

## CONFERENCE REPORT:

### EXECUTIVE SUMMARY

#### The “International Symposium on Methods for Studying Drug Metabolism and Transport, and African Traditional Medicines (METHODS2015)”

##### 1. INTRODUCTION

The “International Symposium on Methods for Studying Drug Metabolism and Transport, and African Traditional Medicines (METHODS2015)” was held on 23<sup>rd</sup> to 25<sup>th</sup> November 2015 at Saint George Hotel and Conference Centre in Pretoria, South Africa. It was hosted by Department of Pharmacology and its Research Unit on Indigenous Knowledge Systems (IKS), University of the Free State, in partnership with the Department of Science and Technology (DST) of South Africa. The symposium addressed research issues at the helm of the Department of Science and Technology (DST) national research policy, which is also aligned with the research focus of the Department of Pharmacology at the University of the Free State. Furthermore, the symposium created an interface for policy makers and research scientists both local and international, to deliberate on the best practices for research and development of African Traditional Medicines (ATM) and the pharmacokinetic processes of drug metabolism and transport. The theme of the symposium was “**Rallying for Safe and Effective Medicines**”

The symposium attracted 117 participants the majority of whom were from the host country, South Africa. There were 61 students (52%) of whom 52 were from South Africa and 13 were from other countries, i.e., Zimbabwe, Namibia, Ethiopia, Nigeria, Jamaica, China, India and Sri Lanka. Forty-six (46) local students and 9 international students received bursaries from the symposium organizers. Bursaries were awarded according to the need and they included waiver of registration fees for the symposium and pre-conference workshops, accommodation and, for the international students, contribution towards the ticket costs. The speakers profile was 80% from South Africa, and the international speakers came from Zimbabwe (Prof. Collen Masimirembwa), Sweden (Prof. Eleni Aklillu), Finland (Prof. Olavi Pelkonen), Germany (Prof. Matthias Schwab), China (Prof. Tonghua Liu), Brazil (Prof. Farnao Braga), India (Prof. Tuhinandri Sen) and Jamaica (Dr. Rupika Delgoda, Dr. David Picking, Dr. Simone Badal, and Dr Lowe).

The symposium was preceded on the 22<sup>nd</sup> November 2015 by two pre-conference workshops that were overprescribed to 60-69 people of whom 31 (45%) were students. Workshop-1 was on ‘the Pharmacogenetics of Drug Metabolism and Transport’ and was facilitated by Prof. Collen Masimirembwa from Zimbabwe, while workshop-2 was on ‘the advances in traditional medicines’ research’ was facilitated by Prof. T. Sen from India and Prof. Braga from Brazil.

The symposium was opened on the evening of 22<sup>nd</sup> November 2015, at a Gala dinner honored by the minister of science and technology (DST) who was represented by the director general (DG) Dr Phil Mjwara. It was also attended by officials from the host institution, the University of the Free State, i.e., Prof. Corli Witthuhn, the Deputy Vice Chancellor Research; Prof. GJ van Zyl, the Dean Faculty of Health Sciences and Prof. Alan St Clair Gibson, the Head School of Medicine.

The proceedings of the symposium went smoothly as planned in the main program. The proceeding can be classified into four categories;

- Strategies for research on Drug Metabolism and Transport, and research on African Traditional Medicines; Here, speakers presented the various strategies for research in the respective fields.
- Research on African Traditional Medicines; local progress in African Traditional Medicines research was reported on, and various speakers shared their experience in the different aspects of Traditional Medicines’ research and regulation.
- Research on Drug Metabolism and Transport; the importance of genetic polymorphisms in cytochrome P450 enzymes and drug transporters was emphasized across all presentations.

- Integration of African Traditional Medicines with Drug Metabolism and Transport research; the effect of Traditional Medicines on cytochrome P450 activity and drug transporters were illustrated by different speakers, thereby emphasizing the need for this research approach.

The symposium also enabled participants, students in particular, to share their relevant research results with colleagues in six poster sessions during which 64 posters covering various topics on research on Traditional Medicine (38 posters) and Drug Metabolism and Transport (26 posters) were presented.

We are grateful to the generous donations from our sponsors towards the symposium and workshops that enabled greater participation whereby about 80% of the participants were sponsored by the organizers. The major local sponsors were the national Department Science and Technology (DST), the South African Medical Research Council (SAMRC), the Department of Pharmacology, University of the Free State (UFS), and the National Research Foundation (NRF). The international sponsors were mainly scientific organizations/societies, i.e., the Drug Metabolism and Transport Section of the International Union for Basic and Clinical Pharmacologists (IUPHAR), The American Association of Pharmaceutical Scientists (AAPS), and The International Society for the Study of Xenobiotics (ISSX). The international sponsorship enabled us share the platform with several international students.

Some of the important observations by delegates during this symposium were:

- The potential for discovery of new medicines from natural products has never been exhausted
- People respond differently to medicines, whether conventional or traditional medicines
- Integration of research on traditional medicines with relevant scientific disciplines such as ‘drug metabolism and Transport’ will address the core of African population health.
- The traditional medicine philosophy remains under researched, thereby denying us the potential for development of new remedies.
- Owing to fast growing and complex technological advance (knowledge), further research in ‘cytochrome P450 and drug transporters’ requires a collaborative effort across different disciplines
- Forums for research information such as this symposium (methods2015) are part and parcel of the accelerated strategy for research and development.

b) Using a questionnaire that allowed participants to rate the symposium, it was confirmed that the whole scientific activity was highly welcomed by the participants as informative and, to some, it opened new research avenues and hopefully more collaboration to come.

c) I would like to thank my fellow colleagues on the organizing committee of METHODS2015 and the event management company, ‘Orange Galaxy’ for their untiring effort to ensure success of the event.



Prof. A. Walubo  
Chairman



Some of the delegates and speakers pose for a group photo at a lunch-time break



Session in progress: Prof. F. Braga from Brazil presenting



Thanks to our sponsors