

Pharmacology International

No. 80 June 2013 The semi-annual newsletter from the International Union of Basic and Clinical Pharmacology

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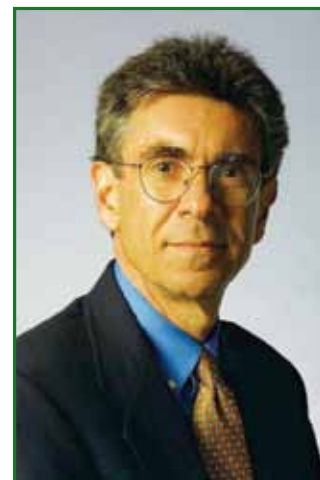


Making History July 13-18, 2014

The South African Society of Basic and Clinical Pharmacology and Pharmacology for Africa (PharfA) initiative will make history July 13 - 18, 2014 by hosting in Cape Town the first World Congress of Basic and Clinical Pharmacology to be held on the African continent. Pharmacology has developed into a cutting edge science, contributing discoveries of new medicine and therapies for the benefit of people around the world. There are now more opportunities than ever to be a part of the advancement.

Scientific Programme

An exciting and world class scientific programme on *Pharmacology at the Cutting Edge* has been designed to present an array of themes, packaged in keynote and plenary lectures, workshops, symposia, social functions and business meetings. The detailed programme will debut August 1, 2013 on the WCP2014.org website and will feature Dr. Robert Lefkowitz (pictured at right) as the keynote opening speaker, 20 plenary lectures by eminent pharmacologists, ~300 invited speakers in 100 sessions, pre- and post-congress meetings, and the largest ever participation by Africans.



Go Green

WCP2014 will utilize state of the art technologies, such as electronic scientific posters and a user-friendly, yet powerful, mobile app to support and enrich your experience. These advances will eliminate the costs associated with printing and transporting your poster. Download the programme app to your portable device to plan your itinerary in advance or on the go.



Continued on page 2...



Cape Town

Cape Town will be the host city of the 17th World Congress. This panoramic city is set on a peninsula of rocky heights and dramatic ocean views at the foothills of Table Mountain, recently acclaimed as one of the 7 natural wonders of the world.



Venue: Cape Town International Congress Centre

The modern Cape Town International Convention Centre with state of the art infrastructure can host more than ten thousand delegates in style. In addition **they** have sufficient world-class accommodation within walking distance from the Convention Centre. The Cape Town International Airport is only 20 minutes away and is serviced by most major international air carriers. In addition flights connect directly from Europe, the Americas and Asia.



www.wcp2014.org

Continued on page 3...



Accompanying persons programme, and pre- and post-congress safaris and tours

Extend your stay and experience the splendours of South Africa and Africa. Besides the natural beauty of the environment, you may experience the diversity of the warm African cultures, game safaris and more. Please see our website for more information on how to book your tours. Information on our exciting accompanying persons programme will be announced soon.



Nelson Mandela Day 18th July 2014

Nelson Mandela, locally known as Madiba, inspired millions of people world-wide. Every year on 18 July, his birthday, peoples from around the globe celebrate Nelson Mandela International Day by giving 67 minutes of your time to be of service to fellow human beings. Come experience and enjoy a life-time opportunity with us as we celebrate Nelson Mandela International Day on Friday 18 July 2014 (last day of the congress), as we visit community projects with a guided opportunity for you to meet people and to lend a hand.

Registration & abstract submissions:

opens 1 Aug 2013

Deadline for submitting abstracts:

31 Jan 2014

Deadline for early bird registration:

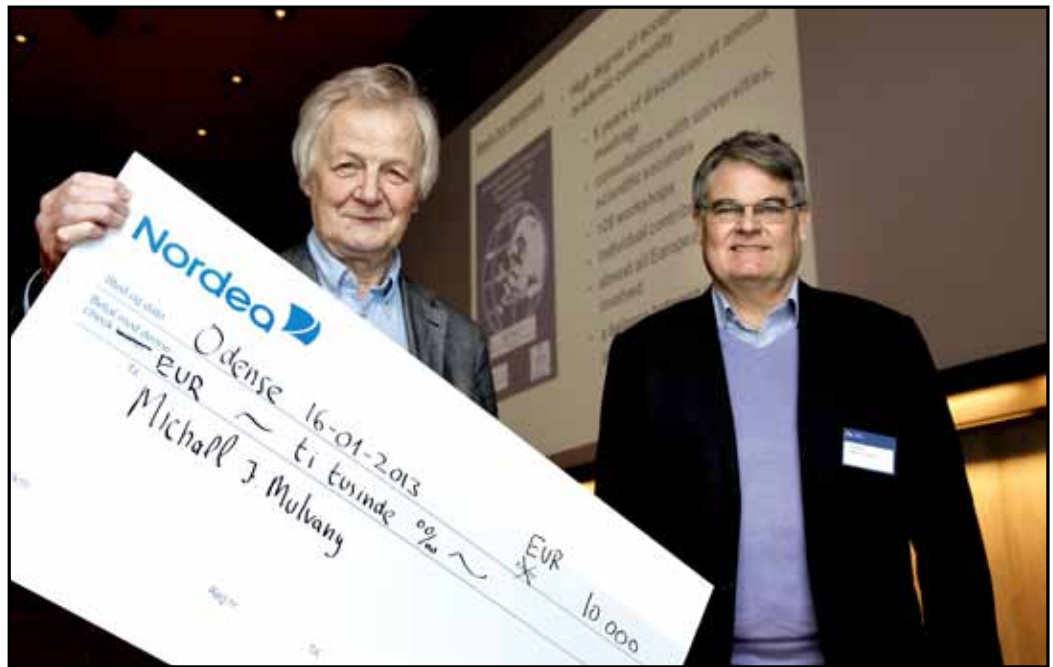
28 Feb 2014

www.WCP2014.org

Invitation

We invite you to Cape Town, South Africa to participate at the 17th World Congress of Basic and Clinical Pharmacology to share a unique once-in-lifetime experience in Africa, engaging with colleagues around “pharmacology at the cutting-edge”.

