



Message from the new president Prof Kennedy Erlwanger

...We need to bring more South African and African institutions on board



Prof Kennedy Erlwanger

Dear Colleagues,
 This edition of the newsletter focuses on the recent PSSA congress successfully hosted by Walter Sisulu University nevertheless, I would like to take this opportunity to thank you for affording me the privilege and honor of serving the PSSA as president. I acknowledge the strong, firm foundation and structures put in place by previous office bearers of the PSSA and my aim is to build on those achievements and milestones. I would like to urge all members (new and old) that have not recently browsed the PSSA website (<http://www.physiolsoc.org.za/index.html>) to take a few minutes to visit the website and go through the various sections and use the opportunity to revitalize their energy to open a new chapter

in the PSSA.
 As a society our objective is *“To promote all aspects related to the TEACHING, RESEARCH AND EMPLOYMENT IN BASIC AND APPLIED HUMAN AND ANIMAL PHYSIOLOGY.”* *‘By providing a spectrum of physiological information, the society strives to play a role in the progress of the physiological sciences in Southern Africa’.*
 With that in mind, I would like to use my term in office to build on the initiatives taken thus far in fulfilling our objectives. The list of participating departments on our website lists 12 South African institutions and the University of Zambia is the sole Southern African representative north of the Limpopo River. We need to bring more South African and African institutions on board and your proactive

assistance will be called upon.
 The PSSA congress should be high on the list of priority conferences that physiologists (not only on the African continent but world over) diarize to participate in annually. Let us strive together to put the PSSA on the international itinerary of Physiologists.
 For various reasons, many members were unable to attend the PSSA AGM, the minutes of the AGM held in East London have been circulated early so that members are aware of resolutions made and so that we can engage in debate and start to put into action our resolutions right away.
 I look forward to your guidance and support as we strive to grow the PSSA and take our rightful place on the continent.
Kennedy Erlwanger

Inside this issue:

Wyndham prize	2
John van der Walt prize winner	2
The prize Runner Ups	3
Message from the former PSSA president	4
Logan's Undergraduate Prize	5
Incoming and outgoing PSSA secretary	6
PSSA 2011	6

PSSA CONFERENCE REPORT

The 2010 PSSA conference at the picturesque Regent hotel in East London was a resounding success with 115 delegates from United States of America, United Kingdom, Germany, Democratic Republic of Congo, Malawi and South Africa in attendance. The valued sponsorship from LASEC, Logans Bookshop and the Directorate of Research and Development (Walter Sisulu University) was appreciable. To set the tone of the conference were the key note speakers, Professor Charles Muller (Sperm Tales) and Professor Alaistar Sammon (Oesophageal cancer in Transkei) with their highly inspiring presentations. The quality of both the oral presentations and the posters was good with a number of presenters shining in the respective competitions; **Wyndham Prize** (Llewelen Rapuling, Stellenbosch), **John Van Der Walt Prize** (Damian Hacking, UCT) and the **Logan's Undergraduate Prize** (Sisanda Tiya, WSU). The climax of the conference was the handover of the presidency from Professor Kathy Myburgh (who had impressively steered the association out of the woods) to the able hands of Professor Kennedy Erlwanger (Wits University). The office of the secretary/treasurer went to Professor Hans Strijdom (Stellenbosch University). Indeed, the success of the conference was a rewarding culmination of months of painstaking preparation for us at the WSU physiology department. The experience was definitely priceless and fulfilling. **Allen Meeme**



Congratulations to our prize winners...!

Wyndham Prize (Llewelen Rapuling)

"The PSSA conference is one of the highlights each year I would not miss for anything. As it provides a platform for physiologists to exchange ideas and learn from one another. This year was the highlight of my research career as I got the chance to share my research with my fellow colleagues in physiological sciences and also received a price (Winner of the Wyndham oral presentation competition) for doing so. I am a very active scientist and believe one should make the best of what you have and take on each challenge as a learning opportunity. Apart from my studies I enjoy spending time with friends and family. I take part in various student committees (Academic Affairs Council, Sports Management committee and Campus safety) and enjoy spending time on the sports field (Captain of Western Cape volleyball team, Maties squash and chest team). My field of interest is reproductive research in the context of male infertility. The aim of my research is to elucidate the molecular mechanisms involve in the pathogenesis of sperm dysfunction and associated sub-fertility. I would like to develop a biomarker that can be used in the screening of drugs to alleviate sperm dysfunction."

