## **Annual Meeting**

## The 16th Annual Meeting of JSIT

2009.8.27-28. Asahikawa City Cultural hall

President: Takahiko Yoshida, Department of Health Science, Asahikawa Medical College, Asahikawa, Japan

Special Lecture I

Special Lecture I		
Does immunomodulation early in life increase disease risk in children and beyond?	Germolec Dori R (1), Dietert Rodney R (2)	<ol> <li>National Toxicology Program,</li> <li>National Institute of Environmental</li> <li>Health Sciences</li> <li>Department of Microbiology and</li> <li>Immunology, Cornell University</li> </ol>
Special Lecture II		
Role of Asahiyama Zoo	Masao Kosuge	Director Emeritus of Asahikawa Asahiyama Zoo
Symposium		
	Organizer	
Children and Immunity	Fujio Kayama	Jichi Medical University
	Kazuichi Nakamura	Shionogi & Co., Ltd.
Breakdown of mucosal immunity in the gut and allergic sensitization by dioxin	Sho Ishikawa	Dept of Molecular Preventive Medicine, The University of Tokyo, Tokyo, Japan
Health examination system to prevent fetal exposure of persistent organic pollutants (POPs) and atopic dermatitis in infants.	Chisato Mori	Center of Preventive Medical Science, Department of Bioenvironmental Medicine, Graduate School Medicine, Center for Environment, Health and Field Sciences, Chiba University
Prenatal exposure to cigarette smoke increases tumor susceptibility of juvenile mice via changes in anti-tumor immune mechanisms	Zelikoff Judith T (1), Ng Sheung P (1), Yoshida Kotaro (1), Silverstone Allen E (.2), Lai Zhi-Wei (2)	New York University School of Medicine, Nelson Institute of Environmental Medicine     SUNY Upstate Medical University, Department of Microbiology & Immunology
Workshop		
Standardization of an	Organizer	

Organizer immunotoxicity test: T cell-dependent Naohisa Tsutsui Mitsubishi Tanabe Pharma Co. antibody response to keyhole limpet Shigeru Hisada Aska Pharmaceutical Co., Ltd. hemocyanin Background for a Safety Research Laboratory, discussion on Naohisa Tsutsui Research Division, Mitsubishi Tanabe standarized protocols Pharma, Chiba, Japan of KLH-TDAR

Case 1: Rat strain comparison of T cell dependent antibody response using keyhole limpet hemocyanin as an antigen	Ryota Kawai, Shiho Ito, Hiroyuki HattoriI, Tetsuo Aida, Tadashi Furukawa, Atsushi Sanbuissho	Medicinal Safety Research Laboratories, DAIICHI SANKYO CO., LTD.
Case 2: Protocol for Rat KLH-TDAR in Takeda Pharmaceutical Company Limited	Kanako Mori, Takako Iwachido, Masami Aoki, Hideki Yamasaki, Kenji Takami, Hirofumi Nagai	Development Research Center, Pharmaceutical Division, Takeda Pharmaceutical Company Limited
Case 3:TDAR method using the commercial anti KLH-ELISA kit - Comparison with SRBC method-	Horoyuki Komatsu	SUGI Institute of Biological Science
Case 4: Case study of both anti-KLH IgM and IgG antibody measurement in TDAR testing	Hideki Harada, Makoto Tsunimi, Hideki Tokudome, Takayuki Okamura, Yasuyuki Oonishi, Hideaki Hiratsuka	Kashima Laboratory, Toxicological Science Division, Medi-Chem Business Segment, Mitsubishi Chemical Medience Corporation
Oral Presentations		
Assessment of the influence of possible endocrine disruptors on the development of non-pathogenic-bacterial induced infectious diseases	Noriko Mizutani(1), Masashi Muroi(1,2), Arisa Igarashi(1), Shinji Kanno(1), Yoichi Kamata(1), Yoshiko Konishi(1), Ken-ichi Tanamot(1,2)	(1) Division of Microbiology, National Institute of Health Sciences, Tokyo, Japan, (2) Faculty of Pharmacy, Department of Pharmaceutical Sciences, Musashino University, Tokyo, Japan
Estrogen receptors in rainbow trout immune organs and cells	Nakayama Ayako (1), Koellner Bernd (2), Eppler Elisabeth (3), Segner Helmut (1)	(1) Centre for Fish and Wildlife Health, University of Bern, (2) Friedrich-Loeffler-Institute, (3) Research Group Neuro-Endocrine- Immune Interactions, University of Zurich
Effects of exposure to phthalates on atopic dermatitis-like skin lesions in NC/Nga mice	Rie Yanagisawa, Hirohisa Takano, Eiko Koike, Ken-ichiro Inoue	Environmental Health Sciences Division, National Institute for Environmental Studies, Tsukuba, Japan
Allergic reaction induced by dermal and/or respiratory exposure to several types of pesticides	Tomoki Fukuyama, Yukari Tajima, Koichi Hayashi, Hideo Ueda, Yasufumi Shutoh,Takanori Harada,Tadashi Kosaka	The Institute f Environmental Toxicology, Toxicology Division, Ibaraki, Japan
Suppression of airway responsiveness and eosinophilic infiltration in asthmatic mice by propolis	Ryoji Hirota(1), Masamitsu Eitoku(1), Ken-ichi Yagyu(2), Hiroyuki Tanaka(3), Naoki Inagaki(3),	(1)Department of Environmental Medicine, Kochi Medical School Kohasu, Kochi, Japan, (2)The Science Research Center, Kochi University, (3 Bioactive Molecules,

