

# **The 39th Annual Meeting of the Japanese Society for Biomedical Mass Spectrometry**



## **Program**

**October 16th (Thu) – 17th (Fri), 2014**

**Mitsui Garden Hotel Chiba  
1-11-1 Chuo, Chuo-ku, Chiba, 260-8626 JAPAN**

**Fumio Nomura, M.D.,Ph.D.**

**President of the 39th Annual Meeting of  
the Japanese Society for Biomedical Mass Spectrometry**

**Department of Molecular Diagnosis, Graduate School of Medicine,  
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## **Time Schedule**

### **October 16 (Thursday)**

- 9:00- Start Accepting**
- 9:50-9:55 Opening Remarks**
- 9:55-11:35 Symposium 1**
- 11:55-12:35 Board Meeting / Luncheon Seminar**
- 12:55-13:55 Poster Presentation (odd number of subjects)**
- 14:10-14:50 Education Lecture 1**
- 15:05-15:45 JSBMS General Meeting**
- 16:00-17:30 Symposium 2**
- 17:40-18:20 Education Lecture 2**
- 18:30-20:30 Banquet**

### **October 17 (Friday)**

- 8:30- Start Accepting**
- 9:15-9:40 Morning Seminar**
- 10:00-11:40 Symposium 3**
- 12:00-12:40 Luncheon Seminar**
- 13:00-14:00 Poster Presentation (even number of subjects)**
- 14:15-15:05 Invited Lecture**
- 15:10-15:30 Encouragement Award Lecture**
- 15:45-17:15 Technical Workshop**
- 17:15 Closing Remarks**

# Program

**October 16 (Thursday)**

**9:00- Start Accepting**

**9:50-9:55 Opening Remarks**

**9:55-11:35 Symposium 1**

**Newborn screening for inborn errors by tandem mass spectrometry**

Organizer: Seiji Yamaguchi (Shimane University)

**S1-1 Practice for improvement in MS/MS screening accuracy of target disorders**

Yosuke Shigematsu<sup>1</sup>, Ikue Hata<sup>2</sup> (<sup>1</sup>Department of Health Science, Faculty of Medical Sciences, University of Fukui, <sup>2</sup>Department of Pediatrics, Faculty of Medical Sciences, University of Fukui)

**S1-2 Clinical features of diseases detected by advanced neonatal mass-screening**

Masaki Takayanagi (Chiba Children's Hospital, Div. of General pediatrics)

**S1-3 Quality control for newborn screening using tandem mass spectrometry in screening laboratories.**

Junji Hanai<sup>1</sup>, Masaru Fukushi<sup>2</sup>, Nobuyuki Ishige<sup>3</sup>, Ryuji Tasaki<sup>4</sup> (<sup>1</sup>Sapporo City Institute of Public Health, <sup>2</sup>Sapporo Immuno diagnostic laboratory, <sup>3</sup>Tokyo Health Service Association, <sup>4</sup>The Chemo Sero-Therapeutic Research Institute)

**S1-4 Development of second tier test system in neonatal screening by LC-MS**

Hideki Nakajima<sup>1</sup>, Nobuyuki Ishige<sup>2</sup>, Akira Anazawa<sup>2</sup>, Torayuki Okuyama<sup>1</sup>, Junichiro Fujimoto<sup>1</sup>, Yosuke Shigematsu<sup>3</sup>, Seiji Yamaguchi<sup>4</sup>, Shohei Harada<sup>1</sup> (<sup>1</sup>National Center for Child Health and Development, <sup>2</sup>Division of Newborn Screening, Tokyo Health Service Association, <sup>3</sup>Department of Pediatrics, Fukui University School of Medicine, <sup>4</sup>Department of Pediatrics, Shimane University School of Medicine)

**11:55-12:35 Board Meeting / Luncheon Seminar**

**Sumitomo Dainippon Pharma**

**LS-1 Diagnosis and Therapeutic Care for Fabry Disease**

Hiroshi Kobayashi (Division of Gene Therapy, Research Center for Medical Sciences, The Jikei University School of Medicine)

**Thermo Fisher Scientific, Inc.**

**LS-2 Metabolome analysis of metabolic disorder patient sample by high-resolution mass spectrometer "Orbitrap"**

Hideki Nakajima<sup>1</sup>, Kentaro Takahara<sup>2</sup>, Masayuki Kubota<sup>2</sup>, Motomichi Kosuga<sup>1</sup>, Torayuki Okuyama<sup>1</sup>, Masafumi Onodera<sup>1</sup>, Junichiro Fujimoto<sup>1</sup> (<sup>1</sup>National Center for Child health and Development, <sup>2</sup>Thermo Fisher Scientific, Inc.)

