Pharmaceutical Sciences beyond 2020 – The rise of a new era in healthcare

Melbourne, Australia
April 13 – 16, 2014
MESSAGE FROM THE VICTORIAN MINISTER FOR TECHNOLOGY
FIFTH PHARMACEUTICAL SCIENCES
WORLD CONGRESS 2014 - 13 TO 16 APRIL

Welcome to Melbourne and the fifth Pharmaceutical Sciences World Congress 2014.

We are delighted to have secured this world-renowned congress for Melbourne and to welcome many of the world’s leading pharmaceutical scientists, researchers and organisations, representing 15 countries.

Over the past 15 years, the Victorian Government has committed $1.8 billion to the life sciences sector.

Victoria has emerged as a leading global destination for life sciences, home to such breakthroughs as the first cervical cancer vaccine and discoveries such as colony stimulating factors and rotavirus.

Victoria has a strong record of commercialising our research, with Melbourne now home to 160 biotech and pharma companies including CSL Ltd, and regional headquarters for major multinationals such as GlaxoSmithKline.

Welcome to Melbourne and the fifth Pharmaceutical Sciences World Congress 2014.

Melbourne is also one of only three cities in the world to have two universities – the University of Melbourne and Monash University – in the top 20 biomedicine rankings, along with 13 dedicated life sciences institutes that attract more than 40 per cent of Australia’s medical research funding.

The Victorian Government is proud to be a supporter of this congress. I wish you all a very productive and enjoyable time.

THE HON GORDON RICH-PHILLIPS MP
Minister for Technology

WELCOME TO MELBOURNE!

To our Global Colleagues in the Pharmaceutical Sciences, on behalf of the International Pharmaceutical Federation (FIP) Board of Pharmaceutical Sciences, we are pleased to welcome you to the 5th Pharmaceutical Sciences World Congress (PSWC) here in Melbourne!

Gathering the world’s leading scientists and researchers, the PSWC 2014 will extend its world-renowned reputation for providing a forum to discuss the latest scientific discoveries driving the pharmaceutical sciences world-wide, focused on the theme of ‘Pharmaceutical sciences – The rise of a new era in healthcare’. Breakthrough technologies and treatments, emerging markets, the power of the information age and societal needs and demands will guide session topics and be complemented by debates, posters and many opportunities to network and share with fellow scientists, researchers, industry representatives and students.

Welcome to the PSWC 2014!

FIP, the PSWC 2014 Programme Committee and the Local Organising Committee in Melbourne wish for you to experience an event that equals previous PSWCs in scope and opportunities for advancing the pharmaceutical sciences on a global level.

Welcome to the PSWC 2014!

Michel Buchmann
President
International Pharmaceutical Federation (FIP)

Ross McKinnon
Congress Chair and
FIP Vice President

YOUR HOST

The International Pharmaceutical Federation (FIP)

VENUE

1 Convention Centre Place
South Wharf Victoria Australia 3006
Tel.: +61 3 9235 8000
Fax: +61 3 9235 8001
E-mail: salesenquiries@mcec.com.au

MELBOURNE
PSWC
13-16 April 2014
YOUR HOSTS

INTERNATIONAL PHARMACEUTICAL FEDERATION (FIP)
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Kamal Midha
Immediate Past President
Luc Besançon
General Secretary & Chief Executive Officer
Ema Paulino
Professional Secretary
Henk de Jong
Scientific Secretary
Andy Gray
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Geoffrey Tucker
Chairman, Board of Pharmaceutical Sciences
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Vice President
Thony Björk
Vice President
Niels Kristensen
Vice President
Ross McKinnon
Vice President
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Vice President
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Honorary President

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Programme Co-chair

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Allan Evans (Australia)
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(as per 1 January 2014)
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Secretary
Carola van der Hoeff
Chief Operating Officer & Congress Director
Rachel van Kesteren
Marketing & Communication Assistant
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FIPEd Project Coordinator

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OFFICIAL CARRIER
Emirates

CONGRESS INFORMATION
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E-mail: pswc@mci-group.com
Website: www.fip.org/pswc2014

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MCI Amsterdam
Jan van Goyenkade 11
2508 HP Amsterdam
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Tel.: +31 20 6793611
E-mail: pswc@mci-group.com
Website: www.mci-group.com/netherlands

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ON SITE REGISTRATION

MCI Amsterdam
Jan van Goyenkade 11
1075 HP Amsterdam
The Netherlands
Tel. +31 20 6793612
E-mail: pswc@mci-group.com
Website: www.mci-group.com/thенetherlands

REGISTRATION FEES

<table>
<thead>
<tr>
<th></th>
<th>On Site</th>
</tr>
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<tbody>
<tr>
<td>Participant</td>
<td>$1,200.00 AUD</td>
</tr>
<tr>
<td>Student/Recent graduate</td>
<td>$1,200.00 AUD</td>
</tr>
<tr>
<td>On site day card (exhibition and Pharma Career Event)</td>
<td>$450.00 AUD</td>
</tr>
<tr>
<td>Accompanying person</td>
<td>$75.00 AUD</td>
</tr>
</tbody>
</table>

On site payment of registration fees can be made:
- By credit card: VISA, MasterCard or American Express are accepted.
- Cash in Australian Dollars

Workshops
- Workshop 1: Biosimilar monoclonal antibodies
- Workshop 2: Challenges with poorly water soluble drugs
- Workshop 3: Translational modelling
- Workshop 4: Transporters in drug disposition
- Workshop 5: Tailoring the drug development process

$200.00 AUD

*(All workshops will be conducted simultaneously, fee includes only one workshop)
All fees are in Australian Dollars
The registration fees include 10% GST
The Australian GST registration number is 96 823 329 314

The registration fee for participants includes:
- Admission to all sessions for which no additional registration is required
- Opening Ceremony
- Welcome Reception
- Entrance to the Exhibition
- Access to all submitted Abstracts and Biographies
- Congress Bag with Final Congress Programme and List of Participants (name and country of participants registered and paid by 15 March 2014)
- Access to a website where you can download the (slides of the) presentations (available as of 1 July 2014)

The registration fee for accompanying persons includes:
- Opening Ceremony
- Welcome Reception
- Entrance to the Exhibition

Please note that the fee for accompanying persons does NOT include admission to the sessions

CERTIFICATE OF ATTENDANCE
If you would like to receive a Certificate of Attendance please make sure to collect your certificate during the congress at the congress registration desk. Certificates will NOT be sent after the congress. Accompanying persons will not receive a certificate of attendance.

POSTER CERTIFICATE
If you would like to receive a poster certificate please make sure to collect this certificate during the congress at the Poster desk. Certificates for oral presentations will be handed out at the congress registration desk. Certificates will NOT be sent after the congress.

REGISTRATION DESK
Entrance hall MCEC
(Melbourne Convention and Exhibition Centre)
The registration desk at the MCEC will be open
- Saturday 12 April 2014 from 15:00 – 18:00
- Sunday 13 to Wednesday 16 April 2014 from 07:30 – 17:30

ON SITE REGISTRATION

MCI Amsterdam
Jan van Goyenkade 11
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- Sunday 13 to Wednesday 16 April 2014 from 07:30 – 17:30
SESSIONS OVERVIEW
SUNDAY APRIL 13, 2014

<table>
<thead>
<tr>
<th>Morning (from 09:00)</th>
<th>Meeting Room 207</th>
<th>Meeting Room 208</th>
<th>Meeting Room 209</th>
<th>Meeting Room 218</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-conference workshop 1</td>
<td>Pre-conference workshop 2</td>
<td>Pre-conference workshop 3</td>
<td>Pre-conference workshop 4</td>
<td></td>
</tr>
<tr>
<td>Afternoon</td>
<td>Pre-conference workshop 1</td>
<td>Pre-conference workshop 2</td>
<td>Pre-conference workshop 3</td>
<td>Pre-conference workshop 4</td>
</tr>
</tbody>
</table>

15:00 Opening Ceremony

SESSIONS OVERVIEW
MONDAY APRIL 14, 2014

<table>
<thead>
<tr>
<th>Morning (08:00)</th>
<th>Meeting Room 212 &amp; 213</th>
<th>Meeting Room 219 &amp; 220</th>
<th>Meeting Room 210</th>
<th>Meeting Room 211</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEYNOTE</td>
<td>Perspective - Pharmaceutical Sciences 2020: An American perspective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIP-ED KEYNOTE</td>
<td>PK-PD to enhance model-based drug development</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>MINI-SYMPOSIUM</td>
<td>Challenges in bioequivalence for inhaled products</td>
<td></td>
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<tr>
<td>PLENARY</td>
<td>Modern pharmacoepidemiology approaches to improve the benefit-risk ratio of medicines</td>
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</tbody>
</table>

10:00 – 10:30 Morning Tea

<table>
<thead>
<tr>
<th>10:30 – 12:00</th>
<th>Meeting Room 212 &amp; 213</th>
<th>Meeting Room 219 &amp; 220</th>
<th>Meeting Room 210</th>
<th>Meeting Room 211</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYMPOSIUM</td>
<td>Emerging markets/East meets West</td>
<td></td>
<td></td>
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<tr>
<td>SYMPOSIUM</td>
<td>Douwe Bremer Foundation Symposium</td>
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<tr>
<td>SYMPOSIUM</td>
<td>PK-PD for supporting clinical decisions and point-of-care dosage</td>
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<tr>
<td>SYMPOSIUM</td>
<td>Challenges for the development of drugs with low aqueous solubility and/or low permeability</td>
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<tr>
<td>SYMPOSIUM</td>
<td>Pharmacoeconomics: Bridging pharmaceutical science and practice</td>
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</tbody>
</table>

12:00 – 13:00 Lunch Break

<table>
<thead>
<tr>
<th>13:00</th>
<th>Meeting Room 212 &amp; 213</th>
<th>Meeting Room 219 &amp; 220</th>
<th>Meeting Room 210</th>
<th>Meeting Room 211</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEYNOTE</td>
<td>Beyond cost arbitrage: Globally networked polycentric R&amp;D addressing affordability and accessibility</td>
<td></td>
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<tr>
<td>SYMPOSIUM</td>
<td>Gene-based therapeutics possibilities and challenges</td>
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</tbody>
</table>

14:00 – 15:00 Afternoon Tea

<table>
<thead>
<tr>
<th>15:00 – 16:00</th>
<th>Meeting Room 212 &amp; 213</th>
<th>Meeting Room 219 &amp; 220</th>
<th>Meeting Room 210</th>
<th>Meeting Room 211</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEBATE</td>
<td>Comparing nanoparticle and classic microparticle in vivo fates</td>
<td></td>
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</tr>
<tr>
<td>ROUND TABLE</td>
<td>The role of biopharmaceutical tools in Quality by Design</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

16:00 – 17:00 Afternoon Tea

<table>
<thead>
<tr>
<th>16:00 – 17:00</th>
<th>Meeting Room 212 &amp; 213</th>
<th>Meeting Room 219 &amp; 220</th>
<th>Meeting Room 210</th>
<th>Meeting Room 211</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHOWCASE</td>
<td>Singapore Showcase</td>
<td></td>
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</tr>
<tr>
<td>SHOWCASE</td>
<td>Australia Showcase</td>
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</tbody>
</table>

27:30 – 18:30 PUBLIC LECTURE | Snakes, spiders and other venomous predators: how can venom peptides be developed into human therapeutics?
SESSIONS OVERVIEW
TUESDAY APRIL 15, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 07:00 – 08:00 | SUNRISE SESSION
Meet the Expert |
| 08:00 – 09:00 | PERSPECTIVE
PSWC Perspectives 2020: A European perspective |
| 09:00 – 10:00 | KEYNOTE
The Future of Vaccines
MINI-SYMPOSIUM
Evolution of the biosimilar regulatory landscape - challenges and opportunities
APSA KEYNOTE
Drug Transporters: Roles in New Drug Discovery and Development
MINI-SYMPOSIUM
Novel nanomaterials with drug delivery applications
MINI-SYMPOSIUM
Personalized medicine in the clinic - Ready for primetime? |
| 10:00 – 10:30 | Morning Tea |
| 10:30 – 12:00 | SYMPOSIUM
Academia and Pharma collaborative models - finding the right balance
SYMPOSIUM
Immunogenicity mitigation strategies for biosimilars
APSA SYMPOSIUM
Barrier mechanisms team up: Interplay between transporters, enzymes and tight junctions
SYMPOSIUM
Nano-technologies for drug delivery
SYMPOSIUM
Enabling personalized medicine: Getting the framework right? |
| 12:00 – 13:00 | Lunch Break |
| 13:00 | SYMPOSIUM
Drug development efforts to combat tropical diseases
MINI-SYMPOSIUM
Intracellular drug trafficking and targeting
SYMPOSIUM
Safety of nanomedicines: Reality check?
SUBMITTED ORALS |
| 13:30 | SUBMITTED ORALS |
| 14:00 | KEYNOTE
Accelerating Development for China and Beyond: Patients, Science, and Public Health
SYMPOSIUM
APSA Submitted Orals
SUBMITTED ORALS |
| 14:30 – 15:30 | KEYNOTE
Therapeutic monoclonal antibodies: Where have we come, and where are we going? |
| 15:30 – 16:00 | Afternoon Tea |
| 16:00 – 17:30 | SHOWCASE
India Showcase
DEBATE/ROUNDTABLE
Interchangeability of biosimilars - Yes or no?
SYMPOSIUM
APSA Early Career Researcher Symposium
SUBMITTED ORALS
SUBMITTED ORALS |
### SESSIONS OVERVIEW
#### WEDNESDAY APRIL 16, 2014

