

## Special Lecture

### SL-S The 2013 EU ban of animal testing for cosmetics

20th, Dec (Fri) 10:00-10:45, TERRSA Hall  
Chairperson, Yasuo Ohno

Horst Spielmann  
Freie Universität Berlin, Inst. Pharmacy, Pharmacology & Toxicology, Königin-Luise-Str. 2-4,  
14195 Berlin, Germany

### SL-1 Nano-Safety Science and Sustainable Nanotechnology -Recent Progress-

20th, Dec (Fri) 11:00-11:45, TERRSA Hall  
Chairperson, Hajime Kojima

Yasuo Tsutsumi<sup>1,2</sup>  
<sup>1</sup>Grad. Sch. Pharm. Sci., Osaka Univ.  
<sup>2</sup>NiBio

### SL-2 Application of iPSCs for in vitro recapitulating disease-phenotype: current status and future perspective

21st, Dec (Sat) 13:00-13:45, TERRSA Hall  
Chairperson, Koichi Imai

Junya Toguchida<sup>1,2,3</sup>  
<sup>1</sup>Institute for Frontier Medical Sciences, <sup>2</sup>Center for iPS Cell Research and Application,  
<sup>3</sup>Department of Orthopaedic Surgery, Kyoto University Hospital, Kyoto University

---

## Educational Lecture

### EL Role of alternative methods in safety evaluation of chemicals

19th, Dec.(Thu) 13:30-14:30, Seminer Room (2,3)  
Chairperson, Noriho Tanaka

Makoto Hayashi  
Public Interest Incorporated Foundation, BioSafety Research Center (BSRC)

---

## Open Lecture (President's Lecture)

### OL New Developments in Basic Science and Alternatives to Animal Experiments

19th, Dec.(Thu) 13:00-13:30, Seminer Room (2,3)  
Chairperson, Hajime Kojima

Koichi Imai  
Osaka Dental University

**JaCVAM International Symposium**

19th, Dec. (Thu) 16:00-18:00, Seminar Room (2, 3)

Chairpersons, Hajime Kojima  
Hidenobu Okumura / Takashi Omori

**IS-1 Activities of EUSAAT, the European Society for Alternatives to Animal Testing**

Horst Spielmann

Freie Universität Berlin, Inst. Pharmacy, Pharmacology & Toxicology, Königin-Luise-Str. 2-4,  
14195 Berlin, Germany

**IS-2 International Alternatives Activities Benefit from Collaboration Between JSAAE and ASCCT**

Rodger Curren

Institute for In Vitro Sciences, Gaithersburg, Maryland, USA

**IS-3 Current status on the alternative to animal experiments in Korea**

Soon Young HAN<sup>1</sup>, Yong HEO<sup>2</sup>, Ki Hwan CHOI<sup>3</sup>, Won Keun SUNG<sup>3</sup>

<sup>1</sup>Korea National Institute of Health/ Korea Centers for Disease Control & Prevention,

<sup>2</sup> College of Natural Sciences, Catholic University of Daegu, <sup>3</sup> KoCVAM, National Institute of Food & Drug Safety Research/Ministry of Food & Drug Safety, Korea

**IS-4 KeraSkin™-VM: A novel reconstructed human epidermis model for skin irritation tests**

Kyoung-Mi Jung<sup>1</sup>, Su-Hyon Lee<sup>2</sup>, Won-Hee Jang<sup>1</sup>, Haeng-Sun Jung<sup>2</sup>,

Young-Ho Park<sup>1</sup>, SeungHyeok Seok<sup>3</sup>, Kyung-Min Lim<sup>4</sup>

<sup>1</sup>Amorepacific Co. R&D Center, Yongin 446-729, Republic of Korea

<sup>2</sup>Modern Cell & Tissue Technologies Inc., Seoul 139-743, Republic of Korea

<sup>3</sup>Department of Microbiology and Immunology, and Institute of Endemic Disease, Seoul National University Medical College, Seoul 110-799, Republic of Korea

<sup>4</sup>College of Pharmacology, Ewha Womans University, Seoul 120-808, Republic of Korea

**IS-5 Activities of JSAAE**

Hajime Kojima

JSAAE, NIHS, Tokyo, Japan

### **Symposium 1 (Radiation)**

19th, Dec. (Thu) 14:30-15:55, Seminar Room (2, 3)  
Chairpersons, Koichi Imai (Osaka Dental Univ.)  
Masahiko Miura (Tokyo Medical and Dental Univ.)

