

# Health Sciences Research News

The University of the Witwatersrand  
Faculty of Health Sciences



September 2012

Although our Biennial Research Day and Postgraduate Expo has come and gone, the Faculty continues to bask in the glow of the important research presented by our tireless researchers and the buzz created by the accompanying Postgraduate Expo. Well done to Dr Bavesh Kana and his team for an exceptional programme! We were delighted to have the Deputy Minister for Health, Dr Gwen Ramokgopa, join us. Congratulations to all the Research Day prize winners (featured herein). We look forward to having you all join us again at Research Day 2014!

*Beu Kramer*

## LEADING RESEARCH NEWS

### FACULTY RESEARCH DAY & PG EXPO

The Faculty of Health Sciences Research Day and Postgrad Expo was held on 19 September 2012. Close to 1000 delegates attended, with 90 oral and 187 poster presentations, covering topics within five themes: Clinical Research and Therapeutics for Health; Diseases of Lifestyle; Education, policy and systems; Infectious Diseases and Molecular and Comparative Biosciences. Research Day 2012, which fell under the auspices of the Wits90 celebrations, was held in the spirit of celebrating the Faculty's achievements in research, which was reflected in the record number of abstract submissions and overall increased attendance by researchers, exhibitors, government officials, senior visitors from other Faculties and senior University staff.

The day started with a heart-warming speech by the Deputy Minister of Health, **Dr Gwen Ramokgopa**. She reaffirmed the importance of medical research and its vital role in creating access to health care services for all. She also highlighted the key role that Wits is playing in creating the new generation of transformative health interventions for South Africa. Subsequently there were two plenary lectures, one given by **Dr Jonathan Lewis** 'The Future of Medicine: Faster, Better, Cheaper'. Dr. Lewis an alumnus of the Faculty is Chief Executive Officer and Director of ZIOPHARM Oncology and has played a leading role in developing several drugs for cancer. Dr Lewis placed substantial emphasis on how technology has influenced changes in health care and how it will bring about even bigger innovations over the next two to three decades. **Professor Shabir Madhi**, Executive Director of the National Institute for Communicable Diseases (NICD) and Director of the Faculty's Respiratory Meningeal Pathogens Research Unit gave the second plenary lecture titled 'Vaccinating toward a brighter future for children'. He highlighted the importance of vaccinations in children, especially in rural areas, and the battle for access to vaccines.

Professor Madhi placed particular emphasis on basic infection control measures, such as hand washing, to curb further spread of disease agents.

After the plenary session, the five parallel breakaway sessions began, with presenters competing for substantial prizes in the form of travel grants. All presenters gave of their best, and the audience was treated to entertaining talks. Three round table discussions were convened in the afternoon, where top, highly qualified stimulating experts gathered to tackle different issues (A world without AIDS; Eliminating TB and Colliding Epidemics – Africa in Transition).

The Faculty Research Office, together with the Faculty Postgraduate Office organised the Postgrad Expo, which ran concurrently with Research Day. This provided an additional opportunity for profiling the numerous prospects for undertaking postgraduate research and career development in the various departments in the Faculty and research units.

The day ended with an evening cocktail party. The winners of the various Research Day prizes were announced. “This was a very successful and exciting day”, acknowledged the Dean at the cocktail party. The Research Day Organizing Committee, the Postgraduate Expo Organizing Committee and members of the Research Office convey their congratulations to all the winners and thank all participants for making the day a success!

