

## Annual Meeting

## The 19th Annual Meeting of JSIT

Special Lecture 1		
Overview and Application of the WHO/IPCS Harmonized Guidance for Immunotoxicity: Risk Assessment for Chemicals	Henk van Loveren	Maastricht University, National Institute of Public Health and the Environment, The Netherlands
Special Lecture 2		
New with old in immunotoxicological research ---- What has been and what shall be in our Society of Immunotoxicology	Motoyasu Ohsawa	Hatano Research Institute, Food and Drug Safety Center, Hadano, Japan.
Master's Lecture 1		
Molecular mechanism of fatigue and relationship between immunotoxicology and fatigue	Kazuhiro Kondo	Department of Virology, The Jikei University School of Medicine
Master's Lecture 2		
Pathological linkage of metabolic disease and autoimmunity by Apoptosis Inhibitor of Macrophage (AIM)	Toru Miyazaki	Laboratory of Molecular Biomedicine for Pathogenesis, Center for Disease Biology and Integrative Medicine, Faculty of Medicine, The University of Tokyo, Tokyo, Japan
Awards Lectures <JSIT RESEARCH AWARD >		
Study on the aggravation mechanism of allergy induced by environmental chemicals	Eiko Koike	Center for Environmental Health Sciences, National Institute for Environmental Studies, Tsukuba, Japan
Awards Lectures <JSIT RESEARCH AWARD > (Symposium)		
Immunological analysis of asbestos-exposed people for identification of new diagnostic markers	○Yasumitsu Nishimura (1), Naoko Kumagai-Takei (1), Hidenori Matsuzaki(1), Suni Lee (1) , Megumi Maeda (2) , Takumi Kishimoto(3) , Takemi Otsuki(1)	(1)Department of Hygiene, Kawasaki Medical School, Kurashiki, Japan , (2)Laboratory of Functional Glycobiology, Department of Biofunctional Chemistry, Graduate School of Environmental and Life Science, Okayama University, Okayama,

		Japan , (3)Okayama Rosai Hospital, Okayama, Japan
Symposium "Progress in research for immunotoxicology"		
Topics of research on sick house syndrome, with special reference to an immunotoxicological aspect	Kou Sakabe	Department of human structure and function, Tokai University School of Medicine, Kanagawa, Japan
Advances in gut immunity to gastrointestinal nematode infections	Kenji Ishiwata	Department of Tropical Medicine, The Jikei University School of Medicine, Tokyo, Japan
Workshop "In vitro immunotoxicology"		
Current Trend on In Vitro Immunotoxicology in EU	Emanuela Corsini	Laboratory of Toxicology, Dipartimento di Scienze Farmacologiche e Biomolecolari, Faculty of Pharmacy, Università degli Studi di Milano, Milan, Italy
Development and application of an in vitro skin sensitization test named h-CLAT based on alteration of dendritic cell surface markers expression	Hitoshi Sakaguchi	Safety Science Reserach Laboratories, Kao Corporation, Tochigi, Japan
Study on safety assessment for sensitization using alternative methods	Taro Ashikaga	Research Center, Shiseido Co., Ltd., Kanagawa, Japan
Development of assay system for immunotoxicity using cytokine reporter cells (Multi-ImmunoTox assay)	Setsuya Aiba	Department of Dermatology, Tohoku University Graduate School of Medicine, Sendai, Japan
Irradiation of light emitting diode at 850 nm inhibits T cell-induced cytokine expression	Kyung Ah Cheong, Chang-hyun Kim, Yun-Seok Choi, ○ Ai-Young Lee	Department of Dermatology, Dongguk University Ilsan Hospital, South Korea
Oral Presentations		
Effects of intratracheal exposure to phthalates in an allergic asthma	○Rie Yanagisawa(1), Eiko Koike(1), Tin Tin Win Shwe(1), Takamichi Ichinose(2), Hiroshi Takano(3)	(1)Center for Environmental Health Sciences, National Institute for Environmental Studies, Japan , (2)Department of Health Sciences, Oita University of Nursing and Health Sciences, Notsuharu, Oita, Japan , (3)Graduate School of Engineering, Kyoto University, Kyoto, Japan

