, to handwriting problem analysis, neonatal pain management and injuries in water polo players.

The prize for the Best Oral presentation went to Shirra Moch for her presentation entitled "Prescribing Competence in Relation to Conceptual and Contextual Teaching and Learning" and to Ronel Roos for her presentation entitled "Physical Activity and Non-Invasive Risk Factors Screening for IHD in Individuals Living with HIV" as runner-up. The prize for the Best Poster was awarded to Denise Franzsen for her poster entitled "Identifying handwriting problems in Higher Education Students" and the runner-up was Biokinetics intern, Natalia Neophytou. Awarded for the first time was the Emerging Researcher prize to Zelna Hubsch, a Master's student in Pharmacy and Pharmacology, for her presentation entitled "What are the Implications of Combining Allopathic Antimicrobials with Traditional Medicinal Plants?"

The School congratulates all the prize winners and extends its thanks to all those who contributed in several ways to making the day a success.



Prize winners at the School of Therapeutic Sciences Research Day (from Left): Mrs Shirra Moch, Dr Witness Mudzi (for Ms Ronel Roos), Head of School, Professor Judith Bruce, Ms Natalia Neophytou, Mrs Denise Franzsen, Ms Zelna Hubsch

Rhodes Scholar hosted by the DPHRU

Dr. Chrystelle Wedi is a South African medical doctor who is passionate about maternal and child health on the African continent. She completed her Bachelor in Medicine and Surgery (MBChB), cum laude, at the University of Pretoria in 2009. During this time she was involved in the initiation of maternal and child health hospitals in the Democratic Republic of the Congo. These hospitals have become local referral healthcare centers in Lubumbashi and treat more than 8000 women and children annually. After graduating from the University of Pretoria, Dr. Wedi was awarded a Rhodes scholarship for outstanding students with leadership capabilities to pursue their academic interests at the University of Oxford, United Kingdom. She is currently enrolled for a PhD in obstetrics and gynaecology at the Nuffield Department of Obstetrics & Gynaecology. Her PhD aims to investigate the immunological mechanisms underlying premature birth and intrauterine growth restriction in pregnant women in S



immunological mechanisms underlying premature birth and intrauterine growth restriction in pregnant women in South Africa. This study will be conducted as part of the new Developmental Pathways for Health Research Unit (DPHRU) Soweto Baby Growth Cohort undertaken by Professor Shane Norris in collaboration with the University of Oxford.

Wits Orthopaedic Department outshines the rest at Congress

The Wits Orthopaedic Department attended the South African Orthopaedic Association (SAOA) Congress in September. Those who attended the congress put Wits on the map by receiving the following awards: **Dr Gregory Firth** was awarded the **ABC Fellow award** and the **South African Orthopaedic Association Literary award** for his presentation entitled "Multilevel Surgery for Equinus gait in children with spastic diplegic cerebral palsy". **Dr Richard Kyte**, **Dr Victor Sinevici** and **Dr Franz Snyman** jointly won the **South African Orthopaedic Association /Synthes Poster award** for their poster entitled "Extra-Corporeal Irradiation & Reimplantation in Humeral Osteosarcoma"; the third prize was awarded to **Drs M Sathekga** and **JM Muller** for their poster entitled "Chronic palmar/volar fracture dislocation of the proximal interphalangeal joint : A case report and literature review". **Professor A Schepers** was awarded the **South African Orthopaedic Association Chropaedic Association Education Medal**. Congratulations to all awardees!

Alumni Diaspora Programme

Once again the Health Sciences Research Office was delighted to host **Professor Roy Zent** and **Professor Ambra Pozzi** from Vanderbilt University as part of the Alumni Diaspora Programme. During their weeklong visit they presented a number of lectures and workshops in the Faculty on grant and paper writing. Both Professors Zent and Pozzi have extensive experience as Journal editors/peer-reviewers. They also serve as grant application reviewers for the National Institute of Health (NIH). They have received several NIH and other large competitive grants. This was the third consecutive year in which they presented courses at Wits. The feedback from attendees has been overwhelmingly positive. They also had the opportunity to meet with various Heads of Schools, Faculty Researchers and the Hillel Friedland Postdocs.



Meeting with the Hillel Friedland Postdocs and their hosts (from Left): Prof Anna Kramvis, Prof Maureen Coetzee, Dr Aurelie Deroubaix, Prof Roy Zent, Dr Antonia Wadley, Dr Kwang Shik Choi and Prof Ambra Pozzi.



