

# PRELIMINARY PROGRAM AGENDA

Shanghai Symposium on Chemical and Pharmaceutical Structure Analysis

Revised Feb 011, 2011

## Changing Paradigm in Drug Discovery and Development: East Meets West

Renaissance Shanghai Pudong Hotel  
Shanghai, China  
April 13-16, 2011

The CPSA Shanghai symposia and roundtables are highly interactive events where scientists share their experiences and visions in a collegial setting. The program will highlight speakers and sessions that provide real-world experiences with new technologies and critical insights into current issues and future needs. Education and specialized training are the foundation of all CPSA events.

Each session at CPSA Shanghai will address the current industrial landscape and the global need to bring products to market faster. The program chairs will promote discussion and exchange of experiences, ideas, and visions so that current processes that involve analytical measurement can be benchmarked and future strategies may be developed.

CPSA上海论坛与圆桌会议是为科学家们提供一个共同的平等交流的场所和平台，通过这一平台，科学家们可以高度互动，分享经验，共享愿景。所有安排的报告都是报告人的切身经历和经验，以及他们对最近和将来的新技术与新领域的深刻理解。为青年科学家提供教育和培训的机会是所有CPSA论坛的出发点。

CPSA上海论坛的每一场分会报告都将结合当前工业界的某一热点话题，以及将产品快速推向市场的全球化需要。大会与分会主席将会调动与会者积极的参与和热烈的讨论，资深科学家们将会现场回答问题，交流经验和提出建议，这些经验和建议将会为每一位参加者将来制定策略和规划提供非常有用的参考。

## PRELIMINARY AGENDA

### Wednesday, April 13 – Workshops

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#### Workshops

1:00 pm – 5:00 pm  
*Ballroom 1*

**Biotransformation: Lead Optimization and Clinical Candidate Selection Through in Vitro ADME Evaluation**

*Workshop Leader: Mingshe Zhu, Bristol-Myers Squibb*

Common in Vitro ADME Assays: Methods and Data Interpretation  
*Weiqing Chen, ChemPartner*

Assessment of Transporter-Mediated Drug-Drug Interactions: Current Strategy and Methodology  
*Cindy Xia, Millennium*

Drug Metabolite Identification in Drug Discovery Using High-Resolution Mass Spectrometry  
*Jie Xing, University of Shandong, China*

Design Proper in Vitro ADME Studies to Meet Needs in Drug Discovery  
*Mingshe Zhu, Bristol-Myers Squibb*

1:00 pm – 5:00 pm  
*Ballroom 2*

**Bioanalysis: LC-MS/MS Bioanalysis from Drug Discovery to Development: Processes, Technologies and Regulations**

*Workshop Leader: Jian Wang, Bristol-Myers Squibb*

Overview of LC-MS/MS Bioanalysis in Pharmaceutical Industry: Processes and Applications  
*Danlin Wu, Roche*

Technical Fundamentals in LC-MS/MS Bioanalytical Method Development, Validation and Sample Analysis: Procedures, Issues and Solutions  
*Yuan-Qing Xia, Bristol-Myers Squibb*

Performing Regulated Bioanalysis, Challenges and Case Studies from a CRO Perspective  
*Xiaohang Shen, WuXi AppTec*

Discovery Bioanalysis  
*Jian Wang, Bristol-Myers Squibb*

1:00 pm – 5:00 pm  
*Rhine Ballroom*

**Pharmaceutical Analysis**

*Workshop Leaders: Gang Xue, Pfizer; Yong-Guo "Fred" Li, Roche*

High Speed and High Efficiency Method Development  
*Gang Xue, Pfizer*

ICH Q-Series, Key Points Exploration  
*Yong-Guo "Fred" Li, Roche*

Dissolution Design and Testing, Critical for Oral Drug  
*Mufeng Xie, Shanghai Institute for Food and Drug Control (SIFDC)*

## PRELIMINARY AGENDA

Evening	Sponsor's Dinner
	<i>Hosted by Thermo Fisher Scientific</i>
	Introduction and Welcome <i>Iain Mylchreest, Vice President and General Manager, Thermo Fisher Scientific</i>
	Applying Proven Proteomic Workflows and Tools for Quantitative Bioanalysis of Large Molecules <i>Jonathan McNally, Marketing Manager for Bioanalysis, Thermo Fisher Scientific</i>