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:00 – 08:00</td>
<td>SUNRISE SESSION Meet the Expert</td>
</tr>
<tr>
<td>08:00 – 09:00</td>
<td>PERSPECTIVE Pharmaceutical Sciences 2020 An Asian perspective</td>
</tr>
<tr>
<td>09:00 – 10:00</td>
<td>FIP KEYNOTE A glance on current progress of innovative drug R&amp;D in China</td>
</tr>
<tr>
<td>10:00 – 10:30</td>
<td>Morning Tea</td>
</tr>
<tr>
<td>10:30 – 12:00</td>
<td>SYMPOSIUM Natural products - Sustainable use of medicinal plant resources</td>
</tr>
<tr>
<td>12:00 – 13:00</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>13:00</td>
<td>SYMPOSIUM Crossing the bridge - Bridging studies</td>
</tr>
<tr>
<td>13:30</td>
<td>KEYNOTE Understanding the physico-chemical and biological determinants of pharmacokinetics from humans to organs, cells and nanoparticles</td>
</tr>
<tr>
<td>14:00</td>
<td>SUBMITTED ORALS</td>
</tr>
<tr>
<td>14:30 – 15:30</td>
<td>DDA SUBMITTED ORALS</td>
</tr>
<tr>
<td>15:30 – 16:00</td>
<td>Afternoon Tea</td>
</tr>
<tr>
<td>16:00 – 17:30</td>
<td>SHOWCASE Showcase China</td>
</tr>
<tr>
<td>16:00 – 17:00</td>
<td>DEBATE/ROUNDTABLE Translation through cooperation - how can clinical pharmacology and pharmaceutical sciences work together more effectively?</td>
</tr>
<tr>
<td>16:00 – 17:00</td>
<td>DDA SUBMITTED ORALS</td>
</tr>
<tr>
<td>16:00 – 17:00</td>
<td>DEBATE/ROUNDTABLE Recent trends and standards for dissolution and drug release</td>
</tr>
</tbody>
</table>
PSWC EDUCATION FORUM

SATURDAY 12 APRIL

12.00 – 13.00
NETWORKING LUNCH FOR ALL PARTICIPANTS

13.00 – 17.00
PSWC EDUCATION DAY

One half day of education activities at PSWC specially designed for PhD students and other groups that are involved in pharmaceutical education in the broadest sense of the word. There will be a big student symposium and a smaller invitation-only workshop involving key figures in pharmaceutical education from both the science and practice areas.

Participants of both sessions will lunch together so they can take full advantage of networking opportunities. Monash University has generously agreed to provide its outstanding educational facilities for these activities.

STUDENT SYMPOSIUM

The PSWC 2014 meeting aims to foster professional development of young pharmaceutical scientists. In keeping with this ethos, this student focussed symposium will provide an opportunity for direct engagement with key pharmaceutical science leaders. Held at the Monash University Parkville Campus (a short tram ride from the city), this free symposium is centred around the theme “a vision for young pharmaceutical scientists.” Topics have been chosen to provide future perspectives on wide ranging areas from when to publish or patent to how to use global networks effectively. Speakers will include leading pharmaceutical scientists as well as leaders of professional bodies such as FIP, AAPS and EUFEPS.

This symposium also provides a fantastic opportunity for students to meet these eminent pharmaceutical scientists and educators at complimentary networking functions.

SUNDAY 13 APRIL

4 optional pre-conference workshops to be delivered by Monash University faculty members and invited speakers will provide deep insights into the following topical areas (Separate registration is required).

$200.00 AUD per Workshop

PSWC WORKSHOP 1: BIOSIMILAR MONOCLONAL ANTIBODIES

9.00 – 12.30
LOCATION: Meeting Room 207

PROGRAMME

This workshop will be delivered by Anita O’Connor (USA).

In June 2013, the European Medicines Agency’s Committee for Medicinal Products for Human Use (CHMP) recommended two infliximab containing monoclonal antibody biosimilar preparations. These positive recommendations included extrapolation to indications for which clinical studies have not yet been conducted with the biosimilar product but rather based on the indications approved for the reference monoclonal antibody. Patent expirations for a number of other high market monoclonal antibody therapeutics are also imminent. This workshop will examine the emerging regulatory framework around this important class of biosimilars and examine clinical, analytical and market frameworks for their introduction.

CHAIRS
Christopher Porter (Monash University, Australia)
Orlagh Feeney (Monash University, Australia)
Sifei Han (Monash University, Australia)

SPEAKERS
Michel Buchmann (President, FIP)
Henri Manasse (American Society of Health-System Pharmacists)
Marilyn Morris (President, AAPS)
Meindert Danhof (President, EUFEPS)
Cameron Smith (FB Rice, Australial)
Colin Pouton (Monash University, Australia)
Nigel Bunnett (Monash University, Australia)

TOPICS INCLUDE:
- FIP:6 Ed - What is it and what is it doing?
- The importance of global professional networks
- Successfully patenting innovation while maintaining a competitive publication record
- Biologics versus small molecules in 2020
- Big data, the virtual frontier of medical research

Monash Institute of Pharmaceutical Sciences
Monash University (Parkville Campus)
381 Royal Parade, Parkville
Victoria 3052, Australia

MONASH UNIVERSITY

Sponsored by

GATTEFOSSÉ

PSWC WORKSHOP 2: CHALLENGES OF POORLY WATER SOLUBLE DRUGS

9.00 – 12.30
LOCATION: Meeting Room 208

PROGRAMME

This workshop will be delivered by Ania O’Connor (USA).

In June 2013, the European Medicines Agency’s Committee for Medicinal Products for Human Use (CHMP) recommended two infliximab containing monoclonal antibody biosimilar preparations. These positive recommendations included extrapolation to indications for which clinical studies have not yet been conducted with the biosimilar product but rather based on the indications approved for the reference monoclonal antibody. Patent expirations for a number of other high market monoclonal antibody therapeutics are also imminent. This workshop will examine the emerging regulatory framework around this important class of biosimilars and examine clinical, analytical and market frameworks for their introduction.

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- The importance of global professional networks
- Successfully patenting innovation while maintaining a competitive publication record
- Biologics versus small molecules in 2020
- Big data, the virtual frontier of medical research
PSWC WORKSHOP 3: TRANSLATIONAL MODELLING
9.00 – 12.30
LOCATION: Meeting Room 209

PROGRAMME
Introduction to modelling and translational models
Carl Kirkpatrick (Australia)
Translation on in-vitro and biochemical data – Bench to bedside
Jurgen Bulitta (Australia)
Pharmacokinetics – Species scaling in cancer
Kashyap Patel (Australia)
Translational Diabetes models
Cornelia Landersdorfer (Australia)
Optimal design of Phase I to III studies in patient groups with limited sampling opportunities
Kris Jamsen (Australia)

PSWC WORKSHOP 4: TRANSPORTERS IN DRUG DISPOSITION
9.00 – 12.30
LOCATION: Meeting Room 218

PROGRAMME
9.00 – 9.10
Introduction
Joseph Nicolazzo (Australia)
9.10 – 9.50
Methods and models for assessing hepatobiliary drug transport processes
Kim Brouwer (USA)
9.50 – 10.25
Methods for assessing BBB drug transporters and approaches to overcome the function of drug efflux transporters
William Elmquist (USA)
10.25 – 11.00
Drug transporter proteomics for discovery and profiling
Tetsuya Terasaki (Japan)
11.00 – 11.20
Coffee
11.20 – 11.55
In silico approaches to predict transporter interaction
Peter Swaan (USA)
11.55 – 12.30
Transporters: What do the regulators need to know?
Lei Zhang (USA)
12.30
Lunch

EXPLANATION OF COLOURS

East meets West
Emerging markets, regulatory frameworks, harmonization, natural medicines

Creating the cure
The scientist at the bedside (translational modeling and bioinformatics, biomarkers)

Technologies for tomorrow’s medicines
Materials science, nanomedicine, green technologies, excipients

Meeting society’s needs – Accountability in medicines development
Biosimilars, clinical trials in the 21st century, pharmacoepidemiology/pharmacovigilance, HTA

The power of shared Information
Academic/pharma models, not-for-profit, drug design including fragment based, vaccines, molecular libraries

Solving the secrets of the cell
Cell therapies, imaging, predictive toxicology, new molecular and cellular targets

Explaining the Abstract codes in front of the titles: these codes are the abstract codes that can be found on www.eventure-online.com/eventure/welcome.do?type=public&congress=6_14PSW#217236
The code: (SU-01-01) SU = the day, first number is the session number, second number is the speaker number of that session.
**SUNDAY**
APRIL 13, 2014

**ROOM:** PLENARY 2
15.00 – 17.00 FIP OPENING PLENARY CEREMONY
Opening Plenary
(SU-01-01) THE BIG CHALLENGES
Peter Doherty, Nobel Laureate in Physiology or Medicine (1996) and Author,
University of Melbourne, Australia
17.00 – 19.00 WELCOME RECEPTION
Exhibition Hall

**MONDAY**
APRIL 14, 2014

**ROOM:** PLENARY 2
15.00 – 17.00 FIP OPENING PLENARY CEREMONY
Opening Plenary
(MO-01-01) THE BIG CHALLENGES
Peter Doherty, Nobel Laureate in Physiology or Medicine (1996) and Author,
University of Melbourne, Australia
17.00 – 19.00 WELCOME RECEPTION
Exhibition Hall

**ROOM:** PLENARY 3
09.00 – 10.00 RE-INVENTING CLINICAL DRUG DEVELOPMENT: IT’S ALL ABOUT THE PHARMACEUTICAL SCIENCE!
Keynote
CHAIRS
Susan Charman (Australia) and Kenneth Lee (Australia)
(MO-02-01) Mark Levick, Novartis, Basel, Switzerland

**ROOM:** PLENARY 3
10.00 – 12.00 RE-INVENTING CLINICAL DRUG DEVELOPMENT: IT’S ALL ABOUT THE PHARMACEUTICAL SCIENCE!
Keynote
CHAIRS
Susan Charman (Australia) and Kenneth Lee (Australia)
12.00 – 14.00 LUNCH
(LUNCH)
14.00 – 16.00 RE-INVENTING CLINICAL DRUG DEVELOPMENT: IT’S ALL ABOUT THE PHARMACEUTICAL SCIENCE!
Keynote
CHAIRS
Susan Charman (Australia) and Kenneth Lee (Australia)
(MO-02-01) Mark Levick, Novartis, Basel, Switzerland

**ROOM:** PLENARY 3
15.00 – 17.00 RE-INVENTING CLINICAL DRUG DEVELOPMENT: IT’S ALL ABOUT THE PHARMACEUTICAL SCIENCE!
Keynote
CHAIRS
Susan Charman (Australia) and Kenneth Lee (Australia)
(MO-02-01) Mark Levick, Novartis, Basel, Switzerland
17.00 – 19.00 WELCOME RECEPTION
Exhibition Hall

**ROOM:** PLENARY 3
16.00 – 17.00 RE-INVENTING CLINICAL DRUG DEVELOPMENT: IT’S ALL ABOUT THE PHARMACEUTICAL SCIENCE!
Keynote
CHAIRS
Susan Charman (Australia) and Kenneth Lee (Australia)
(MO-02-01) Mark Levick, Novartis, Basel, Switzerland
17.00 – 19.00 WELCOME RECEPTION
Exhibition Hall

