Annual Meeting

The 21st Annual Meeting of JSIT

Special Lecture Ⅰ		
Immunogenicity assessment of biotechnology-derived pharmaceuticals	Marc Pallardy	Toxicology Department and INSERM UMR 996, Faculty of Pharmacy, University Paris-Súd, France
Special Lecture Ⅱ		
The mechanisms for zinc deficiency-associated dermatitis	Tatsuyoshi Kawamura	University of Yamanashi, Department of Dermatology
Master's Lecture		
Molecular pathogenesis of hyper-IgE syndrome	Yoshiyuki Minegishi	Division of Molecular Medicine, Institute for Genome Research, The University of Tokushima
Symposium "Next-generation Approach in Immunotoxicology"		
Organizers Yasumitsu Nishimura (Kawasaki Medical School) Ryosuke Nakamura (National Institute of Health Sciences) Eiko Koike (National Institute for Environmental Studies) Yasuo Yoshioka (Graduate School of Pharmaceutical Sciences, Osaka University)		
Dynamics of complex biological systems determined/controlled by minimal subsets of molecules in regulatory networks	Atsushi Mochizuki(1) and Bernold Fiedler(2)	(1)Theoretical Biology Laboratory, RIKEN, (2)Department of Mathematics, Free University of Berlin, Germany
Chemical Strategy for direct and indirect detection of protein-small molecule interactions: Drug target discovery and P450 substrate screening	Naoki Kanoh	Graduate School of Pharmaceutical Sciences, Tohoku University
A novel role of spleen-derived IL-10 in obesity-induced systemic inflammation	Koro Gotoh, Hirotaka Shibata	Department of Endocrinology, Metabolism, Rheumatology and Nephrology, Faculty of Medicine, Oita University
New mechanism of action and potential biomarkers for vaccine adjuvant	Ken J Ishii(1),(2)	(1)Laboratory of Adjuvant Innovation, National Institute of Biomedical Innovation, (2)Laboratory of Vaccine Science, Immunology Frontier Research Center, Osaka University
Workshop: Immunotoxicology Methods " Toward the development of new test methods for xenobiotic-induced allergy and autoimmune diseases "		

Autoimmune disorders and side-effects via immune systems that are caused by administering biotechnology-derived pharmaceuticals	Tomoaki Inoue	Safety Assessment Department, Research Division, Chugai Pharmaceutical Co., Ltd.
Splenic lesion in rats treated with antithyroid drugs –suggestive auto-antibody production	Motoko Fukui(1) , Mitsui isobe(1), Shigeru Hisada(2)	(1)Safety Research Department, (2)Developmental Research Center, ASKA Pharmaceutical Co.
Animal model of immediate hypersensitivity induced by transdermal administration of food allergen	Reiko Adachi, Shinobu Sakai, Reiko Teshima	National Institute of Health Sciences
The study of detection method for particulate environmental chemical-induced respiratory allergy	Risako Nishino, Tomoki Fukuyama, Yuko Watanabe, Hideo Ueda, Tadashi Kosaka, Takanori Harada	The Institute of Environmental Toxicology
Award Lecture		
Immunotoxicity of environmental substances with special reference to heavy metals: Toxicological properties and evaluation	Motoyasu Ohsawa(1), (2)	(1)Hatano Research Institute, Food and Drug Safety Center, (2)Teikyo University
Oral Presentations		
ell death of peripheral blood mononuclear cells caused by exposure to titanate nanosheet	Yasumitsu Nishimura(1), Daisuke Yoshioka(2), Suni Lee(1), Hidenori Matsuzaki(1), Naoko Kumagai-Takei(1), Kei Yoshitome(1), Takemi Otsuki(1)	(1)Department of Hygiene, (2)Department of Natural Sciences, Kawasaki Medical School
Particulate-induced IgE production is mediated by DAMPs from alveolar macrophages	Etsushi Kuroda(1), Yasuo Morimoto(2), Ken J Ishii(1),(3)	(1)WPI Immunology Frontier Research Center, Osaka University, (2)University of Occupational and Environmental Health, (3)National Institute of Biomedical Innovation
The transitivity and biological effects of silver nanoparticles to infants through the milk	Yasuo Yoshioka(1), (2), Yuki Morishita(1), Yuya Takimura(1), Shin-ichi Tsunoda(2), (3), Kazuma Higashisaka(1),(2), Yasuo Tsutsumi(1),(3)	(1)Graduate School of Pharmaceutical Sciences, Osaka University, (2)National Institute of Biomedical Innovation, (3) MEIC, Osaka University