## **RESEARCH DAY PRIZE WINNERS**

### **Clinical Research and Therapeutics for Health**

Dr Bridget Hodkinson- Best Oral  
Mr Ronnie Immelman- Best Poster  
Miss Derusha Frank- Best Student Oral  
Dr Candice Feben- Best Student Poster

### **Diseases of Lifestyle**

Dr Nitien Naran- Best Oral  
Dr Marketa Toman- Best Poster  
Mrs Rebecca Meiring- Best Student Oral  
Miss Alessandra Pioreschi- Best Student Poster

### **Education, Policy and Systems**

Dr Duane Blaauw- Best Oral  
Dr Pelagia Ndambakuwa- Best Poster  
Dr Pieter de Jager- Best Student Oral  
Miss Shakira Choonara- Best Student Poster

### **Infectious Diseases**

Mrs Kristie Bloom- Best Oral  
Dr Arthi Ramkissoon- Best Poster  
Mr Previn Naicker- Best Student Oral  
Dr Simbarashe Takuva- Best Student Poster

### **Molecular and Comparative Biosciences**

Dr Susan Williams- Best Oral  
Miss Erin Hutchinson- Best Poster  
Mr Dewaldt Engelbrencht- Best Student Oral  
Mr Mukhlid Yousif- Best Student Poster



Photographs (Left): Professor Yosuf Veriava, the Deputy Minister Dr Gwen Ramokgopa, Professor Ahmed Wadee and Professor Beverley Kramer. (Right): Dr Bavesh Kana and Dr Jonathan Lewis. (Far-right): Professor Yosuf Veriava, Professor Shabir Madhi and Professor Saraladevi Naicker.



Photographs (Left): Dr Alex Welte, Dr Penny Moore, Professor Francois Venter and Professor Lynn Morris (Right): Dr Alisha Wade, Professor Brandon Wainwright, Professor Michèle Ramsay and Professor Stephen Tollman (Far-right): Professor Gavin Churchyard, Dr Bavesh Kana, Dr Kerrigan McCarthy and Dr Neil Martinson



Photograph (Left): Miss Derusha Frank and Professor Ahmed Wadee; (Right): Dr Bavesh Kana, Mr Ronnie Immelman and Professor Ahmed Wadee (Far-right): Miss Erin Hutchinson and Professor Ahmed Wadee

## RESEARCH DAY 2012: Abstracts from some of the prize winning presentations

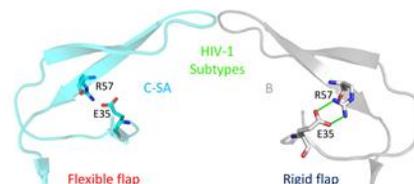
### Cost and Cost-Effectiveness of Conventional and Liquid Based Cytology in South Africa: A laboratory service provider perspective

With the phased implementation of a National Health Insurance system, accurate cost evaluations of health services will become increasingly important for evidence-based decision making in resource allocation. South Africa's organised cervical screening programme hinges on a functioning laboratory service providing cytology services. Liquid based cytology (LBC) is an alternative to conventional cytology.

**Pieter de Jager** from the School of Public Health (winner of the best student oral in Education, Policy and Systems) and his colleagues' undertook a retrospective study which aimed to accurately cost cervical cytology services in the South African public sector and to estimate the cost-effectiveness of liquid based versus conventional cytology from a laboratory service provider perspective. Total average cost per conventional slide was found to be ZAR 64 (CI95 59-69) compared to ZAR 85 (CI95 77 – 92) for a LBC slide. Conventional cytology was found to be more cost-effective ZAR 10 786 (CI95 9 335 – 12 699) than liquid based cytology ZAR 18 911 (CI95 16 180 – 22 435) in detecting CIN II or greater lesions. An improvement in the specificity of LBC and/or a decrease in the cost of consumables utilized in processing LBC specimens could potentially make it a cost-effective alternative to conventional cytology. However, definitive assessment of cost-effectiveness will require a prospective study conducted from a societal perspective.

### Structural Insights into the South African HIV-1 Subtype C Protease: Impact of hinge region dynamics and flap flexibility in drug resistance

The HIV protease plays a major role in the life cycle of the virus and has long been a target in antiviral therapy. Resistance of HIV protease to protease inhibitors is problematic for the effective treatment of HIV infection. FDA-approved protease inhibitors were designed from data produced against the HIV-1 subtype B protease which is common in Europe and North America. However these drugs display reduced inhibition for HIV-1 subtype C proteases which are common in Africa, South America and Asia.