MICHAEL MULVANY HONORED



In recognition of his remarkable contributions to pharmacology at both the national and international levels, *Basic & Clinical Pharmacology & Toxicology (BCPT)* has awarded €10,000 to Professor Michael J. Mulvany (above left) for the *BCPT Nordic Prize in Basic & Clinical Pharmacology & Toxicology for 2012*. The award was presented by Professor Kim Brøsen (above right), the Editor-in-Chief.

Professor Mulvany received his degree in Mathematics and Engineering Science from the University of Oxford, in 1961 after which he worked as an Engineer/Physicist in England and Kenya. From 1969-1988, he was a member of the Department of Biophysics at Aarhus University in Denmark. During these years he spent some time in Vermont. While at Aarhus, Dr. Mulvany developed the microvascular myograph, an instrument now used by investigators worldwide to study the pharmacology of resistance vessels. His research on the structure and function of small arteries and their role in the development of high blood pressure led to new insights into the pathology and pharmacological management of this condition (Mulvany, 2012). This included his work aimed at examining the ability of antihypertensives to reverse the small artery structural alterations associated with hypertension. In 1989 he transferred his growing research group to the Department of Pharmacology at Aarhus University and was appointed Professor in Pharmacology.

MICHAEL MULVANY HONORED

Internationally recognized for his discoveries relating to the pharmacology of small arteries and hypertension, Professor Mulvany's work has resulted in more than 300 highly cited publications (approximately 13,000 citations, Hirsh index of 57). He has received several prestigious awards including the NovoNordisk Prize and the Malphi Award and has been asked to present plenary lectures at more than 170 international congresses and gatherings. He has served on the editorial boards of several journals.

Educating students and young scientists in pharmacology has been a central focus of Professor Mulvany's career. He has mentored large numbers of Danish and foreign research students, PhD students and postdoctoral fellows. A number of these individuals are now professors in the field.

Professor Mulvany has also been actively engaged in improving pharmacology instruction and the research training of young biomedical scientists and colleagues. His impact on pharmacology research and training has been facilitated by his work on various steering committees and as chair of the Danish Society of Pharmacology and Toxicology (2000-2007). Under the auspices of the Federation of European Pharmacological Societies and several other international societies, he initiated and/or organized more than 20 scientific and educational meetings. Perhaps his greatest achievement in this regard was his service as secretary general of the 16th World Congress of Basic and Clinical Pharmacology that was held in Copenhagen in 2010.

From 2003-2011, Professor Mulvany was the head of the Graduate School of Health Sciences at Aarhus University. As the leader of the Graduate School he oversaw the reorganization of the research courses and programs and developed uniform standards for obtaining a PhD at Aarhus. He is a co-founder, and currently vice-president, of the Organization for PhD Education in Biomedicine and Health Sciences in the European System (ORPHEUS). Thanks in part to Professor Mulvany's efforts, many universities have now adopted the ORPHEUS standards in an attempt to improve and standardize PhD training internationally. ●

Kim Brøsen

Editor-in-Chief

BCPT

Mulvany MJ. Small artery remodelling in hypertension. *Basic Clin Pharmacol Toxicol* 2012;**110**:49-55.



The IUPHAR Integrative and Organ Systems Pharmacology (IOSP) Initiative

Over the last 25 years, there has been a marked reduction in the use of animals in scientific and medical research even though whole animal studies remain an integral component of modern biomedical research. As a consequence of the increased use of reductionist experimental techniques, there is now a global shortage of scientists with knowledge, expertise and skills to perform and interpret in vivo studies. To address this shortage, IUPHAR established the Integrative and Organ Systems Pharmacology (IOSP) initiative in

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June 2013



Trainees receive the opportunity to practice new skills in a supervised environment. These photographs are from the workshop held in Cairo, Egypt in 2011.



2007 with a remit to educate the next generation of in vivo scientists, particularly in developing countries. Since then, short (3-4 day) courses, targeted at PhD students and early career scientists,

Continued on page 7...

IUPHAR IOSP INITIATIVE

have been organized in Africa, Thailand and India, with the most recent being held in Nigeria in 2012.

These courses are designed to provide an introduction to in vivo research, including animal handling, care and husbandry, ethics and law, experimental and statistical design, data analysis and interpretation as well as hands-on practical experience for conducting such studies. The courses have proved to be of benefit, not only to those wishing to use in vivo techniques for their research, but also to those involved in student education and in translational research.

The IOSP courses in Africa, organized and executed under the auspices of Pharmacology for Africa (PharfA), have gone from strength to strength. However, IUPHAR and Dr. David Lewis (University of Leeds, UK), the current Chair of the IOSP initiative, are eager to expand this initiative globally. Accordingly, those interested in having an IOSP course in their own country or region, or in collaboration with a national/regional pharmacological society should contact Dr. Lewis at 3Rs@leeds.ac.uk or through the IUPHAR office (IUPHAR@kumc.edu). He can advise on course content, external lecturers (if required) and potential sources of funding for such an initiative.

These short IOSP courses only provide an introduction to in vivo pharmacological techniques. Continuing in vivo education and research is greatly facilitated by the availability of suitable, free, open educational resources (OERs) and e-learning resources to supplement in-house training. Dr. Lewis is currently compiling a wiki of such resources entitled *Educational and Training Resources in In vivo Sciences* (ETRIS), which will be launched soon. Please contact Dr. Lewis if you have any e-learning or training resources (videos, podcasts, guidance notes, experimental design & statistical design software) that can be shared or know of any relevant open access websites. Also, communicate with Dr. Lewis if you would like to be notified when the wiki becomes available. The aim is for this wiki to incorporate training resources across the entire spectrum of in vivo sciences, including, but not limited to, animal welfare and husbandry, animal handling, ethics and the 3Rs, experimental and statistical design, experimental protocol and protocols for use in student education. ●

David Lewis

IUPHAR IOSP Initiative Chair



25th Anniversary
of the
**European Society for
Developmental Perinatal
and Paediatric Pharmacology**
1988-2013

The European Society for Developmental Paediatric and Perinatal Pharmacology (ESDPPP) celebrates its 25th anniversary in 2013. This milestone provides an important opportunity to celebrate ESDPPP's achievements to date and to describe our future aspirations and ambitions on behalf of millions of paediatric patients worldwide.

