

Program

Day 1: September 11th (Monday)

Main Hall (Venue S)

9:20 ~ 9:30 Opening Remarks

The 30th Annual Meeting of the Japanese Society of Immunotoxicology

President: Ryosuke Nakamura

The 81st Meeting of Allergy and Immunotoxicology study group of Japan Society for Occupational Health

Coordinator: Takahiko Yoshida

9:30 ~ 11:00 Students and Young Scientists Session <Y-01 ~ Y-07>

Chairpersons: Takamasa Kido (The Jikei University School of Medicine),

Masashi Tachibana (Graduate School of Pharmaceutical Sciences, Osaka University)

Y-01 Exposure of arsenic increased surface expression of sialic acid, which is involved in Glyco-immune checkpoint

○Hiroki Taguchi, Hitomi Fujishiro, Daigo Sumi

Fac. Pharm. Sci., Tokushima Bunri Univ.

Y-02 Sub-acute oral exposure to mycotoxin Nivalenol significantly aggravates the development of atopic dermatitis in a mouse model via enhancement of ERK1/2 phosphorylation in dendritic cells

○Reo Matsuzaka¹, Hiroki Yamaguchi¹, Chiharu Ohira¹, Tomoe Kurita¹, Tomomi Nishino², Kyoko Noda², Kazutoshi Sugita³, Masayo Kushiro⁴, Shiro Miyake², Tomoki Fukuyama¹

¹ Pharmacology lab, Vet Med, Azabu Univ, ² Food and Hygiene lab, Azabu Univ, ³ Public Health lab, Azabu Univ, ⁴ National Agriculture and Food Research Organization

Y-03 Siglec-14 recognition of various shapes and sizes of carbon nanomaterials

○Ichika Ihashi, Shin-Ichiro Yamaguchi, Miki Kuroiwa, Masafumi Nakayama

Col. Pharm. Sci., Ritsumeikan Univ.

Y-04 Evaluation of post-translational modifications and trafficking of HLA associated with drug hypersensitivity

○Naoki Sakamoto¹, Tomohiro Shirayanagi¹, Keitaro Umezawa², Akira Kazaoka¹, Yuri Miura², Kousei Ito¹, Shigeki Aoki¹

¹Grad Sch of Pharm Sci, Chiba Univ, ²TMIG

Y-05 The impact of CCR4 deficiency in a mouse mode of food allergy

○Yurika Otsuka, Tatsuma Honzawa, Kazuhiko Matsuo, Haruka Nagao, Chihiro Sadamura, Mizuki Nakozi, Yuta Hara, Takashi Nakayama

Kindai University Faculty of Pharmacy

Y-06 A CCR4 inhibitor suppresses atopic dermatitis-like skin inflammation by inhibiting the recruitment and expansion of Th2 cells and Th17 cells

○Takayuki Sakai¹, Masako Sato², Kazuhiko Matsuo¹, Yuta Hara¹, Takashi Nakayama¹

Kindai University Faculty of Pharmacy

¹Kindai University Faculty of Pharmacy, ²Kindai University Faculty of Medicine

Y-07 The impact of CCR4 deficiency in DSS-induced colitis model

○Mizuki Nakozi, Tatsuma Honzawa, Kazuhiko Matsuo, Yurika Otsuka, Yuta Hara, Takashi Nakayama

Kindai University Faculty of Pharmacy

11:00 ~ 11:10 Flash Presentation

Host: Ryosuke Nakamura (National Institute of Health Sciences)

Poster Discussion (Lounge), Young Poster Discussion (ICHIHANA Hall)

11:10 ~ 11:50 Poster Discussion Session <P-01 ~ P-20, Y-01 ~ Y-07>

(Posters for Students and Young Scientist Session are also included in this session)

P-01 Effects of oral exposure to low dose of bisphenol F in allergic asthmatic mice

○Rie Yanagisawa, Eiko Koike, Tin-Tin Win-Shwe, Takehiro Suzuki

National Institute for Environmental Studies, Health and Environmental Risk Division

P-02 Effects of oral exposure to low dose of bisphenol F on the gut microbiota in allergic asthmatic mice

○Takehiro Suzuki, Rie Yanagisawa, Tin-Tin Win-Shwe, Eiko Koike

National Institute for Environmental Studies, Health and Environmental Risk Division

