

## Annual Meeting

### The 15th Annual Meeting of JSIT

September 11-12, 2008, Tokyo, Japan

President: Jun-ichi SAWADA National Institute of Health Sciences, Japan

#### Keynote Lecture

Genetic polymorphisms and myelotoxicity of anti-cancer drugs	Jun-ichi Sawada	National Institute of Health Sciences
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#### Master's Lecture

Immunotoxicogenomics of environmental chemicals	Keiko Nohara	National Institute for Environmental Studies
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#### Invited Plenary Lecture

Immunotoxicology of innate immunity	Stephen B. Pruet	College of Veterinary Medicine, Mississippi State University
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#### Symposium <1>

##### Immunotoxicity of nanoparticles

Organizer

Takemi Otsuki	Department of Hygiene, Kawasaki Medical School
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Seishiro Hirano	National Institute for Environmental Studies
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Hidekazu Fujimaki	Research Center for Environmental Risk, National Institute for Environmental Studies
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Hirohisa Takano	Environmental Health Sciences Division, National Institute for Environmental Studies
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##### Immunotoxicogenomics of environmental chemicals

Akihiko Hirose	National Institute of Health Sciences
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##### The importance of characterization for nanoparticles and its pulmonary effects in rats.

Akira Ogami(1), Yasuo Morimoto(1), Takako Oyabu(1), Toshihiko Myojo(1), Masahiro Murakami(1), Motoi Todoroki(1), Makoto Yamamoto(1), Masami Hirohashi(1), Sayumi Yamasaki(1), Manabu Shimada(2), Shigehisa Endoh(3), Kunio Uchida(3), Junko	(1)Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health, (2)Graduate School of Engineering, Hiroshima University, (3)National Institute of Advanced Industrial Science and Technology
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	Nakanishi(3), Isamu Tanaka(1)	
Synergistic effects of nanoparticles/materials on pathological conditions	Ken-ichiro Inoue, Rie Yanagisawa, Eiko Koike, Hirohisa Takano	Environmental Health Sciences Division, National Institute for Environmental Studies
Safety concerns of nanomaterials to skin: Safety and skin penetration of nanomaterials.	Kenji Sugibayasi	Josei University
Symposium <2>		
Gut-associated lymphoid tissues and their regulations	Organizer	
	Reiko Teshima	National Institute of Health Sciences
	Yukiko Kanazawa	Hatano Research Institute, Food and Drug Safety Center
	Makoto Iwata(1), Aya Yokota(1), Hajime Takeuchi(1), Yoshiharu Ohoka(1), Si-Young Song(2)	(1)Biodefense Research, Faculty of Pharmaceutical Sciences at Kagawa Campus, Tokushima Bunri University, (2)Institute of Neuroscience, Tokushima Bunri University
Regulation of gut immunity by retinoids		
Intestinal immunity-mediated allergy - Establishment of murine food allergy model-	Tomoko Shindo(1), Yukiko Kanazawa(1), Kohichi Kojima(1), Reiko Teshima(2,1)	(1)Hatano Research Institute, Food and Drug Safety Center, (2)National Institute of Health Sciences
Immunomodulation by probiotic lactobacilli through regulating functions of macrophages	Kan Shida	Yakult Central Institute for Microbiological Research
Mucosal immune dysfunction by the trichothecene mycotoxins	James J. Pestka	Center for Integrative Toxicology, Michigan State University
Workshop		
Secondary immunomodulatory effects and allergenicity of pharmaceuticals	Organizer	
	Nsohosa Tsutsui	Mitsubishi Tanabe Pharma Corporation
	Shigeru Hisada	ASKA Pharmaceutical Co., Ltd.
	Eiji Maki	BiosafetyResearchCenter, Foods, Drugs and Pesticides
Regulation of allergic immune response by PPAR agonists	Shigeharu Ueki	Akita University School of Medicine
The role of dopamine as an immune modulator	Kazuhisa Nakano	University of Occupational and