Based in Leuven, Belgium, ESDPPP promotes research in developmental perinatal and paediatric pharmacology and offers a forum for dialogue between pharmacologists, clinicians, and scientists interested in the effect of medications on the developing fetus, infant, and child. The mission of the organization is to improve medicines for children and advance research and global access to paediatric medications. When appropriate, ESDPPP advocates politically for the continued development of safe, evidence-based medications for children. In this respect, ESDPPP works closely with European Medicines Agency (EMA), International Union of Basic and Clinical Pharmacology (IUPHAR), and the World Health Organization (WHO).

Reviewed in this brief report is the state of paediatric pharmacology when ESDPPP was formed 25 years ago, and an overview of the current and future progress in developing medicines for children. Scientific achievements in paediatric pharmacotherapy and the status of paediatric drug development in Europe and the world are considered, with particular emphasis on the contributions of ESDPPP in these endeavors. A history of ESDPPP leadership is also provided.

Medicines for Children in 1988 before the creation of ESDPPP

When ESDPPP was founded, relatively few drugs (~ 20%) had appropriate documentation for use in children. Factors contributing to this problem included a lack of economic incentives for paediatric drug development because of the limited patient population, and a general lack of interest in paediatric pharmacotherapeutics. This meant that children lagged far behind adults in having access to appropriate, evidence-based medicines, especially in those cases where children bore most of the disease burden.

The international stimulus to improve drug safety related to pregnancy and pediatric medications was provided by several therapeutic disasters in the late 1950s, such as the use of sulfisoxazole and chloramphenicol in neonates and thalidomide in pregnancy. These events spurred drug regulators to require improved safety documentation for old and new drugs, particularly those used in fertile women and children.

ESDPPP 25th Anniversary (continued)

These therapeutic tragedies reinforced the long-standing reluctance to treat children and pregnant women. The toxic effects of sulphonamides and chloramphenicol in newborns, for example, were ascribed to altered drug disposition and contributed to the notion that infants have an augmented response to drugs throughout development. Subsequent research has demonstrated this is not always true. Because of these safety concerns, bench scientists and clinicians recognized they must consider the ethics, benefits, risks, and need for the use of certain drugs during pregnancy and lactation. This realization triggered an increase in research on paediatric drug disposition and the efficacy and toxicity to the fetus and newborn of drugs and metabolites that have passed through the placenta or accumulate in breast milk.

It became clear that achieving scientific and clinical progress would require collaboration between specialties such as obstetrics, neonatology, paediatrics, clinical pharmacology, toxicology, pharmacy, and epidemiology. The participation of analytical chemists and other laboratory experts was also necessary to improve the sensitivity and specificity of drug analysis. However, in the mid-1980s there was no scientific forum devoted to developmental and pediatric pharmacology, fetal risk assessment, or the effects of medications on pregnant women and adolescents. Recognition of this gap led to the founding of the European Society for Developmental, Perinatal, and Pediatric Pharmacology (formerly the European Society for Developmental Pharmacology). The organization held its first Congress in Les Diablerets, Switzerland in 1988.

Medicines for Children up to 2013 and the ESDPPP: Who are we, what have been our contributions and where are we now?

Once founded, ESDPPP held meetings every two years in Italy, Sweden, the United Kingdom, Hungary, France, Cyprus (organized by members from Israel), Belgium, Germany, The Netherlands and Norway. These congresses provide a forum to discuss basic developmental pharmacology, clinical paediatric pharmacology, and licensing issues. Although called “European Society...” ESDPPP members are from all over the world. At the 14th ESDPPP congress in June 2013 in Salzburg, delegates from five continents will make presentations and display posters describing research on topics related to the effects of medications on fetuses, infants and children (<http://www.esdppp.org/site>).



Children's song of the Chinese and Japanese group at the ESDPPP congress in Oslo, Norway in 2011.

L → R:
Zhiping Lee,
Wei Zhao,
Hidefumi
Nakamura and
Gideon Koren



ESDPPP 25th Anniversary (continued)



L → R: Anders Rane, Jean-Paul Langhendries, Gerard Pons, Jean-Pierre Guignard, Rafael Gorodisher, and Hannsjörg Seyberth at the ESDPPP Congress 2004 in Marburg, Germany

The first Secretary-General (1988-1994) of ESDPP, Prof. Jean-Pierre Guignard, played a prominent role in the establishment of the organization. Prof. Guignard was succeeded by Prof. Gerard Pons (1994-2001) who, in turn, was followed by Prof. Anders Rane (2001-2004) and Prof. Imti Choonara (2004-2011). Prof. Stephanie Læer has served as Secretary-General since 2011.



ESDPPP council meeting in Marburg, Germany in 2004
L → R: Anders Rane, John van den Anker, Hannsjörg Seyberth, Sharon Conroy, Jean-Paul Langhendries, and Evelyne Jacqz-Aigrain

Presidents of ESDPPP have included Prof. Fabio Sereni, Prof. Lars Boreus, Prof. Fiona Broughton-Pipkin, Prof. Endre Sulyok, Prof. Elisabeth Autret-Leca, Prof. Rafael Gorodisher, Prof. Jean-Paul Langhendries, Prof. Anders Rane, Prof. Hannsjörg Seyberth, Prof. John van den Anker, Prof. Gerard Pons, Dr. Betty Kalikstad, and Dr. Florian Lagler. Prof. Milica Bajcetic, who will be president from 2013 to 2015, is responsible for organizing the 15th ESDPPP congress in Belgrade, Serbia, in 2015.

Members of the ESDPPP have played a key role in highlighting the need for evidence-based and rational use of medications in children, and have lobbied tirelessly for better laws regulating the use of medicines in paediatric patients. Among their accomplishments have been the publication of several seminal reports on the widespread use of off-label medications in children in hospital and community settings. They have also contributed significantly to the creation of new legislation on paediatric medications in the United States [1] and the European Union [2]. Among these were regulations passed in 1997 and 2007 to facilitate paediatric drug development and limiting off-label prescriptions.

