



SCHOOL OF Clinical Medicine NEWSLETTER

EDITORIAL



Dear Colleagues

Welcome to the second SOCM newsletter, which highlights happenings and achievements in our school.

Congratulations to all those whose excellence is featured in this edition.

Welcome to newly appointed staff members and compliments to those who were promoted or received long service awards.

Thank you to those who organised the various seminars, talks and the research day.

Please support our needy students and our Cardiology Fun Run/Walk.

Happy reading.

Please send items that you would like to be included in our next newsletter to Rita Kruger (rita.kruger@wits.ac.za) by :

Wednesday 31 October 2018.

INSIDE THIS ISSUE

WITS SCIENTISTS PART OF A GLOBAL COALITION TO ELIMINATE HEPATITIS B VIRUS	2
HOW THIS BIOENGINEER LINKED A HUMAN BRAIN TO THE INTERNET	3
PROFESSOR N MAHOMED INVITED SPEAKER AT THE CONFERENCE ON BRICS & AFRICAN DEVELOPMENT	3
TOP 10 BEST HOSPITALS IN THE WORLD: SOUTH AFRICAN HOSPITAL RANKED 2ND	4
LECTURE BY THE MINISTER OF HEALTH ON NHI AND MEDICAL SCHEMES BILLS	4
FACULTY LECTURE "VOICES OF MORAL AUTHORITY: PARENTS, PAEDIATRICIANS AND WHAT WILL ACTUALLY HELP" BY PROFESSOR RICHARD HAIN	4
NATIONAL MENTAL HEALTH ALLIANCE PARTNERS (NMHA) MEETING	4
NEWS ON BIOETHICS STAFF ACHIEVEMENTS	5
CMJAH TRAUMA UPDATE MEETING	5
26TH BIENNIAL SURGICAL CONGRESS AT WITS	6
EVENTS & ANNOUNCEMENTS	6

A LOOK AT OUR STAFF ACHIEVEMENTS:

New HOD appointment:

Dr Shivesh Maharaj (ENT)

Acting CEO Chris Hani Baragwanath Academic Hospital

Dr Richard Lebethe has been appointed as Acting CEO from 29 August 2018.

Promotions:

We wish to congratulate the following staff members for their academic promotions:

- Dr Zeyn Mahomed to Adjunct Professor
- Dr Debbie White to Adjunct Professor
- Dr Maeyane Moeng to Adjunct Professor
- Dr Shahed Omar to Adjunct Professor
- Dr Jenny Coetzee to Senior Researcher
- Dr Abdullah Laher to Associate Professor
- Dr Ziyaad Dangor to Associate Professor

Dr Ahmed Solomon to Associate Professor **Visiting and Honorary Staff:**

We have the pleasure of welcoming the following Honorary and Visiting staff to our School:

- Dr A Wooyoung Kim
 - Assoc Prof M Damianova
 - Dr R Saggars
 - Dr R Mathiba
 - Dr C Georgia
 - Dr A Elnour
 - Dr A Van Heerden
 - Dr C Marsay
 - Prof C Lundgren
 - Prof A Meyers
 - Dr Okyere-Dede
 - Dr K Vanderdonck
 - Dr Kotzen
- (*The above information is as

of 31 August 2018.)

Other Achievements:

Prof Charles Feldman received during the 2018 SAMRC Scientific Merit Awards the Platinum Scientific Achievement Award for the recognition of his research excellence.

Dr Boitumelo Phakathi and Dr Nirvana Morgan has been nominated and recognized as one of the Top 200 Young South Africans for 2018.

Prof Efraim Kramer is flying the EM and Wits flag high as the Chief Medical Officer at the FIFA World Cup. He has been responsible for all medical and health care at all the stadiums and players parks. We think this achievement by one of our own needs to be acknowledged.

Well done Prof Kramer!