## 12:55-13:55 Poster Presentation (odd number of subjects)

- P-1 Dried-blood spot metabolite profile analysis by GC/MS and LC/MSMS simultaneously analysis**  
Chunhua Zhang (Department of research & development of MILS International)
- P-3 Confirmatory LC/MS/MS analysis for CAH screening**  
Kazutaka Inaoka<sup>1,5</sup>, Hiroshi Fujita<sup>1</sup>, Shinobu Nakamura<sup>1</sup>, Kiyomi Takeshima<sup>1</sup>, Toshiki Kasahara<sup>1</sup>, Makoto Takeuchi<sup>1</sup>, Yoshinao Wada<sup>1</sup>, Tetsuo Kokaji<sup>2</sup>, Yoshinori Fujimine<sup>3</sup>, Kazuhito Sekine<sup>4</sup>, Shohei Harada<sup>5</sup>, Yosuke Shigematsu<sup>6</sup> (<sup>1</sup> Osaka Medical Center and Research Institute for Maternal and Child Health, <sup>2</sup> AB SCIEX, <sup>3</sup> Otsuka Pharmaceutical Co., LTD, <sup>4</sup> Eiken Chemical Co., LTD, <sup>5</sup> National Center for Child Health and Development, <sup>6</sup> Fukui University.)
- P-5 Analysis for Derivatized Fatty Acids by LC/MS**  
Shu-Ping Hui<sup>1</sup>, Rojeet Shrestha<sup>1</sup>, Ken-ichi Hirano<sup>2</sup>, Akira Suzuki<sup>2</sup>, Hitoshi Chiba<sup>1</sup> (<sup>1</sup> Faculty of Health Sciences, Hokkaido University, <sup>2</sup> Laboratory of Cardiovascular Disease, Novel, Non-Invasive, and Nutritional Therapeutics (CNT), Graduate School of Medicine, Osaka University)
- P-7 Non-target lipidomics approach by new accurate and global screening**  
Kazutaka Ikeda<sup>1,2,3</sup>, Hiroshi Tsugawa<sup>4</sup>, Sanae Yamanaka<sup>2,3</sup>, Masanori Arita<sup>4</sup>, Makoto Arita<sup>1</sup>, Masaru Tomita<sup>2</sup>, Tomoyoshi Soga<sup>2</sup> (<sup>1</sup> Laboratory for Metabolomics, RIKEN Center for Integrative Medical Sciences (IMS), <sup>2</sup> Institute for Advanced Biosciences, Keio University, <sup>3</sup> JST-CREST, <sup>4</sup> Metabolome Informatics Research Team, RIKEN Center for Sustainable Resource Science (CSRS))
- P-9 Acyl-CoA synthetase activity and effect of the drugs on the acyl-CoA synthetases in mouse tissues**  
Takuya Yamashita, Hiroki Satou, Midori Miura, Fumiyo Kasuya (Faculty of Pharmaceutical Sciences, Kobegakuin University)
- P-11 Development of LC/ESI-MS/MS assay for plasma 25-hydroxyvitamin D<sub>3</sub> sulfate**  
Ayaka Goto<sup>1</sup>, Misato Morohashi<sup>1</sup>, Kenji Komatsu<sup>2</sup>, Takahiro Sugiura<sup>2</sup>, Shoujiro Ogawa<sup>1</sup>, Tatsuya Higashi<sup>1</sup> (<sup>1</sup> Faculty of Pharmaceutical Sciences, Tokyo University of Science, <sup>2</sup> Shizuoka Saiseikai General Hospital)
- P-13 Development of highly sensitive quantification method for estradiol in serum by LC-MS/MS**  
Hidehiko Sasamoto, Yoshimichi Miyashiro (Aska Pharma Medical Co., LTD.)
- P-15 Simultaneous Determination of Serum 25-hydroxyvitamin D and 1,25-dihydroxyvitamin D by LC-MS/MS with Immunoaffinity Extraction and DAPTAD Derivatization**  
Takayuki Ishige<sup>1</sup>, Mamoru Satoh<sup>2</sup>, Shoujiro Ogawa<sup>3</sup>, Motoi Nishimura<sup>1</sup>, Sachio Tsuchida<sup>2</sup>, Setsu Sawai<sup>1</sup>, Kazuyuki Matsushita<sup>1</sup>, Tatsuya Higashi<sup>3</sup>, Fumio Nomura<sup>1,2</sup> (<sup>1</sup> Department of Molecular Diagnosis, Graduate School of Medicine, Chiba University, <sup>2</sup> Clinical Proteomics Research Center, Chiba University Hospital, <sup>3</sup> Faculty of Pharmaceutical Sciences, Tokyo University of Science)

- P-17 Exploration of biomarkers for the detection of heart failure**  
 Yasuhiro Irino<sup>1</sup>, Ryuji Toh<sup>1</sup>, Takeshige Mori<sup>2</sup>, Manabu Nagao<sup>2</sup>, Tomoyuki Honjo<sup>2</sup>, Seimi Satomi-Kobayashi<sup>2</sup>, Toshiro Shinke<sup>2</sup>, Tatsuro Ishida<sup>2</sup>, Okiko Miyata<sup>3</sup>, and Ken-ichi Hirata<sup>1,2</sup>  
 (<sup>1</sup> Division of Evidence-Based Laboratory Medicine, Kobe University Graduate School of Medicine, <sup>2</sup> Division of Cardiovascular Medicine, Kobe University School of Medicine, <sup>3</sup> Medicinal Chemistry Laboratory, Kobe Pharmaceutical University)
- P-19 Analysis for Oxidative Stress-related Substances of Human Cell Lines Exposed to Water Pollutants using Ultra-fast LC/MS/MS**  
 Yukiko Hirabayashi, Ayako Nishimura, Yumiko Igarashi (Central Research Laboratory, Hitachi, Ltd)
- P-21 Metabolomics-based search for therapeutic agents against non-alcoholic steatohepatitis**  
 Sin Nishiumi, Yoshihiko Terashima, Takeshi Azuma, Masaru Yoshida (Division of Gastroenterology, Department of Internal Medicine, Kobe University Graduate School of Medicine)
- P-23 Targeted metabolomics approach for Alzheimer's brain and blood samples.**  
 Koichi Inoue<sup>1</sup>, Hiroyasu Akatsu<sup>2</sup>, Hirofumi Tsuchiya<sup>1</sup>, Takahiro Takayama<sup>1</sup>, Noriyuki Matsukawa<sup>2</sup>, Yoshio Hashizume<sup>3</sup>, Takayuki Yamamoto<sup>3</sup>, Toshimasa Toyooka<sup>1</sup> (<sup>1</sup> Laboratory of Analytical and Bio-Analytical Chemistry, School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, Japan, <sup>2</sup> Nagoya City University, Graduate School of Medical Sciences, Nagoya, Japan, <sup>3</sup> Chouji Medical Institute, Fukushima Hospital, Toyohashi, Japan)
- P-25 The C-terminal peptide of prostate-specific antigen as a new urinary biomarker candidate for diagnosing prostate cancer**  
 Kenji Nakayama<sup>1</sup>, Takahiro Inoue<sup>1</sup>, Sadanori Sekiya<sup>2</sup>, Naoki Terada<sup>1</sup>, Yu Miyazaki<sup>1</sup>, Takayuki Goto<sup>1</sup>, Shigeki Kajihara<sup>2</sup>, Shin-Ichiro Kawabata<sup>2</sup>, Shinichi Iwamoto<sup>2</sup>, Koichi Tanaka<sup>2</sup>, Osamu Ogawa<sup>1</sup> (<sup>1</sup> Department of Urology, Graduate School of Medicine, Kyoto University, <sup>2</sup> Koichi Tanaka Laboratory of Advanced Science and Technology, Shimadzu Corporation)
- P-27 Search for novel marker of cats with chronic renal failure using proteome analysis**  
 Hiroto Maeda<sup>1</sup>, Takehiro Maekawa<sup>2</sup>, Yui Shibata<sup>2</sup>, Saori Abe<sup>1</sup>, Waka Horie<sup>1</sup>, Shunsuke Mochizuki<sup>3</sup>, Toshifumi Watanabe<sup>3</sup>, Mamoru Satoh<sup>4</sup>, Akihiro Sanda<sup>2</sup>, Fumio Nomura<sup>4</sup>, Kazuyuki Sogawa<sup>2</sup> (<sup>1</sup> Maeda Veterinary Hospital, <sup>2</sup> Azabu University School of Life and Environmental Science, <sup>3</sup> Azabu University Veterinary Teaching Hospital, <sup>4</sup> Chiba University Graduate School of Medicine)
- P-29 Search for novel allergen of kiwi fruit allergy using IgE-immunoblotting assay**  
 Ayaka Kawahara<sup>1</sup>, Kazuyuki Sogawa<sup>1</sup>, Mamoru Satoh<sup>2</sup>, Akihiro Sanda<sup>1</sup>, Naoki Shimojo<sup>2</sup>, Fumio Nomura<sup>2</sup> (<sup>1</sup> Azabu University School of Life and Environmental, <sup>2</sup> Chiba University Graduate School of Medicine)
- P-31 Establishment of method to analyze immunoglobulin G binding peptides aimed at discovering disease biomarkers.**  
 Yoshiya Hirata<sup>1</sup>, Tatsuya Saito<sup>1,2</sup>, Rika Kato<sup>1,2</sup>, Yusuke Kawashima<sup>2,3</sup>, Yoshio Kodera<sup>1,2</sup>  
 (<sup>1</sup> Laboratory of Biophysics, Department of Physics, School of Science, Kitasato University, <sup>2</sup> Center for Disease Proteomics, School of Science, Kitasato University, <sup>3</sup> RIKEN Center for Integrative Medical Sciences)