		Environmental Health (1)Japanese Center for the Validation of Alternative Methods (JaCVAM), Div. of Pharmacology, National Institute of Health Sciences (NIHS), (2)Daicel Chemical Industries, Ltd, (3)Chemical Evaluation and Research Institute
Inter-laboratory validation studies on LLNA-DA and LLNA-BrdU	Hajime Kojima(1), Kenji Idehara(2), Masahiro Takeyoshi(3,1)	
Validation of non-RI methods -Data analysis-	Takashi Omori(1), Takashi Sozu(2)	(1)Kyoto University School of Public Health, (2)Osaka University
Briefing of ICCVAM LLNA peer review meeting	Takahiko Yoshida	Asahikawa Medical College
Oral Presentations		
Chlorpyrifos induces apoptosis in human T cells	Qing Li, Maiko Kobayashi, Tomoyuki Kawada  Masashi Tsunoda (1), Masayoshi Tsuji(2), Ying Zhang(1), Sachiko Kimura(1), Yuichiro Kudo(1), Hiroshi Katagiri(3), Mika Wakasa(4), Tomoko Tashiro(4), Yoshiko Sugita-Konishi(5), Yoshiharu Aizawa(1)	Department of Hygiene and Public Health, Nippon Medical School  (1)Preventive Med. and Public Health, Kitasato Univ. School of Med, (2)Mejiro Univ., (3)Kitasato Univ. School of Allied Health Sci. , (4)Aoyama Gakuin Univ. , (5)National Instit. Health Sci.
The effects of tributyltin on thymic-lymphocyte populations in F1 rats after subacute administration		
Effect of toluene exposure and BCG stimulation in the infant mice on development of Th1/Th2 balance	Shoji Yamamoto, Tin-Tin Win-Shwe, Hidekazu Fujimaki	Research Center for Environmental Risk, National Institute for Environmental Studies
Radiation effects on aging-associated elevation of inflammatory markers among atomic-bomb survivors	Tomonori Hayashi, Yoichiro Kusunoki, Yukari Morishita, Hiroko Nagamura, Mayumi Maki, Yoshiko Kubo, Kengo Yoshida, Kei Nakachi,	The Department of Radiobiology/Molecular Epidemiology, Radiation Effects Research Foundation
Investigation of evaluation methods for innate immune responses to viral component dsRNA in monkeys	Tomoaki Inoue(1), Chiyomi Kubo(1), Takayuki Sakurai(1), Akifumi Shioda(1), Marie Hayakawa(1), Yukihito Miura(2), Tatsuya Ito(2),	(1)Safety Assessment Dept., Fuji Gotemba Research Labs., Chugai Pharmaceutical Co., Ltd., (2)Chugai Research Institute for Medical Science, Inc.

	Kazuto Watanabe(1)	
Validity evaluation of human cell line activation test for differentiation of skin sensitizers from irritant chemicals in vitro	Yong Heo	Catholic University of Deagu, Korea
Effects of latex nanoparticles on atopic dermatitis-like skin lesions in NC/Nga mice.	Rie Yanagisawa(1), Hirohisa Takano(1), Ken-ichiro Inoue(1), Eiko Koike(1), Kaori Sadakane(2), Takamichi Ichinose(2)	(1)Environmental Health Sciences Division, National Institute for Environmental Studies, (2)Department of Health Sciences, Oita University of Nursing and Health Sciences
Peripheral blood NK cells in patients with mesothelioma and NK cells in PBMCs exposed to asbestos show a common decrease in expression of NKp46	Yasumitsu Nishimura(1), Megumi Maeda(1), Naoko Kumagai(1), Shuko Murakami(1), Hiroaki Hayashi(1), Ying Chen(1), Takumi Kishimoto(2), Takemi Otsuki(1)	(1)Department of Hygiene, Kawasaki Medical School, (2)Okayama Rosai Hospital
Analysis of chemokine receptor CXCR3 expression in human CD4+ T cells exposed to asbestos	Megumi Maeda(1), Yasumitsu Nishimura(1), Shuko Murakami(1), Naoko Kumagai(1), Hiroaki Hayashi(1), Ying Chen(1), Takumi Kishimoto(2), Takemi Otsuki(1)	(1)Department of Hygiene, Kawasaki Medical School, (2)Okayama Rosai Hospital
Associations between HLA alleles and Stevens-Johnson syndrome and toxic epidermal necrolysis in Japanese patients.	Yoshiro Saito(1,2), Masahiro Tohkin(1,2), Kouichi Kurose(1,2), Jun- ichi Sawada(1), Ryuichi Hasegawa(1,2), Chie Sotozono(2), Shigeru Kinoshita(2), Yukitoshi Takahashi(2), Hirokazu Furuya(2), Masaaki Muramatsu(2), Kayoko Matsunaga(2), Michiko Aihara(2), Zenro Ikezawa(2),	(1)National Institute of Health Sciences, (2)JSAR Research Group