#### **S1-1 Significance of Controlling Quiescent Tumor Cell Populations in Cancer Therapy Including Radiation Therapy**

Shin-ichiro Masunaga  
Radiation Biology, Department of Radiation Life and Medical Science,  
Research Reactor Institute, Kyoto University

#### **S1-2 Radiation-induced cell kinetics detected by Fucci in multicellular spheroids**

Masahiko Miura  
Section of Oral Radiation Oncology, Tokyo Medical and Dental University, Tokyo, Japan

#### **S1-3 Analysis of the mechanisms of radiation sensitivity and responses using genetically-engineered mice**

Hiroaki Honda  
Department of Disease Model, Research Institute for Radiation Biology and Medicine,  
Hiroshima University, Hiroshima, Japan

---

### **Symposium 2 (Three Rs and Laboratory Animal Welfare)**

19th, Dec. (Thu) 14:30-16:00, Middle Meeting Room  
Chairpersons, Tsutomu Miki Kurosawa (ex-Osaka Univ.)  
Takashi Unno (JCL Bio assay)

#### **S2-1 *Keynote Lecture***

##### **Three Rs and laboratory animal welfare legislation in EU**

<sup>i</sup>Anderson, D.B., <sup>ii</sup>Louhimies, S.  
European Commission, Brussels

#### **S2-2 A notification or registration system of animal experiment facilities will raise and develop the level of life sciences study**

Takashi Unno  
Nishiwaki Lab, JCL Bioassay Corporation

#### **S2-3 The necessity of regulation the law for laboratory animals**

Lawyer Katsuhiko Ueda  
Head of 「The Pet Houjuku(The Pet Law)」

#### **S2-4 International Legal Framework for Laboratory Animal Welfare**

Tsutomu Miki Kurosawa  
Natsume Seisakusho Co. Ltd.

**Symposium 3 (iPS Cells)**

20th, Dec. (Fri) 13:00-15:00, TERRSA Hall  
Chairpersons, Miho K Furue (National Institute of Biomedical Innovation)  
Koichi Imai / Yoshiya Hashimoto (Osaka Dental Univ.)

**S3-1 Potential of human iPS cell-derived hepatic stem-like cells for drug toxicity test**

Miho K Furue  
Laboratory of Stem Cell Cultures, Department of Disease Bioresources Research,  
National Institute of Biomedical Innovation

**S3-2 Development of in vitro assays for drug discovery and toxicology using human iPS cell-derived neuronal cells**

Yoshihiro Kanemura  
Division of Regenerative Medicine, Institute for Clinical Research, Osaka National Hospital,  
National Hospital Organization, Osaka, Japan

**S3-3 Non-labeled Real-time Evaluation using Cell Morphology Informatics**

Risako Jouto<sup>1</sup>, Mika Okada<sup>1</sup>, Hiroto Sasaki<sup>2</sup>, Kei Kanie<sup>1</sup>, Mika Suga<sup>3</sup>, Kana Yanagihara<sup>3</sup>,  
Takayuki Fukuda<sup>3</sup>, Yasujiro Kiyota<sup>4</sup>, Miho Kusuda-Furue<sup>3</sup>, Ryuji Kato<sup>1</sup>

<sup>1</sup>Graduate School of Pharmaceutical Sciences, Nagoya University

<sup>2</sup>Graduate School of Engineering, Nagoya University

<sup>3</sup>Laboratory of Stem Cell Cultures, Department of Disease Bioresources Research  
National Institute of Biomedical Innovation

<sup>4</sup>Nikon Corporation

## **Symposium 4 (Cosmetics)**

20th, Dec. (Fri) 15:15-17:30, TERRSA Hall  
Chairpersons, Hajime Kojima (NIES)  
Mariko Sugiyama (Shiseido Co.,Ltd.)

