



PSSA Newsletter

March 2016

Volume 9 – No. 17



From the presidents' desk

The year has just started and here already we are publishing the March edition of the PSSA newsletter. This bumper issue largely focuses on the excellent PSSA congress held in Parys last year and my great thanks goes to Prof. David Gray and his team at Wits University for organizing such a superb event.

On another front, I am pleased to inform you that the local organizing committee of PSSA 2016 (headed by Prof. Edward Ojuka) is already hard at work to ensure that the mother city will be the perfect host for this year's congress. For this year, we have set a target to attract around 200 delegates for PSSA 2016 to take place in Cape Town (28-31 August). Moreover, the Congress of the African Association of Physiological Sciences is scheduled to be held 5-8 September in Lagos, Nigeria. This is a rare event and not to be missed – please try and ensure a strong representation from the southern African region!

For the year ahead, the PSSA will continue to expand its footprint and also aim to even offer more benefits to its valued members. Part of the exciting plans include a brainstorming session to be held by the PSSA council in order to assess progress in terms of strategic goals adopted two years ago. This should lead to the development of refined plans that will determine the future success and growth of the PSSA over the course of the next



few years. In addition, we have plans to further improve the PSSA website that should provide for a richer experience and also easier membership administration/registration procedures. We will also continue to roll out the PSSA travel awards and several new prize categories (started last

year). Furthermore, we would like to make a call for nominations for the delivery of the prestigious 'Musabayane Memorial Lecture' at PSSA 2016 - please send nominations to myself (mfessop@sun.ac.za) or Dr. Ben Loos, the PSSA secretary/treasurer (bloos@sun.ac.za).

We hope that you enjoy the newsletter and on a more personal note I have had the opportunity to recently participate in the annual pilgrimage to Mecca – a deeply meaningful experience, while Dr. Loos' son Aaron Lwazi was born on the 3rd of September 2015, a wonderful addition to his beautiful family.

I wish you a wonderful and successful year, with great results, data, publications, graduations and presentations.

Best wishes
Faadiel Essop
PSSA president



Current Council welcomes 3 new members!

Find out more about them in the next newsletter edition.

CURRENT MEMBERS OF COUNCIL 2015/2016

President	Prof Faadiel Essop	Stellenbosch University	mfessop@sun.ac.za
Vice President	Prof Edward Ojuka	University of Cape Town	University of Cape Town
Secretary/ Treasurer	Dr Ben Loos	Stellenbosch University	bloos@sun.ac.za
Members	Prof Willie Daniels	University of Witwatersrand	william.daniels@wits.ac.za
	Dr Aletta Millen	University of Witwatersrand	Aletta.Millen@wits.ac.za
	Prof Mary Pipedi-Tshekiso	University of Botswana	p-tshekiso@mopipi.ub.bw
	Prof Peet du Toit	University of Pretoria	peet.dutoit@up.ac.za

<http://physiolsoc.org.za/>

PSSA 2016 CONFERENCE:

28TH – 31ST AUGUST 2016

Welcome to PSSA 2016 in Cape Town



It is my great pleasure to announce this year's PSSA conference in Cape Town at the River Club; located in the Southern Suburbs of Cape Town, a mere 10 minutes from the CBD, famous V&A Waterfront and only 15 minutes from the Cape Town International Airport. Mark your calendar: Dates are 28th – 31st August 2016.

In addition to advancing physiology research in South Africa and in line with the recent initiative to strengthen robust links with the African Association of Physiological Sciences (AAPS), the vision of PSSA 2016 conference is to showcase our research achievements and prepare PSSA scientists to play a leading role at the AAPS conference in Lagos scheduled on 5th-8th September 2016.

The Local organizing committee comprising of Prof Edward Ojuka (Chair), Prof Malcolm Collins, Prof Dirk Lang, Dr Asfree Gwanyanya and Dr Dale Rae (Secretary) are working hard to put together a rich program and invite prominent speakers from local and international Universities. The full calendar of events at the conference can be viewed from the PSSA 2016 conference site.

We look forward to receiving your abstracts and encourage as many students as possible to present at the conference. An additional budget will be made available for travel bursaries to support students from the far corners of the country. Details and deadlines will be announced shortly. Awards for the "best paper in the past year", the "best method", and the Wyndham Prize Competition will remain prominent features of PSSA 2016 conference.