P-03 Evaluating antiallergic effects of combined intake of flavonoids on allergic asthma

○Kaori Sadakane¹, Takamichi Ichinose², Seiichi Yoshida¹

¹ Oita University of Nursing and Health Sciences, ² Kyoto University

P-04 Analysis of helper T cells distributed in the intestinal lamina propria under zinc deficiency

○Takamasa Kido, Hiroyuki Yamagisawa, Machi Suka

The Jikei University School of Medicine

P-05 Myeloid-derived suppressor cells exert toxic effects in lung inflammation

Zhiqi Xie^{1,2}, Haoyang Zhou¹, Masanori Obana^{1,3,4,5}, Yasushi Fujio^{1,3,4}, Naoki Okada¹, ○Masashi Tachibana^{1,5}

¹ Pharm Sci, Osaka Univ, ² Pharm, Hangzhou City Univ, ³ OTRI, ⁴ CiDER, ⁵ MEIC, Osaka, Univ

P-06 Effect of Antibiotic Co-administration on Regulatory T Cell Induction in ED therapy

○Atsuhito Kubota¹, Wataru Murase¹, Syungo Imai², Mitsuru Sugawara³, Yho Takekuma³, Hiroyuki Kojima¹

¹Pharm Sci, Helth Sci Uni Hokkaido, ²Pharm Sci, Keio Uni, ³Department Pharm, Hokkaido Uni Hos

P-07 Analysis of the relationship between protein NEDDylation mechanism and Regnase-1 activity

○Tingchi Yu, Yuki Komori, ○Ryuta Muromoto, Tadashi Matsuda

Department of Immunology, Faculty of Pharmaceutical Sciences, Hokkaido University

P-08 Analysis of the mechanisms by which dasatinib suppresses particulate-induced pyroptosis

○Naoki Takemura¹, Yixi Pan¹, Tatsuya Saitoh^{1,2,3}

¹Grad Sch Pharm Sci, Osaka Univ, ²Global Ctr, Med Eng Inform, Osaka Univ, ³CiDER, Osaka Univ

P-09 Establishment of a functional alveolar macrophages cell line (Implication of establishment of an animal-free model for assessment of lung inflammation)

○Takumi Adachi¹, Hinata Inoue¹, Hiroto Izumi², Etsushi Kuroda¹

¹ Department of immunology, Hyogo Medical University School of Medicine, ² Department of Occupational Pneumology, Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health

P-10 Aging process augments Th17-type airway inflammation by IL-18

○Masakiyo Nakahira, Etsushi Kuroda

Department of Immunology, School of Medicine, Hyogo Medical University

P-11 Development of a new test method for protein-induced respiratory allergy

○Yi-Ting Lai, Kanako Nakayama, Hideyuki Mizumachi, Takuo Yuki, Masaaki Miyazawa

Safety Science Research Laboratories, Kao Corporation, Tochigi, Japan

P-12 Development of high-throughput screening method for environmental allergy exacerbating substances by evaluation of human IgE cross-linking activity

○Haruyo Akiyama¹, Chisato Kurisaka¹, Asuka Watabe¹, Tomoko Ohashi¹, Kae Harada¹, Ryosuke Nakamura²

¹Teikyo Heisei Univ, ²Natl Inst Health Sci

P-13 Study on visualization methods of skin localization of a personal care product

Megumi Nagao¹, ○Akiko Honda², Saori Tan², Natsuko Miyasaka¹, Binyang Qiu², Raga Ishikawa¹, Hirohisa Takano^{1,3}

¹ Grad. Sch. of Global Environ. Studies, Kyoto Univ., ² Grad. Sch. of Eng., Kyoto Univ., ³ Inst. for Int. Acad. Res., Kyoto Univ. of Adv. Sci.