Congratulations to the following School members who are part of the Faculty of Health Sciences Top 25 researchers:

Prof Saraladevi Naicker and Prof

Shane Norris

Long service Awards:

- Ms D Pretorius (5 years)
- Ms T Chetty (5 years)
- Ms B Kagodora (5 years)

Assoc Prof G Candy (15 years)



Ms A Dreyer (5 years)



WITS SCIENTISTS PART OF A GLOBAL COALITION TO ELIMINATE HEPATITIS B VIRUS



Professor Anna Kramvis directs the Hepatitis Virus Diversity Research Unit (HVDRU), a research entity within the Department of Internal Medicine in the School of Clinical

Two research entities at Wits University are part of the International Coalition to Eradicate Hepatitis B Virus (ICE-HBV).

Hepatitis refers to inflammation of the liver, which can be caused by viruses including hepatitis B virus (HBV), which is prevalent in Africa. The virus is transmitted through contact with the blood or body fluids of an infected person. HBV can cause both acute and chronic disease and it is a root cause of liver cancer and cirrhosis. A persistent infection in Africa.

At least one-quarter of the more than 250 million chronic carriers of HBV in the world reside in Africa. However, this is probably an under-estimate because of under-reporting and lack of extensive surveillance.

Africa is the only continent where HBV infection has a constantly high prevalence in certain regions. Exposure to HBV stands at: 35% to 75% in Southern Africa; 65% to 85% in Eastern Africa; more than 85% in Western Africa.

There is a correspondingly high annual incidence of liver cancer, which ranks second and fifth as the leading cancer-associated deaths for men and women, respectively.

Two research entities in the Faculty of Health Sciences at Wits University are directly involved with research into HBV epidemiology, molecular biology, and antiviral therapy.

Professor Anna Kramvis directs the Hepatitis Virus Diversity Research Unit (HVDRU), a research entity within the Department of Internal Medicine in the School of Clinical Medicine at Wits.

The HVDRU studies the molecular virology of HBV. Specifically, the unit studies uniquely African HBV strains – their epidemiology, molecular and functional characterization, and their role in the clinical manifestation of a disease.

No infectious diseases research in Africa can neglect the pandemic of HIV, which causes AIDS. Thus, the HVDRU also researches HBV/HIV co-infection and develops bioinformatics tools to facilitate the study of these infections.

“Our research has shown that the strains of HBV that prevail in Africa differ both molecularly and functionally from those outside of Africa. We have developed tools that enable us for the first time to be able to screen existing and new anti-HBV therapies against these strains. This is significant because studies on strains that prevail outside Africa do not necessarily always apply here”, says Kramvis.

THE WITS/SAMRC ANTIVIRAL GENE THERAPY RESEARCH UNIT

The Wits/South African Medical Research Council Antiviral Gene Therapy Research Unit (AGTRU), directed by Professor Patrick Arbuthnot, is developing gene therapy to counter serious viral infections – such as HBV – of public health importance in sub-Saharan Africa.

Gene therapy refers to the introduction of genetic material (DNA or RNA) into cells as a mode of treating disease. Because gene therapy is based on rational drug design [the development of medications based on the study of the structures, functions and genetic makeup of target molecules], the technology is very powerful and potentially applicable to many previously ‘undruggable’ diseases of South African importance.

The AGTRU focuses on advancing a cure for persistent infection with HBV. The International Coalition to Eliminate HBV and the search for a cure.

Both the HVDRU and AGTRU at Wits are part of the International Coalition to Eliminate HBV (ICE-HBV). This global group of researchers, patient representatives, and health organizations calls for the integration of an HBV cure in global plans to eliminate viral hepatitis.

A safe and effective vaccine to prevent HBV infection has been available since

1982. The universal delivery of this vaccine is essential for the elimination of HBV as a public health threat. Additionally, those already chronically infected need lifelong treatment, but only some five percent of those who need this treatment can currently access it.

Ahead of World Hepatitis Day, members of ICE-HBV published a paper in Nature Reviews Gastroenterology and Hepatology for the need for appropriate cure research and preparedness to complement the World Health Organization’s global elimination strategy, the HBV vaccine, and the well-tolerated but poorly accessed therapy.

ICE-HBV calls for increased investments in HBV cure research and cure preparedness to save the lives of the 290 million people living with chronic hepatitis B worldwide, most of whom are unaware of their infection.