Phagocytosis of Indium Tin Oxide Nanoparticles by Alveolar Macrophages triggers a pro-inflammatory response	Basilua Andre Muzembo, Abderrahim Naji and Narufumi Suganuma	Department of Environmental Medicine, Kochi University, Kochi Medical School
Suppressive effect of sakuran against IL-13, IL-33, Filaggrin and TNF-alpha in TNCB-induced mice	Ryoji Hirota(1), Nlandu Roger Ngatu(2), Maiko K Okajima(3), Tatsuo Kaneko(3), Narufumi Suganuma(1)	(1)Department of Environmental Medicine, Kochi Medical School, (2)Graduate School of Health & Nursing Sciences University of Kochi, (3)Department of Materials Science, Japan Advanced Institute of Science and Technology
Impact of sex-differences on scratching behavior with pruritus induced by pruritogens in mice	Katsunori Yamaura, Ayana Tomono, Hiromi Sato, Koichi Ueno	Graduate School of Pharmaceutical Sciences, Chiba University
Skin sensitization study from only animal data by structure-toxicity relationships (QSTR) approach	Kazuhiro Sato(1), Yukinori Kusaka(1), Kohtaro Yuta(2)	(1)Deaprtment of Fukui, School of Medicine, University of Fukui, (2)In Silico Data Ltd.
Translocation of Macrophage Receptor with Collagenous Structure (MARCO) to autophagosomes	Seishiro Hirano(1), Sanae Kanno(2)	(1)National Institute for Environmental Studies, (2)St. Marianna University School of Medicine
Effects of intratracheal exposure to bisphenol A on the immune system and central nervous system in a murine model of allergic airway inflammation	Eiko Koike(1), Rie Yanagisawa(1), Tin Tin Win Shwe(1), Hirohisa Takano(2)	(1)National Institute for Environmental Studies, (2)Kyoto University
Functional significance of IL6R genotype and colorectal cancer risk by genotype among atomic-bomb survivors	Tomonori Hayashi(1), Yiqun Hu(1), Yukari Morishita(1)、Keiko Sasaki(1)、Mayumi Maki(1)、Keiko Furudoi(1)、Hiroko Nagamura(1), Kengo Yoshida(1), Junko Kajimura(1), Waka Ohishi(2), Ayumi Hida(2), Ikue Hayashi(3), Seishi Kyoizumi(1), Yoichiro Kusunoki(1), Kei Nakachi(1)	Departments of (1)Radiobiology/Molecular Epidemiology and (2)Clinical Studies, Radiation Effects Research Foundation, (3)Hiroshima University Faculty of Dentistry
Students and Young Scientists Session (Oral and Poster)		
Effects of components of PM(2).(5) on bronchial epithelium cells and immune cells	Wataru Fukushima, Mizuki Oishi, Akiko Honda, Kenshi Tsuji, Takahiro Sawahara, Tomohiro Hayashi,	Graduate school of Engineering Kyoto University