	Hiroichi Nagai(3), Hiroyuki Nakamura(4), Narufumi Suganuma(1)	Gifu Pharmaceutical University, (4)Department of Environmental and Preventive Medicine, Kanazawa University Graduate School of Medical Science.
Effect of ziram, a carbamate pesticide, on human NK activity	Qing Li, Maiko Kobayashi, Tomoyuki Kawada	Department of Hygiene and Public Health, Nippon Medical School, Tokyo, Japan
Development of a novel allergy test using a cultured mast cell line	Nakamura Ryosuke, Yoshimi Uchida, Masakazu Higuchi, Reiko Teshima	Div. Novel Foods Immunochem., Natl. Instit. Health Sci., Tokyo, Japan
A new In Vitro assay system for assessment of food allergenicity	Terumi Katori(1), tomoko Shindo(1), Yukiko Kanazawa(1), Motoyasu Ohsawa(1), Kohichi Kojima(1), reiko Teshima(2)	(1) Hatano Research Institute, Food and Drug Safety Center, Hadano, Japan,(2) National Institute of Health Sciences, Tokyo, Japan
Potential use of human erythropoietin transgenic mouse model as a tool for immunogenicity assessment	Akifumi Shioda(1), Ryousuke Watanabe(2), Tomoaki Inoue(1), Masayuki Mishima(1)	(1) Safety Assessment Dept., Fuji Gotemba Res. Labs., Chugai Pharmaceutical Co., Ltd., Gotemba, Japan, (2)Pharmaceutical Res. Dept. 2, Kamakura Res. Labs., Chugai Pharmaceutical Co., Ltd., Kamakura, Japan
Effect of prenatal and postnatal exposure to low-level toluene on immune development in infant mice	Shoji Yamamoto(1), Win-Shwe Tin-Tin(1), Naoki Kunugita(2), Yasuhiro Yoshida(3), Keiichi Arashidani(3), Hidekazu Fujimaki(1)	(1) Research Center for Environmental Risk, National Institute for Environmental Studies, Tsukuba, Japan, (2)Depertment of Environmental Health, National Institute of Public Health, Wako, Japan, (3)University of Occupational and Environmental Health, Kitakyushu, Japan
The effect of DPH and MXC on the immune response to SRBC-antigen in infant and adult female rats	Koichi Hayashi, Tomoki Fukuyama, Yukari Tajima, Yukiko Kashimoto, Hideo Ueda, Yasufumi Shutoh, Takanori Harada, Tadashi Kosaka	Institute of Environmental Toxicology, Ibaraki Japan
Effect of arsenite on lipopolysaccharide-induced activation of mouse macrophages	Seiichiro Himeno, Koichiro Matsuda, Hiromasa Tsuyama, Hitomi Fujishiro	Laboratory of Molecular Nutrition and Toxicology, Faculty of Pharmaceutical Sciences, Tokushima Bunri University
Benzo[a]pyrene- induced activation of murine immune cells	Eiko Koike, Ken- Ichiro Inoue, Rie Yanagisawa, Hirohisa Takano	Environmental Health Sciences Division, National Institute for Environmental Studies, Tsukuba, Japan
Effects of inflammation-related gene polymorphisms and atomic-bomb	Tomonori Hayashi(1), Waka Ohishi(1), Kazue Imai(1), Kengo Yoshida(1), Ikue	(1) Radiation Effects Research Foundation, Hiroshima, Japan, (2) Central Research Facility, Hiroshima