Expression of neuroimmune biomarkers in hypothalamus of allergic mice after early phthalate exposure	○Tin Tin Win Shwe(1), Rie Yanagisawa(1), eiko Koike(1), Hiroshi Nitta(1), Hirohisa Takano(2)	(1)Center for Environmental Health Sciences, National Institute for Environmental Studies, Tsukuba, Japan , (2)Department of Environmental Engineering, Graduate School of Engineering, Kyoto University, Kyoto, Japan
Analysis of serum IgE from patients sensitized to acid-hydrolyzed wheat protein in facial soap	Rika Nakamura(1), ○Ryosuke Nakamura(1), Shinobu Sakai(1), Reiko Adachi(1), Yasuharu Itagaki(2), Yuma Fukutomi(3), Reiko Teshima(1)	(1)Div. Novel Foods Immunochem., Natl. Inst. Health Sci., Tokyo, Japan , (2)Dept. Health Nutr., Hokkaido Bunkyo Univ., Hokkaido, Japan , (3)Clin. Res. Ctr. Allergy Rheumatol., Sagamihara Natl. Hosp., Kanagawa, Japan
Size-dependent effect of amorphous silica nanoparticles on atopic dermatitis	○Yasuo Yoshioka(1), Toshiro Hirai(1), Shin-ichi Tsunoda(2),(3), Hiromi Nabeshi(4), Tomoaki Yoshikawa , Yasuo Tsutsumi(1),(2),(3)	(1)Laboratory of Toxicology and Safety Science, Graduate School of Pharmaceutical Sciences, Osaka University, Osaka, Japan , (2)Laboratory of Biopharmaceutical Research, National Institute of Biomedical Innovation, Osaka, Japan , (3)MEI center, Osaka University, Osaka, Japan , (4)National Institute of Health Science, Tokyo, Japan
Applicability of CBA/J mice to the Local Lymph Node Assay: BrdU-ELISA.	○Toshio Kobayashi(1), Junichi Kikuchi(1), YasuhiroTsubokura(1), Masanori Taruki(2), Syozo Ajimi(1), Masahiro Takeyoshi (3)	(1)CERI Hita, Chemicals Evaluation and Research Institute, Japan , (2)CERI Kurume , Chemicals Evaluation and Research Institute, Japan. , (3)Chemicals Assessment and Research Center, Chemicals Evaluation and Research Institute, Japan.
Sensitization study by qualitative structure-toxicity relationships (QSTR) approaches	○Kazuhiro Sato, Yukinori Kusaka	Department of Environmental Health, School of Medicine, University of Fukui, Fukui, Japan
Effects of AhR agonists on IL-17 and IL-22 gene	○Hiroyuki Kojima(1), Ryuta Muromoto(2), Miki	(1)Hokkaido Institute of Public Health, Sapporo,