	Hitomi Kudoh, Kayo Ueda, Hirohisa Takano	
The effects of metal nanoparticles on onset of metal allergy	Toshiro Hirai(1), Yasuo Yoshioka(1),(2), Ko-ichi Ichihashi(1), Natsumi Izumi(1), Nobuo Nishijima(1), Takayuki Handa(1), Hideki Takahashi(1), Shin-ichi Tsunoda(2), (3), Kazuma Higashisaka(1),(2), Yasuo Tsutsumi(1),(3)	(1)Graduate School of Pharmaceutical Sciences, Osaka University, (2)National Institute of Biomedical Innovation, (3)MEIC, Osaka University
Medication tendencies for inducing acute severe ocular complications in Japanese Stevens-Johnson syndrome / toxic epidermal necrolysis patients	Yoshimi Uchida(1), Nahoko Kaniwa(1), Mayumi Ueta(2), Ryosuke Nakamura(1), Emiko Sugiyama(1), Yukitoshi Takahashi(3), Hirokazu Furuya(4), Akiko Yagami(5), Setsuko Matsukura(6), Zenro Ikezawa7, Kayoko Matsunaga(5), Chie Sotozono(2), Michiko Aihara, Shigeru Kinoshita(2), Yoshiro Saito(1)	(1)National Institute of Health Sciences, (2)Kyoto Prefectural University of Medicine, (3)Shizuoka Institute of Epilepsy and Neurological Disorders, (4)Kochi University, Medical School, (5)Fujita Health University, School of Medicine, (6)Yokohama City University, Graduate School of Medicine, 7International University of Health and Welfare, Atami Hospital
Preventive effect of the histamine H(4) receptor antagonist on worsening of itching induced by long-term topical glucocorticoid treatment	Seiji Onuma, Katsunori Yamaura, Nobuo Oishi, Ayaka Funakoshi, Hiromi Sato, Koichi Ueno	Department of Geriatric Pharmacology and Therapeutics, Graduate School of Pharmaceutical Science, Chiba University
Effect of oxidized olive oil on mouse lymphocytes and peritoneal macrophages	Hirofumi Ogino, Chisa Betto, Ai Minami, Tomohiro Arakawa, Tomofumi Okuno, Hitoshi Ueno	Faculty of Pharmaceutical Sciences, Setsunan University
Poseter Presentations		
Effects of maternal exposure to carbon black nanoparticle on the lung of mother and the splenic phenotype of offspring mouse	Amika Yoshida(1), Atsuto Onoda(1), Yoichiro Yoshikawa(1), Ken Takeda(2), Masakazu Umezawa(2)	(1)Graduate School of Pharmaceutical Sciences, Tokyo University of Science, (2)The Center for Environmental Health Science for the Next Generation, RIST, Tokyo University of Science
Analysis between plasma DcR(3) and autoantibodies or respiratory score in non-autoimmune disease onset silicosis patients	Suni Lee, Yasumitsu Nishimura, Shoko Yamamoto, Tamayo Hatayama, Hidenori Matsuzaki, Naoko Kumagai-Takei, Kei	Department of Hygiene, Kawasaki Medical School

	Yoshitome, Takemi Otsuki	
Effect of long-term exposure of asbestos on human T cell line MT-2	Hidenori Matsuzaki(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)Department of Biofunctional Chemistry, Division of Bioscience, Okayama University Graduate School of Natural Science and Technology
Long-term monitoring for immunological effects of negatively charged indoor air environment	Takemi Otsuki, Naoko Takei, Hidenori Matsuzaki, Suni Lee, Kei Yoshitome, Yasumitsu Nishimura	Department of Hygiene, Kawasaki Medical School
The effect of mast cell on the respiratory allergy caused by environmental particulate matter	Risako Nishino, Tomoki Fukuyama, Yuko Watanabe, Yoshimi Kurosawa, Hideo Ueda, Tadashi Kosaka, Takanori Harada	The Institute of Environmental Toxicology
HLA association with antipyretic analgesics-related Stevens-Johnson syndrome / toxic epidermal necrolysis with acute severe ocular complications in the Japanese population	Ryosuke Nakamura(1), Nahoko Kaniwa(1), Mayumi Ueta(2), Chie Sotozono(2), Emiko Sugiyama(1), Keiko Maekawa(1), Yoshimi Uchida(1), Akiko Yagami(3), Setsuko Matsukura(4), Zenro Ikezawa(5), Kayoko Matsunaga(4), Katsushi Tokunaga(6), Michiko Aihara(4), Shigeru Kinoshita(2), Yoshiro Saito(1)	(1)National Institute of Health Sciences, (2)Kyoto Prefectural University of Medicine, (3) Fujita Health University, School of Medicine,(4)Yokohama City University, Graduate School of Medicine, (5)International University of Health and Welfare, Atami Hospital, (6)University of Tokyo, Graduate School of Medicine
Low-dose di-((2)-ethylhexyl) phthalate (DEHP) exposure increases susceptibility to testicular autoimmunity in mice	Hayato Terayama(1), Kou Sakabe(1), Shuichi Hirai(2), Munekazu Naito(3), Ning Qu(2), Miyuki Kuramasu(2), Yuki Ogawa(2), Naoyuki Hatayama(2), Shogo Hayashi(2), Yuko Furuya(1), Teruhisa Kanazawa(1), Masahiro Itoh(2)	(1)Department of Anatomy, Division of Basic Medicine, Tokai University School of Medicine, (2)Department of Anatomy, Tokyo Medical University, (3)Department of Anatomy, Aichi Medical University
Allergy to formaldehyde: basophil histamine-release test is useful for diagnosis	Yusuke Tanaka(1), Yuko Nakase(1), Naoya Sugimoto(1), Sayaka Igarashi(1), Hidenori Arai(1), Kenshin Ohara(2),	(1)Division of Respiratory Medicine and Allergology, Department of Medicine, (2)Department of Plastic, Oral and Maxillofacial Surgery, Teikyo University School of Medicine,