**ROOM:** MEETING ROOM 212 & 213
09.00 – 10.00 FIP-ED KEYNOTE
CHAIRS
Jennifer Marriott (Australia) and Joanne Cheah (Australia)
(MO-03-01) Duncan Craig, UCL School of Pharmacy, London, UK
10.00 – 12.00 FIP-ED KEYNOTE
CHAIRS
Jennifer Marriott (Australia) and Joanne Cheah (Australia)
12.00 – 14.00 LUNCH
(LUNCH)
14.00 – 16.00 FIP-ED KEYNOTE
CHAIRS
Jennifer Marriott (Australia) and Joanne Cheah (Australia)
(MO-03-01) Duncan Craig, UCL School of Pharmacy, London, UK
16.00 – 17.00 FIP-ED KEYNOTE
CHAIRS
Jennifer Marriott (Australia) and Joanne Cheah (Australia)
(MO-03-01) Duncan Craig, UCL School of Pharmacy, London, UK
17.00 – 19.00 WELCOME RECEPTION
Exhibition Hall
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<th>ROOM:</th>
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<tr>
<td>CHAIR</td>
<td>Stephanie Reuter-Lange (Australia)</td>
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<td>(MO-04-01)</td>
<td>APPLICATION OF PHARMACOMETRICS TO PRE-CLINICAL DATA TO UNDERSTAND AND OPTIMIZE ANTIMALARIAL THERAPY</td>
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<td>Carl Kirkpatrick, Monash University, Melbourne, Australia</td>
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<tr>
<td>(MO-04-02)</td>
<td>HYBRID PHARMACODYNAMIC MODELING ON CLINICAL BIOMARKERS</td>
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<td>Don Mager, University of Buffalo, New York, USA</td>
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<tr>
<td>CHAIR</td>
<td>Anke-Hilse Maitland van der Zee (The Netherlands)</td>
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<td>(MO-06-01)</td>
<td>MODERN PHARMACOEPIDEMIOLOGY APPROACHES TO IMPROVE THE BENEFIT-RISK RATIO OF MEDICINES</td>
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<tr>
<td>Munir Pirmohamed, Institute of Translational Medicine, Liverpool, UK</td>
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<th>ROOM:</th>
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<th>CHALLENGES IN BIOEQUIVALENCE FOR INHALED PRODUCTS</th>
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<tr>
<td>CHAIR</td>
<td>Vinod Shah (USA)</td>
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<tr>
<td>(MO-05-01)</td>
<td>IVIVCS AND THE POTENTIAL IMPACT OF VARIABILITY IN REGIONAL AIRWAY DEPOSITION PATTERNS ON THE BIOEQUIVALENCE OF PULMONARY PRODUCTS</td>
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<td>Andy Clark, Novartis, California, USA</td>
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<td>(MO-05-02)</td>
<td>THE ROLE OF PHARMACOKINETICS IN BIOEQUIVALENCE OF STUDIES OF INHALATION DRUGS?</td>
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<td>Guenther Hochhaus, University of Florida, USA</td>
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<th>ROOM:</th>
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<th>10.30 – 12.00</th>
<th>EMERGING MARKETS/EAST MEETS WEST</th>
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<tr>
<td>CHAIR</td>
<td>Craig Rayner (Australia)</td>
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<td>(MO-07-01)</td>
<td>USING OF VIRTUAL CHINESE POPULATION FOR ETHIC SENSITIVITY ASSESSMENT IN DRUG DEVELOPMENT: INTRODUCTION OF ROCHE-PUMCH CLINICAL PHARMACOLOGY FELLOWSHIP</td>
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<td>Jun Shi, Roche, Shanghai, China</td>
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<td>(MO-07-02)</td>
<td>PHARMACEUTICALS EMERGING MARKET-WEST MEETS TAIWAN, THE GATE OF FAR EAST</td>
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<td>Oliver Hu, National Defense Medical Center, Taipei, China Taiwan</td>
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<td>(MO-07-03)</td>
<td>DEVELOPMENT OF THE PHARMACEUTICAL PRODUCT FOOD CHAIN – WHAT NEXT IN THE CHANGING WORLD OF STAKEHOLDERS?</td>
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<td>Ian Wilding, Independent Consultant, Nottingham, UK</td>
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ROOM: MEETING ROOM 212 & 213
10.30 – 12.00
DOUWE BREIMER FOUNDATION SYMPOSIUM
Symposium

CHAIR
Douwe Breimer, (The Netherlands)

(MO-08-01) SYSTEMS PHARMACOLOGY – TOWARDS MULTI-TARGET THERAPEUTIC INTERVENTIONS
Meindert Danhof, Leiden University, Leiden, The Netherlands

(MO-08-02) INTEGRATING NETWORK AND PHARMACODYNAMIC MODELS OF DRUG ACTION
Don Mager, University of Buffalo, New York, USA

(MO-08-03) PHARMACOPROTEOMICS: QUANTITATIVE TARGETED ABSOLUTE PROTEOMICS (QTAP) AND ITS APPLICATION TO THE RE-CONSTRUCTION OF IN VIVO PROTEIN FUNCTION
Tetsuya Terasaki, Tohoku University, Tokyo, Japan

ROOM: MEETING ROOM 219 & 220
10.30 – 12.00
PK-PD FOR SUPPORTING CLINICAL DECISIONS AND POINT-OF-CARE DOSAGE
Symposium

CHAIR
Carl Kirkpatrick, (Australia)

(MO-09-01) PK-PD ANALYSIS OF MECHANISM OF TOXICITY OF MOLECULAR TARGET DRUGS: TOWARDS OPTIMAL TREATMENT OF CANCER
Hiroshi Suzuki, University of Tokyo, Japan

(MO-09-02) DESIGN, GOVERNANCE AND IMPLEMENTATION OF WEB-BASED DECISION ANALYTICS TO GUIDE PEDIATRIC PHARMACOTHERAPY
Jeffrey Barrett, Children’s Hospital of Philadelphia, USA

(MO-09-03) POPULATION PHARMACOKINETICS AND PHARMACOGENETICS OF VITAMIN D IN HIV-POSITIVE PATIENTS
Monia Guidi, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland
**MONDAY**

**APRIL 14, 2014**

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**ROOM: MEETING ROOM 210**

10.30 – 12.00

**CHALLENGES FOR THE DEVELOPMENT OF DRUGS WITH LOW AQUEOUS SOLUBILITY AND/OR LOW PERMEABILITY**

Symposium

**CHAIR**

Val Stella (USA)

(MO-10-01) **SOLUBILITY AND FORMULATE-ABILITY: KEY MOLECULAR DETERANTS OF DEVELOPABILITY OF LIGANDS TO CONTEMPORARY TARGETS**

Christel Bergstrom, Uppsala University, Uppsala, Sweden

(MO-10-02) **DEVELOPMENT OF ORAL DRUG PRODUCT BASED ON BCS CONCEPT; INTEGRATING DRUG PERMEABILITY, SOLUBILITY AND DISSOLUTION**

Shinji Yamashita, Setsunan University, Neyagawa, Japan

(MO-10-03) **SOLUBILIZATION FOR ORAL DRUG DELIVERY: NEW CHALLENGES IN PREDICTION**

Bradley Anderson, University of Kentucky, USA

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**ROOM: MEETING ROOM 211**

10.30 – 12.00

**PHARMACOEPIDEMIOLOGY: BRIDGING PHARMACEUTICAL SCIENCE AND PRACTICE**

Symposium

**CHAIR**

Lloyd Sansom (Australia)

(MO-11-01) **TO GENOTYPE OR NOT TO GENOTYPE: PHARMACOGENETICS OF COUMARINS. RESULTS FROM OBSERVATIONAL STUDIES AND CLINICAL TRIALS**

Anke-Hilse Maitland – Van Der Zee, University of Utrecht, The Netherlands

(MO-11-02) **MULTIMORBIDITY, POLYPHARMACY AND REGIMEN COMPLEXITY: THE EXAMPLE OF PEOPLE WITH COGNITIVE AND FUNCTIONAL DECLINE**

Simon Bell, Monash University, Melbourne, Australia
**MONDAY APRIL 14, 2014**

**ROOM:** MEETING ROOM 219 & 220

13.00 – 14.30

**SUBMITTED ORALS**

**CHAIR**
Ian Tucker (New Zealand)

13.00 – 13.15

(MO-14-01)

**STRATEGIC FUNCTIONALIZATION OF NANOMATERIALS FOR POTENTIAL BIOMEDICAL APPLICATIONS**
Giorgia Pastorin (Singapore)

13.15 – 13.30

(MO-14-02)

**DEVELOPMENT OF AN IN VIVO ASSESSMENT TOOL FOR QUANTITATIVE AND QUALITATIVE MEASUREMENT OF SKIN DRUG DELIVERY: PRELIMINARY EVALUATION WITH MICRONEEDLES**
Heather Benson (Australia)

13.30 – 13.45

(MO-14-03)

**BIOLOGICAL ASSESSMENT OF SILICA NANOPARTICLES FOCUSED ON NEUTROPHIL FOR ENSURING SAFETY OF NANOMATERIALS**
Kazuma Higashisaka (Japan)

13.45 – 14.00

(MO-14-04)

**NOVEL NANOVESICLES OF PHOSPHONATED CALIXARENE TO ENHANCE THE CELLULAR UPTAKE OF LOADED CARGO**
Jingxin Mo (Australia)

14.00 – 14.15

(MO-14-05)

**PREPARATION AND ANTI-TUMOR EFFICACY ASSESSMENT OF A MULTIPLE-UNIT DRUG DELIVERY SYSTEM FOR A CHINESE MEDICINAL FORMULA NIUHUANG XINGXIAO WAN BASED ON MICRO/NANO TECHNOLOGIES**
Feng Nianping (China)

14.15 – 14.30

(MO-14-06)

**MECHANISTIC INSIGHTS INTO MAB AGGREGATION AND THE DEVELOPMENT OF NOVEL PREDICTIVE TOOLS TO STABILIZE THERAPEUTIC PROTEINS**
Veyssel Kayser (Australia)

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**ROOM:** MEETING ROOM 212 & 213

13.00 – 14.00

**FIP Keynote**

13.00 – 13.15

(MO-12-01)

**DRUG DELIVERY TO THE BRAIN: IS THE BLOOD-BRAIN BARRIER A FRIEND OR FOE?**
Joseph Nicolazzo (Australia)

13.15 – 13.30

(MO-13-01)

**ADVERSE EFFECTS OF INTESTINAL MUCOSAL INJURIES DUE TO DRUG DELIVERY SYSTEMS**
William Banks, University of Washington, USA

13.30 – 13.45

(MO-13-02)

**CEPHALOSPORIN RESISTANCE IN HOSPITALIZED PATIENTS: ASSOCIATION WITH AGE AND INTRAPARTURIENTAL PATTERNS**
Sven Sjoerdsma, University of Washington, USA

13.45 – 14.00

(MO-13-03)

**IN VIVO EVALUATION OF A DUODENAL SLEEVE HYPOTHESIS TO TREAT OBESITY**
Robert Egan, University of Washington, USA

14.00 – 14.15

(MO-13-04)

**REVIEW OF THE CURRENT state OF THE ART FOR THE TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)**
Dennis Cates, University of Washington, USA

14.15 – 14.30

(MO-13-05)

**STUDIES OF NEUROGENETIC FUNCTION IN THE PERIPHERAL NERVE**
James Galloway, University of Washington, USA

14.30 – 14.45

(MO-13-06)

**ANIMAL MODELS OF ANTIBODY THERAPEUTICS IN THE TREATMENT OF AUTOIMMUNE DISEASES**
Vicki Miller, University of Washington, USA

14.45 – 15.00

(MO-14-01)

**THE ROLE OF NEUTRALISATION IN THE TREATMENT OF AUTOIMMUNE DISEASES**
Holly Geerts, University of Washington, USA

15.00 – 15.15

(MO-14-02)

**STUDIES OF THE ROLE OF IMMUNE-MEDIATED THERAPIES IN THE TREATMENT OF AUTOIMMUNE DISEASES**
Thomas Grady, University of Washington, USA

15.15 – 15.30

(MO-14-03)

**ANIMAL MODELS OF THERAPEUTICS IN THE TREATMENT OF AUTOIMMUNE DISEASES**
Nellie Roeder, University of Washington, USA

15.30 – 15.45

(MO-14-04)