Five facts about Hepatitis B Virus in South Africa:

- 1) In South Africa, screening for HBV is public health policy only for HIV-infected individuals.
- 2) HIV-negative patients are only screened when there is an indication of HBV, and they are then treated accordingly.
- 3) In South Africa, the three-dose HBV vaccination coverage has dropped from 80% in 2014 to 66% in 2017.
- 4) The World Health Organization-recommended birth dose of HBV vaccination is not currently administered universally.
- 5) The unprecedented human migration currently taking place from Africa means that HBV is being dispersed from a continent where the virus is endemic [regularly found in a particular people or region] to low endemic areas of the world.

HOW THIS BIOENGINEER LINKED A HUMAN BRAIN TO THE INTERNET

Adam Pantanowitz, a Lecturer from the School Of Electrical & Information Engineering, Wits University has designed an interface that connects the human brain to the internet.

By using his Brainternet (a device he first conceived of four years ago) he recently developed it with two senior biomedical engineering students that made it possible to convert brain waves into signals and stream them into cyberspace, a tech that offers practical, health-based applications.

This is the first step toward the next inevitability: bidirectional information flow (the ability to download data from the internet directly into our cerebral matter). However, they are

not there yet and they still have to work out the ethics of dialling up someone's brain.

He supervised the two students while they hacked together a portable Emotive EEG headset and mini Raspberry Pi computer, and equipping them with either 3G or LTE. By using that connection, they were able to stream their brain signals as data to an online server. "They figured out when a person was raising their right arm, or raising their left arm, and the screen would display not only the signals back to them but also the information about what activity they were doing," he says. In the future, he predicts: "Just like cellphones or air conditioners can have an IP address, a person could

be connected to the internet with biological signals."

He put an ethical question to Dr. Estelle Trengove, who heads the School of Electrical Engineering at Wits. "At this stage Brainternet is a rough-hewn prototype, but if it becomes commercially viable, she sees immediate privacy concerns. Your brain wave patterns would be transmitted to a doctor via the internet, and a lot of information transmitted on the internet can be hacked or data-mined," says Trengove, who also pointed to a vague fear that hackers could disrupt a person's neurological systems.

When asked how he will describe the technology he noted that if a person suffering from epilepsy were connected to the Brainternet, it could potentially predict the



Pantanowitz models the kind of EEG headset he and his team used to create Brainternet.

SOURCE [TAFLINE LAYLIN](#)

next seizure. "If they get into a particularly bad space," he continues, "they could alert their friends and family without them being able to physically."

<https://www.ozy.com/rising-stars/how-this-bioengineer-linked-a-human-brain-to-the-internet/81732>
(By Tafline Laylin)

PROFESSOR N MAHOMED INVITED SPEAKER AT THE CONFERENCE ON BRICS & AFRICAN DEVELOPMENT



Professor Nasreen Mahomed

Professor Nasreen Mahomed, Head of Department of Radiology at Rahima Moosa Mother and Child hospital and Chair of the South African Society of Paediatric Imaging (SASPI) has been formally invited as a speaker at the conference on BRICS & African Development

under the theme BRICS and African Development: Development Finance A Catalyst for BRICS Economic Partnership in Africa in August 2018. The conference is a joint initiative from Human Sciences Research Council (HSRC) BRICS Research Centre, the South African Department of International Relations & Cooperation (DIRCO), the Nelson Mandela University, the Academy of Internet Finance and the Centre for Internet and Financial Innovation (CIFI). Professor N Mahomed will be presenting on BRICS partnerships for telemedicine options and the Role of Artificial Intelligence in Radiology in Africa.

The South African Minister of Finance will also be giving a talk at this congress. Given the significance of South Africa's

2018 Presidency of the BRICS in the year of President Mandela's Centenary, this congress will highlight the pertinent issues of the panel theme with respect to the importance of development finance in BRICS economic partnership for development in Africa. One of the four key priorities for its 2018 Presidency of BRICS South Africa has set is the leveraging of the strategy for BRICS economic partnership linked to the fourth industrial revolution. The other priorities include collaboration for vaccine innovation, a BRICS gender and women's forum, and the will include establishment of a working group on peace-keeping. Given that the BRICS Summit will include an Outreach Programme for the African continent, indicators for Africa show that direct

investment presents an opportunity for potential growth in the continent, an ideal time to discuss the role of the African Regional Centre (ARC) of the New Development Bank (NDB) in promoting development finance for a BRICS economic partnership with African countries, hence Professor N Mahomed's lecture on BRICS partnerships for telemedicine options and the Role of Artificial Intelligence in Radiology in Africa will be pertinent to this discussion.