expressions in mouse T lymphoma EL4 cells	Takahashi(2), Shinji Takeuchi(1), Tadashi Matsuda(2)	Japan , (2)Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo, Japan
Effects of inorganic arsenite on the signal pathway evoked by ATP exposure	○Daigo Sumi, Hideta Okada, Kuniko Yogi, Hideki Miyataka, Seiichiro Himeno	Faculty of Pharmaceutical Sciences, Tokushima Bunri University, Tokushima, Japan
Continuous exposure of asbestos accelerates cell cycle progression in MT-2 Cell	○Sun Lee(1), Hidenori Matsuzaki(1) , Megumi Maeda(2), Naoko Kumagai- Takei(1), Yasumitsu Nishimura(1), Takemi Otsuki(1)	(1)Department of Hygiene, Kawasaki Medical School, Kurashiki, Japan , (2)Lab. Functional Glycobiology, Dept. Biofunctional Chemistry, Graduate School of Environmental and Life Science, Okayama Univ., Okayama, Japan
Molecular mechanisms of alteration of MT-2 cells induced by long term exposure to asbestos.	○Hidenori Matsuzaki(1), Sun Lee(1), Megumi Maeda(2) , Naoko Kumagai- Takei(1), Yasumitsu Nishimura(1), Takemi Otsuki(1)	(1)Department of Hygiene, Kawasaki Medical School, Kurashiki, Japan , (2)Division of Bioscience, Graduate School of Natural Science and Technology, Okayama University, Okayama, Japan
Functional analysis of CD8+ lymphocytes in patients with pleural plaque or malignant mesothelioma	○Naoko Kumagai-Takei, Yasumitsu Nishimura, Hidenori Matsuzaki, Suni Lee, Takemi Otsuki	Department of Hygiene, Kawasaki Medical School, Kurashiki, Japan
Alteration of cellular characterization caused by continuous exposure of crocidolite or chrysotile on human T cell line	Megumi Maeda(1), ○Takemi Otsuki(2), Hidenori Matsuzaki(2), Suni Lee(2), Naoko Takei(2), Yasumitsu Nishimura(2)	(1)Lab. Funct. Glycobiology, Dept. Biofunctional Chem., Div. Agricult. Life Science, Graduate School of Environmental and Life Science, Okayama University, Okayama, Japan , (2)Department of Hygiene, Kawasaki Medical School, Kurashiki, Japan
Commercially available drink-induced anaphylaxis: analyzed using basophil activation test (BAT) and histamine release test	○Masao Yamaguchi(1), Yusuke Tanaka(1), Yuko Nakase(1), Naoya Sugimoto(1), Takako Toda(1), Yasuhiro Kojima(1), Asae Kamiyama(1), Hisanao Yoshihara(1), Michio Kuramochi(1), Hiroyuki Tashimo(1), Hidenori Arai(1), Ayako Kawakami(2),	(1)Division of Respiratory Medicine and Allergology, Department of Medicine, Teikyo University School of Medicine, (2)Publish Health Insurance Association, (3)National Institute of Health Sciences, (4)National Hospital Organization

	Hiroshi Akiyama(3), Hiroyuki Nagase(1), Ken Ohta(1),(4)	Tokyo National Hospital, Tokyo, Japan
Mechanisms of aggravation atopic dermatitis by environmental immunosuppressive chemicals in NC/Nga mice	OTomoki Fukuyama, Tadashi Kosaka, Lisa Miyashita, Risako Nishino, Koichi Hayashi, Hideo Ueda, Takanori Harada	The Institute of Environmental Toxicology (IET), Ibaraki, Japan
Prior oral exposure to environmental immunosuppressive agents aggravates OVA allergen-induced allergic asthma in NC/Nga mice	ORisako Nishino, Tomoki Fukuyama, Lisa Miyashita, Koichi Hayashi, Hideo Ueda, Tadashi Kosaka	The Institute of Environmental Toxicology, Ibaraki, Japan
Change of lactoperoxidase in saliva by thalassotherapy	ORika Watanabe, Takahiro Sakuta, Mami Kawaguchi, Kuniaki Takagi, Masakuni Degawa	School of Pharmaceutical Science, University of Shizuoka, Shizuoka, Japan
Change of $\beta$ -casein in breast milk before and after relaxation experience by thalassotherapy	OYukina Ichiki Yukina , Uehara Masashi , Masuda Miyabi , Takagi Kuniaki , Degawa Masakuni	School of Pharmaceutical Science, University of Shizuoka, Shizuoka, Japan
The effects of tributyltin (TBT) on the mRNA expressions of cytokines in the splenic macrophages and lymphocytes from the F1 rats exposed to TBT	OMasashi Tsunoda(1), Takamasa Kido(2), Chiemi Sugaya(1), Hiroshi Katagiri(3), Yoshiharu Aizawa(4)	(1)Department of Preventive Medicine, Kitasato University School of Medicine, Sagamihara, Japan , (2)Department of Public Health and Environmental Medicine, The Jikei University School of Medicine, Tokyo, Japan , (3)Department of Public Health, Kitasato University School of Allied Health Sciences , (4)Kitasato University, Tokyo, Japan
Can measuring the expressions of perforin, granzymes and granulysin alternative the assay of NK activity in human peripheral lymphocytes?	OQing Li, Maiko Kobayashi, Hirofumi Inagaki, Yoko Wakayama, Masao Katsumata, Yukiyo Hirat , Yingji Li, Kimiko Hirata, Takako Shimizu, Tomoyuki Kawada	Department of Hygiene and Public Health, Nippon Medical School, Tokyo, Japan
Application of Human Cell Line Activation Test (h-CLAT) as a method for detecting allergic potential of drug candidates	OMitsuhiro Uchida(1), Toshiyuki Tsuchiya(1), Maho Ukaji(2), Yoshiro Saito(2), Kouichi Kurose(2)	(1)Toxicology Laboratory, Pharmaceutical research center, Meiji Seika Pharma Co., Ltd., Kanagawa, Japan , (2)Division of Medicinal Safety Science, National Institute of Health Sciences, Tokyo, Japan
Students and Young Scientists Session		