Llewelen Rapuling, Department Medical Physiology, Stellenbosch University

Who said marking was not a joke? :

"The red cell membrane is only one cell layer thick, for easy diffusion of gases."

"Nitric oxide is secreted by the atmosphere"

"... when the allergen is consumed into blood, you get asphaltic shock..."

"Allergies are not serious, because they do not intend to cause internal harm."



Llewelen Rapuling receives the Wyndham prize 2010, presented by Gideon Burger (Lasec) together with Prof Kathy Myburgh and Prof Charles H Muller.

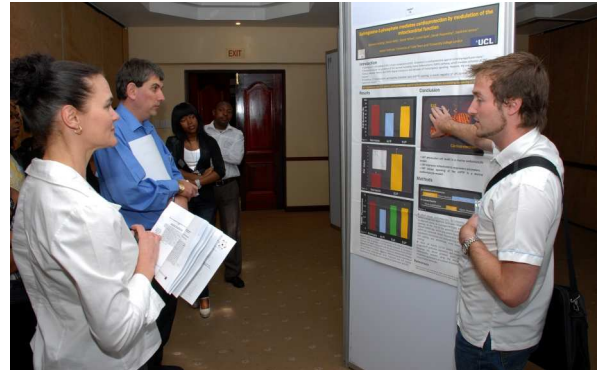
John Van Der Walt Prize (Damian Hacking,)

"I am currently interested in HDL cholesterol and how it protects hearts against an ischemic insult. One of the constituents of HDL cholesterol is sphingosine-1-phosphate, which our lab, and others, have proved to be protective in various models. I am currently elucidating the end targets of this protection. My further work hopes to elucidate the pathways involved, and to translate these findings into the clinical setting."

**Damian Hacking, Hatter Cardiovascular Research Institute
Cape Heart Centre, University of Cape Town**



Congratulations to our prize winners...



*Damien Hacking receives the **John Van Der Walt Prize 2010**, presented by Prof Kathy Myburgh and Prof E Umapathy.*

And the Runner up goes to...

Runner up Wyndham Prize (Gina Leisching)

“From the moment I began my Honours course, my interest in cancer and its wide-spread effect on humanity was realised. From that point onward I knew that I wanted to continue working in this field of research and hopefully find my niche. Currently, my PhD is centred around autophagy and cervical cancer, two completely different research fields which may be more closely related than one might think. I would like to remain in cancer research, particularly in women’s health, where I hope to contribute to bettering the lives of women suffering from cancer.” **Gina Leisching, Department of Physiological Sciences, Stellenbosch University**



Runner up John Van Der Walt Prize (Heloïse le Roux)

“I am currently doing my honours on the effect of Vitamin D₃ on cancer therapy. It is a cell based project and I am working with HeLa cells (cervical cancer cells). I just love working in the lab and what interests me the most is the fact that something natural like Vitamin D₃ has possible anticancer effects. The effect it has in conjunction with a chemotherapeutic drug (cisplatin) is what I am currently investigating. I am planning on doing my Masters next year and would like to take this project further with a more in depth investigation.” **Heloïse le Roux, Department of Physiological Sciences, Stellenbosch University**



*Heloïse le Roux receives the Runner up **John Van Der Walt Prize 2010**, presented by Prof Kathy Myburgh and Prof E Umapathy.*



Message from the former president Prof Kathy Myburgh

Dear Readers

I have been asked to reflect on highlights of the past 6 years of Presidency of PSSA.

Recognition of fellow physiologists:

The most satisfying events have been the awarding of Lifelong Honorary Fellowship to Prof Johan Koeslag, Prof Helen Laburn and Prof Cephas Musabayane. These esteemed colleagues are not only excellent physiologists, but imparted their knowledge at PSSA conferences on a regular basis for many years.