TOP 10 BEST HOSPITALS IN THE WORLD: SOUTH AFRICAN HOSPITAL RANKED 2ND

Chris Hani Baragwanath Hospital is ranked # 2 in the Top 10 Hospitals in the World. It is located in Johannesburg, South Africa, comprises about 172 buildings that have an area of more than 173 acres with 2964 beds. All these developments allow it to be the largest medical center in the world. It serves approximately 3.5 (m) people inside the Soweto location in South Africa. This hospital provides 50% of health-related facilities in the South Gauteng region. There are actually 5,000 faculty members associated with the hospital.

LECTURE BY THE MINISTER OF HEALTH ON NHI AND MEDICAL SCHEMES BILLS:

03 SEPTEMBER 2018

It was indeed an extremely successful lecture by the Minister of Health, Dr. Aaron Motsoaledi.

We took advantage of the opportunity to increase visibility of transformation committees and to launch a bank account to raise funds which will assist the Office of Student Support.

We also showed the excellent program which SOCM (Dr Richard Cooke and the team) has prepared for the NMFC Collaboration Students.

It was well attended and we want to thank staff and students who participated.

Prof Thifheli Luvhengo

If you would like to contribute to the support of students in the Faculty:

- **Account name:** University of the Witwatersrand, Faculty of Health Sciences
- **Bank:** FNB
- **Account no.:** 62150130426
- **Branch code:** 210-554
- **Account type:** Cheque Account
- **SWIFT code:** FIRNZ AJJ

FACULTY LECTURE “VOICES OF MORAL AUTHORITY: PARENTS, PAEDIATRICIANS AND WHAT WILL ACTUALLY HELP” by PROFESSOR RICHARD HAIN

A number of recent high profile cases globally have highlighted two strong but contradictory views of who should make decisions about medical treatment at the end of a child’s life. Some believe it is self-evidently the right of parents. Others consider the responsibility to be entirely that of the expert doctors. This talk, hosted by the Centre as a Faculty lecture on the 4th of June explored the origins of moral authority in decision making over children.



L-R: Professor Richard Hain and Dr Christopher

NATIONAL MENTAL HEALTH ALLIANCE PARTNERS (NMHA) MEETING



groups who are part of the multi-disciplinary team in mental health. The meeting’s program included an overview of

A meeting was held recently at the SA Mental Health Federation’s (SAFMH) offices in Randburg, to formally constitute the collaboration of the National Mental Health Alliance Partners (NMHA). Current confirmed partner members include the South African Society of Psychiatrists (SASOP), SA Depression and Anxiety Group (SADAG), SAMHF, SECTION27, the Rural Health Advocacy Project (RHAP) and its Rural Mental Health Campaign (RMHC), the Steve Biko Centre for Bioethics, Allan Flisher Centre for Public Mental Health), MHLP (Mental Health Law Project) and the SAPC (South African Psychoanalytic Confederation). The NMHA will be inclusive of all prospective partners who can support its terms of reference, purpose and objectives, such as other advocacy groups focusing on re-

the advocacy partnership that existed since August 2015, alluding to lessons learnt from Life Esidimeni and the Eastern Cape, as well as a discussion of the components of a proposed strategic advocacy plan. The provisional scheduling of 2018/19 activities was discussed, including an endorsement of the SASOP’s program for “Human Rights for People Living with Mental Illness”. This program consists of a poster exhibition by the German Association of Psychiatry, Psychotherapy and Neurology (DGPPN), as well as a speakers program, in several cities in the country, including Johannesburg at the Wits Adler Museum and Pretoria, at the UP Faculty of Medicine.

NEWS ON BIOETHICS STAFF ACHIEVEMENTS

Professor Barney Pityana has been appointed as the Chair of the Steve Biko Centre for Bioethics Advisory Board.

Miss Lizeka Tandwa was appointed as Associate Lecturer at the Centre.

