Program

【December 10, 2015 (Thursday)】

Greetings from the Chair of the Annual Meeting	13:00 ~
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Symposium 1	19:10

Alternative test methods (I) using mammalian cells developed in Japan ----- Skin Sensitization Tests

- Chair: Takao Ahikaga (Shiseido Research Center)
 - S1-1 OECD adverse outcome pathway (AOP) for skin sensitization and development of AOP for immunotoxicity of chemicals

Setsuya Aiba Department of Dermatology, Tohoku University Graduate School of Medicine

S1-2 Validation tests of IL-8 Luc assay

Yutaka Kimura Department of Dermatology, Tohoku University Graduate School of Medicine

S1-3 Validation study and Guideline development of h-CLAT

Takao Ashikaga Shiseido Research Center

S1-4 Development of a novel skin sensitization test applicable to lipophilic chemicals -The utility of "EpiSensA"; a test method with three-dimensional human skin model –

Kazutoshi Saito Kao corporation, Safety science laboratory

Session by General affairs committee in JSAAE

15:00~

Briefing session of Mandom International Research Grants on Alternative to Animal Experiments

- Chair: Soichiro Kimura (Faculty of Pharmaceutical Sciences, Josai University, Member of General affairs committee in JSAAE)
 - M-1 Development of the prediction method for repeated-dose toxicity of chemical compounds based on the statistical data analysis using in vivo toxicity database and in vitro assays.

Kouichi YOSHINARI

Department of Molecular Toxicology, School of Pharmaceutical Sciences, University of Shizuoka

M-2 Establishment of in vitro culture system mimicking organisms by co-culture of hepatic

progenitor cell line HepaRG and stellate cell

Seiichi Ishida Division of Pharmacology, National Institute of Health Sciences

M-3 Prediction of the risk of drug-induced cholestasis based on the functional evaluation of bile canalicular transporters *in vitro*

Takashi Yoshikado and Yuichi Sugiyama Sugiyama Laboratory, RIKEN Innovation Center, RIKEN, Yokohama, Japan

M-4 Development of universal method in skin stimulus measurement using epidermal keratinocyte mitochondria as a forefront of sensory system for homeostasis maintenance -Feasibility study-

Toshihiro Ona 1,2, Junko Shibata 1,2

¹ Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University ² O'Atari Inc.

Session by the international exchange committee of JSAAE

- Chairs: Hiroshi Yamamoto (University of Toyama) Tsutomu Miki Kurosawa (Kagoshima University)
 - I-1 Current situation of Alternatives in USA and WC10
 - I-2 Advanced alternative test using mouse and human embryonic stem

Eui-Bae Jeung Laboratory of Veterinary Biochemistry and Molecular Biology, Chungbuk National University, Republic of Korea

I-3 Progress of Alternative Methods for Drug Safety Evaluation in China

Jufeng Wang, Zhengming He, Bo Li National Center for Safety Evaluation of Drugs, National Institutes for Food and Drug, Beijing, China

I-4 3Rs Initiatives in India- Opportunities and Challenges

Mohammad A. Akbarsha Mahatma Gandhi-Doerenkamp Center (MGDC) for Alternatives, Bharathidasan University, India

Symposium 2

Japan Chemical Industry Association LRI Symposium

- Chairs: Fumiaki Shono (Executive Director, Japan Chemical Industry Association) Kunihiko Yamashita (Daicel corporation Corporate research center)
 - S2-1 The status quo of JCIA LRI, and the aim of this symposium

Fumiaki Shono Executive Director, Japan Chemical Industry Association

S2-2 Assessing the risk of chemical compounds mediating CSC generation employing an iPS model

Masaharu Seno, Tomonari Kasai, Saki Sasada, Kenta Hoshikawa, Takuma Matsumoto Junko Masuda, Anna Sanchez Calle, Arun Vaidyanath, Takayuki Kudo Laboratory of Nano-Biotechnology, Department of Medical Bioengineering, Graduate School of Natural Science and Technology, Okayama University