### **S4-1 Current problems on the safety control of new cosmetics**

Ichiro Katayama  
Department of Dermatology Course of Integrated Medicine, Graduate School of Medicine,  
Osaka University, Osaka, Japan

### **S4-2 Update on the regulation of Cosmetics and Quasi-Drugs regarding alternatives to animal testing**

Hajime Kojima  
Japanese Center for the Validation of Alternative Methods, National Institute of Health Sciences

### **S4-3 Approach for alternatives to animal testing of cosmetic ingredients**

Shigenobu Hagino  
Shiseido Research Center

### **S4-4 Approaches of L'OREAL Group to Alternatives to Animal Experiments**

Setsuko Jitsukawa  
Scientific Direction, Research & Innovation Center, Nihon L'OREAL

### **S4-5 Skin Sensitization Hazard Identification: Refinement of *in chemico* Alternative Methods**

Petra Kern<sup>1</sup>, John Troutman<sup>2</sup>, Cindy Ryan<sup>2</sup>, Leslie Foertsch<sup>2</sup>, Frank Gerberick<sup>2</sup>.

<sup>1</sup>Procter & Gamble Technology, Shunyi District, Beijing, 101312, P.R.China

<sup>2</sup>Procter & Gamble Company, Cincinnati, USA

**Symposium 5 (Industrial Academic Government Cooperation)**

20th, Dec. (Fri) 13:00-15:00, Large Meeting Room  
Chairpersons, Seiichi Ishida (NIES)  
Kazuya Maeda (Univ. of Tokyo)

**S5-1 In silico prediction of CYP-mediated drug metabolism**

Yasushi Yamazoe<sup>1,2</sup>, Kazumi Ito<sup>1</sup>, Kouichi Yoshinari<sup>1</sup>

<sup>1</sup>Graduate School of Pharmaceutical Sciences, Tohoku University

<sup>2</sup>Food Safety Commission, Cabinet Office, Government of Japan

**S5-2 Prediction of drug-drug interactions mediated by hepatic uptake transporters based on the physiologically-based pharmacokinetic models**

Takashi Yoshikado<sup>1</sup>, Kenta Yoshida<sup>2</sup>, Kazuya Maeda<sup>2</sup>, Yuichi Sugiyama<sup>1</sup>

<sup>1</sup>Sugiyama Laboratory, RIKEN Innovation Center, RIKEN, Yokohama, Japan

<sup>2</sup>Laboratory of Molecular Pharmacokinetics, Graduate School of Pharmaceutical Sciences, The University of Tokyo, Tokyo, Japan

**S5-3 Functional expression of human cells induced in engineered culture environment**

Toshiyuki Kanamori, Kimio Sumaru, Shinji Sugiura, Taku Satoh, Fumiki Yanagawa

Drug Assay Device Team, Research Center for Stem Cell Engineering,

National Institute of Advanced Industrial Science and Technology

**S5-4 Investigation of Substrate-Dependent Inhibition of Organic Anion Transporting Polypeptide 1B1 to Mitigate the Risk of False-Negative Prediction of Drug-Drug Interactions**

Yoshitane Nozaki<sup>1</sup>, Saki Izumi<sup>1</sup>, Takafumi Komori<sup>1</sup>, Kazuya Maeda<sup>2</sup>, Hiroyuki Kusuhara<sup>2</sup>, Yuichi Sugiyama<sup>3</sup>