- P-33 Proteomic analysis of exosomes in serum and plasma aimed at discovering disease-related proteins.**  
Eri Takahashi<sup>1</sup>, Tatsuya Saito<sup>1,2</sup>, Yusuke Kawashima<sup>2,3</sup>, Hideaki Kume<sup>4</sup>, Takeshi Tomonaga<sup>4</sup>, Yoshio Kodera<sup>1,2</sup> ( <sup>1</sup> Laboratory of Biophysics, Department of Physics, School of Science, Kitasato University, <sup>2</sup> Center for Disease Proteomics, School of Science, Kitasato University, <sup>3</sup> RIKEN Center for Integrative Medical Sciences, <sup>4</sup> Laboratory of Proteome Research, National Institute of Biomedical Innovation)
- P-35 The effects of preanalytical variables on serum peptidome profiling by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry**  
Sachio Tsuchida<sup>1,2</sup>, Mamoru Satoh<sup>1,2</sup>, Kazuyuki Sogawa<sup>1,2</sup>, Hiroshi Umemura<sup>1,2</sup>, Minako Beppu<sup>1,2</sup>, Setsu Sawai<sup>1,2</sup>, Motoi Nishimura<sup>1,2</sup>, Yoshio Kodera<sup>2,3</sup>, Kazuyuki Matsushita<sup>1,2</sup>, Fumio Nomura<sup>1,2</sup> ( <sup>1</sup> Department of Molecular Diagnosis, Graduate School of Medicine, Chiba University, <sup>2</sup> Clinical Proteomics Research Center, Chiba University Hospital, <sup>3</sup> Laboratory of Biomolecular Dynamics, Department of physics, School of Science, Kitasato University )
- P-37 Doping control analysis of stimulants using dried blood spot (DBS)**  
Asami Kojima<sup>1</sup>, Masato Okano<sup>1</sup>, Mitsuhiko Sato<sup>1</sup>, Yasunori Nishitani<sup>1</sup>, Michiko Dohi<sup>2</sup>, Shinji Kageyama<sup>1</sup> ( <sup>1</sup> Anti-Doping Laboratory, LSI Medience Corporation, <sup>2</sup> Medical Centre, Japan Institute of Sports Sciences)
- P-39 Enantioselective determination of ibuprofen in saliva by LC/MS/MS with chiral ESI-enhancing and stable isotope-coded derivatization**  
Hiroaki Tadokoro, Maho Sato, Shoujiro Ogawa, Tatsuya Higashi (Faculty of Pharmaceutical Sciences, Tokyo University of Science)
- P-41 Application of monolithic silica solid-phase extraction tips for GC/MS analysis of NSAIDs in blood**  
Chika Hasegawa<sup>1,2,3</sup>, Takeshi Kumazawa<sup>2,3</sup>, Xiao-Pen Lee<sup>2</sup>, Masaru Terada<sup>1</sup>, Keizo Sato<sup>2</sup>, Hiroshi Seno<sup>3</sup>, Kunihiro Kurosaki<sup>1</sup> ( <sup>1</sup> Department of Legal Medicine, Toho University School of Medicine, <sup>2</sup> Department of Legal Medicine, Showa University School of Medicine, <sup>3</sup> Department of Legal Medicine, Aichi Medical University School of Medicine)
- P-43 Search for biomarkers of drug intoxication cases of postmortem**  
Hiroko Abe<sup>1</sup>, Yumi Hoshioka<sup>1</sup>, Kayako Suga<sup>2</sup>, Yuko Kubo<sup>1</sup>, Makiko Hayashida<sup>3</sup>, Hirotarou Iwase<sup>1,4</sup> ( <sup>1</sup> Department of Legal Medicine, Graduate School of Medicine, Chiba University, <sup>2</sup> AB SCIEX, <sup>3</sup> Department of Legal Medicine, Nippon Medical School, <sup>4</sup> Department of Forensic Medicine, Graduate School of Medicine, The University of Tokyo)
- P-45 Determination of a new generation's Bcr-Abl tyrosine kinase inhibitors in human plasma by LC/MS method**  
Yuri Goto<sup>1</sup>, Noritaka Ariyoshi<sup>2</sup>, Chiaki Nakaseko<sup>3</sup>, Chiaki Imai<sup>2</sup>, Itsuko Ishii<sup>2</sup> ( <sup>1</sup> Department of Clinical Pharmacology, Graduate School of Pharmaceutical Sciences, Chiba University, Chiba, Japan, <sup>2</sup> Division of Pharmacy, University Hospital, Chiba University School of Medicine, Chiba, Japan, <sup>3</sup> Clinical Cell Biology and Medicine, Graduate School of Medicine, Chiba University, Chiba, Japan)