radiation exposure on risks of stomach and liver cancers	Hayashi(2), Saeko Fujiwara(1), Yoichiro Kusunoki(1), Kei Nakachi(1)	University Faculty of Dentistry, Hiroshima, Japan
Associations between HLA alleles and Stevens-Johnson syndrome and toxic epidermal necrolysis in Japanese patients (Second report)	Yoshiro Saito(1,2), Nahoko Kaniwa(1,2), Masahiro Tohkin(1,2), Kouichi Kurose(1,2), Jun-ichi Sawada(1), Kayoko Matsunaga(2), Yukitoshi Takahashi(2), Hirokazu Furuya(2), Masaaki Muramatsu(2), Chie Sotozono(2), Shigeru Kinoshita(2), Michiko Aihara(2), Zenro Ikezawa(2), Ryuichi Hasegawa(1,2)	(1) National Institute of Health Sciences,(2) JSAR Research Group
Systematic evaluation between particle characteristics of silica and inflammatory responses	Yasuo Yoshioka(1,2), Tomohiro Morishige(2), Hiroshi Inakura(2), Aya Tanabe(2), Yasuo Tsutsumi(1,3,4), Shin-ichi Tsunoda(4), Yuichi Kawai(5), Tadanori Mayumi(5), Yohei Mukai(2), Naoki Okada(2), Shinsaku Nakagawa(1,2)	(1) The Center for Advanced Medical Engineering and Informatics, Osaka University, Osaka, Japan, (2) Department of Biotechnology and Therapeutics, Graduate School of Pharmaceutical Sciences, Osaka University, Osaka, Japan, (3) Department of Toxicology, Graduate School of Pharmaceutical Sciences, Osaka University, Osaka, Japan, (4) Laboratory of Pharmaceutical Proteomics, National Institute of Biomedical Innovation Osaka, Japan, (5) Faculty of Pharmaceutical Sciences, Kobe-Gakuin University, Kobe, Japan.
Enhancement of suppression function of MT-2 cells on T cell proliferation by long- term and low-level exposure to asbestos	Megumi Maeda(1), Ying Chen(1), Hiroaki Hayashi(1), Naoko Kumagai(1), Yoshie Miura(2), Yasumitsu Nishimura(1), Takemi Otsuki(1)	(1) Department of Hygiene, Kawasaki Medical School, Kurashiki, Okayama, Japan, (2) Department of Molecular Genetics, Division of Molecular and Clinical Genetics, Medical Institute of Bioregulation, Kyushu University, Fukuoka, Japan
Involvement of cytokines in suppressed induction of CTL upon exposure to asbestos	Naoko Kumagai, Yasumitsu Nishimura, Megumi Maeda, Hiroaki Hayashi, Takemi Otsuki	Department of Hygiene, Kawasaki Medical School, Kurashiki, Japan
Analysis for suppressed expression of NKp46 on NK cells exposed to asbestos, possible predictive	Yasumitsu Nishimura(1), Naoko Kumagai(1), Megumi Maeda(1), Hiroaki Hayashi(1), Takumi	(1) Department of Hygiene, Kawasaki Medical School, Kurashiki, Japan, (2) Okayama Rosai Hospital, Okayama, Japan