Prof Edward Ojuka
Chairman, Local Organizing Committee
PSSA 2016 Conference

PSSA 2015 Congress

**Reflections and winners –
See pages 4 to 10**

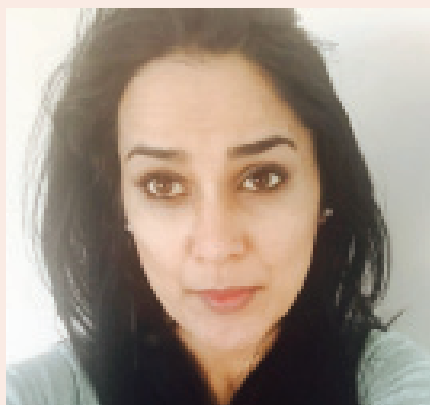
CONGRATULATIONS TO THE POSTER PRESENTERS PSSA 2015 CONGRESS

JvdWalt poster winners

- | | |
|-----------------|--------------------------------------|
| 1 st | Nyasha Mukonowenzou (Wits) |
| 2 nd | Emilene Breedt (Stellenbosch) |
| 3 rd | Suzanne Koegelenberg (NWU) |

SPECIAL MENTION OF ORAL PRESENTATION THAT STOOD
OUT ALTHOUGH IT WAS NOT AWARDED A PRIZE:

Mogashoa Eunice
(University of Limpopo)



My reflections on PSSA 2015

Dr. Veneesha Thaver (University of KwaZulu-Natal)

The annual flagship event of the Physiological Society of South Africa, PSSA 2015, held at the picturesque Khaya Ibhumbesi Conference venue, situated in the rustic town of Parys, united a critical mass of emerging and seasoned researchers from universities throughout the country who exhibited interdisciplinary research excellence from universities across South Africa. A hub of selected oral and poster presentations at the congress show-cased innovative world class cutting edge research, focussing on challenging health care issues in the African health environment such as HIV, hypertension, cancer, cardio metabolic syndrome, neurodegeneration and diabetes. Held over 3 days, the conference provided an ideal platform for informal discussion on new ideas and created an environment for the formation of research collaboration initiatives, focusing on building human research capacity nationally. An enjoyable relaxing sunset cocktail evening on the first day, was followed the next day by a fun-filled quiz night that many delegates participated in, with much enthusiasm. The most popular sessions attended by

delegates was the Wyndham Oral presentations and keynote sessions that many described as fascinating, interesting and excellent. Academics commented that they were indeed impressed by the quality of work that was presented. Leisurely walks around the conference venue during breaks, occasional distant echoes of the roar of the lions, the citing of zebra and buck in the dense thickets of bush and trees, combined with luxurious accommodation and delectable ambrosial food, were the perfect ingredients for enjoyable and memorable experience. The conference culminated on a high note with a gala evening where longstanding members of the association were honoured, awards were presented to high achievers in the oral & poster presentations categories and thereafter both academic and students let down their hair and danced the night away. Students, delightfully commented that it was the most fun that they have ever had at a conference and were inspired and motivated and are most certainly looking forward to attending PSSA 2016!

Below: Dr. Thaver's shots of the lions near the congress.



PSSA 2015 Congress Wyndham Winners!

Joint 3rd place Tamarin Perks



Tell us a bit about your research focus

We are investigating the ability of novel antimitotic estradiol derivatives, designed by the Cancer Biology Group at the University of Pretoria, to overcome hypoxia-induced chemoresistance in triple negative breast cancer cells. In order to understand the mechanisms involved in the induction of hypoxia-induced chemoresistance, we are setting up a 3D system *in vitro* environment that closely mimics the *in vivo* environment of small tumours. This system improves the 3D architecture that is lacking in 2D cell culture, including self-assembly and cell-cell interactions.

Looking back, what was it that first sparked your interest in Human Physiology?

Since I was a child I have always had an interest in how the human body functioned on a molecular level, and have always had a thirst for knowledge and detail.

I was always asking the big 'why' question so that I could understand more, so that I could understand why things happened and how they happened. I think the questions that hit closest to home were those of disease and illness. How diseases like cancer worked within the body and what could be done to overcome the effects of these diseases. My interest started with Biology and just developed from there.

In your opinion, what is/are the most pressing issue/s in your field today?

Cancer is one of the leading causes of mortality throughout the world, with the major cause often not being the primary tumour but rather the metastasis of cancer cells to tissues elsewhere in the body. I believe that the prevention of cancer metastasis is one of the most pressing issues in the field of cancer biology. If the movement of cancer can be restricted or completely stopped then the death toll from cancer might decrease.

Tell us a bit about your future project/s?