P-14 Development of a method for evaluating the activating potentials of nanomaterials to antigen-presenting cells using THP-1 cells and analysis of the activation mechanism

○Maki Yamashiro¹, Akiko Ohno², Takao Ashikaga², Kazutoshi Iijima³

¹Grad Sch Eng Sci, Yokohama National Univ, ²Natl Inst Health Sci, ³Fac Eng, Yokohama National Univ

P-15 Analysis of bronchial epithelial secreted cytokines for development of nanomaterial inhalation toxicity evaluation method combining bronchial epithelial model and THP-1 cells

○Rion Arai¹, Asuka Nishida¹, Haruka Takahashi¹, Mizuki Nakahama¹, Akiko Ohno², Takao Ashikaga², Kazutoshi Iijima³

¹Grad Sch Eng Sci, Yokohama National Univ, ²Natl Inst Health Sci, ³Fac Eng, Yokohama National Univ

P-16 Development of a cellular immunity test against SARS-CoV-2 based on qPCR and its potential application

○Yuta Higashikuse, Taro Saito, Yuki Katayama

Minaris Medical Co., Ltd.

P-17 Development of anti-infliximab and anti-adalimumab monoclonal antibody panels, and evaluation of the IgE type ADA

○Takuo Suzuki, Minoru Tada, Akiko Ishii-Watabe

Natl Inst Health Sci

P-18 Evaluation of anti-drug antibodies in IBD patients treated with therapeutic antibodies and their clinical impact

○Hiroko Shibata¹, Kazuko Nishimura¹, Eri Tsukagoshi¹, Emu Ikarigawa², Yasuo Suzuki², Yoshiro Saito¹, Akiko Ishii-Watabe¹

¹Natl Inst Health Sci, ²Ginza Central Clinic

P-19 Points to consider in antibody titer assay for immunogenicity assessment

○Kazuko Nishimura¹, Hiroko Shibata¹, Emu Ikarigawa², Takuo Suzuki¹, Yasuo Suzuki², Yoshiro Saito³, Akiko Ishii-Watabe¹

¹DBCB, Natl Inst Health Sci, ²Ginza Central Clinic, ³Natl Inst Health Sci

P-20 Establishment of T cell assay for evaluating immunogenicity of biopharmaceuticals

○Michihiko Aoyama, Minoru Tada, Akiko Ishii-Watabe

Natl Inst Health Sci

<Break>

12:00 ~ 12:50 Luncheon Seminar 1 (Shimadzu Corporation) <LS-01>

LS-01 Evaluation of aggregates in biopharmaceuticals

○Hiroki Maeda¹, Shinichiro Totoki²

¹ Instruments Expert Group Material & Infrastructure Solution Unit Solutions COE, Analytical & Measuring Instruments Division Shimadzu Corp. ² Testing Machine Business Unit, Analytical & Measuring Instruments Division Shimadzu Corp.

<Break>

13:00 ~ 13:40 General Assembly

13:40 ~ 14:25 30th Anniversary Lecture <ML-01 ~ ML-02>

Immunotoxicology: Honor the Past and Build the Future

Chairperson: Yoshiro Saito (National Institute of Health Sciences)

ML-01 The dawn of immunotoxicology - Immune mechanisms as toxic targets and immune modification by environmental factors -

○Takahiko Yoshida

Asahikawa Medical University (4th JSIT Executive President)

ML-02 Significance of ICH S8 guideline and emerging issues thereafter

○Kazuichi Nakamura

Hokkaido University (5th JSIT Executive President)

<Break>

14:30 ~ 15:20 Special Lecture 1 <SL-01>

Chairperson: Ryosuke Nakamura (National Institute of Health Sciences)

SL-01 Vaccine R & D in Japan: SCARDA initiative

○Junichi Koga

Provost, Strategic Center of Biomedical Advanced Vaccine Research and Development for Preparedness and Response, Japan Agency for Medical Research and Development

<Break>

15:30 ~ 17:30 Symposium <S-01 ~ S-05>

Immunotoxicity in the R & D of New Modality Drugs and Vaccines

Chairpersons: Akiko Ishii-Watabe (National Institute of Health Sciences),

Shogo Matsumura (Astellas Pharma Inc.)

S-01 Introduction to Immunotoxicity in the R & D of New Modality Drugs and Vaccines

○Akiko Ishii-Watabe

Division of Biological Chemistry and Biologicals, National Institute of Health Sciences

S-02 Challenges in immunotoxicity evaluation for AAV vector products

○Shogo Matsumura

Exploratory Pathophysiology, Non-Clinical Biomedical Science, Applied Research & Operations,
Astellas Pharma Inc.