**THE ROLE OF THERAPEUTIC IMMUNOLOGIES IN THE TREATMENT OF AUTOIMMUNE DISEASES**
David Welsh, University of Washington, USA
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<td>GENE-BASED THERAPEUTICS: POSSIBILITIES AND CHALLENGES Symposium</td>
<td>Colin Pouton (Australia)</td>
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<td>(MO-15-01)</td>
<td>CO-DELIVERY OF DRUGS AND siRNA TO TREAT MULTIDRUG RESISTANT CANCERS</td>
<td>Vladimir Torchilin, Northeastern University, Boston, USA</td>
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<td>(MO-15-02)</td>
<td>PERSONALISED GENETIC MEDICINES FOR INHERITED DISORDERS</td>
<td>Steve Wilton, University of Western Australia, Perth, Australia</td>
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<td>(MO-15-03)</td>
<td>DELIVERING PLASMID DNA TO HEPATOCYTE NUCLEI</td>
<td>Leaf Huang, University of North Carolina, USA</td>
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<td>13.00 – 14.00</td>
<td>MEDICATION SAFETY: CHALLENGES FOR THE 21st CENTURY Plenary</td>
<td>Libby Roughead, University of South Australia, Adelaide, Australia</td>
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### MONDAY
**APRIL 14, 2014**

**ROOM:** MEETING ROOM 212 & 213

14.00 – 15.30

**SUBMITTED ORALS**

**CHAIR**
Takuya Kumamoto (Japan)

14.00 – 14.15
(MO-18-01)

**DESIGN, SYNTHESIS AND ANTIDEPRESSANT ACTIVITIES OF SOME NOVEL FATTY ACID ANALOGUES**
Jubie Selvaraj (India)

14.15 – 14.30
(MO-18-02)

**COMPUTATIONAL PREDICTION OF APPARENT SOLUBILITY OF LIPOPHILIC DRUG MOLECULES IN FASTED STATE SIMULATED INTESTINAL FLUID**
Christel Bergström (Sweden)

14.30 – 14.45
(MO-18-03)

**SMALL MOLECULE BLOCKERS OF N-TYPE CALCIUM ION CHANNELS**
Peter Duggan (Australia)

14.45 – 15.00
(MO-18-04)

**SYNTHESIS AND ANTICANCER ACTIVITY OF 2-SUBSTITUTED AMINOMETHYL-5-METHYLENYCLOPENTANONES AS APOPTOSIS INDUCERS THROUGH DOWN-REGULATING C-FLIP**
Linxiang Zhao (China)

15.00 – 15.15
(MO-18-05)

**SUPPRESSION OF LIPOPOLYSACCHARIDE-INDUCED MACROPHAGE ACTIVATION BY ALIPHATIC AMINE-HEPARIN CONJUGATES**
Shinya Yanamoto (Japan)

15.15 – 15.30
(MO-18-06)

**THE SEROTONIN 5-HT3 RECEPTOR C AND E SUBUNITS INFLUENCE THE RESPONSE TO ANTAGONISTS**
Helen Irving (Australia)

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**ROOM:** MEETING ROOM 219 & 220

14.30 – 15.30

**REGULATORS, PAYERS AND INDUSTRY – CONVERGENCE OR DIVERGENCE**

**FIP Keynote**

**CHAIR**
John Skerritt (Australia)

14.30 – 14.45
(MO-19-01)

**Lloyd Sansom,** Independent Consultant, Adelaide, Australia
### Room: MEETING ROOM 211

**14.00 – 15.30**

**SUBMITTED ORALS**

**Chair**
Christel Bergström (Sweden)

- **14.00 – 14.15**
  - ALTERTING MEDICINES TO MEET PATIENT NEEDS: PHARMACISTS ARE THE KEY TO ENSURING QUALITY
    Beverly Glass (Australia)

- **14.15 – 14.30**
  - POTENTIAL RISK FACTORS OF SERIOUS ADVERSE DRUG REACTIONS IN THAILAND
    Sareeya Wechwithan (Thailand)

- **14.30 – 14.45**
  - A COMPARISON OF ANTICHOLINERGIC RISK SCALES AND ASSOCIATIONS TO ADVERSE HEALTH OUTCOMES IN OLDER PEOPLE
    Prasad Nishtala (New Zealand)

- **14.45 – 15.00**
  - BIO REGULATORY REQUIREMENTS OF PRESSURIZED METERED DOSE INHALER (PMDI) AND OPTIMIZING IN-VITRO CHARACTERIZATION OF INHALER
    Deepika Aggarwal (India)

- **15.00 – 15.15**
  - CLINICAL IMPLICATIONS OF OXIDIZED LDL IN FREQUENT-RELAPSE MINIMAL CHANGE NEPHROTIC SYNDROME PATIENTS
    Sachiko Tanaka (Japan)

- **15.15 – 15.30**
  - EFFICACY OF A SCAR THERAPY TREATMENT: A RANDOMIZED, DOUBLE-BLIND, CONTROLLED TRIAL
    Marina Holt (Australia)

### Room: MEETING ROOM 212

**14.00 – 15.30**

**SUBMITTED ORALS**

**Chair**
Greg Peterson (Australia)

- **14.00 – 14.15**
  - ALTERING MEDICINES TO MEET PATIENT NEEDS: PHARMACISTS ARE THE KEY TO ENSURING QUALITY
    Beverly Glass (Australia)

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    Marina Holt (Australia)
MONDAY
APRIL 14, 2014

ROOM: MEETING ROOM 219 & 220
16.00 – 17.30
CARRIER MEDIATED TRANSPORT THROUGH MEMBRANES:
THE EXCEPTION OR THE RULE?
Moderated Debate

CHAIR
Giovanni Pauletti (USA)

(MO-24-01)
Dhiren Thakker, University of North Carolina, USA

(MO-24-02)
Alex Avdeef, In-ADME Research, New York, USA

ROOM: MEETING ROOM 212 & 213
16.00 – 17.30
SINGAPORE SHOWCASE

Showcase

CHAIR
Wai Keung Chui (Singapore)

(MO-23-01)
AN OVERVIEW OF PHARMACEUTICAL EDUCATION, RESEARCH AND
DEVELOPMENT IN SINGAPORE
Wai Keung Chui, National University of Singapore, Singapore

(MO-23-02)
TOWARDS THE DEVELOPMENT OF NEW CANCER CHEMOTHERAPEUTICS
Christina Li Lin Chai, National University of Singapore, Singapore

(MO-23-03)
DESIGN AND FUNCTION OF ENGINEERED PEPTIDE- AND POLYMER-
BASED BIOMATERIALS FOR ANTIMICROBIAL THERAPEUTICS
Rachel Pui-Lai EE, National University of Singapore, Singapore

(MO-23-04)
TYROSINE KINASE INHIBITORS: NEW HOPE WITH NEW CHALLENGES
Han Kiat Ho, National University of Singapore, Singapore
**MONDAY**  
**APRIL 14, 2014**

**ROOM: MEETING ROOM 210**

**16.00 – 17.30**

**THE ROLE OF BIOPHARMACEUTICAL TOOLS IN QUALITY BY DESIGN**  
Round table

**CHAIR**  
Jennifer Dressman (Germany)

**(MO-25-01)**

**THE ROLE OF BIOPHARMACEUTICAL TOOLS IN QUALITY BY DESIGN**  
Jennifer Dressman, Goethe University, Frankfurt, Germany

**(MO-25-02)**

**QUALIFYING VS. VERIFYING VS. VALIDATING MULTI-LEVEL NETWORKED MODELS**  
Amin Rostami-Hodjegan, Sim-CYP, Sheffield, UK

**(MO-25-03)**

**HORSES FOR COURSES: PICKING THE RIGHT BIOPHARMACEUTICS TOOL FOR QBD IN THE INDUSTRIAL SETTING**  
Bertil Abrahamsson, Astra Zeneca R&D, Wilmington, USA

**(MO-25-04)**

**THE BIOPHARMACEUTICS RISK ASSESSMENT ROADMAP (BIORAM): BUILDING IN CLINICAL RELEVANCE FOR PATIENT BENEFIT**  
Arzu Selen, FDA’s Office of New Drug Quality Assessment, Maryland, USA

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**ROOM: MEETING ROOM 211**

**16.00 – 17.30**

**DRUG DISCOVERY AND DEVELOPMENT IN AUSTRALIA**  
Australian Showcase

**CHAIR**  
William Charman (Australia)

**(MO-26-01)**

**BUILDING A GLOBAL DRUG DISCOVERY COMPANY FROM AUSTRALIA**  
Deborah Rathjen, Bionomics, Adelaide, Australia

**(MO-26-02)**

**PHARMACEUTICAL SCIENCES IN AUSTRALIA: DRUG DISCOVERY AND DEVELOPMENT FROM AN AUSTRALIAN PERSPECTIVE**  
Nigel Bunnett, Monash University, Melbourne, Australia

**(MO-26-03)**

**GLYCOPEPTIDE AND LIPOPEPTIDE ANTIBIOTICS WITH POTENT ACTIVITY AGAINST MULTI-DRUG RESISTANT BACTERIA RESPONSIBLE FOR UTI, CSSSI AND CAP/NP INFECTIONS**  
Matthew Cooper, University of Queensland, Queensland, Australia

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**MONDAY**  
**APRIL 14, 2014**

**ROOM: MEETING ROOM 211**

**17.30 – 18.30**

**SNAKES, SPIDERS AND OTHER VENOMOUS PREDATORS**  
Public Lecture

**CHAIR**  
Raymond Norton (Australia)

**(MO-27-01)**

**HOW CAN VENOM PEPTIDES BE DEVELOPED INTO HUMAN THERAPEUTICS?**  
Glenn King, University of Queensland, Queensland, Australia
PLENARY 3
THE FUTURE OF VACCINES
FIP Keynote

CHAIR
Colin Pouton (Australia)

Sir Gus Nossal, Melbourne, Australia

ROOM: 09.00 – 10.00 (TU-05-01)

TUESDAY APRIL 15, 2014

ROOM: MEETING ROOM 219 & 220
07.00 – 08.00 (TU-01-01)

SUNRISE SESSION: MEET THE EXPERT
Expert: Marilyn Morris (USA)
Academic chair: Don Mager (USA)
Student host: Sam Robinson (Australia)

TUESDAY APRIL 15, 2014

ROOM: MEETING ROOM 210
07.00 – 08.00 (TU-02-01)

SUNRISE SESSION: MEET THE EXPERT
Expert: Wolfgang Sadee (USA)
Academic Chair: Hitoshi Sasaki (Japan)
Student host: Sharad Mangal (Australia)

TUESDAY APRIL 15, 2014

ROOM: MEETING ROOM 211
07.00 – 08.00 (TU-03-01)

SUNRISE SESSION: MEET THE EXPERT
Expert: Mark Levick (Switzerland)
Academic Chair: Takuya Kumamoto (Japan)
Student host: Gordon Lee (Australia)

TUESDAY APRIL 15, 2014

ROOM: MEETING ROOM 219 & 220
08.00 – 09.00 (TU-04-01)

PHARMACEUTICAL SCIENCES 2020: A EUROPEAN PERSPECTIVE

CHAIRS
William Charman (Australia) and Igor Chekhtman (Australia)

A EUROPEAN PERSPECTIVE
Meindert Danhof, Leiden University, The Netherlands

TUESDAY APRIL 15, 2014
TUESDAY APRIL 15, 2014

ROOM: MEETING ROOM 212 & 213
09.00 – 10.00
EVOLUTION OF THE BIOSIMILAR REGULATORY LANDSCAPE – CHALLENGES AND OPPORTUNITIES
Mini-Symposium
CHAIR
Anita O’Connor (USA)
(TU-06-01)
BIOLOGICALS AND BIOSIMILARS, WHAT’S IN A NAME?
Paul Declerck, University of Leuven, Belgium
(TU-06-02)
REGULATION OF BIOSIMILARS: CONSIDERATIONS IN THE DEVELOPMENT OF BIOSIMILARS IN AN EVOLVING LANDSCAPE
Scott Anderson, Pfizer, San Diego, USA

ROOM: MEETING ROOM 210
09.00 – 10.00
NOVEL NANOMATERIALS WITH DRUG DELIVERY APPLICATIONS
Mini-Symposium
CHAIR
Clive Prestidge (Australia)
(TU-08-01)
THERANOSTIC NANOPARTICLES DESIGNED TO RELEASE THERAPEUTIC MOLECULES AND ACT AS MRI CONTRAST AGENTS
Tom Davis, Monash University, Melbourne, Australia
(TU-08-02)
ALBUMIN-BASED NANOMATERIALS FOR TARGETED DRUG DELIVERY
Yu Seok Youn, Sungkyunkwan University, Seoul, South Korea