S2-3 New approach for the prediction of repeated-dose toxicity

Kouichi Yoshinari Department of Molecular Toxicology, School of Pharmaceutical Sciences, University of Shizuoka

S2-4 Development of a novel method for *in vitro* assessment of chemical respiratory sensitizers

Takayuki Yoshimoto, Yukino Chiba, Ren Tsunoda, Mingli Xu, and Izuru Mizoguchi Departmentof Immunoregulation, Institute of Medical Science, Tokyo Medical University Physiologically-relevant cell-based assays based on tissue engineering methodologies

- Chair: Yasuyuki Sakai (Department of Chemical System Engineering, Graduate School of Engineering, University of Tokyo)
 - S3-1 Development of scaffold-free 3D tissue & organ fabrication by bio-3D printer

Koichi Nakayama Department of Regenerative Medicine and Biomedical Engineering, Faculty of Medicine, Saga University

S3-2 Development of microfluidic biochips in predictive toxicology and applied pharmacology

Eric Leclerc CNRS/IIS UMI 2820, Laboratory for Integrated Micro Mechatronic Systems, Institute of Industrial Science, University of Tokyo

Luncheon Seminar

 $12:00 \sim 13:00$

Approach to non-animal systemic toxicity evaluation for cosmetics in Shiseido (Shiseido symposium)

Chair:	Takao Ashikaga (Shiseido Research Center)				
S4-1	Strategy to evaluate systemic toxicity for cosmetics				
	Akiko Tamura Shiseido Research Center				
S4-2	Strategy of in vitro hepatotoxicity evaluation for cosmetics				
	Kousei Ito and Shuichi Sekine Chiba University Graduate School of Pharmaceutical Sciences Approach for reproductive and developmental toxicity evaluation of cosmetic ingredients				
S4-3					
	Tomoka Shiseid	ı Hisaki o Research Center			
Poster Se	ession		14 : 30 ~ 17 : 30		
<introduction> Odd numbers :</introduction>		Odd numbers :	$14:30 \sim 15:30$		
		Even numbers :	$16:00 \sim 17:00$		
Get-Toge	ther Par	ty	18 : 00 ~20 : 00		

[December 12, 2015 (Saturday)]

Symposium 5

Alternative test methods (II) using mammalian cells developed in Japan ------ Eye Irritation Tests

- Chair: Hitoshi Sakaguchi (Kao Corporation R&D Safety Science Research)
 - S5-1 Approval of Short Time Exposure (STE) Test as OECD Test Guideline

Masaaki Miyazawa Kao Corporation, R&D Safety Science Research

S5-2 Trend on validation study of SIRC-CVS:TEA test as an alternative method for evaluating eye irritation

Shigenobu Hagino Shiseido Research Center

S5-3 Validation study of Vitrigel-EIT (Eye Irritancy Test) method

Hiroyuki Yamaguchi^{1), 2)}, Toshiaki Takezawa¹⁾ ¹⁾ National Institute of Agrobiological Sciences, ²⁾ Kanto Chemical Co., Inc.

Updated techniques for differentiation of ES/iPS cells

- Chair: Koichi Saito (Environmental Health Science Laboratory, Sumitomo Chemical Co.)
 - S6-1 Functional adenohypophysis generated in three-dimensional culture of human ES cells

Hidetaka Suga Department of Endocrinology and Diabetes , Nagoya University Hospital

S6-2 Investigation of intractable diseases utilizing disease-specific iPS cells.