### Thursday, April 14 – Main Symposium

8:15 am – 8:30 am	Welcome <i>Mike Lee, Milestone Development Services</i> Ballroom 1-2
8:30 am – 8:45 am	Meeting Overview <i>Jing-Tao Wu, Millennium Pharmaceuticals</i> Ballroom 1-2
8:45 am – 9:30 am	<b>Plenary Lecture</b> Challenges and Future Direction of Oncology Drug Development <i>Pete Smith, Senior Vice President, Millennium Pharmaceuticals</i> Ballroom 1-2
10:15 am – 11:45 am	<b>Parallel Sessions</b>
<b>Parallel Track I</b>	<b>ADME I</b> Ballroom 1
10:15 am – 11:45 am	Comparison of Regulatory Requirements on DMPK Package <i>Chair: Jeff Zhang, Novartis</i> Overview of DMPK Package in China: Regulatory Requirement & Current Practice <i>Dafang Zhong, Shanghai Institute of Materia Medica</i> US/Europe Regulatory Requirements on Metabolites in Safety Testing <i>Mingshe Zhu, Bristol-Myers Squibb</i> US/Europe Regulatory Requirements on Drug/Drug Interactions <i>Mark Milton, Novartis</i>
<b>Parallel Track II</b>	<b>Pharmaceutical Sciences</b> Rhine Ballroom
10:15 am – 11:45 am	Emerging Trends and Technologies in Pharmaceutical Sciences <i>Chair: Jack Chen, DSM</i> PAT Applications in a Quality-by-Design (QbD) Environment <i>Kevin Bittorf, Vertex Pharmaceuticals</i>

## PRELIMINARY AGENDA

Enhancing Product Performance Through Innovative Formulation and Manufacturing  
*Qun Lu, Merck*

New Technology in Polymorph Studies  
*Beth Sarsfield, Bristol-Myers Squibb*

### Parallel Track III

#### Bioanalytical

*Ballroom 2*

10:15 am – 11:45 am Dried Blood Spots and Other Emerging Bioanalytical Technologies  
*Chair: Naidong Weng, Johnson & Johnson*

Applications of DBS for Clinical Bioanalysis Support  
*Tom Verhaeghe, Johnson & Johnson*

Case Study of Dried Blood Spots Application in Toxicology Study  
*Luke Bi, Covance*

High Resolution Accurate Mass Spectrometry in Quantitative Bioanalysis: Effect of Mass Resolution and Extraction Window on Selectivity  
*Yuan-Qing Xia, Bristol-Myers Squibb*

High-Throughput Bioanalysis Using an Ultra-fast On-line Extraction System  
*Wenyong Jian, Johnson & Johnson*

11:45 am – 1:15 pm **Lunch & Roundtable Discussion**

11:45 pm – 1:15 pm **Sponsored Roundtable Workshops**

Hosted by AB Sciex – *Danube Ballroom*

High Resolution Quantitation for Bioanalysis using AB Sciex 5600 Triple ToF  
*Hesham Ghobarah, AB Sciex*

Targeted Peptide Quantitation using MIDAS Workflow  
*Wenhai Jin, AB Sciex*

Hosted by McKinley Scientific – *The Boardroom*

Topic to be announced

1:15 pm – 5:00 pm **Parallel Sessions**

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### Parallel Track I

#### ADME II

*Ballroom 1*

1:15 pm – 2:45 pm Drug-Drug Interactions  
*Chairs: Cindy Xia, Millennium; Angela Wong, Merck Serono*