<p>Fetal exposure to carbon nanoparticle altered development of the neonatal immune system</p>	<p>○Ryuhei Shimizu(1), Masakazu Umezawa(2), Saki Okamoto(1), Rikio Niki(2), Shuhei Ogawa(2),(3), Shiho Watanabe(3), Ryo Abe(3), Ken Takeda(1),(2)</p>	<p>(1)Department of Hygienic Chemistry, Faculty of Pharmaceutical Science, Tokyo University of Science, Noda, Chiba, Japan , (2)Center of Environmental Health Science Next Generation, RIST, Tokyo University of Science, Noda, Chiba, Japan , (3)Research Institute for Biological Sciences, Tokyo University of Science, Noda, Chiba, Japan</p>
<p>Effect of fetal exposure to carbon black nanoparticle on splenic gene expression in neonatal mouse</p>	<p>○Masakazu Umezawa(1), Ryuhei Shimizu(2), Saki Okamoto(2), Shiho Watanabe(3), Shuhei Ogawa(1),(3), Ryo Abe (3), Ken Takeda(1),(2)</p>	<p>(1)The Center for Environmental Health Science for the Next Generation, RIST, Tokyo University of Science, Noda, Chiba, Japan, (2)Department of Hygienic Chemistry, Faculty of Pharmaceutical Science, Tokyo University of Science, Noda, Chiba, Japan, (3)Research Institute for Biological Sciences, Tokyo University of Science, Noda, Chiba, Japan</p>
<p>The novel immune-modulating effects of amorphous nanosilica particles following epicutaneous exposure</p>	<p>○Toshiro Hirai(1), Yasuo Yoshioka(1), Hedeki Takahashi(1), KO-ichi Ichihashi(1), Nobuo Nishijima(1), Tokuyuki Yoshida(1), Shin-ichi Tsunoda(2),(3), Hiromi Nabeshi(4), Tomoaki Yoshikawa(1), Yasuo Tsutsumi(1),(2),(3)</p>	<p>(1)Laboratory of Toxicology and Safety Science, Graduate School of Pharmaceutical Sciences, Osaka University, Osaka, Japan , (2)Laboratory of Biopharmaceutical Research, National Institute of Biomedical Innovation (NiBio), Osaka, Japan , (3)MEI center, Osaka University, Osaka, Japan , (4)National Institute of Health Science, Tokyo, Japan</p>
<p>Effect of Asian sand dust particles on human airway epithelial cells</p>	<p>○Yugo Matsuda(1), Akiko Honda(1), Rumiko Murayama(1), Kenshi Tsuji(1), Masataka Nishikawa(2), Eiko Koike(3), Seiichi Yoshida(4), Takamichi Ichinose(4), Hirohisa Takano(1)</p>	<p>(1)Environmental Health Division, Department of Environmental Engineering, Graduate School of Engineering, Kyoto University, Kyoto, Japan , (2)Center for Environmental</p>

		Measurement and Analysis, National Institute for Environmental Studies, Tsukuba, Japan , (3)Center for Environmental Health Sciences, National Institute for Environmental Studies, Tsukuba, Japan , (4)Department of Health Sciences, Oita University of Nursing and Health Sciences, Oita, japan
Luncheon Seminar 1		
Evaluation of Anti-Drug Antibodies During Non- Clinical Safety Studies	Gary Bembridge	Huntingdon Life Sciences Ltd.
Luncheon Seminar 2		
Validation and use of several assays to monitor pharmacodynamic markers intended for human use, in the cynomolgus monkey	Lawrence D Jacob	Principal Immunologist and Molecular Biologist, Bioanalysis and Immunology Group, Charles River Laboratories Preclinical services, Edinburg