Keiko Muguruma Laboratory for Cell Asymmetry, RIKEN Center for Developmental Biology

S6-3 Generation of a ciliary margin-like stem cell niche from self-organizing human ESC-derived retinal tissue

Atsushi Kuwahara^{1),2),3),4)}, Chikafumi Ozone¹⁾, Tokushige Nakano^{1),2)}, Koichi Saito²⁾, Mototsugu Eiraku⁴⁾ and Yoshiki Sasai¹⁾

- ¹⁾ Laboratory for Neurogenesis and Organogenesis, RIKEN Center for Developmental Biology
- ²⁾ Environmental Health Science Laboratory, Sumitomo Chemical Co., Ltd.
- ³⁾ Regenerative & Cellular Medicine Office, Sumitomo Dainippon Pharma Co.,Ltd
- ⁴⁾ Laboratory for In Vitro Histogenesis, RIKEN Center for Developmental Biology

General Meeting

 $12:00 \sim 13:15$

Educational Lecture

Chair: Yukiko Kanazawa (Hatano Research Institute, Food and Drug Safety Center)

International Trend in Animal Welfare

Tsutomu Miki Kurosawa, Kagoshima University

Special Lecture	è
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13:55 ~

Chair: Atsushi Ono (Division of Risk Assessment, Biological Safety Research Center, National Institute of Health Sciences)

Current Problems and Perspectives of the Alternate Test Methods from the Viewpoint of in vivo Toxicology.

Jun Kanno Division of Cellular & Molecular Toxicology, Biological Safety Research Center, National Institute of Health Sciences

METI Project, Briefing session of ARCH-Tox project • For the paradigm shift of the toxicity evaluation •

Chars: Hajime Kojima (Division of Risk Assessment, Biological Safety Research Center, National Institute of Health Sciences) Nobuya Imatanaka (Chemicals Assessment and Research Center, Chemicals Evaluation and Research Institute) Mitsuo Oshimura (Chromosome Engineering Reserch Center, Tottori University)

Greetings

Hironobu Okumura Chemical Management Policy Division, Manufacturing Industries Bureau, Ministry of Ecology, Trade and Industry

S7-1 Outline of a plan for Japanese Project "ARCH-Tox" for the Future Chemicals Management Policy: Research and Development of in vitro and in vivo Assays for Internationally Leading Hazard Assessment and Test Methods

Hajime. Kojima Div. of Risk Assessment, Biological Safety Research Center (BSRC), National Institute of Health Sciences (NIHS)

S7-2 Mechanism-based evaluation system for chemical toxicity using gene expression analysis

Fumiyo Saito Chemicals Assessment and Research Center, Chemicals Evaluation and Research Institute, Japan (CERI)

S7-3 Challenge to short-term prediction for chemical carcinogenicity by gene expression analysis

Hiroshi Matsumoto Chemicals Assessment and Research Center, Chemicals Evaluation and Research Institute, Japan (CERI)

S7-4 Establishment of comprehensive evaluation method on neurotoxicity targeting neurogenesis and gliogenesis

Makoto Shibutani Dept. of Veterinary Medicine, Faculty of Agriculture, Graduate School, Institute of Agricultural Science, Tokyo University of Agriculture and Technology

S7-5 Development of cell-based assay system using artificial chromosome vector and bioluminescent reporters

Yoshihiro Nakajima Health Research Institute, National Institute of Advanced Industrial Science and Technology (AIST) S7-6 In vitro nephrotoxicity assays using mammalian artificial chromosome vector

Tetsuya Ohbayashi¹⁾, Shinji Kitamura²⁾, Mituso Oshimura³⁾

- ¹⁾ Research Center for Bioscience and Technology, Tottori University
- ²⁾ Department of Medicine and Clinical Science, Okayama University Graduate School of Medicine hromosome
- ³⁾ Chromosome Engineering Research Center, Tottori University
- S7-7 In vitro hepatotoxicity assay using the primary cells of transgenic mouse hepatocyte

Kohji Yamakage Hatano Research Institute, Food and Drug Safety Center

S7-8 In vitro neurotoxicity assays using mouse embryonic stem cells

Kumiko Kobayashi, Noriyuki Suzuki, Koichi Saito Environmental Health Science Laboratory, Sumitomo Chemical Co., Ltd.

General Discussion