Day 1 | May 16, 2016
---|---
08:00-08:30 | Registrations

**RUBY**

**conference.org** 08:30-09:00

**Opening Ceremony**

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**Keynote Forum**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:30</td>
<td><strong>18O-assisted 31P NMR and mass spectrometry: From phosphometabolomics to fluxomics</strong></td>
<td>Petras Dzeja, Metabolomics NMRS Core, Mayo Clinic, USA</td>
</tr>
<tr>
<td>09:30-10:00</td>
<td><strong>Diet, amino acids profile, and diabetes risk</strong></td>
<td>Lu Qi, Tulane University, USA</td>
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</tbody>
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**Group Photo**

Networking and Refreshments Break: 10:00-10:20 @ Foyer

Session Introduction

**Track 1: Metabolomic Profiling**

**Track 2: Clinical Metabolomics & Lipidomics**

**Track 3: Cancer Therapeutic Approaches**

Session Chair: Petras Dzeja, Metabolomics NMRS Core, Mayo Clinic, USA

Session Co-Chair: Björn Riefke, Bayer Pharma AG, Germany

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<thead>
<tr>
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<tbody>
<tr>
<td>10:20-10:40</td>
<td><strong>Metabolic and epigenetic alterations in patients with Alzheimer's disease</strong></td>
<td>Eugenia Trushina, Mayo Clinic College of Medicine, USA</td>
</tr>
<tr>
<td>10:40-11:00</td>
<td><strong>Fucoidan inhibitory function in cancer in vivo and in vitro: Role in the development of human anti-cancer therapeutic intervention</strong></td>
<td>Hsien-Yeh Hsu, National Yang-Ming University, Taiwan</td>
</tr>
<tr>
<td>11:00-11:20</td>
<td><strong>Interference with glutamine metabolism: A novel approach for treatment of acute myeloid leukemia</strong></td>
<td>Ashkan Emadi, University of Maryland School of Medicine, USA</td>
</tr>
<tr>
<td>11:20-11:40</td>
<td><strong>Myc induces expression of glutamine synthetase through promoter demethylation</strong></td>
<td>I-Chen Peng, National Cheng Kung University, Taiwan</td>
</tr>
<tr>
<td>11:40-12:00</td>
<td><strong>Slow-MAS NMR Metabolomics</strong></td>
<td>Jian Zhi Hu, Pacific Northwest National Laboratory, USA</td>
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**Lunch Break:** 12:00-13:00 @ Salon Panoramica

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<tbody>
<tr>
<td>13:00-13:20</td>
<td><strong>Prevention of metabolite change due to enzymatic post-sample activity using heat based enzyme inactivation</strong></td>
<td>Mats Borén, Denator, Sweden</td>
</tr>
<tr>
<td>13:20-13:40</td>
<td><strong>Clinical metabonomics for biomarker discovery of malignant pleural effusions (MPE)</strong></td>
<td>Ching-wan Lam, The University of Hong Kong, Hong Kong</td>
</tr>
<tr>
<td>13:40-14:00</td>
<td><strong>Mass spectrometry-based metabolomics reveals that serum lysophospholipids are associated with incident type 2 diabetes</strong></td>
<td>Yonghai Lu, National University of Singapore, Singapore</td>
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**Special Session**

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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>14:00-15:00</td>
<td><strong>Metabolomics in neuroscience: Old tools for new models and new tools for old models</strong></td>
<td>Andrea Armirotti, Istituto Italiano di Tecnologia, Italy</td>
</tr>
</tbody>
</table>

Networking and Refreshments Break: 15:15-15:35 @ Foyer
### Track 10: Plant & Environmental Metabolomics
### Track 13: Food & Nutritional Metabolomics

**Session Chair:** Ching-wan Lam, The University of Hong Kong, Hong Kong  
**Session Co-Chair:** Yongyu Zhang, Shanghai University of Traditional Chinese Medicine, China

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<tr>
<td>15:20-15:40</td>
<td>ERRα induces mitochondrial glutaminase expression guiding anaplerosis upon osteogenic</td>
<td>Min Guan, Chinese Academy of Sciences, China</td>
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<td></td>
<td>differentiation of mesenchymal stem cells</td>
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<tr>
<td>15:40-16:00</td>
<td>Urine metabolomics study on unilateral ureteral obstruction induced renal fibrosis in rats</td>
<td>Yongyu Zhang, Shanghai University of Traditional Chinese Medicine, China</td>
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<td></td>
<td>and intervention effects of total aglycone extracts of Scutellaria baicalensis</td>
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</tr>
<tr>
<td>16:00-16:20</td>
<td>Serum lipid alterations identified in chronic Hepatitis b, Hepatitis b virus-related cirrhosis</td>
<td>Tao Wu, Shanghai University of Traditional Chinese Medicine, China</td>
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<td>and carcinoma patients</td>
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<td>16:20-16:40</td>
<td>Metabolism alterations in aggressive lymphomas</td>
<td>Pier Paolo Piccaluga, Bologna University School of Medicine, Italy</td>
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<tr>
<td>16:40-17:00</td>
<td>The correlation of polar lipids changes with TAG accumulation under nitrogen deprivation in</td>
<td>Song Xue, Dalian Institute of Chemical Physics-CAS, China</td>
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<td></td>
<td>Nannochloropsis oceanica based on lipidomics</td>
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**Panel Discussion**

