

**9 – 12 JANUARY 2018**

**Venue: Sanlam auditorium, Hatfield campus, University of Pretoria**

### **SECOND CIRCULAR**

The purpose of this second circular is to provide information on the plenary speakers at SAAB 2018, and to give further details about the workshop on the subject of plant blindness.

#### **REMINDER OF IMPORTANT DATES**

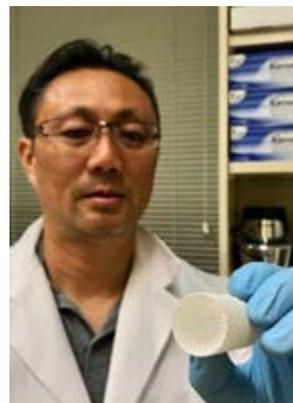
- Early bird registration: 15 August to 31 October 2017
- Standard registration: 1 November to 24 November 2017
- Late registration: 25 November to 8 December 2017
- Submission of abstracts opens: 7 August 2017
- Abstract submission deadline: 30 September 2017

#### **REGISTRATION**

Please visit the SAAB 2018 website [www.saab2018.co.za](http://www.saab2018.co.za) for further information regarding registration costs and to access the registration form.

## PLENARY SPEAKERS

**Professor Lin** is the Research Associate Professor and lead scientist who is in charge of bioremediation and natural products research programs at the Center for Agroforestry at University of Missouri (MU). He has been exploring the utilization of plants and bacteria for the development of bioeconomy. Dr. Lin primary research foci include 1) identifying the new uses of the high-valued natural products isolated from the waste and byproducts, and 2) developing novel biocatalyst systems for production of biofuel and specialty chemicals. Over the past 5 years, Dr. Lin and his team have successfully transferred their inventions to the industry. Examples include start-ups like Tiger Energy Solutions LLC and Elemental Enzyme LLC., and established industrial players like Bayer. The spin-off start-ups from his translational research projects have created >30 full-time positions for scientists and professionals in the region and have generated significant revenue for MU through technology licensing.



**Dr. Gordon E. Uno** joined the Department of Botany and Microbiology at the University of Oklahoma in 1979 after completing his Ph.D. in Botany from the University of California, Berkeley. He was appointed a David Ross Boyd Professor of Botany in 1997 and was the Department's chair from 2000-2015. Dr. Uno has authored or co-authored 27 textbooks and supplemental resources including: *Principles of Botany*; *Handbook for Developing Undergraduate Science Courses*; *Biological Science: an Ecological Approach*; and *Inquiring About Plants*. Dr. Uno was a Program Officer in the Division of Undergraduate Education at the National Science Foundation (1998-2000), was awarded Honorary Membership by the National Association of Biology Teachers (NABT) in 2001, and was NABT President in 1995. He became a Fellow of the American Association for the Advancement of Science (AAAS) in 2000, and he has received one national, two state, and three University-level teaching awards. He has taught over 15,000 undergraduates and has led many faculty development workshops for university and secondary science instructors. He served on the Board of Directors for the American Institute of Biological Sciences (AIBS) for nine years and has just completed his Presidency of the Botanical Society of America (he remains on the Board of the BSA as Past-President). He has received multiple grants from the National Science Foundation (NSF) including three from the Research Coordination Networks in Undergraduate Biology Education (RCN-UBE) program. Uno was the Chair and organizer of the first Gordon Research Conference on Undergraduate Biology Education Research (GRC-UBER). Finally, he was the Chair of the College Board committee (from 2010-2016) that revised the Advanced Placement (AP) Biology course and wrote the new Biology exams, taken by 250,000 students each year.

**Professor Sally Archibald** works on understanding the dynamics of savanna ecosystems in the context of global change. Her work integrates field ecological data, remote sensing, modelling, and biogeochemistry. She is involved in collaborative research projects on fire-grazer interactions, inter-continental savanna comparisons, the importance of land-atmosphere feedbacks, and pursuing a global theory of fire. She is closely linked with the Global Change and Ecosystems group at the CSIR where she holds an affiliate position. Prof. Archibald is on editorial board of the South African Journal of Science and the steering committee of several scientific programs including iLEAPS, the Miombo Network, and SASSCAL. She has authored and co-authored more than 40 publications.