S-03 Non-clinical evaluation of CAR-T cell therapy, from the view of immunotoxicology

○Yukari Fujiwara

Preclinical Safety / Translational Medicine, Novartis Pharma K.K.

S-04 Immunotoxicity of Oligonucleotide Therapeutics

○Yuko Nagayama

Global Drug Safety, Eisai Co., Ltd.

S-05 Immunological studies for understanding new modality of vaccines

○Yoshimasa Takahashi

Research Center for Drug and Vaccine Development, Natl Inst Infect Dis

TREX River Cafe (Venue R)

18:00 ~ 20:00 Banquet

Award Ceremony for Students and Young Scientists

Day 2: September 12th (Tuesday)

Main Hall (Venue S)

9:05 ~ 9:35 Oral Presentation 1 <O-01 ~ O-02>

Chairperson: Chiomi Kubo (Chugai Pharmaceutical Co., Ltd.)

O-01 Validation of a novel genotyping technique for a surrogate marker of *HLA-B*58:01* to predict allopurinol-induced SJS/TEN in Japanese

○Eri Tsukagoshi¹, Ryosuke Nakamura¹, Hideo Asada², Yoshiro Saito¹

¹National Institute of Health Sciences, ²Nara Medical University

O-02 Glycolysis in CD8⁺ T cells plays an important role in the onset of HLA-mediated idiosyncratic drug toxicity

○Takeshi Susukida¹, Shigeki Aoki², Yuchen Sun³, Yoshihiro Hayakawa¹

¹ Grad School of Pharm Sci, Univ of Toyama, ² Grad School of Pharm Sci, Chiba Univ, ³ Natl Inst Health Sci

<Break>

9:40 ~ 10:30 Special Lecture 2 <SL-02> – Online –

Chairperson: Yasumitsu Nishimura (Kawasaki Medical School)

SL-02 Utility of Immune Humanized Mice in Toxicity Assessment

○Kristina E Howard, DVM, Ph.D.

DARS/OCP/OTS/CDER, U.S. Food & Drug Administration, Silver Spring, MD, USA

<Break>

10:35 ~ 11:35 Oral Presentation 2 <O-03 ~ O-06>

Chairpersons: Izumi Sasaki (Wakayama Medical University),

Ryuta Muromoto (Hokkaido University)

O-03 A stress sensor IRE1 α is required for bacterial exotoxin-induced inflammasome activation in tissue resident macrophages

○Izumi Sasaki¹, Naoko Wakaki-Nishiyama¹, Daisuke Okuzaki², Shuhei Morita³, Takashi Kato¹, Asumi Yamamoto¹, Koichi Furukawa⁴, Tsuneyasu Kaisho¹

¹Department of Immunology, Institute of Advanced Medicine, Wakayama Medical University, ²Genome Information Research Center, Research Institute for Microbial Diseases, Osaka University, ³First Department of Medicine, Wakayama Medical University, ⁴Department of Lifelong Sports and Health Sciences, Chubu University College of Life and Health Sciences

O-04 The pyrin inflammasome activation in murine tissue resident macrophages

○Shiori Kaji¹, Izumi Sasaki², Yuki Furuta³, Takashi Kato², Naoko Nishiyama², Asumi Yamamoto², Masayuki Kitano¹ and Tsuneyasu Kaisho²

¹Second Department of Internal Medicine, Wakayama Medical Univ, ²Department of Immunology, Institute of Advanced Medicine, Wakayama Medical Univ, ³First Department of Surgery, Wakayama Medical Univ

O-05 Activation of inflammasome exacerbates Gram-positive bacteria infection

○Hideki Hara^{1,2}, Yasuyuki Matsuda¹, Akihiko Yoshimura², Gabriel Nunez³

¹Infect Dis, Asahikawa Med Univ, ²Microbiol Immunol, Keio Univ Med, ³Pathol, Med Univ Michi.