Continued on page 11...

ESDPPP 25th Anniversary (continued)

There persists today an apparent paradox in evaluating medicines for children. While paediatric clinical studies are necessary to develop and document evidence-based, safe and effective medicines for this population, for ethical reasons children must also be protected as much as possible from invasive procedures and from the risks of adverse outcomes from exposure to investigational agents. Efforts are ongoing to identify ways to make paediatric studies more feasible while fully respecting ethical requirements. Innovative strategies of medicinal products developmental plans (*e.g.*, in Paediatric Investigation Plans) and innovative study designs are important parts of this effort. These include pharmacokinetic and pharmacokinetic/pharmacodynamic studies using population-based approaches, modelling, simulation and extrapolation; adaptive dose-finding and phase III studies; and sound, appropriate observational studies on drug safety and, to some extent, efficacy.

Members of ESDPPP play a key role in these activities. They work with EMA and the Paediatric Committee (PDCO) to elaborate Paediatric Investigation Plans, to help develop new guidelines for the proper evaluation



Imti Choonara on behalf of the ESDPPP at the Chinese Annual National Paediatric Society Meeting, XIAN, in China in 2012

of medicinal products in children, and they participate directly in evaluating these products. The work of ESDPPP members helps validate these new approaches, improve new study models, and define new paediatric clinical endpoints. The investment of ESDPPP in this international clinical research effort is essential for creating guidelines on the more rational use of medicinals in children. Because ESDPPP's members have established networks for conducting clinical trials and are funded by FP7 programmes, their contributions are substantial. Even with these efforts, however, more than 50% of medicines prescribed to children today still have not been studied or authorized for use in this population.

The ESDPPP recognizes that the safe and effective use of medicines in children depends on more than just clinical trials. For this reason the ESDPPP has established training programmes in paediatric clinical pharmacology in the United Kingdom, France, and Finland. Efforts are underway to consolidate and expand this training by partnering with Global Research in Paediatrics (GRIP), an FP7-funded programme. Publishing original research and high-quality reviews is essential for disseminating scientific information on the use of drugs in children. For this reason, the ESDPPP has a quarterly Drug Therapy section in the Archives of Disease in Childhood, a leading international paediatric journal.



The Future of Medicines for Children

Paediatric legislation in the United States and Europe is reframing global thinking about the appropriate use of medications in children. Paediatric regulations have increased significantly in this area. However, Europe and other parts of the world still have a ways to go in establishing the expertise and infrastructure needed to properly study and evaluate paediatric medications. In recognition of these changes and challenges, the ESDPPP in 2013 received legal recognition as a non-profit organization. This advances the mission of taking an active role in encouraging the international study of medicines in children. The ESDPPP will continue to serve as a scientific academy while bridging developmental clinical pharmacology and the basic sciences. The ESDPPP will continue to collaborate with other organizations in providing a teaching academy for paediatric clinical pharmacology and rational drug use. As a think tank on paediatric pharmacotherapeutic research, ESDPPP will take a prominent role in encouraging cooperation between national and international societies.

As an example, the ESDPPP recently joined the European Network of Paediatric Research at the European Medicines Agency (Enpr-EMA), making it possible to integrate more fully our work with clinical research efforts throughout Europe as we strive to define more precisely the rational use of medicinal products in children. ●



Current ESDPPP council members in 2013

Top L → R: Karel Allegaert, Milica Bajcetic, Antonio Clavenna, Saskia de Wildt
Bottom L → R: Kalle Hoppu, Betty Kalikstadt, Stephanie Läer, Florian Lagler

Inti Choonara, University of Nottingham, United Kingdom
Stephanie Läer, Heinrich-Heine-Universität Düsseldorf, Germany
Gerard Pons, University Paris Descartes, France
Anders Rane, Karolinska Institute Stockholm, Sweden

European Society for Developmental Perinatal and Paediatric Pharmacology,
VZW/ASBL (non-profit organization)
University Hospitals Leuven, Herestraat 49, 3000 Leuven, Belgium

Email for correspondence:
Stephanie.laeer@uni-duesseldorf.de

References

1. Best Pharmaceuticals for Children Act /BPCA, 2002
2. Regulation (EC) No 1901/2006 of the European Parliament and of the Council of 12 December 2006 on medicinal products for paediatric use and amending Regulation (EEC) No 1768/92, Directive 2001/20/EC, Directive 2001/83/EC and Regulation (EC) No 726/2006



**PACIFIC RIM ASSOCIATION
FOR CLINICAL PHARMACOGENETICS 2013:
SURPASSING MORE THAN TWO DECADES IN THE ASIA-PACIFIC**

The Pacific Rim Association for Clinical Pharmacogenetics (PRACP) was founded by Professor Werner Kalow and several leading investigators more than two decades ago in the then-emerging field of pharmacogenetics (<http://www.med.niigata-u.ac.jp/psy/PRACP>). The idea for the Association was conceived during the 1990 Collegium Internationale Neuro-Psychopharmacologicum meeting in Kyoto. A number of scientists from various parts of the Pacific Rim region, including Professors Werner Kalow (Canada), Wen-Ho Chang (Taiwan), Ted Inaba (Canada), Saburo Takahashi (Japan) and Siu-Wa Tang (USA) were present at the inaugural meeting. Soon thereafter the Association was established through the approval of the Constitution and Bylaws, drafted in November, 1993 at the Tokyo meeting. Subsequent meetings organized by, or in affiliation with, the PRACP were held in Tokyo, Los Angeles, Toronto, San Diego, Taipei, Osaka, Kyoto, Busan and Hong Kong.



PRACP 2008 meeting in Busan, Korea in collaboration with the Korea PharmacoGenomics Research Network and the US NIH Pharmacogenetics Network. Depicted in the picture are some of the PRACP and NIH colleagues participating at the exciting social program of the 2008 meeting.