<sup>1</sup>Drug Metabolism and Pharmacokinetics Japan, Eisai Co., Ltd., Ibaraki, Japan

<sup>2</sup>Laboratory of Molecular Pharmacokinetics, Graduate School of Pharmaceutical Sciences, University of Tokyo, Tokyo, Japan

<sup>3</sup>Sugiyama Laboratory, RIKEN Innovation Center, RIKEN

**S5-5 Proposal and Verification of in vitro/in silico Testing System for the Evaluation of Drug Transport and Metabolism in Liver**

Seiichi Ishida

Division of Pharmacology, National Institute of Health Sciences, Tokyo, Japan

**Symposium 6 (Nano materials)**

20th, Dec. (Fri) 15:15-17:15, Large Meeting Room  
Chairpersons, Kunihiko Yamashita (Daicel Corp.)  
Masahiro Okada (Osaka Dental Univ.)

**S6-1 Examination of hazard effect of nanomaterials -Role of inhalation study and intratracheal instillation study-**

Yasuo Morimoto

Dept. of Occupational Pneumology, Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health, Japan

**S6-2 Development of a cultured alveolus epithelium model and its application in evaluation of health effects of nanoparticles**

Yasuyuki Sakai

Department of Materials and Environmental Science, Institute of Industrial Science,  
University of Tokyo, Japan

**S6-3 Biomedical applications of phospholipid nanodiscs and photo-responsive nanomaterials**

Tatsuya Murakami

Institute for Integrated Cell-Material Sciences (WPI-iCeMS), Kyoto University

**S6-4 Engineered Three-Dimensional Tissue Construction for Alternatives to Animal Experiments**

Michiya Matsusaki, Mitsuru Akashi

Graduate School of Engineering, Osaka University, Osaka, Japan

**Symposium 7 (Chemicals)**

21st, Dec. (Sat) 9:00-11:55, TERRSA Hall  
Chairpersons, Koichi Saito (Sumitomo Chemical Co., Ltd.)  
Kunihiko Yamashita (Daicel Corp.)

**S7-1 New LRI**

Tatsuya Mizukoshi  
Japan Chemical Industry Association

**S7-2 Global Trends of Chemical Safety Management and Industry Challenging**

Fumiaki Shono  
Japan Chemical Industry Association, Tokyo, Japan

**S7-3 A new system for the efficient assessment and test methods for the hazard of chemicals using mammalian artificial chromosome vectors**

Mitsuo Oshimura  
Department of Biomedical Science, Institute of Regenerative Medicine and Biofunction,  
Graduate School of Medical Sciences, Tottori University, Yonago, Japan

**S7-4 A new assessment and test methods for the hazard of chemicals using the culture cells from luminescent transchromosomic mice**

Tetsuya Ohbayashi  
Division of Laboratory Animal Science, Research Center for Bioscience and Technology,  
Tottori University, Yonago, Japan

**S7-5 Development of artificial chromosome vector-based luciferase assay system**

Yoshihito Nakajima  
National Institute of Advanced Industrial Science and Technology (AIST),  
Health Research Institute, Kagawa, Japan

**S7-6 in-vitro hepatotoxicity test to eliminate high-risk chemicals**

Masako Tada  
Chromosome Engineering Research Center, Tottori University, Japan

**S7-7 Development of new HTP screening in Vitro system for evaluating renal Toxicology by using kidney tissue stem cells**

Shinji Kitamura  
Department of Medicine and Clinical Science, Okayama University Graduate School, JAPAN

**S7-8 Development of a novel in-vitro neurotoxicity assay**

Kumiko Kobayashi, Noriyuki Suzuki, Atsushi Kuwahara, Satoshi Ando, Koichi Saito  
Sumitomo Chemical Co.,Ltd. Osaka, Japan



**Workshop & AATEX Exhibition**  
**(Support for Activation of the JSAAE Journal)**

Workshop, 20th, Dec (Fri) 12:30-13:00, 15:00-15:30, 17:15-17:30  
AATEX Exhibition, 20th, Dec(Fri) 11:00-21st (Sat)15:00  
(Audiovisual Training Room)  
Chairperson: Hideto Ariumi (Kitasato Univ.)

