## 日本免疫毒性学会 The Japanese Society of Immunotoxicology

## Annual Meeting

## The 23rd Annual Meeting of JSIT

Special Lecture		
Inhaled Nanoparticles: Consequences of Exposure and Approaches for Hazard Identification	Victor J. Johnson	Burleson Research Technologies, Inc., Morrisville, North Carolina, USA
Master's Lecture 1		
Autoimmunity induced by adjuvants	Minoru Satoh	Department of Clinical Nursing, School of Health Sciences, University of Occupational and Environmental Health, Japan
Master's Lecture 2		
Toxicity and side effects of immunosuppressive drugs for treatment in rheumatic diseases	Kazuyoshi Saito, Yoshiya Tanaka	The First Department of Internal Medicine, School of Medicine, University of Occupational and Environmental Health, Japan
Master's Lecture 3		
Clinical characteristics and mechanisms of drug-induced pulmonary toxicity.	Kazuhiro Yatera(1), Takashi Kido(1), Hiroshi Ishimoto(2), Yasuo Morimoto(3), Hiroshi Mukae(2)	(1)Department of Respiratory Medicine, University of Occupational and Environmental Health, Japan, (2)Second department of Internal Medicine, Nagasaki University School of Medicine, (3)Department of Occupational Pneumology, University of Occupational and Environmental Health, Japan
Symposium   [Estimation of pulr practice]	monary toxicity by fine and ultr	afine particles and its social
Organizers: Seishiro Hirano (National Institute for Environmental Studies), Hiroto Izumi (University of Occupational and Environmental Health, Japan)		
Development of hazard screening methods for industrial nanomaterials: intratracheal instillation study.	Hiroto Izumi(1), Yukiko Yoshiura(1), Takako Oyabu(2), Toshihiko Myojo(2), Yasuo Morimoto(1)	(1)Department of Occupational Pneumology, Institute of Industria Ecological Sciences, University of Occupational and Environmental Health, Japan, (2)Department of

		Environmental Health Engineering, Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health, Japan	
Lung inflammation and allergy induced by fine particles	Etsushi Kuroda(1),(2),(3), Ken J Ishii(1),(2),(3)	(1)Laboratory of Vaccine Science, Immunology Frontier Research Center, Osaka University, (2)Laboratory of Vaccine Design, Center for Drug Design Research, (3)Laboratory of Adjuvant Innovation, National Institute of Biomedical Innovation, Health and Nutrition	
Development of devices to screen asbestos exposure and mesothelioma based on immunological analysis	Yasumitsu Nishimura, Suni Lee, Naoko Kumagai-Takei, Kei Yoshitome, Takemi Otsuki	Department of Hygiene, Kawasaki Medical School, Kurashiki, Japan	
From databases and bioinformatics to pulmonary diseases	Kenji Mizuguchi	National Institutes of Biomedical Innovation, Health and Nutrition, Japan	
Workshop: ΓAdverse outcome	Workshop: 「Adverse outcome pathway (AOP) and immunotoxicity research」		
Organizers: Shigeru Hisada (Innovative Drug Discovery Division, ASKA Pharmaceutical Co., Ltd.), Tadashi Kosaka (Study Management Division, The Institute of Environmental Toxicology)			
The Concept of development for AOP in OECD	Hajime Kojima		
The Adverse Outcome Pathway on immunotoxicity of chemicals that dysregulates the induction of Th subsets through affecting IL-2 transcriptional activity.	Yutaka Kimura, Setsuya Aiba	Department of Dermatology, Tohoku University Graduate School of Medicine, Japan	
The Adverse Outcome Pathway on immunosuppression caused by formation of FKBP12-FK506 complex	Shiho Ito, Kiyoshi Kushima, Yasuharu Otubo, Takumi Ohishi、Hiroyuki Komatsu, Ken Goto、Junichiro Sugimoto, Yoshihiro Talahashi	AOP Working Group, Testing Methodology Committee, The Japanese Society of Immunotoxicology	
Point to note learned from the experience of AOP development	Kiyoshi Kushima, Shiho Ito, Yasuharu Otubo, Takumi Ohishi、Hiroyuki Komatsu, Ken Goto、Junichiro Sugimoto, Yoshihiro Talahashi	AOP Working Group, Testing Methodology Committee, The Japanese Society of Immunotoxicology	
The 6th JSIT Award Lecture (for Distinguished Contribution)			