Since its inception, the PRACP has made significant efforts in advancing the collegial exchange of scientific expertise and ideas, training of young scholars, establishing collaborations, and increasing awareness of pharmacogenetics and personalized medicine in the Asia-Pacific region. As a nonprofit learned professional association, the mission of the PRACP is to contribute to the advancement of population-based clinical pharmacogenetics

THE PRACP SURPASSES MORE THAN TWO DECADES IN THE ASIA-PACIFIC

(continued)

research, to encourage international collaborations in this field, and to foster education in pharmacogenetics and personalized medicine. The PRACP is an associate member society of the International Union of Basic and Clinical Pharmacology (IUPHAR).

Most recently, the PRACP established in memory of Professor Werner Kalow the 'Werner Kalow Global Pioneers in Pharmacogenetics and Personalized Medicine Prize'. The inaugural winner has been selected by the PRACP Executives, and will be announced officially in the autumn of 2013.



The PRACP Executives, Professors Vural Özdemir (President, above left, email: vural.ozdemir@alumni.utoronto.ca), Brian Tomlinson (Secretary General, above center, email: btomlinson@cuhk.edu.hk) and Kazutaka Shimoda (Treasurer, above right, email: shimoda@dokkyomed.ac.jp) are delighted that the Asia-Pacific region is in the forefront of pharmacogenetics, personalized medicine and pharmacology research and development. Indeed, there has been a doubling of the annual investment in global R&D to \$1.1 trillion since 1996 (Suresh, 2011). They also note that many countries, both large and small, are now embracing the concept of the knowledge society, whether because of hopeful expectations for a prosperous 'knowledge economy', greater economic interdependence, or the decreasing cost of certain biotechnologies such as genomics (Dove and Özdemir 2013).

An analysis of the scientific publication data shows that over the past 30 years (1980-2009) Asia's share of the world scientific output grew dramatically by 155% (Science Metrix, 2010). Included among the leading institutions responsible for this explosion in innovative R&D are the Beijing Genomics Institute, the Eijkman Institute for Molecular Biology in Indonesia, the Institute of Molecular and Cell Biology in Singapore, the RIKEN Center for Genomic Medicine in Japan, and the Nutrigenomics New Zealand, to name but a few.

**THE PRACP SURPASSES MORE
THAN TWO DECADES IN THE ASIA-PACIFIC**

(continued)



PRACP Meeting 2005 (Kyoto, Japan)

*Sitting L → R: Professors Toshiyuki Someya, Kazutaka Shimoda, Junichi Azuma, Norio Ozaki, Izumi Shimoda
Standing L → R: Professors Hyung-Keun Roh, Larry Albers, Ms. Anna Bertilsson, Professor Siu-Wa Tang, Ms
Patty Poon, Professors Leif Bertilsson, John Miners, Min-Soo Lee, Vural Ozdemir, Hong-Hao Zhou*

Looking ahead, the PRACP aims to play a transformative and inclusive leadership role in the Asia-Pacific region in bringing together members and stakeholders in local and regional workshops and meetings on topics related to pharmacogenetics and global personalized medicine research. The PRACP executives welcome proposals from colleagues in the Asia-Pacific region who would like to organize local workshops in collaboration with the PRACP. It is hoped these workshops will address the current challenges and opportunities in these rapidly evolving fields. ●

Vural Özdemir
PRACP President

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- Suresh S. (2011) Moving toward global science. *Science*; 333(6044): 802.

2013 Anniversaries

IUPHAR congratulates these member societies on their Milestone Anniversaries:

American Society for Pharmacology and
Experimental Therapeutics
1908-2013

Finnish Pharmacological Society
1948-2013

Israel Society for
Physiology and Pharmacology
1963-2013

Argentine Society for
Experimental Pharmacology
1968-2013

Iranian Society of
Physiology and Pharmacology
1968-2013

Chilean Society of Pharmacology
1978-2013

Philippine Society of Experimental and
Clinical Pharmacology
1978-2013

Serbian Pharmacological Society
1978-2013

European Society for Developmental,
Perinatal & Pediatric Pharmacology
1988-2013

European Association for Clinical
Pharmacology and Therapeutics
1993-2013

Pacific Rim Association
for Clinical Pharmacogenetics
1993-2013



NEWSLETTER SPECIAL

Until the end of 2013, enter **IUPHAR** as the coupon code to receive **50% off** all products and services when you advertise your available employee positions on PharmacoCareers.org.

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The Second World Conference on the Pharmacology of Natural and Traditional Medicines

This conference was held in Macau, China, from the 6th to 8th November, 2012. It was sponsored by the IUPHAR Section on Pharmacology of Natural Products (SPNP) and co-sponsored by the Chinese Pharmacological Society (CNPHARS), the International Society for Chinese Medicine (ISCM) and the University of Macau (UM). The co-chairs were Prof. Yong-Xiang Zhang, current Chair



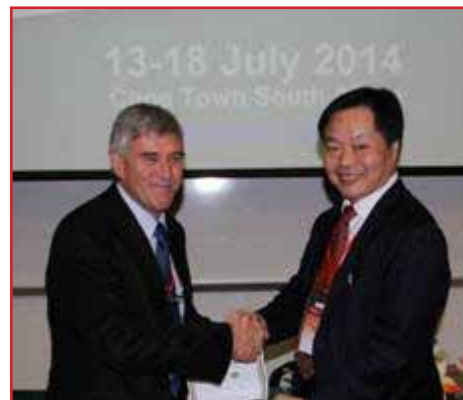
*Prof. Yong-Xiang Zhang
chaired the scientific program*

of SPNP and Yi-Tao Wang, General Secretary of ISCM. The conference theme was *Pushing forward the study of natural and traditional medicines with new ideas and technologies*. About 160 participants from 13 countries or regions attended the conference. Among the many famous experts engaged in pharmacological studies on natural and traditional medicines who attended the conference were Prof. S. J. Enna, IUPHAR Secretary-General, Prof. Douglas Oliver, Councilor of the IUPHAR Executive Committee, Prof. Sue P. Duckles, IUPHAR Past President, and Prof. Paul M. Vanhoutte, IUPHAR Past President.