DDI of Herbal Medicines  
*Chuan Li, Shanghai Institute of Materia Medica*

## PRELIMINARY AGENDA

	<p>Transporter-mediated DDI <i>Cindy Xia, Millennium Pharmaceuticals</i></p> <p>Pharmacogenetics in Drug Discovery and Development <i>Renke Dai, South China University of Technology</i></p>
3:00 pm – 5:00 pm	<p>ADME Optimization to Advance CNS and Oncology Drug Discovery &amp; Development: Industry Case Studies <i>Chairs: Zack Cheng, GlaxoSmithKline; Haojing Rong, Pfizer</i></p> <p>Blood-Brain Barrier Transporters: Friend or Enemy for CNS Drug Discovery and Development? <i>Zack Cheng, GlaxoSmithKline</i></p> <p>Intranasal Administration for CNS Drug Delivery: Hope or Hype? <i>Haojing Rong, Pfizer</i></p> <p>ADME Support of Oncology Programs: Risk Management vs. Pursuit of Appropriate Drug-Like Properties <i>Hongjian Zhang, PharmaResources</i></p> <p>Predictive Toxicology Approaches for Small Molecule Oncology Drugs <i>Vic Kadambi, Millennium Pharmaceuticals</i></p>
<b>Parallel Track II</b>	<b>Pharmaceutical Analysis Summit</b> <i>Ballroom 2</i>
1:15 pm – 2:45 pm	<p>High-speed, High-Resolution Techniques for Pharmaceutical Analysis <i>Chairs: Anne-Françoise Aubry, Bristol-Myers Squibb; Xiaoyi Gong, Merck</i></p> <p>Chromatographic Methodology and Technology for Developing TCM <i>Xinmiao Liang, Dalian Institute of Chemical Physics</i></p> <p>Mass Spectrometry and Ion Mobility-Based Techniques for Rapid Pharmaceutical Analysis: No Sample Preparation? <i>Zhongli Zhang, Pfizer</i></p> <p>Evaluation of Ionic Liquid Stationary Phases for GC-MS and GCxGC Analyses of Fatty Acids in Marine Biota <i>Qun Gu, Dalian Institute of Chemical Physics</i></p>
3:00 pm – 5:00 pm	<p>Analytical Approaches for the Determination of Low-Level Impurities to Comply with International Regulations <i>Chairs: Todd Gillespie, Eli Lilly and Company; Roman Szucs, Pfizer</i></p> <p>Genotoxic Impurities in Drug Development <i>James An, Wilmington Pharmatech</i></p> <p>Analytical Strategy for Quantifying Low-Level Genotoxic Impurities <i>Todd Gillespie, Eli Lilly and Company</i></p> <p>Quantitation of API Impurities Near the Qualification Level <i>Tianmin Zhu, Hisun Pharmaceuticals</i></p> <p>High-throughput Chiral Analyses <i>Xiaoyi Gong, Merck</i></p>

## PRELIMINARY AGENDA

### Parallel Track III

### Workshop

*Rhine Ballroom*

1:15 pm – 5:00 pm

Absolute Quantification of Peptides and Proteins: From Sample Preparation and Chromatography to ESI-MS/MS

*Leaders: Gary Valaskovic, New Objective; Nalini Sadagopan, Agilent Technologies*

5:00 pm – 6:00 pm

**Poster Viewing** - Yangtze Ballroom

6:00 pm – 9:00 pm

### Dinner

*Ballroom 1-2*

Welcome Toast - Agilent Technologies

### Keynote Lectures

Stable and Reactive Metabolites in Drug Research

*Scott Obach, Pfizer*

Simultaneous Determination of the PK profile of Clozapine and its Metabolites in Rat Plasma Using a High-Resolution 6540 QTOF instrument

*Lester C. Taylor, Shane Tichy, and Na Pi, Agilent Technologies*

## Friday, April 15

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8:15 am – 9:00 am

### Plenary Lecture

*Ballroom 1-2*

Multi-dimensional Chromatography-Mass Spectrometry for Protein Analysis

*Xiangmin Zhang, Fudan University*

9:30 am – 11:00 am

### Parallel Sessions

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### Parallel Track I

9:30 am – 11:00 am

### Novel Drug Delivery Technologies

*Chair: Mark Milton, Novartis*

*Ballroom 1*

Antibody Drug Conjugates - A General Review

*Mark Milton, Novartis*

Drug Targeting and Nanotechnology

*Yiqiao Hu, Nanjing University*

Novel Technologies for the Delivery of Biologics

*Zhixuan Wang, Novartis*

## PRELIMINARY AGENDA

### Parallel Track II **Biomarker Discovery**

9:30 am – 11:00 am

*Chairs: Scott Fountain, Pfizer; Nalini Sadagopan, Agilent  
Ballroom 2*

Application of Target and Mechanism Biomarkers in Advancing Biotherapeutics and Pharmatherapeutics

*Scott Fountain, Pfizer*

Implementing Biomarkers into Clinical Trials on a Global Scale

*Tom Turi and LiBin Ma, Covance*

Proteomics Approaches to the Development of Plasma Markers for Predicting Pre-Term Birth

*Kevin P. Rosenblatt, The Brown Foundation Institute of Molecular Medicine*

### Parallel Track III

### **Comparison of Regulations for Pharmaceutical Sciences**

9:30 am – 11:00 am

*Chair: Gang Xue, Pfizer  
Rhine Ballroom*

Reviews of CMC Requirements for Drug Development, Registration and Post Approval

*Yanyun Chen, Pfizer*

CMC Requirements for Analytical/QC

*Wenfang Miao, Pharmaron*

11:00 am – 12:00 pm

**Poster Session – Yangtze Ballroom**

12:00 pm – 1:30 pm

**Lunch / Roundtable Discussion**

12:30 pm – 1:30 pm

**Sponsored Roundtable Workshops**

Hosted by Thermo Fisher Scientific – *Danube Ballroom*

Identification and Screening for Drug Impurities, Leachables, and Extractables Using New Software and High Resolution Mass Spectrometry