ROOM: MEETING ROOM 219 & 220
09.00 – 10.00
APSA KEYNOTE
CHAIR
Parisa Aslani (Australia)
(TU-07-01)
DRUG TRANSPORTERS: ROLES IN NEW DRUG DISCOVERY AND DEVELOPMENT
Yuichi Sugiyama, RIKEN Innovation Center, Saitama, Japan

ROOM: MEETING ROOM 211
09.00 – 10.00
PERSONALIZED MEDICINE IN THE CLINIC: READY FOR PRIMETIME?
Mini-Symposium
CHAIR
Michael Sorich (Australia)
(TU-09-01)
THE UNEXPECTED COMPLEXITIES OF PERSONALISED MEDICINE IN THE CLINIC
Robyn Ward, University of New South Wales, Sydney, Australia
(TU-09-02)
CLINICAL FRONT LINE AND CHALLENGE OF PERSONALIZED MEDICINE
Hitoshi Sasaki, Nagasaki University Hospital, Japan
### TUESDAY
**APRIL 15, 2014**

#### ROOM: PLENARY 3
**10.30 – 12.00**

- **ACADEMIA AND PHARMA COLLABORATIVE MODELS – FINDING THE RIGHT BALANCE**
  - Symposium

  **CHAIR**
  - Mark Levick (Switzerland)

  **(TU-10-01)**
  - **COOPERATIVE RESEARCH CENTRES – THE AUSTRALIAN MODEL APPLIED TO DRUG DISCOVERY**
    - Warwick Tong, CRC Cancer Therapeutics, Melbourne, Australia

  **(TU-10-02)**
  - **CROSS-SECTOR COLLABORATIONS IN PHARMA DESIGNED TO MAXIMIZE BENEFITS FOR PATIENTS**
    - Patrick Smith, University of New York, Buffalo, USA

#### TUESDAY
**APRIL 15, 2014**

#### ROOM: MEETING ROOM 219 & 220
**10.30 – 12.00**

- **BARRIER MECHANISMS TEAM UP: INTERPLAY BETWEEN TRANSPORTERS, ENZYMES AND TIGHT JUNCTIONS**
  - APSA Symposium

  **CHAIR**
  - Joseph Nicolazzo (Australia)

  **(TU-12-01)**
  - **INTERPLAY OF DRUG METABOLIZING ENZYMES AND TRANSPORTERS**
    - Dhiren Thakker, University of North Carolina, USA

  **(TU-12-02)**
  - **TIGHT JUNCTIONAL MODULATION AND PATHWAYS TO DRUG DELIVERY**
    - Peter Swaan, University of Maryland, USA

  **(TU-12-03)**
  - **REGULATORY MECHANISMS INFLUENCING DRUG TRANSPORT ACROSS THE BLOOD-BRAIN BARRIER**
    - William Elmquist, University of Minnesota, USA
ROOM: MEETING ROOM 211

MEETING ROOM 211

10.30 – 12.00

ENABLING PERSONALIZED MEDICINE: GETTING THE FRAMEWORK RIGHT?
Symposium

CHAIR
Wolfgang Sadee (USA)

(TU-14-01)
IMPROVING DRUG SAFETY THROUGH PERSONALIZED MEDICINE APPROACHES
Munir Pirmohamed, University of Liverpool, UK

(TU-14-02)
DEVELOPING EVIDENCE TO INFORM THE CLINICAL UTILITY AND COST-EFFECTIVENESS OF PHARMACOGENOMIC MARKERS: CHALLENGES AND OPPORTUNITIES
Michael Sorich, Flinders University, Adelaide, Australia

(TU-14-03)
PERSONALISED MEDICINE AND THERAPEUTIC DRUG MONITORING – ADDING VALUE TO CURRENT PRACTICE
Niels Vande Casteele, KU Leuven, Leuven, Belgium and University of California San Diego, La Jolla, USA
TUESDAY
APRIL 15, 2014

ROOM: PLENARY 3
13.00 – 14.30
DRUG DEVELOPMENT EFFORTS TO COMBAT TROPICAL DISEASES
Symposium

CHAIR
Susan Charman (Australia)

(TU-15-01)
DRUG DEVELOPMENT EFFORTS TO COMBAT MALARIA
David Reddy, Medicine for Malaria Venture, Genève, Switzerland

(TU-15-02)
DRUGS FOR NEGLECTED TROPICAL DISEASES: NEW APPROACHES, CURRENT STATUS AND CHALLENGES
Eric Chatelain, Drugs for Neglected Diseases Initiative, Genève, Switzerland

TUESDAY
APRIL 15, 2014

ROOM: MEETING ROOM 212 & 213
13.00 – 14.00
BIOSIMILARS: CHALLENGES AND OPPORTUNITIES
Mini-Symposium

CHAIR
John Skerritt, Australia

(TU-16-01)
UPDATE AND SCIENTIFIC STRATEGIES FOR ACCESSING THE US MARKET FOR BIOSIMILARS
Anita O’Connor, Anita O’Connor Consulting, USA

(TU-16-02)
INTERNATIONAL PHARMACEUTICAL BIOSIMILARITY - ARE WE THERE YET?
Dianne Jackson-Matthews, ERA Consulting, Queensland, Australia

ROOM: MEETING ROOM 219 & 220
13.00 – 14.30
INTRACELLULAR DRUG TRAFFICKING AND TARGETING
APSA Symposium

CHAIR
Andrew McLachlan (Australia)

(TU-17-01)
THE SEQUESTRATION OF DRUGS IN LYSOSONES: MECHANISMS AND THERAPEUTIC CONSEQUENCES
Jeff Krise, University of Kansas, USA

(TU-17-02)
BREAKTHROUGH TECHNOLOGY BASED ON CONTROLLED INTRACELLULAR TRAFFICKING OF FUNCTIONAL NUCLEIC ACIDS WITH MEND
Hideyoshi Harashima, Hokkaido University, Japan

(TU-17-03)
INTRACELLULAR LIPID BINDING PROTEINS AS MEDIATORS OF NUCLEAR TARGETING
Christopher Porter, Monash University, Melbourne, Australia

TUESDAY
APRIL 15, 2014

ROOM: MEETING ROOM 212 & 213
13.00 – 14.00
BIOSIMILARS: CHALLENGES AND OPPORTUNITIES
Mini-Symposium

CHAIR
John Skerritt, Australia

(TU-16-01)
UPDATE AND SCIENTIFIC STRATEGIES FOR ACCESSING THE US MARKET FOR BIOSIMILARS
Anita O’Connor, Anita O’Connor Consulting, USA

(TU-16-02)
INTERNATIONAL PHARMACEUTICAL BIOSIMILARITY - ARE WE THERE YET?
Dianne Jackson-Matthews, ERA Consulting, Queensland, Australia
MEETING ROOM 210

13.00 – 14.30
SAFETY OF NANOMEDICINES: REALITY CHECK?
Symposium

CHAIR
Gert Fricker (Germany)

(TU-18-01)
THE VALUE OF NOT OVER-ENGINEERING – SIMPLE BIOMATERIALS OVERCOME MGST-1 MEDIATED RESISTANCE IN BREAST CANCER
Andreas Nystrom, Karolinska Institute, Sweden

(TU-18-02)
CHALLENGES IN PRECLINICAL CHARACTERIZATION OF NANOMEDICINES
Marina Dobrovol skaia, SAIC Frederick, Inc., Frederick, USA

(TU-18-03)
NANOPARTICLES AND SKIN: UNMOVEABLE OBJECTS AND IRRESISTIBLE BARRIER
Richard Guy, University of Bath, UK

ROOM: MEETING ROOM 211

13.00 – 14.30
SUBMITTED ORALS

CHAIR
Michael Ward (Australia)

13.00 – 13.15
(TU-19-01)
THERAPEUTIC ANTIBODY DRUGS BASED ON TARGETED MOLECULAR EPITOPES
Jianmin Fang (China)

13.15 – 13.30
(TU-19-02)
NOVEL INJECTABLE PENTABLOCK COPOLYMER-BASED THERMORESPONSIVE HYDROGELS FOR SUSTAINED VACCINE DELIVERY
Sharan Bobbala (New Zealand)

13.30 – 13.45
(TU-19-03)
DEVELOPMENT OF SELF-ADJUVANTING POLYMER-PEPTIDE CONJUGATES AS THERAPEUTIC VACCINE AGAINST CERVICAL CANCER
Tzu-Yu Liu (Australia)

13.45 – 14.00
(TU-19-04)
DESIGNING A NON-VIRAL GENE DELIVERY SYSTEM USING ADENOVIRAL PROTEINS
Yaurav Sharma (India)

14.00 – 14.15
(TU-19-05)
DESIGN, SYNTHESIS AND IN VITRO CHARACTERIZATION OF PEPTIDE BASED GENE DELIVERY SYSTEMS
Michelle Christie (Australia)

14.15 – 14.30
(TU-19-06)
CLEANING TUMOR MARGINS VIA ABROGATION OF HEAT SHOCK PROTEIN 90 WITH PROTEIN ENGINEERED TRI-BLOCK BIOPOLYMER-GELDANAMYCIN CONJUGATES
Yizhe Chen (China)
TUESDAY
APRIL 15, 2014

ROOM: PLENARY 3
14.30 – 15.30
ACCELERATING DEVELOPMENT FOR CHINA AND BEYOND: PATIENT, SCIENCE, AND PUBLIC HEALTH
FIP Keynote
CHAIR
Sang Guo Wei (China)
(TU-20-01)

Weidong, Roche, Shanghai, China

ROOM: MEETING ROOM 212 & 213
14.00 – 15.30
SUBMITTED ORALS
CHAIR
Sanjay Garg (Australia)

14.00 – 14.30
(TU-21-01)

DRUG DELIVERY TO THE BRAIN BY COLLOIDAL CARRIER SYSTEMS
Gert Fricker (Germany)

14.30 – 14.45
(TU-21-02)

TOPICAL NANOMEDICINE – OVERCOMING THE BARRIERS
Tarl Prow (Australia)

14.45 – 15.00
(TU-21-03)

DEVELOPMENT OF PECTIN-BASED NANOPARTICLES CONTAINING MELATONIN FOR THE TREATMENT OF INFLAMMATORY BOWEL DISEASE I. PREPARATION AND CHARACTERIZATION STUDIES
Fusun Acarturk (Turkey)

15.00 – 15.15
(TU-21-04)

ELECTROSTATICALLY STABILIZED IRON OXIDE NANOPARTICLES FOR THERMORESPONSIVE CANCER TREATMENT
Giovanni Pauletti (USA)

15.15 – 15.30
(TU-21-05)

ENGINEERING MODIFIED SirNA’S AGAINST PTP-1B WITH ENHANCED BIO-& THERMO-STABILITY: THEIR POTENTIAL APPLICATION IN TYPE 2 DIABETES MELLITUS (T2DM)
Ganesh Kokil (Australia)
ROOM: MEETING ROOM 219 & 220

14.30 – 15.30
SUBMITTED APSA ORALS

CHAIRS
Gemma Ryan (Australia) and Gemma Nassta (Australia)

14.30 – 14.45 (TU-22-01)
THE INVOLVEMENT OF FATTY ACID-BINDING PROTEIN S IN THE BLOOD-BRAIN BARRIER TRANSPORT OF DOCOSAHEXAENOIC ACID
Yijun Pan (Australia)

14.45 – 15.00 (TU-22-02)
STEALTH NANOEMULSIONS EVADE INTESTINAL LIPOLYSIS AND IMPROVE DRUG ABSORPTION AFTER ORAL ADMINISTRATION
Orlagh Feeney (Australia)

15.00 – 15.15 (TU-22-03)
IDIOSYNCRATIC DRUG INDUCED LIVER INJURY: FROM POPULATION TO MOLECULAR TARGET
Samuel Ho (Australia)

15.15 – 15.30 (TU-22-04)
THE ROLE OF CAVEOLAE IN CATIONIC PEPTIDE-BASED ASYMMETRIC DENDRIMER MEDIATED CELLULAR DELIVERY
Prarthana Rewatkar (Australia)

ROOM: MEETING ROOM 210

14.30 – 15.30
SUBMITTED ORALS

CHAIR
Hiroshi Sasaki (Japan)

14.30 – 14.45 (TU-23-01)
STRATEGIES FOR TRANSLATIONAL BIOMARKER RESEARCH AND VALIDATION FOR PERSONALIZED MEDICINE
Dianne Jackson-Matthews (Australia)