Miss Lizeka Tandwa was invited to a workshop hosted by the Croatian Academy of Sciences and Arts and other key stakeholders. The title of the workshop was: "Governance of dual-use research in the life sciences". The workshop was in Zagreb, Croatia between the 10 -13 June.

Dr Jillian Gardner was invited by the Research Office of the University of Botswana, to teach in their Research Ethics induction training programme for members of human research ethics committees in Botswana on the 3rd of May.

Dr Jillian Gardner has been invited to sit on the Biobank Advisory Committee for the Sydney Brenner Institute for Molecular Bioscience (SBIMB).

In their capacity as National Health Research Ethics Council (NHREC) members Dr Norma Tsotsi and Jillian Gardner are currently involved in conducting quality assurance audits of registered research ethics committees (RECs) across the country. They are also reviewing existing Guidelines for Good Practice in the Conduct of Clinical Trials with Human Participants in South Africa.

Ms Sibongile Tshabalala, National Chairperson for the Treatment Action Campaign (TAC) was appointed as an Honorary Fellow at the Centre.

Professor Kevin Behrens presented a paper entitled "A principled ethical approach to intersex paediatric surgeries in South Africa" at the Conference "Intersex Social Sciences: Activism, Human Rights and Citizenship" held at the University of Bologna, Bologna, Italy between the 4-5 June.

Professor Kevin Behrens attend a Workshop on Developing Systematic Reviews on the 25, 28 & 29 June.

Ms Bonnie Venter presented at the University of Pretoria (Dentistry) on

"Medical Litigation: Defining the Reasonable Health Practitioner" on the 30th of May.

Ms Bonnie Venter was invited to represent the Centre at Helen Joseph Hospital, Department of Psychology and delivered a lecture on "HIV, Ethics and the Law" on the 28th of May .

Professor Ames Dhai contributed to the meeting and launch of the National Mental Health Alliance Partners on the 9th of June.

Professor Ames Dhai is involved in the establishment of a Bioethics Centre based in Swansea University and was invited to deliver the keynote address at its launch on the 29th June.

Professor Ames Dhai presented a talk entitled 'Growing up in apartheid South Africa' at the India Centre in Cardiff, Wales on the 27th June.

Ms Sibongile Tshabalala, National Chairperson for the Treatment Action Campaign (TAC) was appointed as an Honorary Fellow at the Centre.

In their capacity as National Health Research Ethics Council (NHREC) members Dr Norma Tsotsi and Jillian Gardner are currently involved in conducting quality assurance audits of registered research ethics committees (RECs) across the country.

They are also reviewing existing Guidelines for Good Practice in the Conduct of Clinical

Trials with Human Participants in South Africa.

Professor Ames Dhai contributed to the meeting and launch of the National Mental Health Alliance Partners on the 9th of June.

Professor Ames Dhai is involved in the establishment of a Bioethics Centre based in Swansea University and was invited to deliver the keynote address at its launch on the 29th June.

Professor Ames Dhai presented a talk entitled 'Growing up in apartheid South Africa' at the India Centre in Cardiff, Wales on the 27th June.

Ms Sibongile Tshabalala, National Chairperson for the Treatment Action Campaign (TAC) was appointed as an Honorary Fellow at the Centre.

Professor Kevin Behrens presented a paper entitled "A principled ethical approach to intersex paediatric surgeries in South Africa" at the Conference "Intersex Social Sciences: Activism, Human Rights and Citizenship" held at the University of Bologna, Bologna, Italy between the 4-5 June.

Professor Kevin Behrens attend a Workshop on Developing Systematic Reviews on the 25, 28 & 29 June.

CMJAH Trauma Update Meeting

I have attended the yearly CMJAH Trauma Update Meeting on 13th July 2018. It has been one of the best organized and well attended conferences I have attended. It is up there with top international academic congresses. The topics were carefully selected and in-line with Patients Safety and Quality Improvement Strategies within the CMJAH Cluster and beyond.

Incidentally, Dr Moeng's leadership within the CMJAH was highly appreciated yesterday during the Gauteng Province Surgical Disciplines Quality Improvement and Cost Containment Status Review held at the Department of Surgery of the Dr. George Mukhari Academic Hospital and Sefako Makgatho Health

Sciences University, which was also extremely successful.