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### Day 2    May 17, 2016

**RUBY**

**Keynote Forum**

<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>09:00-09:30</td>
<td>Plasma metabolic profiles are associated with habitual dietary patterns</td>
<td>Choon Nam ONG, National University of Singapore, Singapore</td>
</tr>
<tr>
<td>09:30-10:00</td>
<td>NMR Metabolomics Studies of Mice Exposed to Ionizing Radiation</td>
<td>Jian Zhi Hu, Pacific Northwest National Laboratory, USA</td>
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**Track 11: Metabolic Syndrome**  
**Track 12: Metabolomics in Precision Medicine**

**Session Chair:** Robert Plumb, Imperial College London, UK  
**Session Co-chair:** Houkai Li, Shanghai University of Traditional Chinese Medicine, China

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<tr>
<td>10:00-10:20</td>
<td>Biomarker Discovery in Cardiovascular Disease and role of LC/MS</td>
<td>Jose Castro-Perez, Waters Corp, USA</td>
</tr>
<tr>
<td>10:20-10:40</td>
<td>Metabolomic study on the different responses to simvastatin therapy in normal and antibiotic-</td>
<td>Houkai Li, Shanghai University of Traditional Chinese Medicine, China</td>
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<tr>
<td></td>
<td>treated mice</td>
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<tr>
<td>10:40-11:00</td>
<td>Understanding human health and disease with LC/MS based metabolic phenotyping</td>
<td>Robert Plumb, Imperial College London, UK</td>
</tr>
<tr>
<td>11:00-11:20</td>
<td>Treatment of natural plants on diabetes and metabolic syndrome</td>
<td>Jingxin Zhou, Beijing University of Chinese Medicine, China</td>
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**Networking and Refreshments Break: 11:20-11:40 @ Foyer**

**Special Session**

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<td>11:40-12:40</td>
<td>Two cases of the serious dementia improved dramatically by placing denture</td>
<td>Yoshiro Fujii, Shin Kobe Dental Clinic, Japan</td>
</tr>
</tbody>
</table>

**Poster Presentations**  
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<table>
<thead>
<tr>
<th>Poster</th>
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<th>Authors</th>
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<tbody>
<tr>
<td>P01</td>
<td>Elevation in liver function marker (alanine aminotransferase) and plasma metabolites with aging</td>
<td>Minjoo Kim, Yonsei University, Korea</td>
</tr>
</tbody>
</table>
P02  Fenofibrate regulates cell energy metabolism by restricting hypoxia-induced factor expression in human glioma cells
Wan-Rou Shih, Central Taiwan University of Science and Technology, Taiwan

P03  Augmentation in LDL-cholesterol with aging leads to oxidative stress and disturb sphingolipid metabolism
Miso Kang, Yonsei University, Korea

P04  Urine metabolomics revealed complex pesticide exposure in farmers in Chinese
Yan-xin Zhang, Harbin Institute of Technology, China

P05  Ferrous glycinate reverses epithelial mesenchymal transition and drug resistance to BCNU by suppression of hypoxia-induced factor in human U87 glioma cells
Yu-Syuan Lin, Taipei Medical University, Taiwan

P06  Combining in vitro and in silico techniques: a complex case of metabolite structural assignment
Minkyung Kim, Yonsei University, Korea

P07  Development of quantitative analytical method using liquid chromatography-tandem mass spectrometry for the tryptophan and its metabolites in serum and gastric juice to discovery biomakers for the diagnosis of gastric cancer
Byung Hwa Jung, Korea Institute of Science and Technology, Republic of Korea

P08  Comparison of three mobile phase with liquid chromatography/time-of-flight mass spectrometry (LC/TOF-MS) for urine metabonomics analysis
Pan Zou, Harbin Institute of Technology, China

P09  Ferrous glycinate regulates cell energy metabolism via suppression of hypoxia-induced factor in human A549 cells
Jhong-Huei Jheng, Taipei Medical University, Taiwan

P10  The association between carbon and nitrogen stable isotope ratios of human hair and cardiovascular risk factors
Song Vogue Ahn, Yonsei University, South Korea

P11  Alteration of plasma acylcarnitines and glycerophospholipids between metabolically healthy and unhealthy overweight subjects
Seung Han Baek, Yonsei University, Korea

P12  Heat-killed and live Lactobacillus reuteri GMNL-263 exhibit similar effects on improving metabolic functions in high-fat diet-induced obesity rat
Wu Ching-Shuang, Kaohsiung Medical University, Taiwan