molecular marker for

anti-tumor immune function	Kishimoto(2), Takemi Otsuki(1)	
Development of an allergenicity assay for genetically modified animal foods	Nakamura Rika(1), Ryosuke Nakamura(1), Hiroyuki Horiuchi(2), Reiko Teshima(1)	(1) Division of Novel Foods and Immunochemistry, National Institute of Health Sciences, Tokyo, Japan, (2) Graduate School of Biosphere Science, Hiroshima University
Murine Food Allergy Model with Oral Sensitization and Oral Challenge (7)	Tomoko Shindo(1), Terumi Katori(1), Yukiko Kanazawa(1), Motoyasu Ohsawa(1) Kohichi Kojima(1), reiko teshima(2)	(1) Hatano Research Institute, Food and Drug Safety Center, Hadano, Japan, (2) National Institute of Health Sciences, Tokyo, Japan
Parabens enhance mouse contact hypersensitivity	Fumitoshi Sakazaki, Naoe Chinen, Mari Matsuo, Hirofumi Ogino, Megumi Shiroshita, Hitoshi Ueno, Katsuhiko Nakamuro	Faculty of Pharmaceutical Sciences, Setsunan University, Hirakata, Osaka, Japan
Poster Presentations		
T-cell Dependent Antibody Response in Spontaneously Hypertensive rat Effects of Immunosuppressive Drugs on Primaly Antibody Response -	Akihiko Hisatomi, Kiyoshi Kushima, Kenji Hoshino, Michio Fujiwara	Drug Safety Research Labs. Astellas Pharma Inc.
Immunotoxicity evaluation in beagle dogs, including T-cell dependent antibody response	Ryota Kawai, Shiho Ito, Hiroyuki Hattori, Tetsuo Aida, Hidetoshi Ooshima, Satomi Komatsu, Toshihiko Makino, Kumi Honda, Tadashi Furukawa, Atsushi Sanbuissho	Medicinal Safety Research Laboratories, DAIICHI SANKYO CO., LTD., Shizuoka, Japan
Relationship between blood lymphocyte decrease induced by administration stress and CXCR4-mediated T cell migration in cynomolgus monkeys	Takayuki Okamura, Hideki Tokudome, Makoto Tsunemi, Kiyohisa Fukasawa, Hideki Harada, Yasuyuki Ohnishi, Hideaki Hiratsuka	Toxicological Science Division, Mitsubishi Chemical Medience Corporation, Kashima, Japan
Effects of toluene exposure on developmental immunotoxicity in infant mice brain	Tin-Tin Win-Shwe(1), Naoki Kunugita(2), Shoji Yamamoto(1), Keiichi Arashidani(3), Hidekazu Fujimaki(1)	(1)National Institute for Environmental Studies, (2)National Institute of Public Health, (3)University of Occupational and Environmental Health, Kitakyushu, Japan
Effect of Oenothein B on cultured human	Hideki Matsuoka(1), Morio Yoshimura(2),	(1) Division of Novel Foods and Immunochemistry, National Institute