**Professor Ian Dubery** is a Research Professor in the Department of Biochemistry at the University of Johannesburg. The focus of his research is understanding the molecular and biochemical aspects of plant - microbe interactions, inducible host responses to pathogen attack and innate immunity in general. He has contributed much to the present knowledge on bacterial lipopolysaccharides as microbe-associated molecular pattern (MAMP)

molecules, able to trigger plant defence (MAMP-triggered immunity) and subsequently to induce protection in plants. To date he has published 137 papers in leading international journals specialising in the Biochemistry and Molecular Biology of plant- and microbial systems. The impact of his work is reflected by an h-index factor of 30. Combined, his papers have received more than 3200 citations. Thus far 46 Masters and 13 Doctoral students in Biochemistry have graduated under his supervision and mentorship. Five of his previous students are current professors in Biochemistry or Plant Science departments at South African universities. Others are group leaders at research institutes or divisions of the ARC and the CSIR. He has received many national and international awards for research excellence, the most recent the 2016 Gold Medal from the South African Society for Biochemistry and Molecular Biology (SASBMB).

**Ms Dorcas Lekganyane** was awarded the “Best Young Botanist” prize at the SAAB 2017 conference. She obtained her BSc (Biochemistry and Botany) and Honours degree in Botany and Plant Biotechnology from the University of Johannesburg (UJ) in 2014 and 2015, respectively. She is currently enrolled for an MSc Botany degree (with specialization in molecular systematics and DNA Barcoding) at the same university. Ms Lekganyane’s keen interest is in using



DNA barcoding technology to aid in rapidly identifying and describing new or existing species to better understand South Africa’s rich biodiversity. Her study addresses the major threats to biodiversity such as the illegal trade of protected and threatened species as well as overharvesting of wild plant resources for trade at traditional medicinal markets which results in noticeable levels of species depletion. Ms Lekganyane’s study focuses on evaluating the authenticity and conservation status of traded medicinal plant products at “muthi” markets in South Africa. The preliminary results of her study have been described as exciting by her peers and are in alignment with the World Health Organization Regional Committee for Africa’s call to develop herbal pharmacopoeias as well as applying scientific criteria to prove the safety and efficacy of medicinal plant products.

## **WORKSHOP**

### ***Teaching relevant botany for future generations: Addressing the issue of plant blindness***

The workshop will be led by Prof Gordon Uno from the Department of Botany and Microbiology at the University of Oklahoma.

The workshop will aim to address different aspects of plant sciences education by giving an overview of the following issues:

- An overview of SA school curriculum
- Marketing of Plant Sciences as a field of study in school and tertiary institutions
- Curriculum design for especially first year courses; and
- Making the first year matter

Discussions at the workshop will be facilitated by Mrs Angelique Kritzinger and Dr Ina Louw.

The envisaged outcomes from the workshop are:

- Improved understanding by lecturers about the prior knowledge of first-year students;
- An open source marketing tool/strategy to be used to attract students for the discipline;
- Improved understanding of the need for aligned curriculum design, especially for the first year of studies; and
- Greater awareness of the importance of teaching strategies for first-year students.

*Come and experience how you can open your students’ eyes to the diversity of our botanical heritage.*

The workshop will take place on the morning of Thursday, 11 January 2018, as one of the parallel sessions.

Should you want to attend the workshop, please indicate this on the registration form.

Please take note that the workshop is limited to a maximum of 40 delegates.

Please contact Mrs Angelique Kritzinger ([angelique.kritzinger@up.ac.za](mailto:angelique.kritzinger@up.ac.za)) should you have any queries.

### ***LATEST INFORMATION AND UPDATES***

For the latest information and updates, please visit the website at: [www.saab2018.co.za](http://www.saab2018.co.za). Further information concerning conference scientific and social programmes will be posted as it becomes available.

### ***CONTACT INFORMATION***

***For all general queries regarding registration, accommodation and travel:***

Marcia Mabuza: [marcia@saab2018.co.za](mailto:marcia@saab2018.co.za)

***For all queries regarding the scientific programme:***

Dr Quenton Kritzinger: [quenton.kritzinger@up.ac.za](mailto:quenton.kritzinger@up.ac.za)