14.45 – 15.00 (TU-23-02)
IMPACT OF CYP3A5 POLYMORPHISMS ON THE TREATMENT OF CHINESE RENAL TRANSPLANT RECIPIENTS SWITCHING FROM CYCLOSPORINE TO TACROLIMUS
Zhuo Wang (China)

15.00 – 15.15 (TU-23-03)
DISCOVERY OF POTENTIAL BIOMARKERS ASSOCIATED WITH TYPE 2 DIABETES USING ARTIFICIAL INTELLIGENCE TECHNOLOGIES
Qun Shao (UK)

15.15 – 15.30 (TU-23-04)
SIRTUIN 2 INHIBITORY ACTIVITY OF FUNCTIONALIZED TETRAHYDRO-Y-CARBOLINES
Mei Lin Go (Singapore)
ROOM:  MEETING ROOM 211

14.30 – 15.30  THERAPEUTIC MONOCLONAL ANTIBODIES:
WHERE HAVE WE COME, AND WHERE ARE WE GOING?
Keynote
CHAIR
Marilyn Morris, USA
(TU-24-01)  Patrick Scannon, Xoma Corp, CA, USA

ROOM:  PLENARY 3

16.00 – 17.30  INDIAN SHOWCASE

CHAIRS
Kamal Midha (India) and Rashmi Barbhaiya (India)
(TU-25-01)  BACK TO THE FUTURE
Rashmi Barbhaiya, Advinus Therapeutics Pvt Ltd, New York, USA
(TU-25-02)  SYSTEMS BIOLOGY APPROACH TO SOLVING DRUG DISCOVERY
CHALLENGES – AN ENGINEER’S PERSPECTIVE
Anand Anandkumar, CHILD Childrens Home, Bengaluru, India
(TU-25-03)  TBA
Amulya Panda, National Institute of Immunology, New Delhi, India
(TU-25-04)  DRY POWDER INHALATIONS IN THE TREATMENT OF
PULMONARY TUBERCULOSIS
Amit Misra, CSIR Central Drug Research Institute, India
MEETING ROOM 212 & 213

INTERCHANGEABILITY OF BIOSIMILARS - YES OR NO?
Roundtable discussion

CHAIR
Paul Chamberlain (UK)
Anita O’Connor (USA)
Paul Declerk (Belgium)
Simon Roger (Australia)
Freddy Faccin (USA)

MEETING ROOM 219 & 220

APSA EARLY CAREER RESEARCHER SYMPOSIUM

CHAIR
Parisa Aslani (Australia)

(DU-27-01) DIALYSIS-RELATED CARNITINE DEFICIENCY: PHARMACOKINETIC, PHARMACOLOGICAL AND CLINICAL ASPECTS
Stephanie Reuter-Lange, University of South Australia, Adelaide, Australia

(DU-27-02) STATINS IN OLDER PEOPLE: WHERE IS THE EVIDENCE?
Danijela Gnjidic, University of Sydney, Australia

(DU-27-03) NOVEL INHALED COMBINATION POWDERS FOR RESPIRATORY INFECTIONS
Tony Zhou, University of Sydney, Australia

APSA AWARDS AND BUSINESS
TUESDAY
APRIL 15, 2014

MEETING ROOM 211

ROOM:

16.00 – 17.30

MEETING ROOM 211

SUBMITTED ORALS

CHAIR
Desmond Williams (Australia)

16.00 – 16.15

UNDERSTANDING THE DE-AGGLOMERATION KINETICS OF DRY COATED POWDERS
Peter Stewart (Australia)

16.15 – 16.30

THE DEVELOPMENT OF ELECTROSPUN ZEIN NANOFIBRES FOR PHARMACEUTICAL APPLICATIONS
Susan Barker (UK)

16.30 – 16.45

EFFECTS OF LIPID DIGESTION ON THE PHASE BEHAVIOUR OF INTESTINAL MIXED MICELLES: CORRELATION OF IN VITRO STUDIES WITH AND IN SILICO MOLECULAR DYNAMICS SIMULATION
Colin Pouton (Australia)

16.45 – 17.00

INVESTIGATION OF POLYCAPROLACTONE MATRICES CONTAINING DOXYCYCLINE AND METRONIDAZOLE FOR THE TREATMENT OF PELVIC INFLAMMATORY DISEASE
Meenakshi Pathak (Australia)

17.00 – 17.15

EXPLORATION OF METHACRYLATE-BASED POLYPLEXES AS SAFE NON-VIRAL GENE DELIVERY SYSTEMS
Giovanni Pauletti (USA)

17.15 – 17.30

BUCCAL MUCOSAL DELIVERY OF A PEPTIDE FOR THE TREATMENT OF AUTOIMMUNE DISEASES
Liang Jin (Australia)
PLENARY 3
PHARMACEUTICAL SCIENCES 2020 – AN ASIAN PERSPECTIVE

CHAIRS
Les Benet (USA) and Chelsea Hosey (USA)

AN AUSTRALIAN PERSPECTIVE
William Charman, Monash University, Melbourne, Australia

AN ASIAN PERSPECTIVE
Mitsuru Hashida, Kyoto University, Japan

ROOM:
08.00 – 09.00
WE-04-01
WE-04-02

WEDNESDAY
APRIL 16, 2014

ROOM: MEETING ROOM 219 & 220
07.00 – 08.00
(WE-01-01)

SUNRISE SESSION: MEET THE EXPERT
Expert: William Banks (USA)
Academic Chair: Joseph Nicolazzo (Australia)
Student Host: Stephanie Phan (Australia)

ROOM: MEETING ROOM 210
07.00 – 08.00
(WE-02-01)

SUNRISE SESSION: MEET THE EXPERT
Expert: Mitsuru Hashida (Japan)
Academic Chair: Giovanni Pauletta (USA)
Student Host: Igor Chekhtman (Australia)

WEDNESDAY
APRIL 16, 2014

ROOM: MEETING ROOM 211
07.00 – 08.00
(WE-03-01)

SUNRISE SESSION: MEET THE EXPERT
Expert: Vladimir Torchilin (USA)
Academic Chair: Ben Boyd (Australia)
Student Host: Orlagh Feeney (Australia)

ROOM: PLENARY 3
09.00 – 10.00
WE-05-01

A GLANCE ON CURRENT PROGRESS OF INNOVATIVE DRUG R&D IN CHINA
FIP Keynote

CHAIR
Geoff Tucker (UK)

(WE-05-01)
Sang Guo Wei, Chinese Pharmaceutical Association, Beijing, China
**MEETING ROOM 211**

**DRUG DISCOVERY IN ACADEMIA**

**Mini-Symposium**

**CHAIR**

Pramod Nair (Australia)

**DRUG DISCOVERY IN ACADEMIA: GROWING PAINS**

Jonathan Baell, Monash University, Melbourne, Australia

**ROLES OF POLYAMINES IN DRUG DESIGN AND DISCOVERY TOWARD NEUROLOGICAL DISORDERS**

Takuya Kumamoto, Musashino University, Tokyo, Japan

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**WEDNESDAY**

**APRIL 16, 2014**

**MEETING ROOM 210**

**09.00 – 10.00**

**A GENOMICS VIEW OF DRUG THERAPY**

FIP Keynote

**CHAIR**

Ross McKinnon (Australia)

**Wolfgang Sadee, Ohio State University, USA**

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**MEETING ROOM 212 & 213**

**09.00 – 10.00**

**MOLECULAR AND FUNCTIONAL IMAGING IN DRUG DEVELOPMENT AND EARLY CLINIC**

Mini-Symposium

**CHAIR**

Michael Roberts (Australia)

**WE-09-01**

**MICRO DOSING AND PET STUDIES IN DRUG TRANSPORTER RESEARCH**

Yuichi Sugiyama, RIKEN Innovation Center, Saitama, Japan

**WE-09-02**

**IMAGING DRUG DISPOSITION**

Jashvant Unadkat, University of Washington, USA

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**MEETING ROOM 219 & 220**

**08.00 – 09.00**

**BLOCK COPOLYMER MICELLES AS SMART NANO CARRIERS FOR TARGETED DRUG DELIVERY**

DDA Keynote

**CHAIR**

Ben Boyd (Australia)

**WE-07-01**

**Kazunori Kataoka, University of Tokyo, Japan**

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**MEETING ROOM 211**

**09.00 – 10.00**

**DRUG DISCOVERY IN ACADEMIA**

Mini-Symposium

**CHAIR**

Pramod Nair (Australia)

**WE-09-01**

**DRUG DISCOVERY IN ACADEMIA: GROWING PAINS**

Jonathan Baell, Monash University, Melbourne, Australia

**WE-09-02**

**ROLES OF POLYAMINES IN DRUG DESIGN AND DISCOVERY TOWARD NEUROLOGICAL DISORDERS**

Takuya Kumamoto, Musashino University, Tokyo, Japan

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WEDNESDAY
APRIL 16, 2014

ROOM: MEETING ROOM 212 & 213
10.30 – 12.00
NEW MOLECULAR AND CELLULAR TARGETS FOR THE TREATMENT OF HUMAN DISEASE
Symposium
CHAIR
Nigel Bunnett (Australia)

(WE-11-01) ALLOSTERIC DRUG DISCOVERY AT G PROTEIN-COUPLED RECEPTORS
Arthur Christopoulos, Monash University, Melbourne, Australia

(WE-11-02) AMYLOID-BETA AND TAU – A TOXIC PAS DE DEUX IN ALZHEIMER’S DISEASE
Jürgen Götz, University of Queensland, Australia

(WE-11-03) TARGETING THE CELL CYCLE MACHINERY FOR THE TREATMENT OF CARDIOVASCULAR DISEASE
Gavin Brooks, University of Reading, UK

WEDNESDAY
APRIL 16, 2014

ROOM: PLENARY 3
10.30 – 12.00
NATURAL PRODUCTS – SUSTAINABLE USE OF MEDICINAL PLANT RESOURCES
Symposium
CHAIR
Michiho Ito (Japan)

(WE-10-01) EASY TO GROW BUT ENDANGERED: FIELD SURVEY AND RELEVANT EXPERIMENTS ON AGAR WOOD
Michiho Ito, Kyoto University, Japan

(WE-10-02) LOCALLY-DRIVEN RESEARCH ON MEDICINAL PLANTS FROM KUUKU’I’YU (NORTHERN KAANJU) HOMELANDS, CAPE YORK PENINSULA, AUSTRALIA
Susan Semple, University of South Australia, Adelaide, Australia

(WE-10-03) MANAGING SUSTAINABLE USE OF FINITE RESOURCES – RESPONSIBILITIES FOR IMPORTING COUNTRIES AND A JAPANESE CASE
Takashi Hakamatsuka, University of Tokyo, Japan
WEDNESDAY
APRIL 16, 2014

ROOM: MEETING ROOM 210
10.30 – 12.00
TRANSPORTERS AS MEDIATORS OF CLINICAL DRUG-DRUG INTERACTIONS
Symposium
CHAIR
William Elmquist (USA)

(WE-13-01) DRUG INTERACTIONS IN HEPATOBILIARY TRANSPORT: MECHANISMS AND CLINICAL RELEVANCE
Kim Brouwer, University of North Carolina, USA

(WE-13-02) TRANSPORTER-MEDIATED DRUG-DRUG INTERACTIONS
Lei Zhang, FDA, Silver Spring, USA

(WE-13-03) CELLULAR MODELS AND CLINICAL RELEVANCE OF RENAL TRANSPORTER-MEDIATED DRUG-DRUG INTERACTIONS
Martin Fromm, Friedrich-Alexander-Universität, Erlangen, Germany

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WEDNESDAY
APRIL 16, 2014

ROOM: MEETING ROOM 219 & 220
10.30 – 12.00
SELF-ASSEMBLED DRUG DELIVERY SYSTEMS
DDA Symposium
CHAIR
Clive Prestidge (Australia)

(WE-12-01) NANOVACCINES
Istvan Toth, University of Queensland, Australia

(WE-12-02) POLYMERIC MICELLES FOR DRUG DELIVERY IN CANCER
Vladimir Torchilin, Northeastern University, Boston, USA

(WE-12-03) CONTROLLING STRUCTURAL TRANSFORMATIONS BETWEEN BICONTINUOUS AND OTHER LIPID LIQUID CRYSSTALLINE MATERIALS FOR DRUG DELIVERY
Ben Boyd, Monash University, Melbourne, Australia
ROOM: MEETING ROOM 211