We are currently completing the process of setting up the 3D spheroid system and have started testing the estradiol derivatives. We are already seeing differences between the 2D and 3D cell culture systems. We will be further investigating these differences as well as determining the mechanisms behind hypoxia-induced chemoresistance, by identifying specific downstream proteins affected by the hypoxia and attempting to overcome this chemoresistance.

What advice or words of encouragement would you give to up and coming Physiology scholars?

As in all scientific fields you need to love what you do, work really hard and you need to be resilient. Experiments do not always work or give you the results that you are expecting. The good thing is that it will always eventually work and when it does it would have all been worth it. You are making a difference in your field, no matter how small. Every little bit counts.

PSSA 2015 Congress Wyndham Winners!

Joint 3rd place Lebogang Mokotedi



Tell us a bit about your research focus

My research project at Wits University aimed to evaluate the effects of low potassium intake on salt-induced increases in blood pressure. Several human and animal studies have reported that increases in potassium intake attenuate the blood pressure effects of high salt intake. However less is known about the effect of a low dietary potassium intake on blood pressure. In addition, there is controversy in relation to the specific effects of a high salt and low potassium intake on blood pressure control and target organ damage in normotensive rats. Hence, in my study, I wished to determine whether salt-induced increases in blood pressure and changes in vascular reactivity are altered by variations in potassium intake in adult rats. The study showed that a high salt intake induced an increase in blood pressure as well as greater *in vitro* mesenteric artery contractions in Sprague Dawley rats. However a low potassium diet did not worsen these high salt intake effects.

Looking back, what was it that first sparked your interest in Human Physiology?

My interest with Human Physiology began during my early undergraduate degree in Medical Sciences. Although all aspects of physiology intrigued me, I was particularly interested in Cardiovascular Physiology. Having done both Anatomy and Physiology, learning about structure and functions of the heart really intrigued

me. In addition, growing up with family members suffering from diseases such as hypertension, I have always been interested in finding out more about these diseases and ways to improve them. These experiences sparked my interest in pursuing a research career in cardiovascular pathophysiology.

In your opinion, what is/are the most pressing issue/s in your field today?

South Africa has one of the highest rates of hypertension worldwide with about 6.3 million individuals living with hypertension. Salt is a key contributor to high blood pressure in black South Africans as it can lead to heart disease and strokes. Studies have reported that the average South African consumes more salt than the recommended daily salt intake. However some people are still unaware of the amount of salt they take in. Hence more awareness is needed.

Tell us a bit about your future project/s?

For my PhD I intend on focusing on the cardiovascular risk factors in rheumatoid arthritis patients. Cardiovascular disease is a major cause of morbidity and mortality in black rheumatoid arthritis patients and is the main determinant of premature mortality experienced by such patients. However, little is known about myocardial structure and function in this population. Therefore additional investigation is needed to clarify the direct effects of the rheumatoid arthritis disease process and the effects of rheumatoid arthritis-directed therapeutics on the myocardium at all stages of the disease, in order to define appropriate strategies to prevent or attenuate the development of cardiovascular diseases in black rheumatoid arthritis patients. This knowledge will translate into more refined treatment strategies for cardiovascular diseases in rheumatoid arthritis patients.

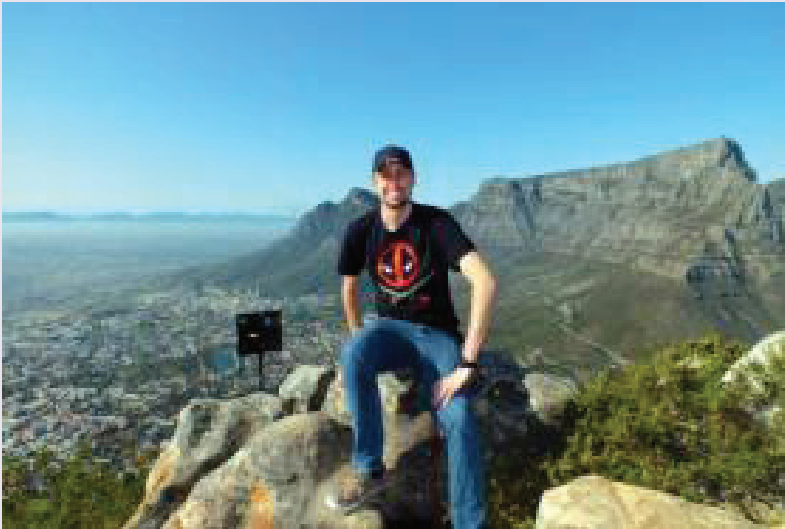
What advice or words of encouragement would you give to up and coming Physiology scholars?

Have the drive to learn more, explore and never give up. A lot of integration is needed in this field therefore keep challenging yourself to master all body systems.