- P-47 A Novel and Sensitive Assay of Kidney Heme Oxygenase Activity**  
Saki Iwamori<sup>1</sup>, Emiko Sato<sup>1,2</sup>, Kouichi Yoshinari<sup>3</sup>, Miki Shimada<sup>4</sup>, Nariyasu Mano<sup>4</sup>, Sadayoshi Ito<sup>2</sup>, Hiroshi Sato<sup>1,2</sup>, Nobuyuki Takahashi<sup>1,2</sup> (<sup>1</sup> Division of Clinical Pharmacology and Therapeutics, Graduate School of Pharmaceutical Sciences, Tohoku University, Sendai, Japan, <sup>2</sup> Division of Nephrology, Endocrinology and Vascular Medicine, Department of Medicine, Tohoku University, Sendai, Japan <sup>3</sup> Division of Drug Metabolism and Molecular Toxicology, Graduate School of Pharmaceutical Sciences, Tohoku University, Sendai, Japan, <sup>4</sup> Department of Pharmaceutical Sciences, Tohoku University Hospital, Sendai, Japan)
- P-49 Factors involved in the peritoneal clearance of indoxylsulfate in peritoneal dialysis**  
Emiko Sato<sup>1,2</sup>, Takefumi Mori<sup>2</sup>, Sanae Sugawara<sup>2</sup>, Ikuko Oba<sup>2</sup>, Kenji Koizumi<sup>2</sup>, Makiko Chida<sup>2</sup>, Eri Naganuma<sup>2</sup>, Hiroshi Sato<sup>1,2</sup>, Sadayoshi Ito<sup>1</sup> (<sup>1</sup> Division of Clinical Pharmacology and Therapeutics, Graduate School of Pharmaceutical Science, Tohoku University, <sup>2</sup> Division of Nephrology, endocrinology and Vascular Medicine, Graduate School of Medicine, Tohoku University)
- P-51 Determination of epigallocatechin galate in rat retina following oral administration of green tea extract by LC-MS/MS**  
Kazuo Igarashi<sup>1</sup>, Yuko Emoto<sup>2</sup>, Jun Otaki<sup>3</sup>, Yasuhiro Aoki<sup>3</sup>, Yoshitaka Maeno<sup>4</sup>, Katsuhiko Yoshizawa<sup>2</sup>, AiroTsubura<sup>2</sup> (<sup>1</sup> Association of Medicinal Analysis, <sup>2</sup> Division of Diagnostic Cytopathology and Histopathology, Kansai Medical University, <sup>3</sup> Department of Forensic Medicine, Nagoya City University Graduate School of Medical Sciences, <sup>4</sup> Food and Nutritional Sciences, College of Biosciences and Biotechnology, Chubu University)
- P-53 Discrimination between methicillin-sensitive and methicillin-resistant *Staphylococcus aureus* by MALDI-TOF mass spectrometry**  
Kazuyuki Sogawa<sup>1,2</sup>, Syota Murata<sup>2</sup>, Megumi Nakamura<sup>2</sup>, Mami Uehara<sup>2</sup>, Tomoko Sakai<sup>2</sup>, Syunsuke Segawa<sup>2</sup>, Akiko Miyabe<sup>2</sup>, Tomoko Saito<sup>2</sup>, Masaharu Watanabe<sup>2</sup>, Akihiro Sanda<sup>1</sup>, Fumio Nomura<sup>2,3</sup> (<sup>1</sup> Azabu University School of Life and Environmental Science, <sup>2</sup> Chiba University Hospital, <sup>3</sup> Chiba University Graduate School of Medicine)
- P-55 Visualization of lipid Species in NASH Model Mouse's Kidney Tissue using Imaging Mass Spectrometry**  
Takahiro Hayasaka<sup>1</sup>, Hirotohi Fuda<sup>1</sup>, Shu-Ping Hui<sup>1</sup>, Hitoshi Chiba<sup>1</sup> (<sup>1</sup> Faculty of Health Sciences, Hokkaido University)
- P-57 Atmospheric pressure MALDI-IMS using p-nitroaniline as the matrix at high spatial resolution in the positive and negative ion modes**  
Shoko Matsushita<sup>1</sup>, Eiji Sugiyama<sup>1</sup>, Takahiro Hayasaka<sup>2</sup>, Noritaka Masaki<sup>1</sup>, Mitsutoshi Setou<sup>1</sup> (<sup>1</sup> Department of Cell Biology and Anatomy, Hamamatsu University School of Medicine, <sup>2</sup> Faculty of Health Sciences, Hokkaido University)
- P-59 LC/MS analysis of small molecule drugs in biological sample using polymer-based reverse-phase column Shodex ODP2 HP**  
Junji Sasuga, Motoaki Kamachi (Showa Denko K.K.)

### **14:10-14:50 Education Lecture 1**

Lecturer: Tatsuya Higashi (Faculty of Pharmaceutical Sciences, Tokyo University of Science)  
Organizer: Shigeo Ikegawa (Genmai Koso Co., Ltd.)

#### **L-2 Derivatization of low-molecular compounds in LC/ESI-MS/MS for increasing sensitivity and isomer discrimination**

Tatsuya Higashi (Faculty of Pharmaceutical Sciences, Tokyo University of Science)

### **15:05-15:45 JSBMS General Meeting**

#### **16:00-17:30 Symposium 2**

##### **Mass spectrometric diagnosis of drug abuse**

Organizer: Kazuo Igarashi (Association of Medicinal Analysis)

#### **S2-1 Approach to acute poisoning causative agent analysis of the hospital pharmacy**

Hiromi Mori (Ogaki Municipal Hospital Pharmacy)

#### **S2-2 The utility of analysis by mass-spectrometry in possible poisoning autopsy cases**

Koutaro Hasegawa<sup>1</sup>, Wurita Amin<sup>1</sup>, Itaru Yamagishi<sup>1</sup>, Hideki Nozawa<sup>1</sup>, Kayoko Minakata<sup>1</sup>,  
Kunio Gonmori<sup>1</sup>, Osamu Suzuki<sup>2</sup>, Kanako Watanabe<sup>1</sup> (<sup>1</sup> Hamamatsu University School of  
Medicine, Department of Legal Medicine, <sup>2</sup> Hamamatsu University School of Medicine)

#### **S2-3 Diagnosis of drug intoxication by mass spectrometry**

**- from a forensic medical expert's viewpoint**

Hiroshi Seno (Department of Legal Medicine, Aichi Medical University School of Medicine)

### **17:40-18:20 JSBMS General Meeting**

Lecturer: Dayan Goodenowe (Phenomenome Discoveries Inc. , Canada)

Organizer: Takeshi Tomonaga (Project Leader, Laboratory of Proteome Research, Director of  
Proteome Research Center, National Institute of Biomedical Innovation)

#### **L-3 Incorporating Mass Spectrometry into Routine Clinical Chemistry Laboratories: Challenges and Opportunities**

Dayan Goodenowe (Phenomenome Discoveries Inc.)

### **18:30-20:30 Banquet**



## October 17 (Friday)

**8:30- Start Accepting**

**9:00-9:40 Morning Seminar**

### **Phenomenome Discoveries, Inc.**

**MS-1 Method development of high throughput flow injection tandem mass spectrometry analysis**  
Asuka Mochizuki<sup>1,2</sup>, Yasuyo Yamazaki<sup>1</sup>, Dayan Goodenowe<sup>1</sup> (<sup>1</sup> Phenomenome Discoveries, Inc., Saskatoon, Saskatchewan, Canada, <sup>2</sup> Department of Molecular Diagnosis, Graduate School of Medicine, Chiba University, Chiba, Japan)

### **Agilent Technologies Japan Ltd.**

**MS-2 Easy Sample preparation for LC/MS (Purificate, Digest, Cleanup, Fractionate) and Biomarker analysis**  
Masayuki Nishigata, Masahiro Maeda (Agilent Technologies Japan Ltd.)