dendritic cells	Hiroshi Akiyama(1), Kozue Sakata(1), Yoshiaki Amakura(2), Takashi Yoshida(2), Reiko Teshima(1)	of Health Sciences, Tokyo, Japan, (2) College of Pharmaceutical Sciences, Matsuyama University, Ehime, Japan
Effects of exposure to low-dose arsenite on degranulation of mast cell ( 2 )	Yuri Shimizu, Seiichiro Himeno	Tokushima Bunri University,Faculty of Pharmaceutical Sciences,Laboratory of Molecular Nutrition and Toxicoloby,Tokushima,Japan
Effects of acute inflammation of indigenous bacteria on lung asbestosis.	Kyoko Hiyoshi(1), shoji Yamamoto(2), Ken-ichiro Inoue(3), Takamichi Ichinose(4)	(1) School of Nursing, University of Shizuoka, Shizuoka, Japan, (2) Research Center for Environmental Risk, National Institute for Environmental Studies, Tsukuba, Japan, (3) Environmental Health Sciences Division, National Institute for Environmental Studies, Tsukuba, Japan, (4) Department of Health Sciences, Oita University of Nursing and Health Sciences, Oita, Japan
Immunological effects of CD4+CD25+T cells exposed to silica.	Hiroaki Hayashi(1), Megumi Maeda(1), Naoko Kumagai(1), Yasumitsu Nishimura(1), Masayasu Kusaka(2), Kouzou Uragami(3), Takemi Otsuki(1)	(1) Department of Hygiene, Kawasaki Medical School, Kurashiki, Japan, (2) Kusaka Hospital, (3) Uragami Iin
Cytokine alteration and speculated immunological pathology in silicosis and asbestos-related diseases	Takemi Otsuki(1), Megumi Maeda(1), Shuko Murakami(1), Naoko Kumagai(1), Hiroaki Hayashi(1), Yoshie Miura(2), Yasumitsu Nishimura(1), Masayasu Kusaka(3), Takumi Kishimoto(4)	(1) Dept. Hygiene, Kawasaki Med. Sch., Kurashiki, Japan, (2) Dept. Mol. Genet., Med. Inst. Bioregulation, Kyushu Univ., Fukuoka, Japan, (3) Kusaka Hosp., Bizen, Japan, (4)Okayama Rosai Hops., Okayama, Japan
Cytotoxicity study of high-alumina low-silica stone wool by cell magnetometric evaluation	Yuichiro Kudo, Sachiyo Mogi, Yumi Komatsu, Etsuko Ohta, Michiyo Koyama, Yumiko Sugiura, Masashi Tsunoda, Yoshiharu Aizawa	Department of Preventive Medicine and Public health, Kitasato University School of Medicine
Effectiveness of self- check software on the website to prevent Sick Building Syndrome	Hiroko Nakaoka(1,2), Emiko Todaka(1,2), Masamichi Hanazato(2,3), Chisato Mori(1,2,4)	(1) Bioenvironmental Medicine, Graduate School of Medicine, Chiba University, Chiba, Japan, (2) Center for Environment, Health and Field Sciences, Chiba University, Kashiwa, Chiba, Japan, (3) Department of Architecture, Graduate School of Engineering, Chiba University, Chiba, Japan, (4) Center for Preventive

Chiba, Japan (1) Center for Environment, Health and Field Sciences, Chiba University, The Current Situation Kashiwa, Chiba, Japan, (2) and Treatment of Sick- Emiko Todaka(1,2), Bioenvironmental Medicine, Graduate **Building Syndrome** Hiroko Nakaoka(1,2), School of Medicine, Chiba University, Caused by Volatile Masamichi Chiba, Japan, (3) Department of Organic Compounds Hanazato(1,3), Architecture, Graduate School of Including Flame Chisato Mori(1,2,4) Engineering, Chiba University, Chiba, Retardants Japan, (4) Center for Preventive Medical Science, Chiba University, Chiba, Japan (1) Center for Environment, Health and Field Sciences, Chiba University, Kashiwa, Chiba, Japan, (2) A Suggestion of Town Masamichi Department of Architecture, Planning to Prevent Hanazato(1,2),Graduate School of Engineering, Adverse Health Effect Hiroko Nakaoka(1,3), Chiba University, Chiba, Japan, (3) by Environmental Emiko Todaka(1,3), Bioenvironmental Medicine, Graduate Chemicals Chisato Mori(1,2,4) School of Medicine, Chiba University, Chiba, Japan, (4) Center for Preventive Medical Science, Chiba University, Chiba, Japan Luncheon Seminar <1> Pharmacodynamic endpoints in the Department of Cell Biology & assessment of **Gregory Bannish** Immunology, Huntingdon Life immunotoxicity Sciences Inc. (US) forbiopharmaceutical development Luncheon Seminar <2> Pre-clinical Vaccine Development and Lawrence Jacob Charles River Laboratories

Immune Monitoring

Medical Science, Chiba University,