	Nahoko Kaniwa(1,2)	
	Hiroaki Hayashi(1), Megumi Maeda(1), Shuko Murakami(1),	(1)Department of Hygiene, Kawasaki Medical School, (2)Kusaka Hospital, Bizen
Serum levels of soluble IL-2 receptor as an immunological disorder in silicosis patients.	Naoko Kumagai(1), Ying Chen(1), Yasumitsu Nishimura(1), Masayasu Kusaka(2), Takemi Otsuki(1)	
	Yoshihiro Takahashi(1), Atsunobu Muneoka(1), Shogo Misumi(2), Mitsuaki Masuyama (1,2), Yasuharu Otsubo(1), Takahiro Nakamura(1), Shozo Shoji(2), Hiroyuki Izumi (1), Takayuki Sukamoto(1)	(1)Shin Nippon Biomedical Laboratories, Ltd., (2)Department of Pharmaceutical Biochemistry, Graduate School of Medical and Pharmaceutical Sciences, Kumamoto University
	Nobuaki Mizutani(1), Takeshi Nabe(2), Masanori Fujii(2), Shin Yoshino(1), Teruhisa Hirayama(3), Shigemakatsu Kohno(2)	(1)Department of Pharmacology, Kobe Pharmaceutical University, (2)Department of Pharmacology, Kyoto Pharmaceutical University, (3)Department of Public health, Kyoto Pharmaceutical University
Polycyclic aromatic hydrocarbons aggravate antigen-induced nasal blockage in experimental allergic rhinitis		
	Yuri Shimizu(1), Yumiko Nishii(2), Nobuyuki Fukuishi(2), Masaaki Akagi(2), Seiichiro Himeno(1)	(1)Tokushima Bunri University, Faculty of Pharmaceutical Sciences, Laboratory of Molecular Nutrition and Toxicology, (2)Tokushima Bunri University, Faculty of Pharmaceutical Sciences, Laboratory of Pharmacology
Effects of exposure to low-dose arsenite on degranulation of mast cells		
	Eiko Koike, Hirohisa Takano, Ken-Ichiro Inoue, Rie Yanagisawa	Environmental Health Sciences Division, National Institute for Environmental Studies
Di-(2-ethylhexyl) phthalate affect the activation of immune cells from atopic prone mice in vitro		
Poster Discussion		
Carotenoid intake inhibits the oral sensitization and development of food	Hiroshi Akiyama(1), Yuji Sato(1), Hideki	(1)Division of Novel Foods and

allergies	Matsuoka(1), Rika Nakamura(1), Ryosuke Nakamura(1), Shingo Ishikawa(2), Takahiro Inakuma(2), Mamoru Totsuka(3), Reiko Teshima(1)	Immunochemistry, National Institute of Health Sciences,, (2)Research Institute, Kagome Co., LTD., (3)Department of Applied Biological Chemistry, The University of Tokyo
Multicolor flow cytometry for differentiation analysis of monkey peripheral T cells	Hideki Harada, Makoto Tsumemi, Hideki Tokudome, Yasuko Yakabe, Takayuki Okamura, Yasuyuki Ohnishi	Safety Assessment Division I, Kashima Laboratory, Mitsubishi Chemical Safety Institute Ltd
Effect of exposure to asbestos on the lytic function of human cytotoxic T lymphocytes	Naoko Kumagai, Yasumitsu Nishimura, Megumi Maeda, Shuko Murakami, Hiroaki Hayashi, Yin Chen, Takemi Otsuki	Department of Hygiene, Kawasaki Medical School
Comparison of cytokine secretion between a human T cell line and a subline continuously exposed to chrysotile asbestos	Ying Chen, Megumi Maeda, Shuko Murakami, Naoko Kumagai, Hiroaki Hayashi, Yasumitsu Nishimura, Takemi Otsuki	Department of Hygiene, Kawasaki Medical School
Validation of the peripheral blood lymphocyte subset test in beagle dogs	Takayuki Okamura, Hideki Tokudome, Yasuko Yakabe, MakotoTsunemi, Hideki Harada, Yasuyuki Ohnishi	Safety Assessment Division I, Kashima Laboratory, Mitsubishi Chemical Safety Institute Ltd.
Strain difference of extracellular amino acid neurotransmitter levels in the hippocampus of MHC-congenic mice exposed to toluene	Tin-Tin Win- Shwe(1), Dai Mitsushima(2), Shoji Yamamoto(1), Hidekazu Fujimaki(1)	(1)Research Center for Environmental Risk, National Institute for Environmental Studies, (2)Department of Physiology, Yokohama City University Graduate School of Medicine
Identifying the low dose chemical- induced respiratory allergic response in mice	Tomoki Fukuyama, Yukari Tajima, Hideo Ueno, Koichi Hayashi, Yasufumi Shuto, Takanori Harada, Tadashi Kosaka	Toxicology Division, The Institute of Environmental Toxicology
The effect of Methoxychlor (MXC) on the immune response to SRBC-antigen in infant rats.	Koichi Hayashi, Tomoki Fukuyama, Yukari Tajima, Hideo Ueda,	The Institute of Environmental Toxicology