*Cutting the ribbon at the opening ceremony during the
Second World Conference on the Pharmacology of Natural and Traditional Medicines*

A welcoming speech on behalf of the local sponsors was presented at the opening ceremony by Prof. Wei Zhao, University of Macau Rector. Prof. Yong-Xiang Zhang, the Conference Chair, delivered a welcome on behalf of the conference organizers. The conference was then officially opened with a ribbon cutting ceremony performed by the distinguished guests. Professors Enna, Zhi-Bin Lin, Oliver, and Vanhoutte all delivered



*Prof. Guan-Hua Du (right) presented the
appreciation certificate to Douglas Oliver*

Continued on page 19...

The Second World Conference on the Pharmacology of Natural and Traditional Medicines (continued)

plenary lectures during the meeting. Twenty other scientists gave oral presentations covering basic and clinical pharmacological research and drug relating discovery and development relating to natural and traditional medicine research.

Oral presentation and poster session competitions were held for young scientists. The top presentations and posters, based on the quality of the research, the clarity of the report and the response to questions, were selected by a panel of senior scientists. Seven winners were selected from the oral competition and fifteen from the poster presentations. The winners received their awards during the closing ceremony.

A highly successful conference, this gathering not only offered an outstanding opportunity for the delegates to present and communicate their research results, new ideas, and methods and techniques used to study the pharmacological properties of natural and traditional medicines, it also contributed greatly to the establishment of international communication and collaborations on this topic. Such interactions are certain to enhance progress in search for new drugs derived from natural and traditional medicines.

Yong-Xiang Zhang
SPNP Section Chair



*Top:
Professors Paul
M. Vanhoutte
(at left) and Sue
P. Duckles at
the conference*

*Middle:
Professor S. J.
Enna making
his plenary
lecture*

*Bottom:
Participants
of the Second
World
Conference
on the
Pharmacology
of Natural and
Traditional
Medicines*

News from the IUPHAR Section of Pharmacogenetics and Pharmacogenomics

The Section of Pharmacogenetics and Pharmacogenomics (PGx) co-organized the 2nd Latin-American Pharmacogenomics and Personalized Medicine Congress, 27-29 June 2012 in Rio de Janeiro, Brazil. This effort was led by Professor Guilherme Suarez-Kurtz, Instituto Nacional de Câncer, Brazil, a member of the Section who represents the Brazilian Pharmacogenomics Network (Refargen). The Section of PGx is grateful for the support of IUPHAR and the Clinical Division of IUPHAR in this endeavor.

The conference attracted nearly 200 participants, mostly from Brazil, but also from Argentina, Chile, Colombia, Costa Rica, Cuba, Ecuador and Mexico. The Section of PGx sponsored on June 29 a brilliant keynote lecture entitled “Pharmacogenomic and pharmacoepigemonic biomarkers for drug therapy” that was presented by Magnus Ingelman-Sundberg. The symposium “Recent progress in the pharmacogenomics of drug transporters” consisted of outstanding lectures by Deanne Kroetz on “Genetic Variation in the Control of Transporter Expression”, Ingolf Cascorbi on “Epigenomics of drug transporters: Role of microRNA” and Matthias Schwab on “Epigenomics of drug transporters: Role of DNA-modification”. These presentations were well received as evidenced by the lively discussions that ensued. Professor Suarez-Kurtz introduced the Brazilian network, Refargen, a consortium of 18 research groups working together to provide leadership in Pharmacogenetics research and education in Brazil. Another Section member, Professor Adrián Llerena, described the Iberian American Network of Pharmacogenetics and Pharmacogenomics, a consortium representing 16 Latin American countries, Spain and Portugal.

By promoting the exchange of pharmacogenetic knowledge and contributing to the evaluation of the clinical impact of pharmacogenetics, this conference helped further the mission of the IUPHAR Section of PGx. A complete conference report, which is freely available to the public, was published by Professor Suarez-Kurt (Pharmacogenomics 2012:13;1449-1452).



Speakers at the 2nd Latin-American Pharmacogenomics and Personalized Medicine Congress held in 2012 in Rio de Janeiro, Brazil, L → R: Jorge Duconge, George Patrinos, Adrián Llerena, Mara Helena Hutz, Zineh Issam, Magnus Ingelman-Sundberg, Guilherme Suarez-Kurtz, Julie Johnson, Howard McLeod, Deanna Kroetz, Alfredo Hidalgo, Fernando Perez, Frank Scappaticci, and Matthias Schwab. Speakers not in this photograph: Dirceu Barbano, Pat Brooks, Ingolf Cascorbi, Rick Hockett, and Karen Weck

Gastrointestinal (GI) Section Honors Prof. Koji Takeuchi

GI Section members along with 160 colleagues and former students honored Prof. Koji Takeuchi on the occasion of his retirement from the Kyoto Pharmaceutical University during a special symposium held in Kyoto, Japan on March 3, 2013. Prof. Takeuchi has been instrumental in organizing several of the GI Section meetings and symposia and is known for his research on nonsteroidal anti-inflammatory drug-induced gastric damage.



The invited speakers at the symposium honoring Prof. Koji Takeuchi. Seated L → R: Profs. K. Amagase (Japan), H. Sato (Japan), K. Takeuchi (Japan), S. Okabe (Japan), Mrs. Takeuchi (Japan), and Prof. L. Filaretova (Russia). Standing L → R: Profs. J.Y. Wang (USA), S. Szabo (USA), H. Kim (Korea), J. Kaunitz (USA), J. Wallace (Canada), Y. Tache (USA), and G. and Mrs. Flemstrom (Sweden). Invited speaker not in this photograph: Prof. T. Arakawa (Japan).