PSSA 2015 Congress Wyndham Winners!

2nd place

**Nicholas
Woudberg**



and it was always this link that made me want to pursue a career in research.

In your opinion, what is/are the most pressing issue/s in your field today?

Currently a major problem is the translation of basic research into valuable patient interventions. Often what is seen in the lab in animals or cells doesn't translate into anything meaningful for patient treatment. In addition, for my work particularly, is the dramatic rise in cardiovascular diseases in Africa. Often regarded as a health concern of the first world, cardiac illness is becoming a major issue in Africa and needs translatable research as well as good communication of potential risk to the

broader community.

Tell us a bit about your research focus

My research focusses on high-density lipoproteins (HDL) and their link to cardiovascular disease risk factors. As part of my PhD at UCT I am looking at the relationship between the anti-atherogenic functionality and subclass distribution of HDL and risk factors such as ethnicity, obesity and hypertension. In addition we are looking at how an exercise intervention may alter HDL function in obese participants.

Looking back, what was it that first sparked your interest in Human Physiology?

I obtained my honours in biochemistry and was always interested in how the techniques I learnt could be applied to a human health setting. This led me to the Hatter Institute at UCT and a project examining how cardiovascular disease affects biochemical function in the body. Human Physiology provides the key link between fundamental biochemical science and a "real-world" application

Tell us a bit about your future project/s?

For the latter part of my PhD I will be looking at the role of exercise as an intervention in an obese female population in Khayelitsha. The women will be enrolled in a 12-week aerobic intervention after which I will be examining how HDL functionality and subclass may change subject to exercise.

What advice or words of encouragement would you give to up and coming Physiology scholars?

It is an ever changing field and it is critical for your research to remain relevant. In order to do this, stay informed but also be aware of opportunities for cross-disciplinary collaboration. This will allow for the development of new and creative ideas to solve the health issues present today. Finally, always be mindful of how your research may be of benefit to the scientific community and to patients.

PSSA 2015 Congress Wyndham Winners!

1st place

**Itumeleng
Chabaesele**



In your opinion, what is/are the most pressing issue/s in your field today?

Chronic DOX cardiotoxicity leads to the development of congestive heart failure. This condition has a poor prognosis, with a 50% mortality rate in the year of diagnosis. Even more alarming is the fact that this condition is prevalent in childhood cancer survivors. Another pressing issue is the fact that oncologists are also forced to limit chemotherapy administration to minimize the chance of developing chronic DOX cardiotoxicity.

Tell us a bit about your research focus

My research at the Department of Physiological Sciences at Stellenbosch University looks at finding adjuvant therapies to treat or prevent the detrimental effects that are associated with chronic doxorubicin (DOX) cardiotoxicity. This is a life threatening condition that remains untreatable thus far. My work has shown that induction of autophagy (a well-known cellular degradative process) before chemotherapy treatment can successfully prevent the damaging effects associated with this condition.

Looking back, what was it that first sparked your interest in Human Physiology?

Growing up I was always keen on understanding why and how diseases progress. This interest was further inspired by my high school tutor, Mr Madzime, who from time to time would tell us about his research and about what he was trying to solve or understand. That experience was one of the key factors that lead me to the field of Human Physiology.

Tell us a bit about your future project/s?

For my PhD, I aim to use an *in vivo* model to confirm whether autophagy induction can prevent the detrimental effects associated with chronic DOX cardiotoxicity, as I have already shown this using an *in vitro* model. Furthermore, I will zoom into mitochondria and elucidate which pathways contribute to the beneficial effects associated with autophagy induction in our context. This work will bring us a step closer to finding adjuvant therapy treatment for chronic DOX cardiotoxicity.

What advice or words of encouragement would you give to up and coming Physiology scholars?

The most important thing is to talk about your project with as many people as possible. Most breakthroughs in my project are due to the discussions I had with my colleagues, thus I truly believe it is important to talk about your work and not to suffer alone.

PSSA 2015 Congress

PSSA Honours Excellence in Research

Prof Alta Schutte is awarded the Lasec Award for Excellence in Physiology Research.

The Physiological Society of Southern Africa (PSSA) has honoured Prof Alta Schutte with the Lasec Award for Excellence in Physiology Research. Prof Schutte is the Unit Director on Hypertension, South African Medical Research Council (MRC), is part of the Hypertension in Africa Research Team (HART) and holds a South African Research Chair (SARChI) in the Early Detection and Prevention of Cardiovascular Disease (CVD) in South Africa at North-West University. This accolade comes as no surprise as she is honoured for her contribution to research excellence.