	Yasufumi Syutoh, Takanori Harada, Tadashi Kosaka	
Preventive effect of bronchial asthma by administration of Japanese loquat ( <i>Eriobotrya japonica</i> ) seeds extract in mice.	Ryoji Hirota(1), Junko Yokota(2), Masahide Onogawa(2,3), Mitsuhiko Miyamura(2), Kunihiro Akimaru(1), Hiroyuki Nakamura(4), Hiroshi Iwamoto(5), Akihito Yokoyama(5), Hiroyuki Tanaka(6), Naoki Inagaki(6), Hiroichi Nagai(6), Narufumi Suganuma(1), Yutaka Nishioka(2,3)	(1)Dept. Environmental Medicine, Kochi Medical School, (2)Dept. Pharmacy, Kochi Medical School Hospital, (3)Dept. Biomedical Science, Kochi Medical Graduate School, (4)Dept. Environmental and Preventive Medicine, Kanazawa University Graduate School of Medical Science, (5)Dept. Hematology and Respiratory Medicine, Kochi University, (6)Laboratory of Pharmacology, Dept. Bioactive Molecules, Gifu Pharmaceutical University
Optimization and validation of in vitro neutrophil phagocytosis assay using rat whole blood	Seiji Shibata, Mitui Isobe, Shigeru Hisada	Safety Research Department, ASKA Pharmaceutical Co., Ltd
The enhancement of T cell proliferation caused by trichloroethylene ingestion from drinking water	Ryo Kobayashi, Syosaku Watanabe, Tsuyoshi Nakanishi, Hisamitsu Nagase	Gifu Pharmaceutical University, Gifu, Japan
Validation study of LLNA (Local Lymph Node Assay) with BrdU assay using CBA strain mice	Yasuhiro Tanaka, Yoshihiro Takahashi, Kaori Kumano, Yasuharu Otsubo, Nozomi Matsuo, Yusuke Yamashita, Shinji Utsunomiya, Takayuki Ichii,, Takahiro Nakamura, Hiroyuki Izumi, Takayuki Sukamoto	Drug Safety Research Laboratories, Shin Nippon Biomedical Laboratories, Ltd.
Differences in gene expression profiles of the lesions with TNBS- and DSS-induced colitis	Yasuhiro Matsumoto, Motoko Fukui, Seiichi Araki, Shigeru Hisada	Safety Research Department, ASKA Pharmaceutical Co., Ltd.
Effect of nanomaterials against innate immunity	Tanabe Aya(1), Yoshioka Yasuo(1,2), Morishige Tomohiro(1), Tsunoda Shin- ichi(2,4), Tsutsumi Yasuo(2,3,4), Mukai	(1)Dept. Biotechnology and Therapeutics Graduate School of Pharmaceutical Sciences, Osaka University, (2)The center for Advanced Medical Engineering and Informatics, Osaka

	Yohei(1), Okada Naoki(1), Nakagawa Shinnsaku(1,2)	University, (3)Dept. Toxicology, Graduate School of Pharmaceutical Sciences, Osaka University, (4)National Institute of Biomedical Innovation (NiBio)
Alternative endpoints in the LLNA in order to reduce false positive results	M.H.M van Tuyl, A.H.B.M van Huygevoort, R.P.L van Swelm, H.H. Emmen, M. Stitzinger	NOTOX B.V. 's-Hertogenbosch, the Netherlands
The studies for the effect of deoxynivalenol on Toll-like receptor signaling pathways	Kei-ichi Sugiyama(1), Masashi Muroi(1), Yuji Minai(2), Ken-ichi Tanamoto(1), Minoru Haga(2), Yoshiko Sugita-Konishi(1)	(1)National Institute of Health Sciences, (2)Faculty of Agriculture, Tamagawa University
Myelotoxicity of indium chloride - chromosomal aberration-	Yuichi Miyakoshi, Yuji Suzuki, Hiroyuki Yanagisawa	Dept. public health and environmental medicine, The Jikei University School of Medicine
Luncheon Seminar <1>		
Immunological Assessment and the Use of Biomarkers in Translational Medicine	LawrenceJacob	Charles River Laboratories, Edinburgh, UK
Luncheon Seminar <2>		
Non-clinical strategies to mitigate the risk for first-in-man studies with immunomodulatory drugs	MarkWing	Huntingdon Life Sciences, Huntingdon, England