Meeting with Heads of Schools and Senior Researchers (back row, from Left): Prof Judith Bruce, Prof Martin Smith, Prof Laetitia Rispel, Prof David Gray. (front row, from Left) Dr Julitha Molepo, Prof Roy Zent, Prof Beverley Kramer and Professor Demitri Constantinou

Students from the Fever Lab, in the School of Physiology won at Conference

The 41st Conference of the Physiology Society of Southern Africa (PSSA) took place in September. Tamzyn Baartman and Tanusha Dukhan from the Fever Lab within the Brain Function Group were respectively awarded second and third place in the Johnny Van Der Walt student poster competition. Tamzyn was awarded for her poster presentation entitled "Sickness response in rats following central administration of Interleukin-1ß" and Tanusha for her poster presentation entitled "A neonatal and adolescent animal model of pneumococcal disease". Congratulations to both ladies!



Photographs (from Left to right): Tamzyn Baartman and Tanusha Dukhan at the conference

Steven Mufamadi from the WADDP completes the Novartis Next Generation Internship Programme

Mr. Maluta Steven Mufamadi, a PhD candidate in novel drug delivery, under the supervision of Professor Viness Pillay of the Wits Advanced Drug Delivery Platform (WADDP) in the Department of Pharmacy and Pharmacology, has successfully completed a 3-month Novartis Next Generation Scientist (NGS) Internship Programme in Basel, Switzerland. The programme is a platform for augmenting the scientific and leadership capabilities of talented and motivated research scientists from emerging countries. During this programme Mr. Mufamadi successfully undertook an intensive research project under the mentorship of Novartis scientists, Dr. Giancarlo Francese, Dr. Andreas Fisch and Dr. Harry Tiemessen from the Department of Parenteral Drug Users (PDU) and Topical, Nanomedicine Technology Platform, Technical R&D.

His research findings, entitled 'Microfluidic technology for manufacturing of stealth liposomal nanomedicine', were presented as a scientific poster during the Novartis NGS Research Day. This study employed a novel continuous-flow microfluidics technology to assess the manufacturability of nano-sized stealth gel-state liposomes while encapsulating model compounds. Apart from his research project, Mr. Mufamadi also participated in interactive learning sessions on pharmaceutical research and development topics, including: technical drug development, drug targets and regulation, clinical trials, health systems, safety, ethics, intellectual property, modelling and simulation. This opportunity endorsed significant exchange of scientific knowledge and collaborations with Technical R&D researchers at Novartis Pharma AG, Basel and the WADDP. Mr. Mufamadi believes that implementation within the WADDP of these scarce skills and cutting edge technologies he was exposed to during the programme, could see an enhancement to the current approach on manufacturing of nano-medicines. The relationship which was built through this internship programme is aimed at endeavouring to create nextgeneration medicines to ease suffering and improve quality of life for patient populations around the world.



Photograph (top): Mr Maluta Mufamadi, (bottom): Mr Maluta Mufamadi amongst other individuals who participated on the Novartis Next Generation Scientist (NGS) Internship Programme in Basel, Switzerland

WITSIE AT THE CUTTING EDGE: Researcher Profile

Professor David Gray

Head of School School of Physiology



Read one of Dave's papers:

Gray, DA, Marais M & Maloney SK. A review of the physiology of fever in birds (2013). Journal of Comparative Physiology B, 183: 297 – 312.

Who are you and what is your academic/scientific training and background?

I am a "Geordie" as I was born in Newcastle upon Tyne in the North-East of England, the land of brown ale; football and ballet (remember Billy Elliott). I was educated (BSc and MSc) in England prior to taking up myfirst job as a research scientist in the Division of Endocrine Physiology and Pharmacology at the National Institute for Medical Research (NIMR), Mill Hill, London. In 1981 I moved to Germany to work at one of the Max-Planck Institutes at the W.G. Kerckhoff Institute for Clinical Research located in Bad Nauheim, just north of Frankfurt. During the period 1986 and 1987 I was awarded an overseas scholarship by the Max-Planck Society and completed my PhD at the University of Port Elizabeth, South Africa. In 1992 I left Germany to return to South Africa, spending two years at Rhodes University in Grahamstown, before joining the Department of General Physiology, which in 1996 merged with the Department of Physiology at Medical School and ultimately became the School of Physiology. In 2006 and again in 2011 I was appointed as the Head of the School of Physiology.

Explain the nature of the work that you are currently undertaking?