P13  Replacing carbohydrate with protein and fat affects PBMC metabolites in prediabetes or type-2 diabetes: Comparison with plasma metabolites
Hye Jin Yoo, Yonsei University, Korea

P14  Development and mechanism research of multi functional peptide product
I-Chuan Sheih, Ta Hwa Institute of Technology, Republic of China

P15  A 1H-NMR-Based Metabolomics Investigation on The Effect of Saffron Extract and Crocin on Rats Fed a High Fat Diet
Fatin Najwa, Universiti Putra Malaysia, Malaysia

P16  Nα-(carboxymethyl) lysine decreases insulin secretion in beta cells through mitochondrial dysfunction and mitophagy
Mei-Chen Lo, Taipei Medical University, Taiwan

P17  Praeruptorin A regulates bone metabolic diseases via anti-osteoclastogenic activity by p38/Akt-c-Fos-NFATc1 signaling and PLCγ-independent Ca2+ oscillation
Sik-Won Choi, National Institute of Crop Science, Republic of Korea

P18  The targeted and untargeted analysis of serum indicate changes in the urea cycle of psoriasis patients
Aigar Ottas, University of Tartu, Estonia
Plasma taurine, genetic predisposition, and changes of insulin sensitivity in response to weight-loss diets: The POUNDS lost
Yoriko Heianza, Tulane University, USA

Development of galectin-12 siRNA to defeat metabolic disorders
Yen-Ju Lin, Industrial Technology Research Institute, Taiwan

Brain metabolic change in the dorsolateral prefrontal cortex and its correlation with anxiety levels in patients with generalized anxiety disorder: 1H-MR spectroscopy
Gwang-Woo Jeong, Chonnam National University Hospital, Republic of Korea

Skin metabolomics approach for the development of biomarkers in psoriatic disease
Ewelina P Dutkiewicz, National Chiao Tung University, Taiwan

Lunch Break: 13:40-14:40 @ Salon Panorama

Metabolomic biomarkers for amyotrophic lateral sclerosis (ALS) in patients and animal models of ALS
Loeffler Jean Philippe, Université de Strasbourg, France

Comparative assessment of phenolic compounds and antioxidant properties related to the harvest times from the leaves of Korean barley (Hordeum vulgare L.) cultivars
Woo Duck Seo, National Institute of Crop Science, Republic of Korea

Crosstalk between the circadian clock and cancer metabolism reveals novel anticancer strategies
Benedetto Grimaldi, Istituto Italiano di Tecnologia, Italy

Ferrous glycinate reverses Warburg effect and regulates cell energy metabolism via suppression of hypoxia-induced factor in human lung adenocarcinoma A549 cells
Horng-Mo Lee, Taipei Medical University, Taiwan

NMR-based metabolomics analysis of 2D with 3D (Spheroids) of breast cancer cells
Björn Riefke, Bayer Pharma AG, Germany

Networking and Refreshments Break: 16:20-16:40 @ Foyer

Translational Research in Targeting Glucose or Glutamine Dependency in Solid and Hematologic Neoplasms
Ashkan Emadi, University of Maryland School of Medicine, USA

Molecular Mechanism for modulation of a multiple transcription factor complex formed on enhancer site upon phosphorylation
Kazuhiro Ogata, Yokohama City University Graduate School of Medicine, Japan

Development and commercialization of a plasma amino acid based risk diagnosis service
Takeshi Kimura, Ajinomoto Co., Inc., Japan

Studying Conformational Changes on GDP and GTP Binding with a Novel Visualization Platform
Darby Tien-Hao Chang, National Cheng Kung University, Taiwan
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<td>Using chlorophyll as gamma absorber generated from uranium coated weapons to protect Iraqi children from cancer</td>
<td>Jaleel Kareem Ahmed, Babylon University, Iraq</td>
</tr>
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<td>11:40-11:40</td>
<td>Networking and Refreshments Break: 11:20-11:40 @ Foyer</td>
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<td>11:40-12:00</td>
<td>Recent advancements in Mendelian genomics and data management at the Yale Center for Genome Analysis</td>
<td>Shrikant Mane, Yale University School of Medicine, USA</td>
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<td>ERRα induces mitochondrial glutaminase expression guiding anaplerosis upon osteogenic differentiation of mesenchymal stem cells</td>
<td>Min Guan, Chinese Academy of Sciences, China</td>
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<td>12:20-12:40</td>
<td>Development and mining of a volatile organic compound database</td>
<td>Md. Altaf-Ul-Amin, Nara Institute of Science and Technology, Japan</td>
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<tr>
<td>12:40-13:00</td>
<td>Detection of Bt protein metabolites presence in insect and their predator transferred through GM rice using ELISA technique</td>
<td>Zunnu Raen Akhtar, University of Agriculture Faisalabad, Pakistan</td>
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<td></td>
<td>Lunch Break 13:00-14:00 @ Salon Panorama</td>
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<td>Awards and Closing Ceremony</td>
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