10.30 – 12.00
NON-ADHERENCE – THE LARGEST CONTRIBUTION TO VARIABILITY IN DRUG RESPONSE
Symposium
CHAIR
Michael Wiese (Australia)

(WE-14-01) SCOPE OF PATIENT NON-ADHERENCE TO PRESCRIBED DRUG DOSING REGIMES
John Urquhart, MWV Healthcare, Visé, Belgium and UCSF, San Francisco, CA, USA

(WE-14-02) THE CMC ISSUES SURROUNDING ADHERENCE ASSOCIATED WITH PEDIATRIC AND GERIATRIC POPULATIONS
Alastair Coupe, Pfizer, Kent, UK

(WE-14-03) UTILIZING TECHNOLOGY TO IMPROVE ADHERENCE AND PATIENT OUTCOMES
Greg Peterson, University of Tasmania, Hobart, Australia

WEDNESDAY APRIL 16, 2014

ROOM: MEETING ROOM 211

13.00 – 14.30
CROSSING THE BRIDGE – BRIDGING STUDIES
Symposium
CHAIR
Michael Coory (Australia)

(WE-15-01) HARMONIZATION OF ASIAN BRIDGING STUDY: 2013 FIP/AAPS/TFDA SPONSORED WORKSHOP REPORT AND FUTURE PERSPECTIVES
Oliver Hu, National Defense Medical Center, Taipei, China Taiwan

(WE-15-02) INTER-ETHNIC DIFFERENCES IN DRUG RESPONSE, BRIDGING STUDIES AND DRUG DEVELOPMENT IN EAST ASIA
Annette Gross, GSK Australia, New South Wales, Australia

(WE-15-03) REGULATORY PERSPECTIVE ON USE OF FOREIGN CLINICAL DATA FOR DRUG APPROVAL: PMDA’S EXPERIENCE
Yoshiaiki Uyama, International PROGRAMMES Pharmaceuticals and Medical Devices Agency, Tokyo, Japan
WEDNESDAY
APRIL 16, 2014

ROOM: MEETING ROOM 212 & 213
13.00 – 14.00
UNDERSTANDING THE PHYSICOCHEMICAL AND BIOLOGICAL DETERMINANTS OF PHARMACOKINETICS: FROM HUMANS TO ORGANS, CELLS AND NANOSYSTEMS
FIP Keynote
CHAIR
Don Mager (USA)

(WE-16-01) Michael Roberts, University of South Australia/University of Queensland, Westlake, Australia

ROOM: MEETING ROOM 210
13.00 – 14.30
HERB-DRUG INTERACTIONS: ARE THEY DANGEROUS?
Symposium
CHAIR
Peter Bird (Australia)

(WE-18-01) Andrew McLachlan, University of Sydney, Australia

(WE-18-02) Ge Lin, Chinese University of Hong Kong, Hong Kong, China

(WE-18-03) Olavi Pelkonen, University of Oulu, Finland

WEDNESDAY
APRIL 16, 2014

ROOM: MEETING ROOM 212 & 213
13.00 – 14.30
PULMONARY DRUG DELIVERY
DDA Symposium
CHAIR
Paul Young (Australia)

(WE-17-01) Carsten Ehrhardt, Trinity College, Ireland

(WE-17-02) Olivia Merkel, Wayne State University, USA

(WE-17-03) Daniela Traini, University of Sydney, Australia
WEDNESDAY
APRIL 16, 2014

ROOM: MEETING ROOM 211
13.00 – 14.15
SUBMITTED ORALS
CHAIR
David Grainger (USA)

13.00 – 13.15
AMITRIPTYLINE AND KETAMINE HYDROGEL: NEW FORMULATION FOR PERIPHERAL NEUROPATHIC PAIN
Sui Yung Chan (Singapore)

13.15 – 13.30
INHIBITION OF BACTERIAL CYTOKINESIS BY CURCUMIN ANALOGUES
Vivian Liao (Australia)

13.30 – 13.45
DEVELOPMENT OF A NOVEL SELF-DISSOLVING MICRONEEDLE ARRAY OF ALENDRONATE, A NITROGEN-CONTAINING BISPHOSPHONATE
Kosuke Kusamori (Japan)

13.45 – 14.00
ENHANCED UPTAKE AND TRANSPORT OF (-)-CATECHIN AND (-)-EPIGALLOCYCATECHIN GALLATE IN NIOSOMAL FORMULATION BY HUMAN INTESTINAL CACO-2 CELLS
Dan Li (New Zealand)

14.00 – 14.15
PREPARATION OF NOVEL POLYMERIC MICROPARTICLES FOR SLOW-RELEASE INTRATHECAL DELIVERY OF ANALGESICS
Yaqin Han (Australia)

WEDNESDAY
APRIL 16, 2014

ROOM: PLENARY 3
14:30 – 15:30
PHYSICAL PHARMACY AND PHARMACEUTICS, GRAND ACHIEVEMENTS, AND NOW FOR THE FUTURE
FIP Keynote
CHAIR
Bradley Anderson (USA)

(WE-20-01)
Val Stella, University of Kansas, USA

ROOM: MEETING ROOM 211
13.00 – 14.15
SUBMITTED ORALS
CHAIR
David Grainger (USA)

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Yaqin Han (Australia)
ROOM: MEETING ROOM 212 & 213

14.00 – 15.30
SUBMITTED ORALS

CHAIR
Takuya Kumamoto (Japan)

14.00 – 14.15
(WE-21-01)
INVESTIGATING THE STRUCTURAL AND THERMODYNAMIC BASIS OF SUBSTRATE SELECTIVITIES OF HUMAN CYTOCHROME P450 ENZYMES: A MOLECULAR DYNAMICS STUDY
Pramod Nair (Australia)

14.15 – 14.30
(WE-21-02)
IMPACT OF INFLAMMATION AND CONCOMITANT GLUCOCORTICOID ON PHARMACOKINETIC DISPOSITION OF VORICONAZOLE AND ITRACONAZOLE IN IMMUNOCOMPROMISED PATIENTS
Takafumi Naito (Japan)

14.30 – 14.45
(WE-21-03)
HUMAN BILIARY EXCRETION OF UNCHANGED DRUG CAN BE PREDICTED PRIOR TO HUMAN DOSING
Chelsea Hosey (USA)

14.45 – 15.00
(WE-21-04)
GLUCOSIDATION AND GLUCURONIDATION REPRESENT PARALLEL METABOLIC PATHWAYS FOR THE METABOLISM OF MYCOPHENOLIC ACID AND MORPHINE BY HUMAN UDP-GLUCURONOSYLTRANSFERASES
Nuy Chau (Australia)

15.00 – 15.15
(WE-21-05)
SIMULTANEOUS AND COMPREHENSIVE IN VIVO ANALYSIS OF CYTOCHROME P450 ACTIVITY BY USING A COCKTAIL APPROACH IN RATS
Shinya Uchida (Japan)

15.15 – 15.30
(WE-21-06)
DEVELOPMENT OF A NEW PHARMACOKINETIC MODEL INCORPORATING NASAL PHYSIOLOGIC FUNCTION TO PREDICT NASAL DRUG ABSORPTION
Daisuke Inoue (Japan)

ROOM: MEETING ROOM 219 & 220

14.30 – 15.30
DDA SUBMITTED ORALS

CHAIR
Istvan Toth (Australia)

14.30 – 14.45
(WE-22-01)
SURFACE ACOUSTIC WAVE (SAW) ATOMIZATION OF THERAPEUTIC ANTIBODIES FOR PULMONARY DELIVERY
Christina Cortez-Jugo (Australia)

14.45 – 15.00
(WE-22-02)
LIPOSOME BASED VACCINE DELIVERY SYSTEM AGAINST MALARIA
Ashwin Giddam (Australia)

15.00 – 15.15
(WE-22-03)
ENHANCED LOCAL DELIVERY OF TOPICAL ANAESTHETICS
Anthony Raphael (Australia)

15.15 – 15.30
(WE-22-04)
AN APTAMER-BASED SIRNA IN VIVO DELIVERY SYSTEM TARGETING CANCER STEM CELLS
Tao Wang (Australia)
WEDNESDAY
APRIL 16, 2014

MEETING ROOM 210
ROOM:
14.30 – 15.30
SUBMITTED ORALS
CHAIR
Susan Semple (Australia)

14.30 – 14.45 (WE-23-01)
BERBERINE IS A NEW MEDICINE FOR ENERGY-RELATED METABOLIC DISORDERS
Jiandong Jiang (China)

14.45 – 15.00 (WE-23-02)
DITERPENOIDS FROM THE KUUKU I’YU (NORTHERN KAANJU) TRADITIONAL MEDICINE PLANT, DODONAEA POLYANDRA AND THEIR EFFECT ON PRO-INFLAMMATORY CYTOKINES
Bradley Simpson (Australia)

15.00 – 15.15 (WE-23-03)
FROM INFLAMMATION TO DEPRESSION – HYPERICUM PERFORATUM L. EXTRACT AS A THERAPEUTIC APPROACH
Karen Nieber (Germany)

15.15 – 15.30 (WE-23-04)
ANTICOAGULANT ACTIVITY OF COUMARIN FROM KLUWAK (PANGIUM EDULE REINW.) SEEDS BASED ON PROTHROMBIN TIME IN RAT
Dara Sumardi (Indonesia)

WEDNESDAY
APRIL 16, 2014

MEETING ROOM 211
ROOM:
14.30 – 15.30
SUBMITTED ORALS
CHAIR
Gavin Brooks (UK)

14.30 – 14.45 (WE-24-01)
SAFETY AND EFFICACY RESULTS OF A PHASE IV SAFETY-MONITORING STUDY OF ICOTINIB IN TREATING ADVANCED NON-SMALL CELL LUNG CANCER
Lieming Ding (China)

14.45 – 15.00 (WE-24-02)
FGF21 MAINTAINS GLUCOSE HOMEOSTASIS BY MEDIATING THE CROSS TALK BETWEEN LIVER AND BRAIN DURING PROLONGED FASTING
Qingning Liang (Hong Kong)

15.00 – 15.15 (WE-24-03)
IMMUNOMODULATORS AND/OR PROBIOTICS AS ADJUNCTIVE THERAPY FOR ERADICATION OF H. PYLORI AND IMPROVEMENT OF IMMUNE SYSTEM IN PEPTIC ULCER DISEASE
Govinden Kughan (Russia)

15.15 – 15.30 (WE-24-04)
POPULATION PHARMACOKINETICS OF IMATINIB MESYLATE IN NIGERIAN PATIENTS WITH CHRONIC MYELOID LEUKEMIA
Babatunde Adeagbo (Nigeria)
**WEDNESDAY**
**APRIL 16, 2014**

**ROOM:** PLENARY 3

16.00 – 17.30

**SHOWCASE CHINA**

**CHAIRS**
Sang Guo Wei (China) and Sifei Han (Australia)

(WE-25-01) CRYSTAL STRUCTURES OF HIV-1 CO-RECEPTORS CCR5 AND CXCR4: IMPLICATIONS FOR ANTI-HIV DRUG DISCOVERY
Beili Wu, Shanghai Institute of Materia Medica (SIMM), China

(WE-25-02) COMPUTATIONAL METHODS FOR DRUG DESIGN AND DISCOVERY: A FOCUS ON CHINA
Hualing Jiang, Shanghai Institute of Materia Medica Chinese Academy of Sciences, China

(WE-25-03) PROGRESS OF REGULATORY SCIENCE RESEARCH IN THE FIELD OF BIOLOGICAL PRODUCTS IN CHINA
Wang Junzhi, National Institutes for Food and Drug Control, Beijing, China

(WE-25-04) THE VIRTUE OF TRANSLATIONAL TOXICOLOGY IN DRUG DISCOVERY: SELECTING THE RIGHT CLINICAL CANDIDATE WHILE REDUCING RISK
Ren Jin, Shanghai Institute of Materia Medica, Shanghai, China

**ROOM:** MEETING ROOM 212 & 213

16.00 – 17.30

**IUPHAR / FIP: TRANSLATION THROUGH COOPERATION – HOW CAN CLINICAL PHARMACOLOGY AND PHARMACEUTICAL SCIENCES WORK TOGETHER MORE EFFECTIVELY?**
Roundtable

**CHAIR**
Geoff Tucker (UK)

(WE-26-01) Geoff Tucker, SimCYP, Sheffield, UK

(WE-26-02) Andrew McLachlan, The University of Sydney, Australia

(WE-26-03) Don Birkett, Flinders University, Adelaide, Australia

(WE-26-04) David Le Couteur, The University of Sydney, Australia
**WEDNESDAY APRIL 16, 2014**