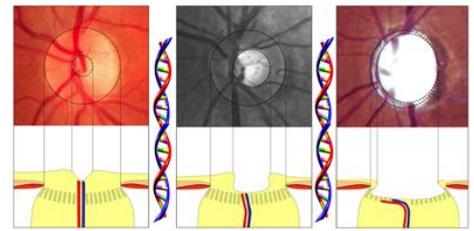


A study conducted by **Previn Naicker** (winner of the best student oral in Infectious Diseases) and colleagues, aimed to elucidate the reasons for this resistance and used structural approaches to aid the design of protease inhibitors with increased binding affinity. The South African HIV-1 subtype C protease (C-SA PR), which contains eight polymorphisms relative to the consensus HIV-1 subtype B protease, was expressed in *Escherichia coli*, purified and crystallized. The crystal structure of the C-SA PR was resolved at 2.7 Å, which is the first crystal structure of a HIV-1 subtype C protease that predominates in Africa. Structural analyses of the C-SA PR in comparison to HIV-1 subtype B proteases, indicated that polymorphisms at position 36 of the homodimeric HIV-1 protease may impact on the stability of the hinge region of the protease, and hence the dynamics of the flap region. Molecular dynamics simulations showed that the flap region of the C-SA PR displays a wider range of movements over time, as compared to the subtype B proteases. Reduced stability in the hinge region resulting from the absent E35-R57 salt bridge in the C-SA PR, most likely contributes to the increased flexibility of the flaps which may be associated with reduced susceptibility to protease inhibitors.

**Naicker P**, Achilonu I, Fanucchi S, Fernandes M, Ibrahim M.A.A, Dirr HW, Soliman M.E.S and Sayed Y. (2012). Structural Insights into the South African HIV-1 Subtype C Protease: Impact of hinge region dynamics and flap flexibility in drug resistance, *Journal of Biomolecular Structure and Dynamics*. (Manuscript accepted).

## Primary Open Angle Glaucoma Genetic Risk Factors In Black South Africans

**Glaucoma**, an optic neuropathy, is the commonest cause of irreversible blindness in South Africa as it is worldwide. The commonest type of glaucoma is Primary Open Angle Glaucoma (POAG). POAG is asymptomatic, yet early detection and treatment can prevent visual loss. POAG has a significant genetic component, and identifying genetic risk factors could facilitate early detection as well as elucidate pathogenic mechanisms of the disease. POAG is more common in populations of African descent, but has been understudied in the context of POAG genetic risk factors in these populations.



**Susan Williams** (winner of the best oral in Molecular and Comparative Biosciences) and colleagues examined the association of candidate genes with POAG in black South Africans. The candidate genes (CDKN2B, CAV1/2, CYP1B1, WDR36, COL1A1/2, COL5A1, COL8A2, ZNF469, SIX1/6, ATOH7 and the chromosome 2p16 locus) were selected because of their association, in other populations, with either POAG or heritable ocular quantitative traits associated with this condition. Single nucleotide polymorphisms (SNPs) were selected within the reported genomic regions using a combination of tagging SNPs in an African population (YRI) and SNPs with a reported association in the literature. The Illumina BeadXpress genotyping platform was successful in genotyping 159 SNPs in DNA samples from 429 black South Africans (215 POAG cases and 214 controls). The study was powered to detect moderate effects (odds ratio less than 0.6 or greater than 1.5). Genetic associations with POAG were evaluated using logistic regression with an additive model, adjusted for age and gender.