With the generosity of our headline sponsors, Lasec, I was also able to make the Student Poster competition more attractive and consolidate its value to the PSSA. The number of entrants continues to climb and at this rate will soon rival the famous Wyndham Award.

I also instituted an award aimed at the mid-career academic physiologist. This award honours national and international research excellence and research contribution to the PSSA. It is awarded by the PSSA Council and only when a suitable candidate becomes apparent. Angela Woodiwiss was the first recipient of the PSSA Award for Excellence in Physiology Research.

Widening the scope, deepening the biological base:

Although our legacy and the current expertise of many members places cardiovascular disease on centre stage, research on other diseases such as diabetes and cancer is increasingly presented and at complex levels. Pain, cytokine and sleep physiology hold their own, while proteomics results were presented first for stress and sperm biology. Skeletal muscle physiology and satellite cell biology now make their yearly appearance. Fluorescence microscopy and epidemiological statistics are evidence of the advancement of techniques on a broad scale.

There has been an interesting addition which should maintain our knowledge of many systems in physiology: the effects of plant medicines on physiological processes and pathophysiological conditions.

Perhaps human physiology should make a come-back over the next 3 years!

Financial forward-thinking:

The PSSA is a non-profit organization, but with a view to long-term financial strength, Prof Engelbrecht and I have been able to build up a healthy investment. This has only been possible by the collaboration of the yearly conference organizers with whom the Council now has a gentleman- and gentlewoman's agreement to donate a proportion of any profit made at the yearly conference to this savings account. For the first time we were able to sponsor the attendance of two academics (in this instance from Malawi) at the Physiological Society of Southern Africa.

As this investment grows, the Council will be able to use the interest in order to institute different ideas to keep the PSSA young at heart.

Speaking of 'young' at heart, one cannot deny that the years have advanced... but watch this space...

Prof Kathy Myburgh, Department of Physiological Sciences, Stellenbosch University



**"Pre-Presidential
fun
(2003)"**



**"Proper Professorial
fun (2008)"**



PSSA conference 2010 Logan's Undergraduate Prize



Sisanda Tiya, WSU receives the Logan's Undergraduate Prize 2010. Sisanda presented her work entitled "Estrogen-like activity of Erythrina abyssinnica".

The prize is presented by Prof Kathy Myburgh and Professor Al-aistar Sammon.

Everyone was there...



... almost

Contact details:

President: Prof Kennedy Erlwanger:
Kennedy.Erlwanger@wits.ac.za

Secretary/Treasurer: Prof Hans
Strijdom: jgstr@sun.ac.za

Newsletter: Dr Ben Loos
(bloos@sun.ac.za), Dr James Meiring
(meiringj@sun.ac.za)



We are on the web !
www.physiolSOC.org.za/



Prof Hans Strijdom has been appointed as new PSSA Secretary/Treasurer, taking over from Prof Anna-Mart Engelbrecht. (top). The society thanks Prof Anna-Mart Engelbrecht for her outstanding work over the last years (right).



Past Presidents of the Society

1985 - 1988	Prof Peter Belonje	Physiology, University of Cape Town
1988 - 1991	Prof Duncan Mitchell	Physiology, University of the Witwatersrand
1991 - 1992	Prof Gerhard van der Horst	Physiology, University of the Western Cape
1992 - 1994	Dr Roger Stewart	SA Medical Research Council
1994 - 1997	Prof Gerhard van der Horst	Physiology, University of the Western Cape
1997 - 2001	Prof Amanda Lochner	Medical Physiology, University of Stellenbosch
2001 - 2004	Prof Johan Koeslag	Medical Physiology, University of Stellenbosch
2004 - 2010	Prof Kathy Myburgh	Physiological Sciences, University of Stellenbosch

To diarize: NEXT MEETING

The 2011 PSSA Congress will be hosted by the University of the Western Cape.

Contact person: Prof David Fisher: dfisher@uwc.ac.za



**UNIVERSITY of the
WESTERN CAPE**