

❖ Name & Designation	: Dr. Kavita Gulati, Associate Prof.
❖ Address	: Dept. Of Pharmacology, VP Chest Institute, University of Delhi, Delhi-110007.
❖ Name of the International Conference/ Seminar/Symposium/Workshop	: 17 th World congress of Basic and Clinical Pharmacology (WCP)-2014.
❖ Title of the abstract accepted	: Involvement of nitric oxide in the toxicodynamics of drugs and xenobiotics.
❖ Date & Venue	: 13-18 th July 2014. Cape Town, South Africa.
❖ Money sanctioned	: Rs 99,209/-
❖ Money reimbursed	: Rs 99,209/-

Participation Report

The 17th World Congress of Basic and Clinical Pharmacology (IUPHAR - WCP-2014) was held in Cape Town, South Africa from 13 to 18 July 2014 and was organized by the South African Society for Basic and Clinical Pharmacology (SASBCP). This is the prime conference of the International Union of Pharmacology (IUPHAR) and is held once in every four years. This year, about 1200 scientists and research scholars from 50 countries participated in this epic conference in the specialty of pharmacology. The scientific program comprised of 18 plenary lectures, 88 Symposia (each comprising of 3-5 speakers) from different parts of the world, and approx. 1400 free communications involving a wide area of topics in basic and clinical pharmacology. The inaugural function was held on 13th July evening and the South African minister for science and technology inaugurated the conference. Several eminent stalwarts in the area of pharmacology and toxicology spoke during this session. This was followed by a keynote address delivered by Prof. Robert J Lefkowitz (Noble Laureate) who spoke on "G-Protein Coupled Receptors". The inaugural session concluded with a colorful cultural programme and a welcome reception. The scientific sessions comprised of Plenary Lectures followed by symposia, workshops and oral sessions on different contemporary topics and the free communication sessions were interspersed between these programmes. The Plenary lectures were focused on contemporary subjects like Signal Transduction in Therapeutics, Protein kinase inhibitors, Purinergic signaling, Pharmacogenomics and drug safety, Drug hypersensitivity, Pharmacoeconomics, Advances in Oncotherapeutics, Medicine selection in emerging economies, Rational Clinical Pharmacology, Stress Neurobiology, etc. Eminent speakers like Richard Newbig (USA), Brian Strom (USA), Kozo Kaibuchi (Japan), Stephen Stahl (UK), Simon Mallal (Australia), Salvador Moncada (UK), Clive Ondari (Switzerland), Martin Michel (Germany), P. Rangachari (Canada), etc. The scientific sessions included, Novel Anti-TB regimens, Antibiotic resistance, Alzheimer's disease therapy, Natural products, Immunotherapeutics with monoclonal antibodies, New Stress targets, Nitric Oxide pathways in neuropsychiatric illness, Global Collaboration in Ph.D programmes, etc. Eminent international scientists and experts from reputed institutions and laboratories viz. Andreas Reif (Germany), Scott Armsstrong (USA), Jian Rong (China), Asla Pitkannen (Finland), Gian Marco Leggio (Italy), Kelly Chibale (South Africa), Michael Mulvany

(Denmark), Zdravko Lackovic (Croatia), Yvette Tache (USA), Sandor Szabo (Hungary), David Gray (UK), etc. delivered lucid plenary lectures and participated in the highly informative and relevant symposia. The various scientific sessions went on throughout the conference days which sometimes extended to the evenings (from 8-30 AM to 6-30 PM). Attending all these above mentioned multifaceted scientific sessions and plenary lectures provided me with the state-of-the-art knowledge and up to date information in the various areas of Basic and clinical pharmacology, toxicology and drug development. Further, my interactions with the various international experts in the respective areas gave a better understanding and a new outlook towards the recent research trends.

In summary, the conference was very well organized. The scientific program was comprised of invited plenary lectures and symposia sessions providing an exciting blend of basic and clinical pharmacology and addressed the key issues of Pharmacology and Toxicology. The symposia were conducted in four parallel streams. There was an interesting exhibition with diverse range of displays from companies and organizations viz. Pharmaceutical industry, government, professional organizers and medical publishers etc. which updated my knowledge about various developments in biomedical research. Internet services were available free of cost. All the general arrangements were of very high order. In the concluding session, the gathering praised the organizers for such excellent arrangements and the organizers thanked the delegates for coming all the way to South Africa. The next meeting will be held in Kyoto, Japan, in 2018 and the Japanese organizers welcomed all to the conference.

researchers showed keen interest in the works presented. Interesting discussions/interactions were associated with both posters. There was also a dedicated Workshop on Standards for PhD Education in Biomedicine to enhance the overall global standards of doctoral education and research and significant unmet needs were discussed. I actively contributed to this session by giving my personal inputs which were well accepted by the experts/panelists. My participation in this conference was thus highly rewarding scientific experience and the knowledge gained will be of immense help in refining my research goals.

Participant's contribution to the conference

I had the unique distinction of being invited by the organizing committee of WCP-2014 as guest speaker to speak in a session on Nitric oxide research, which was held on 17/7/2014 and was well attended. Prof. Brian Harvey (South Africa), Prof. Samia Joca (Brazil), Prof. Andreas Reif (Germany), Prof. Gregers Wagener (Denmark) and Prof. Arunabha Ray (India) were the other participants. Prof. Arunabha Ray and Prof. Brian Harvey were the session chairs. The recent important developments in Nitric Oxide research and their relevance to pharmacology, therapeutics and drug development were discussed. I spoke on "Involvement of nitric oxide in the toxicodynamics of drugs and xenobiotics". My work was greatly appreciated and the concept of involvement of Nitric Oxide in drug and xenobiotic induced toxicity which could provide leads for developing strategies to counteract such toxicities was well taken by the peers as well as researchers. Prof. K Gyires from Department of Pharmacology, Semmelweis University, Hungary showed special interest in my work. Interactions with Greger Wegener (Denmark), Samia joca (Brazil) and Andreas Reif (Germany) were very fruitful and provided me with new ideas as they were also working on the related topics and had long discussions after the talk. Overall, it was a very interesting session and generated lots of discussion on important issues regarding nitric oxide and its application in various fields. After the session, I received invitations for participating in a similar conference in Brazil and offers for collaborative research from University of Western Cape, South Africa.

The free communication sessions were meticulously divided into various sections as to cover all relevant areas in basic & clinical pharmacology and toxicology and some of the topics covered included – Autonomic Pharmacology, Cardiovascular Pharmacology, Psychopharmacology, Gastro-intestinal Pharmacology, Herbal Drugs, Pharmacogenetics etc. Approximately 1400 free papers (posters) were presented by various scientists from different countries. In addition, I also presented 02 posters on (1) Effects of morphine on behavioral, biochemical and cellular markers of stress in rats (In session on *Drugs and Brain*), and (2) Experimental studies on the mechanisms of action of unim-352, a polyherbal agent for the treatment of bronchial asthma: a reverse pharmacology approach (In session on *Immunopharmacology*) on 16/7/2014. Both posters were widely acclaimed by the international gathering and both peers and young