His sterling leadership has made the CMJAH Cluster to be currently miles ahead of the other clusters regarding implementation. And, close to 15% if not more, of research papers presented at this year 46th Annual Meeting of the Surgical Research Society of Southern Africa came from CMJAH Trauma Unit.

A team that are truly leading the way!

By: Prof Thifheli Luvhengo

The Department of Surgery held their 26th biennial surgical congress at Wits this week. For three days more than 260 delegates gathered to keep their skills up to date and hear experts speak on “Advancing surgical practice through innovation and new technologies”. A new format meant more audience participation and reflection- an innovation in itself, and experts from the department of surgery discussed the ways in which areas such as robotics, new endoscopic and laparoscopic techniques and more multi-disciplinary teamwork could contribute to better and safer patient outcomes. By the generous support of the Miller Foundation and Carnegie foundations, international guests Dr

Peter Kingham from Memorial Sloan Kettering Hospital in New York, and Dr Carolynne Vaizey from St Marks hospital in London inspired the audience and lay foundations for future collaborations. On the final day, Prof Oettle reminded the delegates that the ultimate innovation in surgery is thinking beyond the surgical capability with a quote from a surgeon Paul Kalanithi: When there is no place for the scalpel, words are the surgeon’s only tool.



Prof Martin Smith thanking Prof Peter Kingham (the visiting Miller Professor) from Sloan Kettering in New York

EVENTS & ANNOUNCEMENTS

IMPORTANT MEETING DATES TO REMEMBER:

DATE	TIME	MEETING	VENUE
24/10/2018	10h30	Human Resources & Finance Committee	PPS Boardroom
09/10/2018	15H00	Heads of Departments	PPS Committee Room
19/10/2018	12h00	Cut-off for Staffing & Promotions Submissions	* See note below
06/11/2018	15h00	Heads of Departments	PPS Committee Room
21/11/2018	10h30	Human Resources & Finance committee	PPS Boardroom
21/11/2018	13h00	Executive Committee meeting	PPS Boardroom

DEPARTMENT OF CARDIOLOGY
CHARLOTTE MAXEKE JOHANNESBURG
ACADEMIC HOSPITAL 1ST ANNUAL

World Heart Day Fun Run/Walk

SUNDAY, 30 SEPTEMBER 2018, 7H00

ENTRY FEES

5 KM R50

8 KM R100

VENUE:
BOZZOLI SPORTS COMPLEX, WITS EAST CAMPUS
EMPIRE ROAD, PARKTOWN, JOHANNESBURG

Registration Details:
 Online entries close on the 21st September.
 Late entries and collections of race numbers can be done from the 27th-29th September at the venue (9:00-17:00)
 Online entries can be done at www.entrytime.com or physical forms can be collected from:
The Sweat Shop Dunkeld
 Shop 34 Dunkeld West Centre | Cir Jan Smuts Ave and Bospass RD | Dunkeld West | 011 325 2567
The Sweat Shop Broad Acres
 Shop 17 Phase 2 Broad Acres Shopping Centre | Cir Cradler Road and Valley Road | Fourways | 011 467 2566
Charlotte Maxeke Johannesburg Academic Hospital
 Department of Cardiology | Blue Block Area 555 | Jubilee Road | Parktown

VITALITY & MULTIPLY POINTS UP FOR GRABS!
For more information contact:
 Mpali Nzele: 082 535 0417 | 0639761859 | 011 488 3611 | Email: info.cardiology@wits.ac.za

UNIVERSITY OF THE
WITWATERSRAND
JOHANNESBURG

World
Heart Day
AT THE HEART OF HEALTH

GAUTENG PROVINCE
REPUBLIC OF SOUTH AFRICA

T-SHIRTS
WILL BE GIVEN
TO THE 1ST 3000
PRE-ENTRERS.
MEDALS TO ALL
FINISHERS!

SUBMISSION OF CONTENT:

The newsletter will be published bimonthly and we welcome all content, staff (academic & professional) achievements, profiles, and student events and achievements. Photos are always welcome. Should you wish to submit any content for publication, kindly send it to: Rita.Kruger@wits.ac.za (Please note that due to space restrictions content may be edited)