Prof Schutte attributes her success to the amazing team that she works with and the excellent support structure that exists between her, her colleagues and their postgraduate students. Her research investigates hypertension development in various sub-populations in South Africa with a more specific focus on understanding this disease's development in black South Africans and how exposures and biomarkers relate to or predict hypertension development and cardiovascular outcome. This remarkable 10 year, longitudinal study investigated over 1200 subjects.

Looking to the future, Prof Schutte wants to focus primarily on the African-PREDICT study which involves 20-30 year old individuals in which she plans to track disease development over time.



This, in an effort to analyse early stages of disease development in order to prevent or delay the onset of hypertension. In addition she aims to use novel approaches and biomarkers that would lead to a better understanding of cardiovascular deterioration. When she is not focused on her research she has a very busy mom-schedule. She loves reading in general, enjoys mountain-biking and is an avid wildlife photographer.

Congratulations Prof Schutte, a well-deserved award for your excellent contributions to the research field of Human Physiology.

Written by

Kareemah Gamielien (PhD, Physiology)

News from the JAAPS journal

Dear All,

I am pleased to inform you that both **ONLINE** and **PRINT** versions of **J. Afr. Assoc. Physiol. Sci. (Volume 3, Number 2, December 2015)** have now been published. You can view the current online issue by clicking on the link below:

<http://www.jaaps.aapsnet.org/index.php/jaaps/issue/view/5>

The next issue of JAAPS will be published in July, 2016. Kindly encourage your colleagues to submit their original works to JAAPS.

Thank you for your interest in **J. Afr. Assoc. Physiol. Sci.**

Best wishes,

Professor Anthony B. Ebeigbe,
Professor of Physiology,

University of Benin &
Editor-in-chief
Journal of African Association of
Physiological Sciences (JAAPS),

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PSSA confers Honorary Fellowships to Two Exceptional PSSA Members

It is with great pleasure that we announce the conferring of Honorary Fellowships to two extraordinary PSSA members: Emeritus Professor Vivienne Russell and Professor Barbara Huisamen. We celebrate their exceptional contributions to the profession and to PSSA.

Emeritus Professor Vivienne Russell

Prof. Russell is in the Department of Human Biology at the University of Cape Town, and is also a fractional professor in the School of Laboratory Medicine and Medical Science at the College of Health Sciences, University of KwaZulu-Natal. Her research field is neuroscience in which she focuses on animal models of brain disorders. Projects include studies of attention-deficit/hyperactivity disorder (ADHD), Parkinson's disease and the effect of stress and exercise on the brain. In more recent years, she focused on the problem of neuroenergetics and the consequences in terms of brain disorders when the energy supply to functioning neuronal networks is compromised.

Prof Russell is internationally recognised for her research contributions; with over 140 peer-reviewed journal publications, 8 chapters in books, extensive international research collaborations and has presented at countless local and international conference proceedings. She is also the currently Chair of the Scientific Committee of the International Brain Research Organization (IBRO) African Center for Advanced Training in Neuroscience at the University of Cape Town.

When asked what her motivation for choosing neuroscience as her field of research was, she eloquently articulated: *"I was motivated by a desire to understand why humans do what we do. The*



brain with its connections to nearly every part of the body is remarkable and presents an unequalled challenge with the promise to significantly enhance our understanding of life."

Her success, she says has always been based on team effort, and even more she says that her success is foremost shared with her students and her collaborators across the globe. She believes that her achievements would not have been possible without her "wonderful" students, lab

assistants, and collaborators.

When asked what the future holds for her in research, she stated lightheartedly: *"I am pleased to say that there is life after retirement."* She enjoys her role as a mentor to the postgraduate students and junior faculty at the University of Cape Town (UCT) and the University of KwaZulu-Natal. Finding the work very rewarding; she hopes to continue in this role for some time into the future. Her dedication to the field of neuroscience has kept Prof Russell very busy over the years and left very little room for other interests. Yet even with her demanding schedule she has played pivotal roles in the organising and as an instructor in the neuroscience schools for postgraduate students and junior faculty, supported by the International Brain Research Organization (IBRO) and has worked tirelessly in promoting neuroscience training in Africa for many years. Over and above this; she is also part of the committee organizing an advanced school on Epilepsy at UCT in December 2015.

Professor Barbara Huisamen

Prof. Huisamen is the chief specialist scientist with the SA MRC in the Biomedical Research and Innovation Platform and is an associate professor in the Biomedical Sciences department, Division of Medical Physiology of the Faculty of Medicine and Health Sciences at the Stellenbosch University. Prof. Huisamen is internationally recognised for her scientific contribution, with over 60 peer-reviewed journal publications, an array of research collaborations and many local and international conference presentations under her belt, it is no wonder that she is being honoured by the society.