**10:00-11:40 Symposium 3**

#### **Rapid pathogen identification by MALDI-TOF MS**

Organizer: Toyofumi Nakanishi (Osaka Medical College, Clinical Pathology )

- S3-1 Effects of bacterial identification by MALDI-TOF MS in clinical microbiology**  
Shota Murata<sup>1</sup>, Masaharu Watanabe<sup>1</sup>, Tomoko Saito<sup>1</sup>, Akiko Miyabe<sup>1</sup>, Shunsuke Segawa<sup>1</sup>, Tomoko Satokai<sup>1</sup>, Mami Uehara<sup>1</sup>, Megumi Nakamura<sup>1</sup>, Humio Nomura<sup>1,2</sup> (<sup>1</sup> Divisions of Laboratory Medicine, Clinical Genetics and Proteomics, Chiba University Hospital, <sup>2</sup> Department of Molecular Diagnosis, Graduate School of Medicine, Chiba University)
- S3-2 Practice of optimizing preprocessing for identification of non-tuberculous mycobacteria clinical isolates by Matrix-Assisted Laser Desorption Ionization-Time-of-Flight Mass Spectrometry (MALDI-TOF MS)**  
Tomohiro Higashiyama<sup>1</sup>, Toyofumi Nakanishi<sup>2</sup> (<sup>1</sup> Central Clinical Laboratory, Osaka Medical College Hospital, <sup>2</sup> Department of Clinical and Laboratory Medicine, Osaka Medical College)
- S3-3 Evaluate the usefulness of MALDI-TOF MS for clinical index in blood culture positive patients.**  
Toshimasa Nakagawa, Miyoshi Kitazato, Yoshiaki Kiguchi (Yodogawa Christian Hospital Div. of Clinical Laboratory)
- S3-4 Differentiation of *Streptococcus pneumoniae* from *Streptococcus mitis* group by Matrix-Assisted Laser Desorption Ionization-Time-of-Flight Mass Spectrometry (MALDI-TOF MS)**  
Takehisa Matsumoto<sup>1</sup>, Yusuke Ota<sup>2</sup>, Takayuki Honda<sup>1</sup> (<sup>1</sup> Department of Clinical and Laboratory Medicine, Shinshu University Hospital, <sup>2</sup> Department of Health and Medical Sciences, Shinshu University)

## 12:00-12:40 Luncheon Seminar

siemens healthcare diagnostics inc

- LS-3 Application of mass spectrometry in microbiology**  
- **Classification of plant-symbiotic methylotrophic bacteria by MALDI-TOF/MS**  
Akio Tani (Institute of Plant Science and Resources, Okayama University)

**Bruker Daltonics K.K.**

- LS-4 FT-ICR-MS is a powerful tool for tissue imaging / Rapid microbial ID and the new application based on MALD TOF-MS**  
Yoshihiko Morishita, Yumiko Matsuyama (Bruker Daltonics K.K.)

## 13:00-14:00 Poster Presentation (even number of subjects)

- P-2 Assay method of methylmalonyl-CoA mutase activity on patients with mild methylmalonic acidemia by UPLC-MS/MS**  
Kana Gotoh<sup>1</sup>, Yasuhiro Maeda<sup>1</sup>, Tetsuya Ito<sup>2</sup>, Yoko Nakajima<sup>2</sup>, Yoko Maeda<sup>1</sup>, Naruji Sugiyama<sup>3</sup>, Yuji Hotta<sup>1</sup>, Kazunori Kimura<sup>1</sup> (<sup>1</sup> Graduate School of Pharmaceutical Sciences, Nagoya City University, <sup>2</sup> Department of Pediatrics, School of Medicine, Fujita Health University, <sup>3</sup> School of Pharmacy, Aichi-Gakuin University)
- P-4 The unknown peak in urinary organic acids analysis using GC/MS among patients undergone open-heart surgery for the congenital heart diseases.**  
Yuki Omura-Hasegawa, Ryosuke Bo, Yuka Tanabe, Shigeki Nakashima, Kenji Yasuda, Seiji Yamaguchi (Department of Pediatrics, Shimane University School of Medicine)
- P-6 A role of arachidonate release and phospholipase A<sub>2</sub> in activation of human neutrophils *in vitro***  
Tetsuyuki Kobayashi<sup>1,2</sup>, Keiko Onisawa<sup>1</sup>, Hiromi Takeda<sup>2</sup>, Saori Mikami<sup>3</sup>, Junichi Aiboshi<sup>3</sup> (<sup>1</sup> Ochanomizu University, Graduate School of Humanities and Sciences, <sup>2</sup> Ochanomizu University, Faculty of Science, <sup>3</sup> Tokyo Medical and Dental University, Graduate School of Medical and Dental Sciences)
- P-8 HCC patients without both HBs antigen and HCV antibody were characterized by higher stearic acid-to-palmitic acid ratio in serum**  
Eiji Sugiyama<sup>1</sup>, Shoko Matsushita<sup>1</sup>, Yasushi Shibasaki<sup>2</sup>, Koichi Matsuda<sup>3</sup>, Hiroyuki Konno<sup>2</sup>, Mitsutoshi Setou<sup>1</sup> (<sup>1</sup> Department of Cell Biology and Anatomy, Hamamatsu University School of Medicine, <sup>2</sup> Second Department of Surgery, Hamamatsu University School of Medicine, <sup>3</sup> Laboratory of Genome Technology, Human Genome Center, Institute of Medical Science, University of Tokyo)
- P-10 Development of a method for analysis of urinary vitamin D<sub>3</sub> metabolites by LC/MS/MS with ESI-enhancing and stable isotope-coded derivatization**  
Satoshi Ooki, Kenta Shinoda, Shoujiro Ogawa, Tatsuya Higashi (Faculty of Pharmaceutical Sciences, Tokyo University of Science)