*Kate Comstock, Marketing Specialist for Drug Metabolism, Thermo Fisher Scientific*

Hosted by New Objective – *Boardroom*

Topic to be announced

*Gary Valaskovic, New Objective*

1:30 pm – 5:00 pm

**Parallel Sessions**

### Parallel Track I

### **ADME III**

*Ballroom 1*

1:30 am – 3:30 pm

Development of Biologics as Therapeutics

*Chair: Lawrence Gan, Biogen Idec; Haijing Rong, Pfizer*

Introduction of Biologics

*Jennifer Visich, Genentech*

- Biologics Drug Drug Interaction  
*Lewis Klunk, Biogen Idec*
- PK/PD of Biologics  
*Anup Zutshi, Pfizer*
- 3:45 pm – 5:15 pm PK/PD in Drug Discovery & Development  
*Chairs: Jenny Zheng, Pfizer; Zhuohan Hu, Research Institute for Liver Diseases*
- The Myths of PK/PD - Empirical? Mechanistic? Or System?  
*Jenny Zheng, Pfizer*
- A Mechanistic-Based PK/PD Modeling for Drug Metabolism by CYP3A in Rat  
*Wei Lu, Peking University, China*
- Case History – Use of PK/PD in Drug Candidate Selections  
*Lawrence Gan, Biogen Idec*
- Application of PBPK and In-Vitro Hepatocyte Models to Accurately Predict Human PK  
*Yurong Lai, Pfizer*
- Parallel Track II**
- Regulated Bioanalysis Summit**  
*Ballroom 2*
- 1:30 pm – 3:30 pm Regulated Bioanalysis: State of the Art  
*Chair: Danlin Wu, Roche*
- Perspectives on Regional Differences in Bioanalytical Regulations  
*Mark Arnold, Bristol-Myers Squibb*
- Strategies to Avoid Pitfalls in Developing and Validating High-quality Quantitative Bioanalytical Methods to Support Regulated Studies  
*Eric Yang, GlaxoSmithKline*
- Importance of Reagent Quality for Ligand Binding Assay Development  
*Roland Staak, Roche*
- Validation and Application of Ligand Binding Assays for Protein Therapeutics Quantitation and Immunogenicity Testing: A GLP Bioanalytical Lab Perspective  
*Eginhard Schick, Roche*
- 3:45 pm – 5:15 pm Regulated Bioanalysis: Current Challenges  
*Chair: Anne Françoise-Aubry, Bristol-Myers Squibb*
- Unexpected Event Investigations in the Bioanalytical Laboratory  
*Anne Françoise-Aubry, Bristol-Myers Squibb*
- Bioanalytical Method Transfer: Challenges & Opportunities  
*Naidong Weng, Johnson & Johnson*
- Harmonization of Regulated Bioanalytical Operation at both U.S. and China Sites  
*XinPing Fang, XenoBiotic Laboratories*
- Parallel Track III**
- Workshop**  
*Rhine Ballroom*
- 1:30 pm – 5:15 pm Pharmacokinetic Applications in Drug Discovery and Development: Human PK and Efficacious Dose Prediction  
*Workshop Leaders: Frances Wang, Astra Zeneca; Xingmei Han, Novartis*



6:00 pm – 9:30 pm

**CPSA Shanghai Gala Dinner**

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*Ballroom 1-2*

*Held in conjunction with local bioanalytical and metabolism discussion groups*

6:00 pm – 7:00 pm

Dinner Gala

7:00 pm – 7:30 pm

Awards and Announcements

7:30 pm – 9:30 pm

Point/Counterpoint Discussions

Future Direction of Pharmaceutical R&D in China

*Moderator: Jeff Zhang, Novartis*

**Saturday, April 16**

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Morning

**Joint session with local bioanalytical and metabolism discussion groups**

Application of PK/PD in Drug Discovery and Development

*Li Yu, Hoffmann-La Roche*

Application of In-Vitro Data to Predict Clinical PK and Drug-Drug Interaction  
by Simcyp

*Jing Lin, Pfizer*

Application of Radioisotopes in Drug Absorption, Distribution, Metabolism,  
and Excretion Studies

*Zhe-ming Gu, XBL-China*