Immunotoxic effects of agro- chemicals	Tadashi Kosaka	Study Management Division, The Institute of Environmental Toxicology
The 6th JSIT Research Award Lecutre		
Effects of environmental chemicals on immune response via nuclear receptors.	Hiroyuki Kojima	Department of Environmental and Health Sciences, Hokkaido Institute of Public Health, Sapporo
Students and Young Scientists S	ession (Oral and Poster)	
Construction of an in vivo Model for Evaluating the Immune- Mediated Idiosyncratic Drug Toxicity Using Chimeric HLA Transgenic Mice	Takeshi Susukida, Shigeki Aoki, Sota Fujimori, Kotaro Kogo, Kousei Ito	Laboratory of Biopharmaceutics, Graduate School of Pharmaceutical Sciences, Chiba University, Japan
Analysis of Mechanism of Idiosyncratic Drug toxicities Using Keratinocyte Derived From HLA Tg Mice	Sota Fujimori, Shigeki Aoki, Takeshi Susukida, Kousei Ito	Laboratory of Biopharmaceutics, Graduate School of Pharmaceutical Sciences, Chiba University, Japan
Oral Presentations		
Detection of autoantibodies to rods and rings structure (RR) in Japanese patients with chronic hepatitis C virus (HCV) infection using commercial HEp-2 slides	Shin Tanaka(1), Tamiji Nakashima(1), Takashi Himoto(2), Minoru Satoh(1)	(1)University of Occupational and Environmental Health, Japan., (2)Clinical Examination Department, Kagawa Prefectural University of Health Sciences
The responsible for the decrease in anti-inflammatory M2 macrophages in the spleen and role of IL-4 in Zn-deficient rats	Kido Takamasa, Yogosawa Shingo, Yoshioka Wataru, Suga Machi, Yanagisawa Hiroyuki	Department of Public Health and Environmental Medicine, Jikei University School of Medicine
LPS-rich urban particulate matter 10 suppresses immune responses in splenocytes	Yasuhiro Yoshida(1), Yuan Song(1), Cuiying He(1), Kentaro Morita(1), Takamiti Ichinose(2), Tamotsu Kanazawa(1)	(1)Department of Immunology and Parasitology, University of Occupational and Environmental Health, Japan, (2)Department of Clinical Laboratory, the Fourth Hospital of Hebei Medical University
Perturbation of lysosomal pH in silver nanoparticle-induced cellular damage in A549 cells	Takamitsu Miyayama, Masato Matsuoka	Department of Hygiene and Public Health I, School of Medicine, Tokyo Women's Medical University
The effects of cleaning solvent or tetrachloroethylene on the mRNA expressions of human immortal keratinocyte cell line HaCaT	Masashi Tsunoda(1), Chiemi Sugaya(1), Yumiko Sugiura(1)	(1)Department of Hygiene, Kitasato University School of Medicine, Japan