Single SNPs in the COL8A2, COL1A1, ZNF469 and MYOC regions showed marginal association with POAG, but none of these identified associations remained significant after Bonferroni correction for multiple testing. An ocular quantitative trait association analysis was performed with intraocular pressure, central corneal thickness and vertical cup: disc ratio as the continuous variables in a linear regression analysis adjusted for age and gender. This also yielded no significant associations after Bonferroni correction. We did however identify a significant association with Type 2 diabetes mellitus and rs12522383 in WDR36 after adjusting for age, gender and POAG diagnosis in a logistic regression model. This association was not corrected for body mass index and while it is interesting, it requires replication. The data indicated that if there is a genetic risk associated with these candidate genes and POAG in this country, then it is a small risk.

## The Determinants of Non-Alcoholic Fatty Liver Disease in South African Females

Non-alcoholic liver disease (NAFLD) may be characterized by macro-vesicular accumulation of fat that occurs in the absence of alcohol consumption, in amounts that are considered injurious to the liver. It is one of the most common hepatic pathologies in industrialized countries and includes a spectrum of liver diseases ranging from simple fatty liver (accumulation of fat - steatosis), non-alcoholic steatohepatitis (NASH - fat accumulation associated with varying degrees of inflammation) and cirrhosis (advanced and irreversible scarring of the liver tissue potentially leading to liver failure and hepatocellular carcinoma). However, very few studies on fatty liver disease have been conducted in Africa and other developing countries.



**Nitién Naran** (winner of the best oral in Diseases of Lifestyle), and colleagues conducted a study investigating the anthropometric and metabolic characteristics in a South African female population with varying levels of hepatic fatty deposition. Their data demonstrated that the major determinants of fatty liver were increased waist circumference and diabetes, whereas African origin and an increase in subcutaneous fat depot were protective.

## PROFESSOR MADHI ELECTED AS A NEW MEMBER OF ASSAF

Congratulations to **Professor Shabir Madhi** on being elected as a member of Academy of the Science of South Africa (ASSAF). Professor Madhi is an international leader in his field and an A-rated National Research Foundation scientist. Professor Madhi has been involved in research on vaccine preventable diseases for the past 13 years and has contributed to over 110 publications, including many in leading international peer-reviewed journals. Professor Madhi also holds the Department of Science and Technology/National Research Foundation South African Research Initiative Chair in Vaccine Preventable Disease.



## PROFESSOR CHOONARA APPOINTED AS TWAS YOUNG AFFILIATE

Each year the five TWAS Regional Offices select up to five scientists under the age of 40 to be Young Affiliates. This is part of TWAS' effort to recognize promising young researchers and increase the presence of younger scientists in the Academy. Our very own **Professor Yahya Choonara**, from Pharmacy and Pharmacology was amongst the five young affiliates selected for the period 2012-2016. Professor Choonara is an expert in PharMATHaceutics, a novel concept that implements cutting-edge mathematical and statistical design software for specialized applications in drug delivery prototyping.

## NATIONAL RESEARCH FOUNDATION RATINGS



Congratulations to **Professor Emeritus Duncan Mitchell** on once more receiving an A-1 rating awarded to "a researcher recognised by all reviewers as a leading scholar in his field internationally for the high quality and wide impact of his recent research outputs." Professor Mitchell is an Honorary Professorial Research Fellow in the Brain Function Research Group (BFRG), School of Physiology.

Congratulations to **Dr Glenda Gray** on being awarded an A-2 rating. Dr. Glenda Gray is the executive Director of the Perinatal HIV Research Unit (PHRU). Trained as a medical doctor and later specialised in the area of Paediatrics, she developed the PHRU into a world renowned clinical research, epidemiology, operational research and treatment site for HIV infected adults and children employing 400 individuals. Under her leadership, the PHRU now has an extensive HIV prevention research portfolio, which includes HIV vaccine research, microbicide research and other biomedical and behavioural interventions.