She has two research fields of interest whose outcomes may possibly find themselves' crossing paths further downstream. One focuses purely on basic science research into the cardiovascular complications associated with obesity and insulin resistance, hypertension and type 2 diabetes while the other involves studying potential nutraceuticals that can be used to successfully treat these diseases. The former research project investigates a protein that forms part of the DNA repair system, the Ataxia telangiectasia mutated (ATM) protein. It is the central role player in a genetic disease called Ataxia Telangiectasia, where the afflicted person expresses ATM in very low levels as a truncated, malfunctioning protein. These patients have a very high incidence of type 2 diabetes and ischaemic heart disease. ATM is also a cytosolic signalling protein that her research group has shown is a prerequisite for glucose uptake in cardiomyocytes and are currently attempting to elucidate the importance of this protein in obesity. The nutraceutical projects are pre-clinical studies and aims to (i) characterize mitophagy in the heart



with respect to ischemia-reperfusion injury and whether melatonin as antioxidant, could modulate this process, and (ii) to demonstrate the cardio-protective effects of aspalathin, the main bioflavonoid of Rooibos herbal tea, with respect to obesity and insulin resistance.

Her primary source of motivation is quite elementary and pure; she really loves and enjoys her work and research. She explains the source of her dedication: *"It is always like building this huge puzzle where each little bit of information, helps to generate a clearer, larger picture. I love recognizing interesting gaps in our knowledge and developing questions to investigate this."* The reasons for her inspiration and success came from the people who surround her everyday whether at work or at home. Prof. Huisamen acknowledges the positive impact the people in her Physiology department has had and sees her husband's insatiable search for knowledge as a powerful motivation to keep searching for answers within her own field.

Looking toward the future, she intends completing her projects' milestones and would like to publish more journal articles as well as guide and support her postgraduate students to ensure that they have secure career paths in science. When asked about passions aside from research she quips, *"I can only smile at this question as I have very little time for hobbies!"* Prof Huisamen's husband is a pastor and she helps with overseeing the relevant parts of their congregation, for example she does the music ministry and loves to play the keyboard. She confesses that she loves reading non-fictional novels as a pastime and also to watch scary movies

Profs Russell and Huisamen we are honoured to have you as part of the PSSA and value the research contributions and personal wisdom you have brought to our society.

Written by Kareemah Gamielien (PhD, Physiology)

SUCCESSFUL HOSTING of the INDIAN OCEAN RIM MUSCLE COLLOQUIUM 2016 in STELLENBOSCH

Prof Kathy Myburgh (distinguished Professor of Physiological Sciences, Stellenbosch University and DST/NRF SARCHI chair for Integrative Skeletal Muscle Physiology, Biology and Biotechnology) and Dr Carola Niesler (Dept Biochemistry and Molecular Biology, University of KwaZulu-Natal) hosted the 4th Biannual IORMC2016 from 24th to 26th January at the Asara Conference Centre. The conference was opened by Prof Albert van Jaarsveld, a long-time supporter of Muscle Biology Research (first as Dean of Science Faculty, Stellenbosch University, then President of the NRF and now Rector of UKZN).

Invited Keynote Speakers kicking off the first session of the conference were: Prof Gianni Parise (McMaster University, Canada) and Dr Thomaz Mars (University of Ljubljana, Slovenia). Prof Parise is a world leader in the field of skeletal muscle satellite and stem cell regulation that is still poorly understood when it comes to human muscle, while Dr Mars has developed a method to study spontaneously contracting skeletal muscle myotubes in culture, a feat only possible by co-culture with neural stem cells. South Africa's rising star in the field of Stem Cell Research, Dr Janine Scholefield (CSIR) how the tools of genome engineering make it possible to manipulate stem cells in vitro to develop models of human cell/tissue dysfunction.

Developing and maintaining muscle strength, understanding the integrity of connective tissue and manipulating connective tissue/muscle stem cell interaction were the key themes. These themes were approached from many angles: molecular, zebrafish, tissue engineering to human models of sarcopenic neuromuscular atrophy. More applied topics centred around muscle damage induced by excess immune cell infiltration, chemotherapy agents or injury and regeneration. The two invited Young Investigators: Dr Yu Suk Choi (University of Western Australia, Perth) and Dr Bali Sishi (University of Stellenbosch) respectively brought us up to date on

mechanical properties of 3-D generated biomaterials that allow for the best growth of muscle cells and the pathways that should be targeted intracellularly to reduce cardiotoxicity.