	Hiroyuki Nagase(1), Masao Yamaguchi(1), Ken Ohta(1),(3)	(3)National Hospital Organization Tokyo National Hospital
Specificity of autoantibodies in patients with rheumatologic syndrome following mineral oil injections and in mice with adjuvant mineral oil-induced autoimmunity	Minoru Satoh(1), Shin Tanaka(1), Hajime Hori(1), Yoshiki Kuroda(2)	(1)University of Occupational and Environmental Health, (2)University of Miyazaki
Fluoride enhances the invasion of inflammatory macrophages into the renal tubulointerstitium of rats with unilateral ureteral obstruction	Takamasa Kido(1),(2), Masashi Tsunoda(2), Chiemi Sugaya(2), Hiroshi Hano(3), Hiroyuki Yanagisawa(1)	(1)Department of Public Health and Environmental Medicine, The Jikei University School of Medicine, (2)Department of Hygiene, Kitasato University School of Medicine, (3)The Jikei University School of Medicine
The trial of mouse TDAR method development for evaluation of immunotoxicity	Ken Goto, Kenichi Fujisawa, Hidekazu Houri, Masahiro Mochizuki, Takumi Ohishi	BOZO RESEARCH CENTER INC.
Study of the effect of Magnolol in depression using Olfactory bulbectomy mouse model	Haruka Akae(1), Nana Hirashima(1), Nobuaki Matsui(1), Nobuyuki Fukuishi(1), Yoshiyasu Fukuyama(2), Masaaki Akagi(1)	(1)Department of Pharmacology, (2)Department of Physical Chemistry, Faculty of Pharmaceutical Sciences, Tokushima Bunri University
The role of signal transduction molecules on the regulation of c-Kit expression on TGF-β-treated mast cells	Risa Hasegawa, Nobuyuki Fukuishi, Hayato Teruya, Yousuke Hata, Mika Yoshida, Masaaki Akagi	Department of Pharmacology, Faculty of Pharmaceutical Sciences, Tokushima Bunri University
Thymic adipogenesis induced by triphenyltin impairs peripheral lymphocyte populations	Youhei Hiromori(1), (2), Noriyuki Sakai(1), Ryo Kobayashi(1), Daichi Jodai(1), Tsuyoshi Nakanishi(1), Hisamitsu Nagase(1)	(1)Gifu Pharmaceutical University, (2)Department of Pharmacy, College of Pharmacy, Kinjo Gakuin University
Effects of TNFa and IL-1β on accumulation of manganese in SH-SY5Y cells	Hitomi Fujishiro, Tomoki Kitayama, Seiichiro Himeno	Faculty of Pharmaceutical Sciences, Tokushima Bunri University
Effects of arsenite on the IL-2-induced NK cells activation	Daigo Sumi, Kumi Harada, Seiichiro Himeno	Faculty of Pharmaceutical Sciences, Tokushima Bunri University
Arsenite impairs the function of natural killer cells	Daigo Sumi, Tomoko Ogawa, Seiichiro Himeno	Faculty of Pharmaceutical Sciences, Tokushima Bunri University
Arsenite enhances IL-8 production in Jurkat cells	Daigo Sumi, Anna Yamachika, Seiichiro Himeno	Faculty of Pharmaceutical Sciences, Tokushima Bunri University

Luncheon Seminar (1)		
Reducing immunogenicity in a T-cell dependent antibody response (TDAR) in cynomolgus monkeys leads to a sensitive assessment of immunosuppression by Abatacept (CTLA4-Ig)	Sylwia Marshall(1), Gregory Bannish(2), Meredith Perpetua(2), Tracy Ziegelhofer(2), John Doughty(2), Aidan Curran(2), Lee Coney(1)	(1)Huntingdon Life Sciences, Cambridgeshire, United Kingdom, (2)Huntingdon Life Sciences, East Millstone, NJ, United States
Luncheon Seminar (2)		
Development of assays to monitor the immunotoxicity and efficacy of biotherapeutics	Marie-Soleil Piche	Science Director Immunology, Charles River Laboratories