## LATEST RESEARCH FINDING ON KHOE-SAN



A paper published recently by **Carina Schlebusch** (a Wits PhD graduate now conducting post-doctoral research at Uppsala University in Sweden) and Colleagues **Pontus Skoglund, Per Sjödin, Lucie M. Gattepaille, Dena Hernandez, Flora Jay, Sen Li, Michael De Jongh, Andrew Singleton, Michael G. B. Blum, Himla Soodyall and Mattias Jakobsson** highlights the genomic variation in seven Khoe-San groups. Professor Soodyall from the Human Genomic Diversity and Disease Research Unit in the Faculty's Division of Human Genetics said that the findings of the study are a 'phenomenal tribute to the indigenous Khoe and San people of southern Africa, and through this magnificent collaboration, we have given the people of Africa an opportunity to reclaim their place in the history of the world'. Congratulations to all the researchers involved for their remarkable work. The paper was published in the prestigious Journal of Science in September 2012.

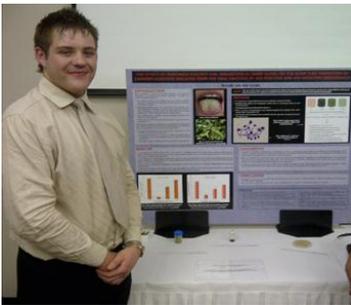
\*Wits News covered this story online (access the article [here](#)).

## WADDP GROUP WINS THE BEST PUBLICATION AWARD IN PHARMACEUTICS



The group members of the Wits Advanced Drug Delivery Platform (WADDP) attended the Academy of Pharmaceutical Sciences Conference held in Grahamstown. The group was awarded with the prize for the 'best publication in Pharmaceutics'. The publication is entitled: Polymeric emulsion and crosslink-mediated synthesis of super-stable nanoparticles as sustained-release anti-tuberculosis drug carriers. The authors of this paper included Professor Yahya Choonara, Professor Vinness Pillay, Dr Valence Ndesendo, Ms Lisa du Toit, Mr Pradeep Kumar, Dr Riaz Khan, Dr Caragh Murphy and Dr Debbie-Leigh Jarvis.

## SCHALK WINS SADA/DENTSPLY STUDENT CLINICIAN PROGRAMME AWARD



**Mr Schalk van der Linde**, a final year Bachelor of Dental Science student won a SADA/Dentsply Student Clinician Programme award in a competition held at the IADR Congress in August in Johannesburg. This is an undergraduate student research competition which is held once a year. He competed with four other students, two representing the University of Nairobi, a student from University of the Western Cape and a student representing the University of Pretoria. He will be representing South Africa and competing in an international conference which will be held in San Francisco in October 2012. His research topic was "Effect of *Dodonaea viscosa* var. *angustifolia* on the virulence of *Candida albicans* isolated from the oral cavities of HIV positive and negative patients." This study was conducted in the division of Oral Microbiology under the supervision of **Dr Mrudula Patel**.

## WITSIE AT THE CUTTING EDGE: Researcher Profile

**Associate Professor Elena Libhaber**

**School of Clinical Medicine  
Research Methodology and Statistics**

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

I am an Associate Professor in the School of Clinical Medicine in Research Methodology and Statistics. I received my first degree in Chemistry from the University of Buenos Aires in Argentina, an MSc in Biochemistry from the University of Tel Aviv and a Master in Research Methodology from the University of Belgrano, Argentina. Later I obtained a PhD degree in Physiology from Wits University. I am a National Research Foundation rated scientist and have won the Gold Award as best novel abstract presentation at the South African Heart Association Congress in 2010. I am presently reviewer for several international journals in the cardiovascular field.



