July 2005 Volume 2, Issue 2

# **PSSA News**

#### Highlights:

 Feedback from IUPS 2005 .

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Newsletter of the Physiology Society of Southern Africa (PSSA)

### **Editors' words**

We send out yet another plea for you to send us news and articles for the newsletter; recent appointments, promotions, awards, achievements, updates, anything that you would like circulated in the newsletter.

Kennedv. Andrea and Alta.

### From the PSSA Treasurer

I must first apologize to all members of the Physiology Society in the delay of this call/announcement. The society previously used Nedbank as our bank. However, with turnover of council it is always difficult to transfer signature rights and still keep one account. With ABSA it is possible to keep the same bank account no, whether the new treasurer/secretary is in Johannesburg, Cape Town or Durban. With the new FICA legislation it is not as easy to just open an account. You had to provide a constitution and also needed a document that would give me permission, from members, to open account. This I managed to bypass with some lengthy negotiations. However, everything is now ready for members to pay their dues (R80).

The account detailed is as follows:

NAME: PSSA

BANK: Absa

BRANCH: Stellenbosch

Account no: 406 193 4654

I would like everyone to fill in their names under reference. Then I know who has paid.

Regards

Dr Jacques van Rooyen

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### **Conference report-back**



Alta Schutte reports on the 35<sup>th</sup> IUPS meeting which she attended recently.

A few privileged South African physiologists had the opportunity to attend the IUPS Congress this year, which was held in sunny San Diego, California. It was quite an overwhelming experience to be part of the literally thousands of participants who took part in numerous parallel sessions – not to mention the hundreds of poster presentations. Even though this congress was attended by so many researchers from around the globe, attendees had numerous opportunities to meet others interested in the same specialization field, whether it was a reunion of old friends (for the more experienced researchers amongst us!) or perhaps the beginning of a new collaborative venture for others. Many would agree that one of the outstanding characteristics of the IUPS Congress was the excellent selection of keynote speakers who consisted in many cases of absolute leaders in their field. Here are 14 highlights of some of the topics of the Congress:

- Statins, other cholesterol depletors, may disrupt hypertension development: UCSD study
- Cranberry juice modulates atherosclerotic vascular dysfunction
- In anoxia, why can't humans be more like western painted turtles?
- 'Second messenger' NAADP shows fast, dose-related impact on satiety cycle
- Viagra shows selective effects in hypertensive pregnancy on mother, fetus
- · Growth factor in baby formula could reduce NEC, most devastating GI disease in preemies
- Pediatric burn victims' recovery, diabetes, metabolism aided by fenofibrate (Tricor)
- Moderate aerobic exercise improves cardiovascular and nervous system function in HIV+
- . In asthma, it's not the drugs but the inflammation that increases cardiovascular risk, damage
- SERPINE2 identified as novel candidate gene for COPD, especially with smoking
- Estrogen, SERMS reduce asthma impact by halting constriction
- 'Mandela's Paradox' may show that osteoporosis propensity starts in pre-teen years
- 15 generations of untrained jocks, couch potatoes show big physiological adaptations
- Alcoholism reduces male heart's ability to synthesize protein; possible therapy target?

Interested? See <a href="http://www.eurekalert.org/pub\_releases/2005-04/aps-1hp040305.php">http://www.eurekalert.org/pub\_releases/2005-04/aps-1hp040305.php</a> for more details regarding these 14 topics.

A searchable online program for IUPS is also available at http://www.faseb.org/meetings/eb2005/call/default.htm.

For those who have been *moved* by this Congress review, there is hope ... the 36th IUPS Congress will take place in Kyoto, Japan in July 2009.

#### Jo and Noko also report back on the IUPS congress

Thanks to the generous support of the PSSA and NRF, we were privileged enough to be given the opportunity of presenting at and attending the XXXV International Congress of Physiological Sciences (From Genomes to Functions) held in San Diego at the San Diego Convention Center (photo below) earlier this year. What a fantastic experience it was to see a meeting of such huge proportion (5000 physiologists from over 80 countries) and excellent organization! Following the Wallace O'Fenn lecture given by Nobel Laureate Peter Agre, the opening ceremony took place on the balcony of the San Diego Convention centre, overlooking the spectacular harbour and bay. The remaining days were filled with outstanding presentations on a wide variety of topics. In conjunction with the IUPS's meeting, the Experimental Biology conference took place concomitantly, enabling delegates to attend sessions from a wide variety of topics. A social highlight was certainly the excellent 60's style beach party thrown for all the delegates on the San Diego bay overlooking the naval base. All in all, the conference was a brilliant experience and learning opportunity. The congress provided us with a chance to focus on physiology's role in translating genomic discoveries into clinical and practical application.



By Jo McVeigh and Noko Mphahlele School of Physiology, Wits University

### **Forthcoming conferences: PSSA 2005**







## 33 rd MEETING OF THE PHYSIOLOGY SOCIETY OF SOUTH AFRICA



33<sup>rd</sup> Meeting of the Physiology Society of South Africa hosted by the University of Cape Town at the Sports Science Institute of South Africa, 7-9 September 2005.

The scientific programme will comprise oral and poster sessions, keynote lectures and the Wyndham student presentations.

### Topics to be covered in the meeting include:

Cardiovascular physiology, neurophysiology, physiological genomics, human physiology, animal physiology, cellular and molecular physiology, exercise physiology, nutrition, and other related topics

We look forward to seeing you in Cape Town in September.

Alan St Clair Gibson Convenor Kathy Myburgh PSSA President

#### **Editorial team**

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#### PSSA on the Web!

Visit:

http://academic.sun.ac.za/ medphys/pssa.htm

#### PROMOTIONS/RECENT APPOINTMENTS

Prof Kathryn H Myburgh has been invited to serve on the Editorial Board of: BMC Physiology published by BioMed Central

This Open Access journal in our field is available at: <a href="http://www.biomedcentral.com/bmcphysiol/">http://www.biomedcentral.com/bmcphysiol/</a>

BMC Physiology publishes original research articles in a variety of areas of physiology: cellular, tissue-level, organismal, functional, and developmental aspects of physiological processes. If you publish in this journal your articles will be indexed/tracked/covered by PubMed, MEDLINE, BIOSIS, CAS and Scopus.

### Who said marking was not a joke?

Students can bring some humour into the mundane task of marking assignments, tests and exams, a couple of examples from exam scripts follow.

- Q. Explain physiological mechanisms by which fertility is suppressed by the contraceptive pill.
- A. The pill has progesterone in it which "fools the stomach" into thinking there is a generated corpus luteum.
- Q. Rectal temperature is higher than oral temperature. (True or false).

  A. 1. False. Reason: the rectum is below the mouth so it cannot be higher.

  A.2. True. Reason: due to altitude we know it is cooler the higher we go so the rectal temperature is higher than oral one which is above the rectum.
- Q. What is the fate of glucose in the body?

A. It can be stored as glucagons.

From the materials and methods section of a report on an experiment with two species of rat:

"Two different spices of rat were used in the study".