- P-12 The Study of high sensitive method for the compounds with 3-oxo- $\Delta^4$ -steroid nucleus as the oxime derivatives by LC-ESI-MS/MS**  
Hajime Takei<sup>1,2</sup>, Susumu Nittono<sup>1</sup>, Xiao-Pen Lee<sup>1</sup>, Takeshi Kumazawa<sup>1</sup>, Tsuyoshi Murai<sup>3</sup>, Takao Kurosawa<sup>3</sup>, Takashi Iida<sup>4</sup>, Hiroshi Nittono<sup>1,2</sup>, Keizo Sato<sup>1</sup> (<sup>1</sup> Department of Legal Medicine, Showa University School of Medicine, <sup>2</sup> Junshin Clininc Bile Acid Institute, <sup>3</sup> School of Pharmaceutical Sciences, Health Sciences University of Hokkaido, <sup>4</sup> Department of Chemistry, College of Humanities and Sciences, Nihon University)
- P-14 Analysis of sulfate conjugates of steroids in urine by PQD and CID in LC/ESI-LIT-MS/MS**  
Kuniko Mitamura<sup>1</sup>, Satoshi Kurabuchi<sup>1</sup>, Mamiko Ueda<sup>1</sup>, Shigeo Ikegawa<sup>2</sup>, Tetsushi Yamamoto<sup>1</sup>, Atsushi Taga<sup>1</sup> (<sup>1</sup> Faculty of Pharmacy, Kinki University, <sup>2</sup> Research and Development Division, Genmaikoso Co. Ltd.)
- P-16 Simultaneous measurement of four Vitamin D metabolites in serum using DAPTAD derivatization followed by LC-MS/MS**  
Mamoru Satoh<sup>1</sup>, Takayuki Ishige<sup>2</sup>, Shoujiro Ogawa<sup>3</sup>, Motoi Nishimura<sup>2</sup>, Kazuyuki Matsushita<sup>2</sup>, Tatsuya Higashi<sup>3</sup>, Fumio Nomura<sup>1,2</sup> (<sup>1</sup> Clinical Proteomics Research Center, Chiba University Hospital, <sup>2</sup> Department of Molecular Diagnosis, Graduate School of Medicine, Chiba University, <sup>3</sup> Faculty of Pharmaceutical Sciences, Tokyo University of Science)
- P-18 The effect of the synthetic cannabinoid MAM-2201 to rat cerebrum metabolome**  
Kei Suzuki<sup>1</sup>, Kei Zaitzu<sup>1</sup>, Yumi Hayashi<sup>2</sup>, Hiroshi Nakayama<sup>1</sup>, Nanpei Hattori<sup>1</sup>, Rina Takahara<sup>1</sup>, Maiko Kusano<sup>1</sup>, Hitoshi Tsuchihashi<sup>3</sup>, Akira Ishii<sup>1</sup> (<sup>1</sup> Department of Legal Medicine & Bioethics, Nagoya University Graduate School of Medicine, <sup>2</sup> Department of Pathophysiological Laboratory Sciences, Nagoya University Graduate School of Medicine, <sup>3</sup> Department of Legal Medicine, Osaka Medical College)
- P-20 The effect of the synthetic cannabinoid MAM-2201 to rat plasma metabolome**  
Nanpei Hattori<sup>1</sup>, Kei Zaitzu<sup>1</sup>, Yumi Hayashi<sup>2</sup>, Hiroshi Nakayama<sup>1</sup>, Kei Suzuki<sup>1</sup>, Rina Takahara<sup>1</sup>, Maiko Kusano<sup>1</sup>, Hitoshi Tsuchihashi<sup>3</sup>, Akira Ishii<sup>1</sup> (<sup>1</sup> Department of Legal Medicine & Bioethics, Nagoya University Graduate School of Medicine, <sup>2</sup> Department of Pathophysiological Laboratory Sciences, Nagoya University Graduate School of Medicine, <sup>3</sup> Department of Legal Medicine, Osaka Medical College)
- P-22 Analysis of Metabolites in Plasma Using Stable Isotope and Ultra-Fast GC-MS/MS System**  
Yumi Unno<sup>1</sup>, Shuichi Kawana<sup>1</sup>, Yukihiko Kudo<sup>1</sup>, Shin Nishiumi<sup>2</sup>, Masaru Yoshida<sup>2,3</sup>, Noriyuki Ojima<sup>1</sup> (<sup>1</sup> Analytical & Measuring Instruments Division, Shimadzu Corporation, <sup>2</sup> Division of Gastroenterology, Department of Internal Medicine, Kobe University Graduate School of Medicine, <sup>3</sup> Division of Metabolomics Research, Department of Internal Related, Kobe University Graduate School of Medicine)
- P-24 Waters metabolomics solution and clinical application**  
Maki Terasaki, Thanai Paxton (Nihon Waters K. K.)

- P-26 Absolute quantitation of low abundant plasma surrogate marker of Alzheimer disease APL1  $\beta$  peptides using SRM/MRM and its clinical application**  
Shozo Sano<sup>1</sup>, Yuuki Hashimoto<sup>1</sup>, Shinji Tagami<sup>2</sup>, Masayasu Okochi<sup>2</sup>, Kumiko Yoshizawa-Kumagaye<sup>3</sup>, Masahiko Tsunemi<sup>3</sup>, Yusuke Inohana<sup>4</sup>, Tsubasa Ibushi<sup>4</sup>, Takeshi Tomonaga<sup>1</sup> (<sup>1</sup> Laboratory of Proteome Research, National Institute of Biomedical Innovation, Osaka, <sup>2</sup> Psychiatry, Department of Integrated Medicine, Division of Internal Medicine, Osaka University Graduate School of Medicine, <sup>3</sup> Peptide Institute, Inc., Osaka, <sup>4</sup> Shimadzu Corporation )
- P-28 Search for novel allergen of peanut allergy using IgE-immunoblotting assay**  
Kanami Ando<sup>1</sup>, Kazuyuki Sogawa<sup>1</sup>, Mamoru Satoh<sup>2</sup>, Akihiro Sanda<sup>1</sup>, Naoki Shimojo<sup>2</sup>, Fumio Nomura<sup>2</sup> (<sup>1</sup> Azabu University School of Life and Environmental, <sup>2</sup> Chiba University Graduate School of Medicine)
- P-30 Discovery of disease-related peptides in plasma by using stable-isotope labeling methods**  
Tatsuya Saito<sup>1</sup>, Yuya Hidoh<sup>1</sup>, Rika Kato<sup>1,2</sup>, Yusuke Kawashima<sup>2,3</sup>, Satoru Minamida<sup>4</sup>, Kazumasa Matsumoto<sup>4</sup>, Masatsugu Iwamura<sup>4</sup>, Yoshio Koder<sup>1,2</sup> (<sup>1</sup> Laboratory of Biophysics, Kitasato University School of Science, <sup>2</sup> Center for Disease Proteomics, Kitasato University School of Science, <sup>3</sup> RIKEN Center for Integrative Medical Sciences, <sup>4</sup> Department of Urology, Kitasato University School of Medicine)
- P-32 Plasma proteome analysis of stress disorder model mouse using stable isotope labeling method**  
Chiharu Kobayashi<sup>1</sup>, Rika Kato<sup>1,2</sup>, Tatsuya Saito<sup>1,2</sup>, Yusuke Kawashima<sup>2,3</sup>, Makoto Itakura<sup>4</sup>, Saori Yamamori<sup>4</sup>, Hiromichi Nagayama<sup>4</sup>, Yuuki Iida<sup>5</sup>, Hitoshi Miyaoka<sup>5</sup>, Masami Takahashi<sup>4</sup>, Yoshio Koder<sup>1,2</sup> (<sup>1</sup> Laboratory of Biophysics, Department of Physics, Kitasato University School of Science, <sup>2</sup> Center for Disease Proteomics, Kitasato University School of Science, <sup>3</sup> RIKEN Center for Integrative Medical Sciences, <sup>4</sup> Department of Biochemistry, Kitasato University School of Medicine, <sup>5</sup> Department of Psychiatry, Kitasato University School of Medicine)
- P-34 Application of proteomic technologies to discover and identify biomarkers for periodontal diseases: Promising technologies for periodontal research**  
Sachio Tsuchida<sup>1,2</sup>, Mamoru Satoh<sup>1,2</sup>, Kazuyuki Sogawa<sup>1,2</sup>, Yusuke Kawashima<sup>3</sup>, Takayuki Ishige<sup>2</sup>, Minako Beppu<sup>1,2</sup>, Setsu Sawai<sup>1,2</sup>, Motoi Nishimura<sup>1,2</sup>, Yoshio Koder<sup>1,3</sup>, Kazuyuki Matsushita<sup>1,2</sup>, Fumio Nomura<sup>1,2</sup> (<sup>1</sup> Clinical Proteomics Reserach Center, Chiba University, <sup>2</sup> Department of Molecular Diagnosis, Graduate School of Medicine, Chiba University, <sup>3</sup> Laboratory of Biomolecular Dynamics, Department of Physics, School of Science, Kitasato University)
- P-36 Discovery of cytokeratin fragments from secreted peptides of cancer cells using mass spectrometry**  
ChienChia Chen<sup>1</sup>, Motoi Nishimura<sup>1,2</sup>, Satomi Nishimura<sup>1</sup>, Takayuki Isige<sup>1,2</sup>, Mamoru Satoh<sup>1</sup>, Kazuyuki Matsushita<sup>1,2</sup>, Fumio Nomura<sup>1,2</sup> (<sup>1</sup> Department of Molecular Diagnosis, Graduate School of Medicine, Chiba University, Chiba, Japan, <sup>2</sup> Clinical Proteomics Research Center, Chiba University Hospital, Chiba, Japan)