Stellenbosch University students did us proud by winning first place in the Poster competition – Chris Reeves, MSc student in Physiological Sciences (supervised by Prof Kathy Myburgh and co-supervised by Prof Carine Smith) and joint second prize for Kelly Petersen (also an MSc student in Physiological Sciences supervised by Prof Carine Smith) for short oral communication. Joint-second for presentation went to Mtho Nkosi from UKZN, while UCT was represented by 2nd place finisher in the poster competition, Ellen Ngarande. South African students were still pipped to the post by Australian PhD student, Lauren Butchart who won the oral presentation.

This was the first IORMC that provided for presentations of innovative new techniques by representatives from Industry and 3 Workshops were held. Ken Wong (Aurora Scientific) flew in from Hong Kong to demonstrate the finer points of muscle force measurements using advanced technology. Closer to home, co-organiser of the conference Mrs Lize Engelbrecht from the Stellenbosch University Central Analytical Facility (CAF) presented a Workshop on Correlative Light and Electron Microscopy (CLEM), while Ms Rozanne Adams covered advanced flow cytometry and cell sorting using her experience of working with primary muscle cells. The workshops were sponsored by the Physiological Society of Southern Africa and BD Biosciences, respectively. We were also privileged to attend a workshop hosted by Dr Anna Clark, Executive Editor of BioMed Central publishing house, London, UK. She imparted a great deal of wisdom to postgraduate students, young investigators and not-so-young investigators, explaining the process of manuscript evaluation and the pitfalls writers should avoid.



4th Biannual IORMC 2016 participants.

The conference was rounded out by an excellent final presentation by an alumnus of Stellenbosch University, Dr Tertius Kohn (PhD Biochemistry, currently senior researcher at UCT). His presentation expounded on the superior attributes of wild animal muscle compared to the domesticated human. This “African Perspective” was enjoyed by our visiting speakers almost as much as the setting. Feedback we received includes e.g. “warm welcoming experi-

ence”; “I look forward to visiting South Africa soon and working with people there”; “Thank you for organising such a great meeting and for giving me the opportunity to visit your wonderful country. I am determined to return!”; “I am reinvigorated”; “this is probably the best venue for a small conference that I have ever been to”; “I think a lot of new connections were made”; “the depth and breadth of muscle science going on in South Africa is amazing, I had no idea”.



Student Prize winners: FRONT: Ellen Ngarande (UCT; poster 2nd); Lauren Butchart (university Western Australia; winner oral communication); Kelly Petersen (Stellenbosch University; oral communication joint 2nd) BACK: Dr Nick Walker (sponsor of prizes); Mtho Nkosi (UKZN; oral communication joint 2nd); Chris Reeves (Stellenbosch University, winner poster)



Universitas
Gadjah Mada



UNIVERSITI
MALAYA

14th Inter-Medical School Physiology Quiz

Prof. A. Raman Challenge Trophy



Program Highlights

Date : 29-30th July 2016

Venue : Grha Sabha Pramana
Universitas Gadjah Mada
Yogyakarta, Indonesia

• Refresher course by:

Prof. Susan M. Barman, Ph.D

(Professor of Neuroscience, Michigan State University;
One of the Authors of Ganong's Medical Physiology)

*"The Role of The Brain in Sympathetic Activity and
Blood Pressure"*

• Award for the best performance on Cultural Night

Eligible Participants

All Universities are welcomed and invited to participate.

One university team consists of a minimum of 3 to a maximum of 5 student participants.

Limited up to 70 teams.

Registration Fee*

(per participant)

1 September 2015 - 31 March 2016: USD 50

1 April - 1 May 2016: USD 65

*Registration fee includes accommodation and food.

*For accompanying lecturers, registration fee of **USD 50** per person is mandatory. The fee includes refresher course, food and transportation from **listed hotels** to venue.

