Issue 9, August 2018

South African Society for

Basic and Clinical Pharmacology

DID YOU KNOW?

Ritalin **(methylphenidate)** is a central nervous system stimulant, commonly used to treat **attention deficit disorder (ADD)**, **attention deficit hyperactivity disorder (ADHD)**, and **narcolepsy.** However, few people know that it was originally designed in 1944 by a chemist, Leandro Panizzon, for his wife Marguerite - who suffered from low blood pressure and played terrible tennis!. In an attempt to improve her skills on the court, Leandro doped his wife with his new chemical and she started playing up a storm at the club. He subsequently named his drug "Ritalin" after her. More information: https://eibalance.com/2012/04/27/3-interesting-characters-in-adhd-history/

Do you believe salt consumption should be regulated during cardiovascular treatment?

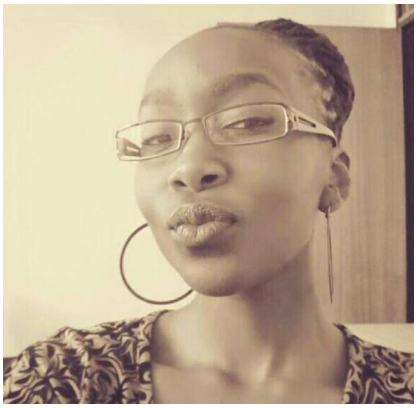
A contentious study showed that reduced salt intake may not be necessary for cardiac health. More information: 1. https://www.medicalbrief.co.za/archives/contentious-study-shows-reduced-salt-consumption-not-necessary-cardiac-health/

2. https://www.independent.co.uk/news/health/salt-diet-high-low-too-little-heart-disease-blood-pressure-lancet-study-a8485341.html

ACCOMPLISHMENTS

Congratulations to Dr Abulfathi Ahmed from the Stellenbosch University, who was awarded the **2018 Hans Dieter (HD) Brede award for Tuberculosis Research.** This award was made available to commemorate the first professor in Microbiology at the Faculty of Medicine and Health Sciences (FMHS), Prof HD Brede, and aims to stimulate good quality infectious diseases research within the Faculty.

Congratulations to Mr Keith Ncube (MSc. Pharmacology Research Scholar ,University of Pretoria) for obtaining **3rd prize for Best Oral Presentation** in Basic Sciences at the Faculty of Health Sciences Research Day at the University of Pretoria.



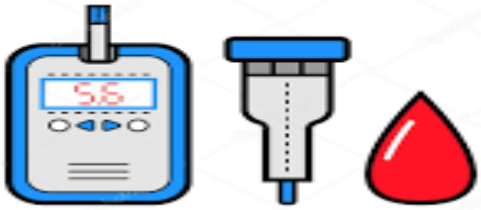
Congratulations to Ms Vuyelwa Buque (Research Scholar, University of Pretoria) for obtaining **2nd prize for Best Oral Presentation** in Basic Sciences at the Faculty of Health Sciences Research Day at the University of Pretoria.

Congratulations to Mr Sipho Mapfumari (PhD Research Scholar, Stellenbosch University) for being **nominated as one of the Mail and Guardian top 200 young South Africans**.

Congratulations to Ms Innocensia Mangoato (MMedSc. Research Scholar, University of the Free State) who was awarded the **South African Women in Science award** in the category of Natural (Physical and Life) and Engineering Sciences.

DIABETES NEW TEST

Diabetes: a new test could detect the disease much earlier. The glucose tolerance test is the standard method for detecting diabetes. But this new study suggests that a different test can identify the disease earlier than the glucose tolerance test.



Control the level of sugar
DIABETES

Cell Reports
Report

Peroxisome Proliferator-Activated Receptor γ2 Controls the Rate of Adipose Tissue Lipid Storage and Determines Metabolic Flexibility

Sam Virtue,[1,4,*] Kasparas Petkevicius,[1] José Maria Moreno-Navarrete,[2] Benjamin Jenkins,[1] Daniel Hart,[1] Martin Dale,[1] Albert Koulman,[1] José Manuel Fernández-Real,[2] and Antonio Vidal-Puig[1,3,*]

SUMMARY

One understudied function of white adipose tissue (AT) is its role in postprandial lipid buffering. In this study, we demonstrate that mice lacking the adipose tissue-specific transcription factor peroxisome proliferator-activated receptor γ2 (PPARγ2) exhibit a defect in their rate of adipose tissue lipid storage. Impaired adipose tissue storage rate reduces metabolic flexibility, without compromising fasted glucose tolerance or insulin sensitivity, even following prolonged high-fat feeding. However, acutely overfeeding PPARγ2-KO mice caused a 10-fold increase in insulin levels compared with controls. Although impaired adipose tissue storage rate did not result in insulin resistance in young mice, 1-year-old PPARγ2-KO mice developed skeletal muscle insulin resistance. Our data indicate that failed adipose tissue storage may occur prior to defects in glucose handling and that overfeeding protocols may uncover genes controlling adipose tissue storage rate, as opposed to capacity, and act as a diagnostic test for early-stage human metabolic disease.