Most recently, the GI Section held a business meeting on April 22, 2013 in Boston, USA in conjunction with the Experimental Biology 2013 conference. Among the topics discussed were new statutes and a reorganization of the Section structure, including the creation of a President's Council in addition to expanding the representation on the International Board. ●

Sandor Szabo
GI Section Chair



Participants in the Boston business meeting included L → R: Klara Gyires (Hungary), Duan Chen (Norway), Predrag Sikiric (Croatia), Koji Takeuchi (Japan), Len Lichtenberger (USA), Sandor Szabo (USA), Yvette Tache (USA), Jonathan Kaunitz (USA), John Wallace (Canada), Masahiko Nakamura (Japan), Akinori Yanaka (Japan), Oksana Zayachkivska (Ukraine), Ludmila Filaretova (Russia), and K.B. Hahm (Korea).

News from PGx Section (continued)

The 2nd Conference of the European Society of Pharmacogenomics and Theranostics will be held in Lisbon Portugal on September 26-28, 2013. This conference, entitled "Pharmacogenomics: From Cell to Clinic", will be held under the auspices of the IUPHAR Section of PGx. Four Section members will be making presentations at this meeting. The 5th International Congress on Psychopharmacology (TAP-ICP) will be held in Antalya, Turkey from October 30 to November 3, 2013. As in 2011, Professor Feyza Aricioglu of Marmara University, Istanbul, invited the Section to organize a symposium on personalized medicine in psychiatry. The Section will also be co-sponsoring this congress. ●

Ingolf Cascorbi
Section of PGx Chair

Upcoming Events

July

13th International Congress of Toxicology (ICTXIII)

June 30 - July 4, 2013 in Seoul, Korea

<http://www.ict2013seoul.org>

European Association of Clinical Pharmacology and Therapeutics (EACPT) Summer School organized by the British Pharmacological Society

July 4 - 6, 2013 in Edinburgh, United Kingdom

<http://www.bps.ac.uk/meetings/139ba11a3ad>

12th Southeast Asian Western Pacific Regional Meeting of Pharmacologists hosted by the Chinese Pharmacological Society (CNPHARS)

July 9 - 13, 2013 in Shanghai, China

<http://www.ascept.org/AsiaPacificFederationofPharmacologists.aspx>

International Narcotics Research Conference partly sponsored by the British Pharmacological Society

July 14 - 19, 2013 in Cairns, Australia

<http://www.dconferences.com.au/inrc2013>

37th Congress of the International Union of Physiological Sciences (IUPS)

July 21 - 26, 2013 in Birmingham, United Kingdom

<http://www.iups2013.org>

Multiscale Systems Biology Symposium, organized by the International Council of Science (ICSU) Bio-Unions, a satellite to the International Union of Physiological Sciences (IUPS) Congress

July 28 - 29, 2013 in Chicheley, United Kingdom

<http://www.iups.org/welcome.htm>

August

11th Congress of the European Association for Clinical Pharmacology and Therapeutics (EACPT), co-sponsored by the Swiss Society for Clinical Pharmacology and Toxicology

August 28 - 31, 2013 in Geneva, Switzerland

<http://www.eacpt2013.org>

September

13th Annual Meeting of the Safety Pharmacology Society

September 16 - 19, 2013 in Rotterdam, the Netherlands

<http://www.safetypharmacology.org/am2013>

11th World Congress on Inflammation supported by the Brazilian Society of Pharmacology and Experimental Therapeutics and the Brazilian Society of Immunology and the International Association of Inflammation Societies

September 21 - 25, 2013 in Natal, Brazil

<http://www.inflammation2013.sbicongressos.com>



Upcoming Events

September (continued)

2013 Annual Meeting of the American College of Clinical Pharmacology

September 22 - 24, 2013 in Bethesda, Maryland, USA

http://www.accp1.org/meetings_future.shtml

2nd Conference of the European Society of Pharmacogenomics and Theranostics - Pharmacogenomics: From Cell to Clinic sponsored in part by the IUPHAR Section on Pharmacogenetics/genomics

September 26 - 28, 2013 in Lisbon, Portugal

<http://www.esptcongress.eu>

October

13th Annual Meeting of the International Society of Pharmacovigilance, "The Renaissance of Pharmacovigilance"

October 1 - 4, 2013 in Pisa, Italy

<http://isop2013pisa.org>

26th Congress of the European College of Neuropsychopharmacology (ECNP)

October 5 - 9, 2013 in Barcelona, Spain

<http://www.ecnp.eu/emc.asp?pageId=315>

LATINFARMA 2013, XXth Latinoamerican Congress of Pharmacology and Therapeutics sponsored by the Association of Latin Pharmacology and the Cuban Society of Pharmacology

October 21 - 25, 2013 in Havana, Cuba

<http://www.scf.sld.cu/html/eventos.htm>

Second Latin American Workshop on Pediatric Clinical Pharmacology Research sponsored by the IUPHAR Section of Pediatric Clinical Pharmacology

October 25, 2013 in Buenos Aires, Argentina

For more information, please contact IUPHAR@kumc.edu

November

5th International Congress on Psychopharmacology (TAP-ICP) sponsored in part by the IUPHAR Section on Pharmacogenetics/genomics

October 30 - November 3, 2013 in Antalya, Turkey

<http://psychopharmacology2013.org>

December

British Pharmacological Society Winter Meeting

December 17 - 19, 2013 in London, United Kingdom

<http://www.bps.ac.uk/details/meeting/984913/BPS-Winter-Meeting-London-2013.html>



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SAFETY PHARMACOLOGY SOCIETY

13th Annual Meeting

SEPTEMBER 16–19, 2013

DE DOELEN CONGRESS CENTRE

Rotterdam

the Netherlands

Abstract Deadline: June 15, 2013

Visit www.safetypharmacology.org for more information.