**ROOM: MEETING ROOM 219 & 220**

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<th>Time</th>
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<tbody>
<tr>
<td>16.00 – 17.30</td>
<td>DDA SUBMITTED ORALS</td>
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<td><strong>CHAIR</strong></td>
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<td>Tim Barnes (Australia)</td>
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<td>16.30 – 17.00</td>
<td>AQUEOUS REMOTE LOADING OF PROTEIN THERAPEUTICS IN PLGA MICROSPHERES</td>
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<td>Steven Schwendeman (USA)</td>
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<td>17.00 – 17.15</td>
<td>FABRICATION OF MUPIROCIN-ENCAPSULATED PLGA NANOPARTICLES FOR THE DELIVERY TO BIOFILMS</td>
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<td>Nicky Thomas (Australia)</td>
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<td>17.15 – 17.30</td>
<td>POLYMER-FUNCTIONALIZED SILICA LIPID HYBRID MATERIALS THAT ENHANCE THE SOLUBILIZATION AND ORAL ABSORPTION OF POORLY WATER SOLUBLE DRUGS</td>
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<td>Clive Presidge (Australia)</td>
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<td>17.30 – 18.00</td>
<td>DDA POSTER PRIZES, DDA CLOSING REMARKS, AND AUS-CRS AGM</td>
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**ROOM: MEETING ROOM 210**

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<tr>
<td>16.00 – 17.30</td>
<td>DOES ALTERED PHYSIOLOGY ALWAYS EQUATE TO ALTERED DRUG DISPOSITION?</td>
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<td>Roundtable Debate</td>
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<td><strong>CHAIR</strong></td>
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<td>Kim Brouwer (USA)</td>
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<td>(WE-28-01)</td>
<td>IMPACT OF BACTERIAL INFECTION AND ALZHEIMER’S DISEASE ON BLOOD-BRAIN BARRIER DRUG TRANSPORT</td>
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<td>Joseph Nicolazzo, Monash University, Melbourne, Australia</td>
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<td>(WE-28-02)</td>
<td>ALTERATION OF HEPATIC DRUG CLEARANCE IN LIVER DISEASE: INTACT HEPATOCYTE HYPOTHESIS OR SICK CELL HYPOTHESIS?</td>
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<td>Yuichi Sugiyama, RIKEN Innovation Center, Saitama, Japan</td>
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<td>(WE-28-03)</td>
<td>DRUG DISPOSITION IN PREGNANCY</td>
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<td>Jashvant Unadkat, University of Washington, USA</td>
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ROOM: MEETING ROOM 211
16.00 – 17.30
RECENT TRENDS AND STANDARDS FOR DISSOLUTION AND DRUG RELEASE
Roundtable/Debate
CHAIR
Vinod Shah (USA)

(WE-29-01) TOPICAL CREAMS, OINTMENTS AND GELS
Vinod Shah, Independent Consultant, Rockville, USA

(WE-29-02) INHALED DRUGS
Mariana Gebara-Coghlan, The University of Sydney, Australia

(WE-29-03) NOVEL LOW-COST APPROACH FOR IN-VITRO DETERMINATION OF BIOAVAILABILITY FOR IMMEDIATE RELEASE SOLID ORAL DOSAGE FORMS
Todd Cecil, USP, Rockville, USA

OPENING HOURS:
Sunday 13 April directly after the Opening Ceremony from 17.00 – 19.00 hours.
Monday 14 April from 09.00 – 17.00 hours.
Tuesday 15 April from 09.00 – 17.00 hours.
Wednesday 16 April from 09.00 – 14.00 hours.

FIP EXHIBITION
• Posters should be mounted on Sunday between 12:00 and 14:00 hours.
• Posters will be on display for four days and will be open for viewing during exhibition hours.
• Please be present at your poster on Sunday during the Welcome Reception after the Opening Ceremony and on Monday, Tuesday and Wednesday during the lunch break (12:00 – 13:00 hours).
• Posters should be taken down on Wednesday between 13:00 and 16:00.
• The allotted timeslots for hanging up the posters should be strictly observed.

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<th>POSTER SESSION PSWC 2014</th>
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SOCIAL EVENTS

OPENING CEREMONY
Plenary Hall 2,
Sunday 13 April 2014 from 15:00 – 17:00

WELCOME RECEPTION
Exhibition hall,
Sunday 13 April 2014 from 17:00 – 19:00

CONGRESS DINNER
The Palladium at Crown,
Tuesday 15 April 2014

The Palladium at Crown is Melbourne’s grandest ballroom, and has played host to some of Australia’s premier functions including the annual TV Week Logie Awards and the Australian Formula 1 Grand Prix Ball. Join us at this magnificent location for a memorable evening of excellent dining and dancing at the PSWC 2014 Congress Dinner!

Make the journey as rewarding as the event

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**TOURS**

**DAYTOURS**

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**PENGUINS**  
*(available daily except Sun/Tues)*  
Enjoy the antics of the world’s smallest penguins at fascinating Phillip Island. The sight of Australia’s largest fairy penguin colony emerging from the surf and waddling up the beach with food for their young brings howls of delight from an enthralled crowd.

**Cost:** $150 pp  
**Includes:** Coach transport, entry to Koala Conservation Centre, Penguin Parade with Penguin Plus Viewing Platform, guide, gst.  
**Times:** 1.30pm to 8.30pm.

**WILDLIFE & WINE**  
*(available daily except Sun/Tues)*  
Travel through to the north-east of Melbourne through the rolling hills of the Yarra Valley to the Healesville Sanctuary, home to more than 200 species of native animals in a natural bush setting. Enjoy a guided tour of this outstanding facility before arriving at Yering Station, the Yarra Valley and Victoria’s first vineyard, internationally recognised for producing cool climate wines.

**Cost:** $200 pp  
**Includes:** Coach transport, entry to & guided tour of the Healesville Sanctuary, wine tasting, main course lunch, glass of wine & coffee at Yering Station, wine tasting with cheese at De Bortoli, guide, gst.  
**Times:** 9.00am to 6.30pm.

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**OUR GOLDEN HERITAGE**  
*(available Monday)*  
Travel to the west where much of Melbourne’s early wealth was derived, from the goldfields at Ballarat. The journey will be broken with a visit to Ballarat Wildlife Park, nestled in bushland and home to native animals including kangaroos and koalas before travelling across to Sovereign Hill, the recreated gold mining township of the 1850s.

**Cost:** $185 pp  
**Includes:** Coach transport, all wine tastings, lunch, glass of wine & coffee at Yering Station, glass of sparkling at Domaine Chandon, cheese platter with tasting at De Bortoli, guide, gst.  
**Times:** 9.00am to 6.30pm.

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**YARRA VALLEY VINEYARDS**  
*(available daily except Sun/Tues)*  
Visit the beautiful Yarra Valley and enjoy tastings at De Bortoli, Yering Station, Domaine Chandon and Coldstream Hills. Appreciate why this region enjoys such a high profile with its world class production of sparkling and table wines and outstanding food.

**Cost:** $185 pp  
**Includes:** Coach transport, entry to Baillarat Wildlife Park & Sovereign Hill, guide, gst.  
**Times:** 8.30am to 6.00pm.

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**GREAT OCEAN ROAD**  
*(available daily except Sun/Tues)*  
Imagine a road that hugs the side of sheer cliffs, where the native bushland meets the blue waters of the Southern Ocean. Experience the temperate rainforest at Maits Rest that features fern gullies and giant myrtle trees. Experience the koalas at Kennett River and the spectacular coastline that’s home to the Twelve Apostles, Loch Ard Gorge and the Razorback.

**Cost:** $130 pp  
**Includes:** Coach transport, lunch, entry to the Port Campbell National Park, guide, gst.  
**Times:** 7.30am to 7.00pm.

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**MCI Melbourne Office**  
82 Harris Street  
Pyrmont NSW 2009  
Phone: +61 3 9320 8600  
E-mail: emma.wall@mci-group.com  
Website: www.mci-group.com
BADGES
Participants will be handed their name badges at the registration desk. Due to tight security regulations all participants and accompanying persons must wear their badges throughout the Congress. Participants with white badges will be admitted to the sessions. Accompanying persons (badges in a different colour may attend the Opening Ceremony, social events and tours but will not be allowed to attend sessions.

BREAKS
The coffee breaks during the sessions will be between 10:00 and 10:30 in the morning and between 15:30 and 16:00 in the afternoon, in the exhibition area. Between the sessions there will be a lunch break between 12:00 and 13:00.

DRESS
Informal dress is acceptable for all sessions but business attire is recommended for the Opening Ceremony.

FILMING, RECORDING AND PHOTOGRAPHY PRODUCTION POLICY
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BUSINESS HOURS
Office hours at the City of Melbourne are from 8:00 am to 5:30 pm. City shops generally open from 9:00 am to 5:00 pm but some have hours of 10:00 am till 6:00 pm, Monday to Friday. On Friday, many shops in the CBD (Central Business District) and suburban shopping centers remain open until 9:00 pm. On Saturday and Sunday, the hours in the CBD and shopping centers are generally 9:00 am to 5:00 pm and 10:00 am to 4:00 pm respectively.

CREDIT CARDS
Hotels, shops and restaurants usually accept all credit cards.

CURRENCY
The currency used in Australia is Australian Dollars.

LIABILITY / DISCLAIMER
It is strongly recommended that participants obtain adequate cover for travel, health and accident insurance before they depart from their countries. The FIP Organising Committee, our Australian hosts, FIP Headquarters, MCI Amsterdam and MCI Melbourne claim no liability for the act of any supplier to this congress, nor liability for personal injury, the safety of any attendee while in transit to or from this event, for any loss or damage, for delays in transport by air, sea, rail, road, weather, in case of strikes, sickness, war or other causes.

NO SMOKING
Please note that all FIP Congresses are tobacco-free: Smoking is NOT allowed anywhere, not in the session rooms, not in the exhibition area, not in the poster sessions and not in the registration area.

MEDIA ROOM
The Congress Media Room will offer a number of services, strictly limited for official press representatives and professional journalists. They will have access to written press material (press releases, speakers’ presentations, etc.) and to working facilities as well as a chance to socialise with their colleagues. There will also be a series of media briefings highlighting prominent topics.

TECHNICAL EQUIPMENT IN SESSION ROOMS
All session rooms will have LCD projectors and laptops. There will be a technician available in every session room. Speakers will receive detailed instructions with regard to their presentation prior to the Congress.

ELECTRICAL APPLIANCES
Electrical appliances in Australia operate on 220 – 240 V/50Hz.
Access to medicines and pharmacists today, better outcomes tomorrow

The 2014 FIP Congress in Bangkok, Thailand, invites pharmacists and pharmaceutical scientists from all over the world to delve into the globally pressing issue of access to medicines – and health care in general. Together we can work towards increasing the role of pharmacy in the provision of healthcare services.

Choose sessions from six packed congress streams:

A > Access to medicines
What can we do to make medicines more available? Deepen your understanding of the complex factors that affect medicines access, from affordability (which is influenced by irresponsible use as well as adverse events) to drug discovery, medicines shortages and the regulatory landscape.

B > Access to pharmacists and pharmacy services
Is it really true that pharmacists are the most accessible healthcare professionals? Learn how we can improve our image, implement more services and demonstrate value. In some parts of the world there are not enough pharmacists or pharmacies. Find out how we can change this. Lectures, case studies, short oral presentations, posters, workshops and great discussions will be open to you.

C > Access to information
Does the information you give patients do what is intended? Develop new tactics and advanced skills to improve adherence and ensure safety. What about information technology? How can it increase the overall efficiency of care delivery and how to use these systems to their full potential? Be inspired to lead the implementation of collaborative approaches that take advantage of the latest technologies.

D > Education, education and education
How best to educate the pharmacists of tomorrow? And how can the current pharmacy workforce be prepared to meet expanded expectations? Listen to the case for transforming education and training, and take home new thoughts, strategies and innovative methods that can be applied to any sector. The programme includes a two-day ‘Expert Forum’.

E > Special interest symposia
Is there something for everyone at the congress? Yes! Whether you are interested in natural materials or biotechnology, humanitarian work or emergency practice, the environment or history, Thai pharmacy or the Basel Hospital Pharmacy statements, all of these topics from the length and breadth of pharmacy will be at your disposal.

A two-day ‘Pharmacy Technicians Symposium’ will also take place.

See you in vibrant Bangkok at the next FIP World Congress!

www.fip.org/bangkok2014
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