INTERESTING READ: CLINICAL PHARMACOLOGY AND THERAPEUTICS LEARNING OUTCOMES

ARTICLE

Key Learning Outcomes for Clinical Pharmacology and Therapeutics Education in Europe: A Modified Delphi Study

David J. Brinkman[1,2], Jelle Tichelaar[1,2], Lidwine B. Mokkink[3], Thierry Christiaens[4], Robert Likic[5], Romaldas Maciulaitis[6], Joao Costa[7], Emilio J. Sanz[8], Simon R. Maxwell[9], Milan C. Richir[1,2], and Michiel A. van Agtmael[1,2], for the Education Working Group of the European Association for Clinical Pharmacology and Therapeutics (EACPT) and its affiliated Network of Teachers in Pharmacotherapy (NOTIP)

Harmonizing clinical pharmacology and therapeutics (CPT) education in Europe is necessary to ensure that the prescribing competency of future doctors is of a uniform high standard. As there are currently no uniform requirements, our aim was to achieve consensus on key learning outcomes for undergraduate CPT education in Europe. We used a modified Delphi method consisting of three questionnaire rounds and a panel meeting. A total of 129 experts from 27 European countries were asked to rate 307 learning outcomes. In all, 92 experts (71%) completed all three questionnaire rounds, and 33 experts (26%) attended the meeting. 232 learning outcomes from the original list, 15 newly suggested and 5 rephrased outcomes were included. These 252 learning outcomes should be included in undergraduate CPT curricula to ensure that European graduates are able to prescribe safely and effectively. We provide a blueprint of a European core curriculum describing when and how the learning outcomes might be acquired.

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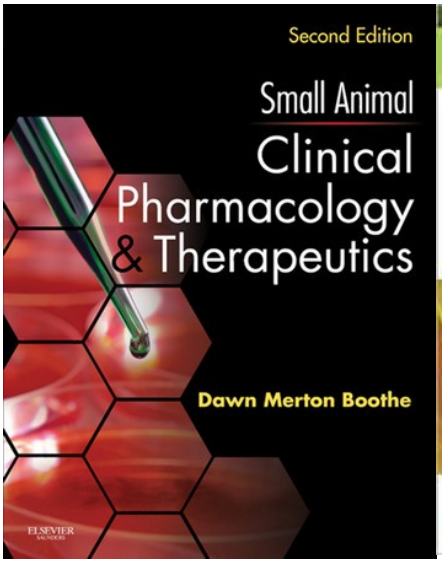

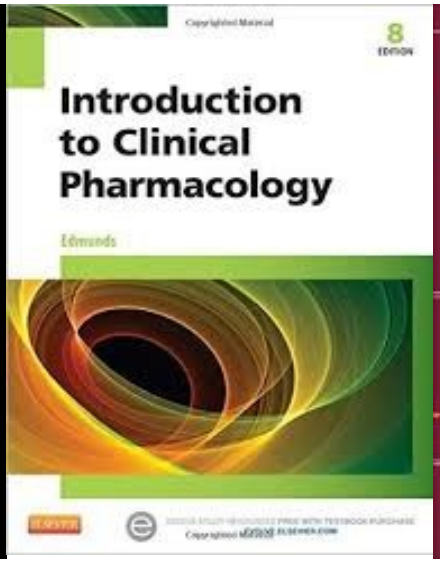

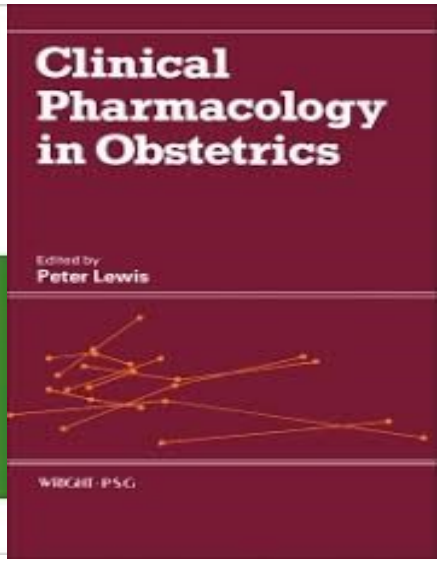

FAIMER®
Foundation for Advancement of International Medical Education and Research

SAFRI

The **Sub-Saharan Africa-FAIMER Regional Institute (SAFRI)** health professions education fellowship applications for 2019 are now open and closes on the **30th of September**. The applications can be found on: https://faimer.fluidreview.com/. The **SAFRI** offers a **two-year fellowship program** for health professions faculty who have the potential to improve medical education at their schools. Approximately 16 fellowships are offered each year. The fellowship is designed to teach education methods, scholarship, and leadership skills, and to develop an active, supportive professional network among educators. Successful applicants will take part in both contact- and distance learning to improve aspects related to health professions education research, such as assessment, leadership, management and research methodology. More information: (https://safri.faimerfri.org/).

PHARMACOLOGY CONTRIBUTIONS

ANY INSTITUTION WISHING TO VOLUNTEER TO HOST THE SASBCP CONFERENCE NEXT YEAR (2019)???? PLEASE LET US KNOW

We welcome any news from our society members. If you have anything interesting you wish to add to our next issue, please contact

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