I am a comparative physiologist, with a focus on avian physiology. I have spent more than 20 years investigating the endocrine control of osmoregulation in birds. Round about 1998 I moved into the area of avian temperature regulation, specifically the physiology of mediation and modulation of fever in birds.

What do you think is the most pertinent/relevant/significant contribution you have made to research/science/your field?

I would like to think that my research work has made a meaningful contribution to understanding aspects of regulatory physiology not only to birds but in animals in general. I believe that there is much to be learnt from comparative physiology and that by understanding the phylogeny of non-mammalian physiological systems our understanding of mammalian systems increases. As with most researchers, very little would have been achieved by me alone and so much of the contribution has involved collaborators such as Rudi Gerstberger, Shane Maloney and Manette Marais as well as those mentioned below.

Did you have a particular mentor or supervisor who inspired you in research?

I have been privileged to work with some of the best researchers in the world. At the NIMR in London I worked with John Parsons, a giant in the field of parathyroid hormone physiology and pharmacology. In Germany I worked with Eckhart Simon and Ted Hammel (from USA), international leaders in their field and here at Wits, Duncan Mitchell continues to be an inspiration.

Tell us about what you do when you are not busy at work and carrying out cutting edge research?

I remain committed to two of the three activities mentioned above that Geordies are known for. The one I'm not so good at is ballet.

THE NEXT GENERATION: Postdoctoral Fellow

Dr Thandeka Khoza



Dr Thandeka Khoza completed her PhD in the Protein Structure-Function Research Unit, based in the School of Molecular and Cell Biology, University of the Witwatersrand.

In December 2012, Dr Khoza joined the **Centre for HIV and Sexually Transmitted Infections** at the National Institute for Communicable Diseases (NICD) as a Postdoctoral Fellow. She is currently under the mentorship of **Professor Lynn Morris**.

Her Postdoctoral research involves isolating broadly neutralizing antibodies from HIV –infected individuals in the CAPRISA cohort. She says she is using structural biological tools to understand the mechanism of action of these antibodies and how the HIV virus escapes neutralization.

Dr Khoza says that she loves the diversity which is offered by the city of Johannesburg, from culture to the various opportunities presented.

Her advice to someone considering doing a Postdoc: "Take your time in finding a good mentor".

NEWS BYTES: Health Sciences in the News

Professor Mkhululi (Mac) Lukhele was featured in the Financial Mail's Business section. Professor Lukhele is the Head of the School of Clinical Medicine, the President of the Spinal Cord Association and International Member of the American Academic Orthopaedic Association as well as a member of the AO Spine (spine care). To read his profile <u>click here</u>



Professor Viness Pillay was recently profiled in Nano eNews. Professor Pillay is the Director of the Wits Advanced Drug Delivery Platform (WADDP), the African Network for Drugs and Diagnostics Innovation (ANDI) Center of Excellence in Advanced Drug Delivery Technology as well as a South African DST/NRF SARChI Research Chair in Pharmaceutical Biomaterials and Polymer-Engineered Drug Delivery Technologies. To read his profile click here.

WITS | HEALTH SCIENCES

WITS School of Public Health



INDEPTH Network Better Health Information for Better Health Policy



The INDEPTH 12th International Scientific Conference (ISC) 28 - 31 October 2013, School of Public Health, University of the Witwatersrand, Johannesburg

The upcoming 2013 ISC will be co-hosted by Statistics South Africa (Stats SA) and the School of Public Health at the University of the Witwatersrand, in collaboration with INDEPTH member Health and Demographic Surveillance Systems (HDSSs) in South Africa (i.e. Africa Centre, Agincourt and Dikgale). The theme of the 2013 ISC conference is "Fitting together the health data puzzle: the contribution of INDEPTH (HDSSs) to the strengthening of national health information systems (NHIS)", the sessions will feature presentations using longitudinal data in conjunction with censuses, national surveys and/or national health information systems.

The full conference programme will be made available on the website shortly. For more information about INDEPTH visit: <u>http://www.indepth-network.org</u>. For queries or concerns, please contact: Nicolette Pingo on <u>Nicolette.Pingo@wits.ac.za</u> or 011 717 2343.



Faculty of Health Sciences Research Office Postgraduate Page

Do you have any significant research news you would like us to include, or comments you would like to make? Please contact <u>Nomfundo.Sibiya@wits.ac.za</u> (news items to reach us by 15 October 2013)

The newsletter is edited by Professor Bev Kramer, Professor Andrea Fuller, Suretha Erasmus and Nomfundo Sibiya Thank you to all who contributed to this month's issue.