- Tuesday**
- Track A:** Reducing Safety Related Attrition—Increasing Likelihood of Success: Target Related Safety
 - Track B:** Expanding the Frontiers of Safety Pharmacology: Support to Late Stage Drug Development (Phase II onwards)—Suicidal Ideation and Behavior
 - Track A:** Reducing Safety Related Attrition—Increasing Likelihood of Success: Chemistry (Molecule) and Off-Target (Selectivity) Related Safety
 - Track B:** Expanding the Frontiers of Safety Pharmacology: Safety Assessment Evaluation of Nonconventional Therapeutic Modalities
- Wednesday**
- Track A:** Reducing Safety Related Attrition—Increasing Likelihood of Success: Novel Approaches to Safety Screening
 - Track B:** Expanding the Frontiers of Safety Pharmacology: Safety Pharmacology beyond Small Molecules
 - Track A:** Improving Support to Clinical Development: Anticipation of ADRs and Dose Limiting Toxicity
 - Track B:** Expanding the Frontiers of Safety Pharmacology: Population-Based Risk Assessment
- Thursday**
- Plenary:** Translation of Safety Pharmacology Findings to Humans
 - Workshop:** Best Practice: Comparing Safety Pharmacology as “stand alone” to SP-endpoint Inclusion In Toxicology—by Pharma, Regulators, and Academia



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**“LATINFARMA
HABANA 2013”**

*International Union of Pharmacology
Latin-American Association of Pharmacology
Cuban Society of Pharmacology*

SECOND ANNOUNCEMENT

**20th Latin-American Congress of Pharmacology
and Therapeutic**

5th Ibero-American Congress of Pharmacology

**5th International Congress and 11th National
Congress of the Cuban Society of Pharmacology**

**October, 21-25, 2013, Havana International Convention Center,
La Habana, Cuba**

[Website: http://www.latinfarma.com](http://www.latinfarma.com)

**TO STRENGTHEN THE IMPACT OF
LATIN AMERICAN PHARMACOLOGY
ON THE HEALTH SYSTEMS IN OUR COUNTRIES**





ANNOUNCEMENT

Executive Director of the Integrated Research on Disaster Risk (IRDR) programme

The International Council for Science (ICSU), the International Social Science Council (ISSC) and the UN International Strategy for Disaster Reduction (UN-ISDR) invite applications for the important post of Executive Director of the Integrated Research on Disaster Risk (IRDR) programme, which is becoming vacant on 30 November 2013.

IRDR is an exciting decade-long, internationally integrated, all-hazards research programme bringing together the talents of the natural, social, medical and engineering sciences in a way not attempted before. Its objectives are the scientific characterization of natural and human-induced environmental hazards, vulnerability and risk; the understanding of decision-making in complex and changing risk contexts; and the reduction of risk and curbing losses through knowledge-based actions. The programme is founded on the recognition that disaster prevention and mitigation are critical dimensions of the global poverty reduction agenda and efforts to adapt to climate change, and should be an integral part of all international and national development efforts.

The Executive Director heads an International Programme Office (IPO) for IRDR being hosted by the Institute of Remote Sensing and Digital Earth (RADI) of the Chinese Academy of Sciences in Beijing, China, with core funding from the China Association for Science and Technology (CAST).

The IPO meets the management needs of the IRDR programme and fully supports the work of the international Scientific Committee for the Integrated Research on Disaster Risk programme (SC-IRDR) responsible for its overall scientific planning, coordination, guidance and oversight.

Under the authority of the SC-IRDR, and in particular its Chair, the Executive Director of IRDR is expected to:

- facilitate the development, implementation and co-ordination of IRDR science projects, and those carried out jointly with partner programmes;
- liaise with such international centres as may be established within IRDR;
- ensure effective representation and links between IRDR and other relevant research programmes and their sponsoring organizations, relevant entities of the United Nations system, as well as the international policy community and funding agencies;
- support the development and implementation of an information strategy which promotes networking within the disaster risk research community and the wider practice community;
- play a major role in organizing capacity building and outreach activities;
- promote the establishment and/or strengthening of national IRDR committees and regional initiatives; and
- promote IRDR internationally and assist in the acquisition of funding for the programme.

The Executive Director will oversee a team of at least two professional staff members, and will direct all activities of the IPO, especially in respect of the preparation for, and conduct of, meetings of the SC-IRDR and of the implementation of actions decided upon by the Committee. He/she will have responsibility for drawing up annual programme and budgets of the Office, and ensuring that they are implemented. The Executive Director will maintain effective cooperation on administrative and technical matters with the host institution and relevant local organizations. He/she will have a particular responsibility for organizing a major IRDR Conference every second year in China.

The host institution, RADI, is recognized for its commitment to scientific research, with wide experience and expertise in research on disaster mitigation - especially through remote sensing, data collection and modelling. The Institute also has a proven track record in international cooperation, establishing long-term partnerships with institutions from more than 20 countries and international organizations. The IPO is located within RADI's new Headquarters within Space City, a major new research park on the edge of Beijing.

The Executive Director will hold a PhD in a natural, social, medical or engineering science discipline related to natural hazards and disaster risk reduction and have several years of direct experience of international research collaboration in an interdisciplinary setting. Proven management, fundraising and diplomatic skills will be essential. He/she will have an excellent command of written and spoken English, and a working knowledge of other major languages would be desirable. Some experience in the use of on-line consultation techniques and web-based collaborative tools would be an advantage.

Applications should include: (i) a Curriculum Vitae; (ii) a covering letter explaining why you are interested in the post, and outlining the skills and experience you feel you, the candidate, could bring to IRDR and its IPO; and (iii) the names and addresses of three individuals who have indicated their readiness to provide a reference.

The address to which applications should be sent is:

Dr. Howard Moore
International Council for Science (ICSU)
5, rue Auguste Vacquerie
75116 Paris, France
e-mail: howard.moore@icsu.org

The closing date for applications is 19 July 2013.

The annual salary of the Executive Director of IRDR will be negotiable in the range OF 80,000-100,000 euros equivalent and will take due account of the experience and qualifications of the candidate. The initial contract of employment will be of two years' duration, renewable. It is expected that the successful candidate would take up his/her appointment, located in Beijing, no later than end of December, 2013.

For more information on the IRDR visit the programme's website at: <http://www.irdrinternational.org>. •

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The IUPHAR Executive Committee serves as the Editorial Board.



Published by

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Contributions:

We welcome contributions from member societies, divisions, sections and committees. Please submit articles and photographs to iuphar@kumc.edu at least one month prior to the cover date.

Membership:

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ISSN 1462-9941

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