O-06 Benzo[a]pyrene induces NLRP1 expression and promotes prolonged inflammasome signaling in lung epithelial cells

○Yuka Nagata¹, Risa Kohno¹, Tomohiro Ishihara¹, Chisato Amma¹, Yayoi Inomata², Takafumi Seto³ and Ryo Suzuki¹

¹Fac Pharm Sci, Inst Med Pharm Sci & Health Sci, Kanazawa Univ, ²Inst Nat & Environ Technol, Kanazawa Univ, ³Fac Front Engineer, Inst Sci & Engineer, Kanazawa Univ

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Large Conference Room (Venue L)

11:50 ~ 12:40 Luncheon Seminar 2 (FonesLife Corporation) <LS-02>

LS-02 Proteomics biomarker discovery and clinical application using SomaScan

○Noriaki Arakawa

National Institute of Health Sciences, Japan

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12:55 ~ 13:50 Awardee Presentation <AL-01 ~ AL-02>

Award Presenter: Yoshiro Saito (National Institute of Health Sciences)

Chairperson: Yasuo Yoshioka (Osaka University)

JSIT Award Lecture

AL-01 Establishment of a new concept “reproductive immunotoxicity” in immunotoxicology

○Kazuichi Nakamura

Translational Research Unit, Veterinary Teaching Hospital, Faculty of Veterinary Medicine, Hokkaido University, Sapporo, Hokkaido, Japan.

JSIT Young Investigator Award Lecture

AL-02 Immunological mechanisms of metal allergy and its prevention and treatment

○Toshinobu Kuroishi

Division of Oral Immunology, Tohoku University Graduate School of Dentistry

13:50 ~ 14:35 Educational Lecture <EL-01>

Chairperson: Shigeki Aoki (Chiba University)

EL-01 Mechanism of Severe Drug Eruption

○Riichiro Abe

Division of Dermatology, Niigata Graduate University of Medical and Dental Sciences

<Break>

14:40 ~ 16:40 Workshop <WS-01 ~ WS-04>

Animal Models and the Alternatives Reflect Human Immune Responses: Current Status and Future Prospects

Chairpersons: Tetsuo Aida (Daiichi Sankyo Co., Ltd.),

Tetsuya Sakairi (Mitsubishi Tanabe Pharma Corp.)

WS-01 Current status and prospect of drug toxicity assessment using HLA transgenic mice

○Shigeki Aoki

Grad Sch of Pharm Sci, Chiba Univ

WS-02 Immunogenicity and toxicity evaluation system of vaccine adjuvant using genomics technology and humanized mouse model

○Eita Sasaki

Research Center for Drug and Vaccine Development, National Institute of Infectious Diseases

WS-03 Construction of the human-type functional lymphoid tissues/organoids and their immunological function

Yuka Kobayashi, ○Takeshi Watanabe, Hiroshi Kawamoto

Lab of Immunology, Institute for Life and Medical Sciences, Kyoto University

WS-04 Immunological characteristics related to age-associated pathologies in Senescence-Accelerated Mouse (SAM): Significance as a model for evaluating immunotoxicity in elderly people

○Yasumitsu Nishimura

Department of Hygiene, Kawasaki Medical School

16:40 ~ 16:50 Award Ceremony for the Best Presenter of 30th Annual Meeting

Closing Remarks

Day 3: September 13th (Wednesday)

Large Conference Room (Venue L)

9:10 ~ 9:15 Opening Remarks

The 30th Annual Meeting of the Japanese Society of Immunotoxicology

President: Ryosuke Nakamura

9:15 ~ 11:50 Open Symposium <OS-01 ~ OS-04>

Immunotoxicity Risk Assessment for Chemicals in the Environment

Chairperson: Koichi Ohno (National Institute for Environmental Studies)

OS-01 Health risk assessment of chemical substances contaminated in the environment

○Yasunobu Aoki

Division of Health and Environmental Risk, National Institute for Environmental Studies

OS-02 Risk assessment of quasi-drugs and chemical substances in food

○Reiko Teshima

Div. Food Safety, Fac. Vet. Med., Okayama Univ. Sci.

OS-03 Chemical exposures and allergy: findings from epidemiological studies

○Kiwako Yamamoto-Hanada, Yukihiro Ohya

National Center for Child Health and Development, Tokyo, Japan

OS-04 Health hazards and risk assessment of chemicals based on immunotoxicity

○Eiko Koike¹, Koichi Ohno¹, Takayuki Nakajima², Noriyuki Suzuki¹, Yasunobu Aoki¹

¹National Institute for Environmental Studies, ²Global Environmental Forum

11:50 ~ 11:55 Closing Remarks

Noriyuki Suzuki (Fellow, Planning Division, National Institute for Environmental Studies)