**W-1 History and Purpose of Alternatives to Animal Testing and Experimentation**

Hideto Ariumi, Yuji Yoshiyama

Division of Community Pharmacy, Research and Education Center for Clinical Pharmacy, School of Pharmacy, Kitasato University

**W-2 How do we activate AATEX (Alternatives to Animal Testing and Experimentation) ?**

Taku Matsushita

Department of Applied Life Science, Sojo University

**W-3 Measures to promote AATEX activities**

Tetsuya Hasegawa

Laboratory of Drug Metabolism and Pharmacokinetics, Faculty of Pharmaceutical Sciences,  
Josai International University

**W-4 Social duties in future of the AATEX**

Koichi Imai

Osaka Dental University

**Luncheon Seminar**

**Luncheon Seminar A**

20th, Dec. (Fri) 12:00-12:55, TERRSA Hall

Chairpersons: Kazuhisa Sekimizu (The University of Tokyo)  
Hajime Kojima (NIES)

**LSA-1 Possibilities of new alternative to animal testing using silkworm**

Hajime Kojima  
(NIES)

**LSA-2 Advantages of the test using silkworm and acute oral toxicity tests**

Takuya Sugita  
Noevir Co., Ltd, Shiga, Japan

**LSA-3 Screening of pharmaceutical products using the silkworm disease models**

Hiroshi Hamamoto  
Graduate School of Pharmaceutical Sciences,  
The University of Tokyo, Tokyo, Japan

**LSA-4 The challenge by silkworm**

Kazuhisa Sekimizu  
Graduate School of Pharmaceutical Sciences,  
The University of Tokyo, Tokyo, Japan

**Luncheon Seminar B**

20th, Dec. (Fri) 12:00-12:55, Large Meeting Room

Chairperson: Teppei Ogawa (Natsume Seisakusho Co., Ltd. )

**LSB-1 Implementation of practical 3Rs with NATSUME RAT which is designed for animal handling model**

**International Trend in Laboratory Animal Welfare**

Tsutomu Miki Kurosawa, DVM, M.Phil, Ph.D, DVCS, DJCLAM, FBB  
(ex Associate Professor, Osaka University Medical School)

**Mandom Award Presentations**

21st, Dec(Sat) 14:00-15:00, TERRSA Hall  
Chairperson: Takashi Omori (Doshisha Univ.)  
Organizer : Hiroaki Todo (Josai Univ.)

**M-1 Development of a cell-based model of the retina within a microfluidic device**

Hirokazu Kaji<sup>1</sup>, Toshinori Fujie<sup>2</sup>, Syuntaro Ito<sup>1</sup>, Nobuhiro Nagai<sup>3</sup>, Kuniaki Nagamine<sup>1</sup>, Matsuhiko Nishizawa<sup>1</sup>, Toshiaki Abe<sup>3</sup>

<sup>1</sup>Department of Bioengineering and Robotics, Graduate School of Engineering, Tohoku University

<sup>2</sup>WPI-Advanced Institute for Materials Research, Tohoku University

<sup>3</sup>United Center for Advanced Research and Translational Medicine,  
Tohoku University Graduate of Medicine

**M-2 Establishment of *in vitro* circadian clock system for evaluation of the mechanism for malignant transformation of cells**

Satoru Koyanagi

Department of Pharmaceutics, Graduate School of Pharmaceutical Sciences, Kyushu University

**M-3 Search for new candidate drugs for Progressive Familial Intrahepatic Cholestasis Type 2 (PFIC2)**

Hisamitsu Hayashi

Graduate School of Pharmaceutical Sciences, Univ. of Tokyo

*26th Annual Meeting of JSAAE, 2013*

---