### What is the nature of the research that you are currently undertaking?

My research is in cardiovascular physiology. I work in the Division of Cardiology at Chris Hani Baragwanath Academic Hospital and at the Wits Faculty of Health Sciences where together with other researchers, we evaluate the effect of antihypertensive drugs in ventricular hypertrophy, assessment of measures of left ventricular remodelling, systolic and diastolic function and myocardial deformation in hypertensive patients of African descent and myocardial fibrosis and apoptosis with serum markers in hypertensive patients of African descent. I have been granted an MRC grant for the project on the effect of diuretics

on central blood pressure and cardiac abnormalities in hypertensives of African Ancestry in collaboration with the Cardiovascular Pathophysiology and Genomics Research Unit in the Faculty. I also belong to the Soweto Cardiovascular Research Unit.

### **What do you think is the most significant contribution you have made to research/science?**

Providing support and mentorship to research group leaders and postgraduate students by offering them formal training in Research Methodology and Applied Statistics in order to obtain their degrees and publish their research articles. In addition, publishing numerous papers that contribute to the understanding of the progression of left ventricular hypertrophy to heart failure in hypertensive patients and its potential regression in patients on treatment.

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

In my undergraduate student years at the University of Buenos Aires Professor D Lantos introduced me to my first research project on the regulation of aldosterone. In later years I became involved in cardiovascular physiology research under the mentorship of Prof. P. Sareli and Prof. G. Norton from the School of Physiology at Wits University with whom I am still collaborating in multiple projects.

### **What do you do when you're not busy at work and carrying out cutting-edge research?**

I like to go to movies, concerts, read, take long walks outdoors with my husband and visit my children who live in the US.

**Read one of Elena's papers:** Libhaber E, Norton G, Libhaber C, Woodiwiss A, Candy G, Essop M, Sareli P. Prevalence of residual left ventricular structural changes after one year of antihypertensive treatment in patients of African descent: role of 24-hour pulse pressure. *Cardiovascular J Afr.* 2012 Apr; 23(3):147-52

## **THE NEXT GENERATION: Postdoctoral Fellows**

### **Dr Emily Mendenhall**



Dr Emily Mendenhall is a very recently acquired asset in the **Developmental Pathways for Health Research Unit (DPHRU)**. She started her postdoc last month. Emily grew up in USA, where she undertook her undergraduate and postgraduate studies. She completed her PhD in Medical Anthropology from Northwestern University (near Chicago, USA) and her MPH in global public health from Emory University, Atlanta, USA.

Emily is very interested in which economic, social and cultural factors shape women's risk and experiences with chronic mental and physical illness. In her new book, "Syndemic Suffering: Social Distress, Depression, and Diabetes among Mexican Immigrant Women", she brings together five years of research on Mexican immigrants in Chicago. The book itself presents an intimate portrait of syndemic suffering to show how social problems are co-constructed with depression and diabetes among the urban poor. It goes beyond epidemiological research in order to reveal how broad structural inequalities play out in the lives of individuals, families and communities and lead to higher rates of mortality and morbidity.

Her current research in Soweto examines this problem but also considers the further complication of HIV and AIDS. Emily is hosted by **Associate Professor Shane Norris**, who Emily insists has developed a great project for her to be able to join the Wits family.

Although she is fairly new in Johannesburg, she says she has thus far enjoyed how friendly everyone around has been towards her. Her best advice for everyone considering doing a Postdoc is that: "Challenge yourself to build your skill-set. It's exciting and nerve-wracking at the same time!"

## Dr Carren Ginsburg

Dr Carren Ginsburg hails from Cape Town, and joined the **Developmental Pathways for Health Research Unit (DPHRU)** in 2011. Carren is hosted by **Associate Professor Shane Norris**.

No stranger to our institution, Carren completed her PhD through the Birth-to-Twenty Research Programme in the Department of Paediatrics. Her PhD investigated longitudinal patterns of residential mobility amongst children in the Birth-to-Twenty cohort and explored the effects of mobility on children's educational progression and attainment. Her Postdoc builds on the work she commenced during her PhD, as she has a strong interest in longitudinal analysis techniques and their application to social and health sciences. Her research is situated within the area of population studies and broadly aims to investigate the potential influence of social and economic factors on health outcomes such as body composition.