Contact us:

Committee: imspq2016@gmail.com

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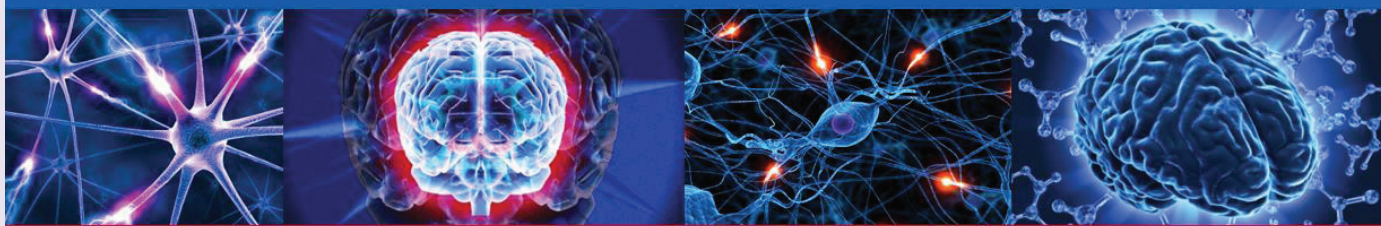
IMSPQ Indonesia 2016

Organized by:

Department of Physiology, Faculty of Medicine Universitas Gadjah Mada, Indonesia

Department of Physiology, Faculty of Medicine Universiti Malaya, Malaysia

Neuroscience Day 2016



7th ANNUAL NEUROSCIENCE CONFERENCE

26 May 2016, University of Pretoria, Groenkloof Campus

The human brain is the most complex living structure in the known universe...

It has a capacity to store more information than a supercomputer & to create a network of connections that far surpasses any social network. The brain has enabled humans to achieve breathtaking milestones — walking on the moon, mapping the human genome, & composing masterpieces of art, literature, & music.

- Society for Neuroscience

The Neuroscience Research Group of the University of Pretoria cordially invites you to attend Neuroscience Day 2016. We look forward to making this another opportunity which brings together scientists, researchers, clinicians, students & individuals from the private sector interested in the exciting and complex field of neuroscience. The conference is characterized by its rich diversity of topics and multidisciplinary nature, aiming to provide a platform for individuals involved in all of the various facets of the neurosciences to share their research findings & future aspirations.

The 7th annual Neuroscience Conference will expand your knowledge, widen your network, & stimulate your inquisitive self in the pursuit of a greater understanding of the mysteries of the human brain. We are very excited about this event and look forward to welcoming you to the University of Pretoria Groenkloof campus on 26 May.

DATE: Thursday, 26 May 2016

VENUE: University of Pretoria, Groenkloof Campus

CPD Points: TBC

COST (Fees include refreshments and lunch):

Delegates & postgraduate students: **R 550**

Registered undergraduate students: **R 250**

Conference Leader details:

Prof Peet du Toit

Telephone: +27 (0) 12 420 2536

Email: peet.dutoit@up.ac.za

Enrol for the event

Submit a poster

Visit our website

For sponsorship opportunities, please contact:

Evangeline Nortje

Telephone: +27 (0) 12 420 4493

Email: Vangi.Nortje@up.ac.za

For more information about the course, please contact:

Course Coordinator: Nishana Naran

Telephone: +27 (0) 12 434 2612

Cell: +27 (0) 83 414 9659

Email: nishana.naran@enterprises.up.ac.za

Find us on Facebook & Twitter



TEDx

Will be joining us for the event



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AFRICAN ASSOCIATION OF PHYSIOLOGICAL SCIENCES & THE PHYSIOLOGICAL SOCIETY OF NIGERIA

invite you to come and experience the best of African hospitality



AAPS

LAGOS 2016
5 - 8 September 2016



At the
**7th International Congress of the
African Association of Physiological Sciences**

Venue: Lagos Sheraton Hotel, Lagos Nigeria

Date: 5 - 8 September 2016

THEME: Physiology and Biotechnology

SUB-THEMES:

Physiological genomics

Cell and tissue culture

Bioinformatics

Genetic Engineering

Drug Development

Pharmacogenomics

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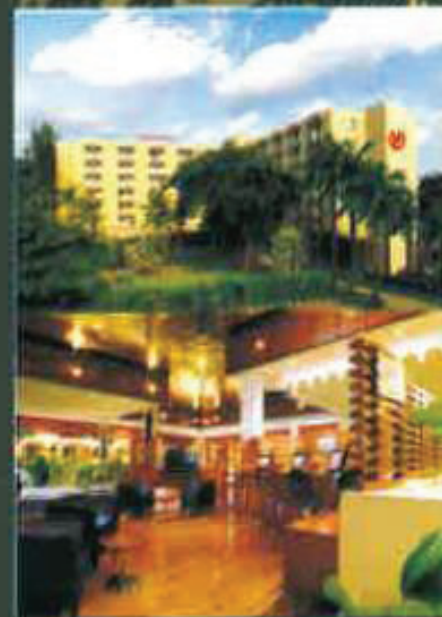
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Abstract Submission and
Registration open 1 September 2015

For updates on AAPS 2016, visit www.physocnigeria.org