Production of IL-1β and changes in p62/SQSTM1 and LC3 in macrophages following simultaneous exposure to particles and LPS.	Seishiro Hirano(1) and Sanae Kanno(2)	(1)Center for Health and Environmental Risk Research, Natl. Inst. Environ. Studies, (2)St. Marianna Univ. School of Medicine
The comparison of expression levels of oxidative phosphorylation-related complexes in human T cell lines, MT-2 and its sublines continuously exposed to asbestos fibers	Takemi Otsuki,Shoko Yamamoto, Suni Lee, Tamayo Hatayama, Hidenori Matsuzaki, Naoko Kumagai- Takei, Kei Yoshitome, Yasumitsu Nishimura	Department of Hygiene, Kawasaki Medical School
Impact of aging and radiation on influenza vaccine response among Atomic-bomb Survivors	Tomonori Hayashi(1), Heather E. Lynch(2), Susan Geyer(3), Kengo Yoshida(1), Ikue Hayashi(4), Junko Kajimura(1), Seishi Kyoizumi(1), Yoichiro Kusunoki(1), Waka Ohishi(1), Saeko Fujiwara(5), Ivo Shterev(2), Janko Nikolich-Zugich(6) Donna Murasko(7), Gregory D. Sempowski(2), Kei Nakachi(1)	(1)Radiation Effects Research Foundation, (2)Duke University Medical Center, (3)University of South Florida, (4)Hiroshima University Faculty of Dentistry, (5)Hiroshima Atomic Bomb Casualty Council, (6)University of Arizona College of Medicine, (7)Drexel University
Evaluation of immunological test in a four-week repeated dose toxicity study of cyclophosphamide in Microminipig	Hiroyuki Komatsu, Masaki Kunieda, Hiroyuki Saito, Takayuki Kubota, Miyuki Takao, Kumiko Kitta, Yoshiyuki Suzuki, Hiro Eda and Yasuki Akie	Bioresearch Center, CMIC Pharma Science Co., Ltd.
Identification of MHC-associated peptides presented by human iPS cell-derived dendritic cells (hiPS-DCs)	Shunsuke Ito, Nobuo Sekiguchi, Tatsuya Ikuno, Toshiko Hara, Ayako Takahashi, Mitsuyasu Tabo, Shuichi Chiba, Tomoaki Inoue	Research Division, Chugai Pharmaceutical Co., Ltd., Gotemba, Japan
oster Presentations		
Toll-like receptor 4 plays a role in diesel exhaust origin secondary organic aerosolinduced impaired spatial learning ability in neonatal mice	Tin Tin Win Shwe, Eiko Koike, Rie Yanagisawa, Yuji Fujitani, Seishiro Hirano	Center for Health and Environmental Risk Research, National Institute for Environmental Studies
Effects of hexabromocyclododecane on	Eiko Koike, Rie Yanagisawa, Tin Tin Win Shwe	Center for Health and Environmental Risk Research,

inflammatory response in adipocytes and macrophages		National Institute for Environmental Studies
Analysis of the appearance of deamidated epitope after acid-hydrolyzation of wheat gluten using epitope-specific monoclonal antibody	Reiko Teshima(1), Shinobu Sakai(1), Masashi Nakamura(2), Yoshiaki Ikarashi(1), Olivier Tranquet(3), Sandra Denery- Papini(3), Kayoko Matsunaga(2)	(1)Natl. Inst. Health Sci., (2)Dep.Integrative Med. Sci.for Allerg.Dis., Fujita Health Univ. School of Med, (3)French Natl. Inst. Agricul. Res.
Effects of maternal exposure to benzo[a]pyrene during neonatal periods on airway allergic inflammation in offspring.	Rie Yanagisawa(1), Eiko Koike(1), Tin-Tin Win- Shwe(1), Hirohisa Takano(2)	(1)Molecular Pathology Section, Center for Health and Environmental Risk Research, National Institute for Environmental Studies, (2)Graduate School of Engineering, Kyoto University, Kyoto, Japan.
In vitro solid phase cytokine release assay with pre-incubation of human peripheral blood mononuclear cells	Shiho Ito(1), Kyoko Miwa(1), Chiharu Hattori(2), Hitomi Terada(1), Tetsuo Aida(1), Yoshimi Tsuchiya(1)	(1) Medicinal Safety Research Laboratories, DAIICHI SANKYO CO., LTD., (2) Biologics & Immuno-Oncology Laboratories, DAIICHI SANKYO CO., LTD
Effects of Infectious Diseases in the Pathogenesis of Stevens- Johnson Syndrome/Toxic Epidermal Necrolysis.	Yoshimi Okamoto-Uchida(1), Ryosuke Nakamura(1), Kimie Sai(1), Takuya Imatoh(1), Kayoko Matsunaga(2), Michiko Aihara(3), Yoshiro Saito(1)	(1)Division of Medicinal Safety Science, National Institute of Health Sciences, Tokyo, Japan, (2)Department of Integrative Medical Science for Allergic Disease, School of Medicine, Fujita Health University, Aichi, Japan, (3)Department of Environmental Immuno-Dermatology, Graduate School of Medicine, Yokohama City University, Kanagawa, Japan
Analysis on immunogenicity of therapeutic proteins using risk management plans.	Yoshiro Saito(1), Yoshimi Okamoto-Uchida(1), Ryosuke Nakamura(1), Akiko Ishii-Watabe(2)	(1)Division of Medicinal Safety Science, National Institute of Health Sciences, Japan, (2)Division of Biological Chemistry and Biologicals, National Institute of Health Sciences
Impact of combined exposure to immunosuppressive chemicals on the respiratory allergic inflammation in the next generation	Risako Tajiki, Tomoki Fukuyama, Yuko Watanabe, Hideo Ueda, Tadashi Kosaka, Takanori Harada	The Institute of Environmental Toxicology