- P-38 Serum and muscle metabolomics profiling: A novel method for estimating post-mortem intervals**  
Richard H. Kaszynski<sup>1,2</sup>, Shin Nishiumi<sup>3</sup>, Takeshi Kondo<sup>1</sup>, Motonori Takahashi<sup>1</sup>, Azumi Kuse<sup>1</sup>, Migiwa Asano<sup>4</sup>, Masaru Yoshida<sup>3</sup>, Takeshi Azuma<sup>3</sup>, Yasuhiro Ueno<sup>1</sup> (<sup>1</sup> Kobe University Graduate School of Medicine, Department of Legal Medicine, <sup>2</sup> Harvard Medical School, Massachusetts General Hospital, <sup>3</sup> Kobe University Graduate School of Medicine, Department of Gastroenterology, <sup>4</sup> Ehime University Graduate School of Medicine, Department of Legal Medicine)
- P-40 Determination of pyrrolidino cathinone derivatives (PV9, PV8, PV4, PVT) in blood by MALDI-Q-TOF mass spectrometry**  
Kayoko Minakata<sup>1</sup>, Masako Suzuki<sup>2</sup>, Hideki Nozawa<sup>1</sup>, Itaru Yamagishi<sup>1</sup>, Koutaro Hasegawa<sup>1</sup>, Amin Wurita<sup>1</sup>, Kunio Gonmori<sup>1</sup>, Kanako Watanabe<sup>1</sup>, Osamu Suzuki<sup>1</sup> (<sup>1</sup> Department of Legal Medicine, Hamamatsu University School of Medicine, <sup>2</sup> Research Equipment Center, Hamamatsu University School of Medicine)
- P-42 Utility of UFLC-IDA-MRM/EPI for high sensitive analysis of benzodiazepine drugs in human blood**  
Xiao-Pen Lee<sup>1</sup>, Takeshi Kumazawa<sup>1</sup>, Chika Hasegawa<sup>2</sup>, Susumu Nittono<sup>1</sup>, Hajime Takei<sup>1</sup>, Yukiko Shouji<sup>1</sup>, Keizo Sato<sup>1</sup> (<sup>1</sup> Department of Legal Medicine, Showa University School of Medicine, <sup>2</sup> Department of Legal Medicine, Toho University School of Medicine)
- P-44 The application of Dried Blood Spot technique for drug screening test**  
Yuko Kubo<sup>1</sup>, Hiroko Abe<sup>1</sup>, Kazuhiro Kobayashi<sup>1</sup>, Hisako Saito<sup>1</sup>, Hirotarou Iwase<sup>1,2</sup> (<sup>1</sup> Department of Legal Medicine, Graduate School of Medicine, Chiba University, <sup>2</sup> Department of Forensic Medicine, Graduate School of Medicine, The University of Tokyo)
- P-46 Determination of ethyl glucuronide and ethanol in human urine after drinking alcohol**  
Tadashi Ogawa, Masae Iwai, Aya Nakajima, Ai Nagashima, Masaya Mizutani, Tomohiro Yamaguchi, Koya Wada, Hideki Hattori, Hiroshi Seno (Aichi Medical University School of Medicine)
- P-48 A case of postmortem detected meconin in urine**  
Kyoko Maebashi, Yasutaka Asao, Isora Tatematsu, Kimiharu Iwadate (Department of Forensic Medicine, The Jikei University School of Medicine)
- P-50 Identification of acetylfentanyl metabolites using LC-QTOFMS : an autopsy case**  
Yumi Hoshioka<sup>1</sup>, Hiroko Abe<sup>1</sup>, Kayako Suga<sup>2</sup>, Masahiko Takino<sup>3</sup>, Ayumi Motomura<sup>1</sup>, Hirotarou Iwase<sup>1,4</sup> (<sup>1</sup> Department of Legal Medicine, Graduate School of Medicine, Chiba University, <sup>2</sup> AB SCIEX, <sup>3</sup> Agilent Technologies, <sup>4</sup> Department of Forensic Medicine, Graduate School of Medicine, The University of Tokyo)
- P-52 Evaluation of mechanism-based inhibition in cytochrome P450 isozyme by MDA drugs - Interaction between MDA drugs and methamphetamine -**  
Kazuna Miyamoto<sup>1,2</sup>, Takuya Yamashita<sup>1</sup>, Rina Koma<sup>1</sup>, Mayu Fukuta<sup>1</sup>, Kenji Tsujikawa<sup>3</sup>, Yuko Iwata<sup>3</sup>, Hiroyuki Inoue<sup>3</sup>, Fumiyo Kasuya<sup>1</sup> (<sup>1</sup> Faculty of Pharmaceutical Sciences, Kobegakuin University, <sup>2</sup> TechnoPro, Inc., <sup>3</sup> National Research Institute of Police Science)