Carren says she chose Wits because it has a strong research focus and offers an excellent base for conducting research in one of southern Africa's most interesting and dynamic urban contexts. She says being part of the DPHRU multidisciplinary research team is commendable because the Unit offers her an opportunity to engage in research in a range of areas concerning health and well-being across the life-course. The best thing that Carren loves about Johannesburg is the weather; particularly the rain free winters- although she says come summer, the Parktown prawns are enough to send you running back to where you came from!

## RESEARCH ACHIEVEMENTS, EVENTS & VISITORS

### VISIT FROM PROFESSOR CHRIS MATHEW



The Sydney Brenner Institute for Molecular Bioscience (SBIMB) and the Molecular Biosciences Research Thrust (MBRT) recently hosted **Professor Chris Mathew** in a visit to Wits. Prof Mathew is currently the HOD of the Department of Medical and Molecular Genetics at Kings College London School of Medicine in the UK. Prof Mathew recently visited numerous institutions around South Africa with an interest in setting up research collaboration network with various cancer research groups across our country. He met with researchers from the Cancer Registry at the NHLS, staff at the Department of Surgery at Baragwanath Hospital, and Wits researchers from the School of Molecular and Cell Biology and Division of Human Genetics in the School of Pathology.

Prof Mathew also delivered a fascinating seminar entitled "New approaches to access the South African Oesophageal Cancer Genome" held at Wits Medical School in August 2012, and highlighted some of the recent developments in molecular biology research on various cancers.

## ALUMNI DIASPORA VISITORS

As part of the **Alumni Diaspora Programme**, **Dr Jonathan Lewis**, Chief Executive Officer and Director of ZIOPHARM Oncology spent two days (19 and 20<sup>th</sup> September 2012) in the Faculty of Health Sciences. Dr Jonathan Lewis received his M.B.B.Ch. and PhD from the University of the Witwatersrand.



He served as Professor of Surgery and Medicine at Memorial Sloan-Kettering Cancer Center. He has been actively involved in leading translational and clinical research in cancer, and is globally recognized by patient advocacy groups. He has helped develop several drugs in cancer. He has received numerous honors and awards in medicine and science, including the ASCO Young Investigator Award, the Kristen Carr Fellowship, the Yale University Ohse Award, the Royal College of Surgeons Trubshaw Medal, and the Sarcoma Foundation of America Hope and Vision Award. He serves as a Director on the Board of POPPA (the Police Organization Providing Peer Assistance) of the New York Police Department (NYPD). He also serves on the Medical Advisory Board of the Sarcoma Foundation of America, and the Scientific Advisory Board of the Combat Wound Initiative and Limb Salvage Program of the Henry Jackson Foundation for the Advancement of Military Medicine.

Dr. Lewis is a member of the Hope Funds Scientific Advisory Council and has served on its Board of Trustees since 2008.

## REPORT ON THE WRITING RETREAT AT WITS RURAL FACILITY FROM 20TH JULY – 26TH JULY 2012

Associate Professor Robyn van Zyl, Dr Hennie Loubser, Mr. Philippe Gradidge, Ms Amme Tshabalala, Ms Annalie van den Heever, Mrs. Rulaine Smith, Ms Lyndsay Koch and Mrs Matty van Niekerk attended a writing retreat at Wits Rural Facility from the 20<sup>th</sup>-26<sup>th</sup> July 2012. The group worked extremely hard for the five days. This was a very successful retreat and the participants really showed their appreciation of this opportunity. Each participant will submit an article to an ISI approved journal.



Do you have any significant research news you would like us to include, or comments you would like to make? Please contact [Nomfundo.Sibiya@wits.ac.za](mailto:Nomfundo.Sibiya@wits.ac.za) (news items to reach us by **17<sup>th</sup> October 2012**)

The newsletter is edited by Professor Bev Kramer, Professor Andrea Fuller, and Nomfundo Sibiya