Effect of IL-15 addition on the suppressed induction of human CTL upon exposure to asbestos	Naoko Kunagai-Takei, Yasumitsu Nishimura, Hidenori Matsuzaki, Suni Lee, Kei Yoshitome, Takemi Otsuki	Department of Hygiene, Kawasaki Medical School
Comparison of detectability of the anti-drug antibody between SPR and ECL bridging assay using WHO anti-EPO antibody reference panel.	Kazuko Nishimura(1), Chizuru Miyama(1), Minoru Tada(1), Takuo Suzuki(1), Yoshiro Saito(2), Akiko Ishii- Watabe(1)	Division of Biological Chemistry and Biologicals, (2)Division of Medicinal safety Science, National Institute of Health Sciences, Japan
Statistical analysis between plasma DcR3 and clinical parameters in silicosis patients.	Suni Lee(1), Yasumitsu Nishimura(1), Hidenori Matsuzaki(1), Naoko Kumagai-Takei(1), Kei Yoshitome(1), Hiroaki Hayashi(2), Masayasu Kusaka(3), Wataru Fujimoto(2), Takemi Otsuki(1)	(1)Kawasaki Medical School, Dept. Hygiene, (2)Kawasaki Medical School, Dept. Dermatology, (3)Kusaka Hospital
Effect of short-term and long- term exposure of asbestos on MT-2 cells.	Hidenori Mastuzaki(1), Suni Lee(1), Megumi Maeda(2), Naoko Kumagai-Takei(1), Yasumitsu Nishimura(1), Takemi Otsuki(1)	(1)Department of Hygiene, Kawasaki Medical School, (2)Laboratory of Functional Glycobiochemistry, Department of Biofunctional Chemistry, Division of Agricultural and Life Science, Graduate School of Environmental and Life Science, Okayama University
Effects of vehicle-exhaust particle uptake by human nasal epithelial cells on cytokine/chemokine production	Akira Onodera(1), Arisa Morikawa(1), Masashi Kawasaki(1), Kosuke Taniguchi(1), Katsutoshi Yayama(1), Yuichi Kawai(1)	(1)Division of Biopharmaceutical Sciences, Faculty of Pharmacy Science, Kobegakuin University
In immunosuppressive agent, integrated assessment of the human and of toxicity test PK / PD measurement	Hiroyoshi Saito(1)、Michiko Sakamoto(2)、Akihiko Morishita(2)、Yasuyuki Ito(3)、Shinko Hata(2)	(1)Hyogo Pet Medical Center Higashinada, (2)Ig-M., Ltd (3)National Center of Neurology and Psychiatry
Luncheon Seminar 1 (Envigo Co., Ltd.)		
Key considerations in the safety evaluation of drugs targeting immune checkpoints	Lee Coney	Envigo CRS Limited
LS-01		
uncheon Seminar 2 (Charles River Laboratories Japan, Inc.)		

Examples of novel approaches		
of assessing preclinical		Director, Immunotoxicology,
immunotoxicity including	Vanessa L. Peachee	Charles River Laboratories
antibody-drug conjugates using		Ashland, LLC
flow cytometry		

The Japanese Society of Immunotoxicology