- P-54 A Rapid identification of bacteria in CSF using MALDI-TOF MS**  
 Minako Beppu<sup>1,2</sup>, Setsu Sawai<sup>1,2</sup>, Shunsuke Segawa<sup>1,2</sup>, Shota Murata<sup>1</sup>, Kazuyuki Sogawa<sup>2</sup>, Masaharu Watanabe<sup>1</sup>, Motoi Nishimura<sup>1,2</sup>, Mamoru Satoh<sup>2</sup>, Kazuyuki Matsushita<sup>1,2</sup>, Fumio Nomura<sup>1,2</sup> (<sup>1</sup> Division of Laboratory Medicine, Clinical Genetics and Proteomics, Chiba University Hospital, <sup>2</sup> Department of Molecular Diagnosis, Graduate School of Medicine)
- P-56 Accumulation of arachidonic acid-containing phosphatidylinositol in the edge of colorectal cancer was elucidated by using imaging mass spectrometer**  
 Takanori Hiraide<sup>1,2</sup>, Takanori Sakaguchi<sup>1</sup>, Koji Ikegami<sup>2</sup>, Eiji Sugiyama<sup>2</sup>, Noritaka Masaki<sup>2</sup>, Michihiko Waki<sup>2</sup>, Makoto Takeda<sup>1,2</sup>, Yasushi Shibasaki<sup>1,2</sup>, Yoshifumi Morita<sup>1,2</sup>, Hiroyuki Konno<sup>1</sup>, Mitsutoshi Setou<sup>2</sup> (<sup>1</sup> Second Department of Surgery, Hamamatsu University School of Medicine, <sup>2</sup> Department of Cell Biology and Anatomy, Hamamatsu University School of Medicine)
- P-58 Synthesis of deuterated evodiamine and its application for determination of evodiamine by LC/MS/MS**  
 Shogo Hirano<sup>1</sup>, Hitoshi Yamashita<sup>2</sup>, Kaname Tsutsumiuchi<sup>1</sup> (<sup>1</sup> College of Bioscience and Biotechnology, Chubu University, <sup>2</sup> College of Life and Health Sciences, Chubu University)
- P-60 Optimized sample-preparation techniques to prevent postmortem degradation of metabolites for imaging and quantitative metabolomics**  
 Kurara Honda<sup>1</sup>, Yuki Sugiura<sup>1,2</sup>, Makoto Suematsu<sup>1</sup> (<sup>1</sup> Department of Biochemistry, Keio University School of Medicine, Japan, <sup>2</sup> Japan Science and Technology Agency, PRESTO Program, Tokyo, Japan)

#### **14:15-15:05 Invited Lecture**

Lecturer: Hisashi Hirano (Yokohama City University Graduate School of Medical Life Science/ Advanced Medical Research Center)  
 Organizer: Fumio Nomura (Department of Molecular Diagnosis, Graduate School of Medicine, Chiba University)

- L-1 Proteomic techniques reveal the relation between abnormal post-translational modifications and diseases**  
 Hisashi Hirano (Yokohama City University Graduate School of Medical Life Science/Advanced Medical Research Center)

#### **15:10-15:30 Encouragement Award Lecture**

Organizer: Toshimitsu Niwa (Faculty of Health and Nutrition, Shubun University)

- L-4 Development of imaging mass spectrometry technology for localized inflammation mediators in tissues**  
 Yuki Sugiura (Department of Biochemistry, Keio University School of Medicine, Japan, Japan Science and Technology Agency, PRESTO Program, Tokyo, Japan)

## 15:45-17:15 Technical Workshop

Organizer: Fumiyo Kasuya (Kobe Pharmaceutical University Faculty of Pharmaceutical Sciences)  
: Yoshio Kodera (Kitasato University School of Science)

- WS-1 High sensitive analysis of vitamin D metabolites in serum by the removal of phospholipids**  
Mariko Matsumoto<sup>1</sup>, Craig Aurand<sup>2</sup>, David Bell<sup>2</sup>, Anders Fridstrom<sup>3</sup>, Rudolf Kohling<sup>3</sup>  
(<sup>1</sup> Sigma-Aldrich Japan G.K., <sup>2</sup> Sigma-Aldrich/Supelco, <sup>3</sup> Sigma-Aldrich Switzerland)
- WS-2 Latest LC-MS/MS analysis methods developed in Application Laboratories of Biotage**  
Maiko Kaneko (Biotage Japan, Ltd.)
- WS-3 Possibility of LC/MS/MS as the instrumental analysis in acute drug intoxication**  
Tetsuo Kokaji (K.K.AB SCIEX)
- WS-4 Analysis of biomarker by using GC/MS**  
Masahiro Hashimoto, Akihiko Kusai (JEOL Ltd.)
- WS-5 mzCloud data mining software for high resolution Orbitrap MS**  
Masayuki Kubota (Thermo Fisher Scientific K.K. Japan)
- WS-6 High throughput analysis accelerate mass analysis**  
Masahiro Maeda (Agilent Technologies, Inc.)
- WS-7 Screening method using GC/MS or GC/MS/MS**  
Katsuiro Nakagawa, Shuichi Kawana, Kouki Tanaka, Haruhiko Miyagawa (Shimadzu Corporation)
- WS-8 Introduction of UHPLC for LC-MS with Straight Injection Technology™**  
Yoshikazu Sugito (Shiseido Co., Ltd., Frontier Science Business Division)
- WS-9 Metabolomic Analyses Using Direct Ambient Ionization Mass Spectrometry**  
Teruhisa Shiota, Motoshi Sakakura (AMR, Inc.)
- WS-10 High sensitive mass spectrometry from tissue sample by LESA on the LC/MS**  
Yoshiharu Naito (LE Technologies)
- WS-11 Introduction of sample preparation and analytical tool for Omix**  
Kenichi Suzuki, Shigenori Ota, Shota Miyazaki, Yuko Yui, Masayoshi Ohira (GL Sciences)
- WS-12 Proteomics approach by highresolution UHR-Q-TOF mass spectrometry Impact II**  
Nobuyuki Shimura (Bruker Daltonics K.K)
- WS-13 Complete IVD instrument based on MALDI-TOF MS – VITEK MS –**  
Yoshifumi Yoshida (SYSMEX bioMerieux Co., Ltd)
- WS-14 A novel preparation kit; rapid BACpro®, for bacterial identification with matrix-assisted laser desorption ionization time-of-flight mass spectrometry**  
Kenta Noda, Kaduho Ashizawa, Satoshi Arai, Youhei Shinpo, Naoya Shibata, Chikao Takayama  
(Nittobo Medical Co., Ltd.)

## 17:15- Closing Remarks

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**The 40th Annual Meeting of the Japanese Society for Biomedical Mass Spectrometry**

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