Program

Day 1: September 19th (Thursday)

Heisei Memorial Hall, Main Hall

$9:00 \sim 9:10$ Opening Remarks

The 31st Annual Meeting of The Japanese Society of Immunotoxicology

President: Etsushi Kuroda

9:10 \sim 10:30 Students and Young Scientists Session < Y-05 \sim Y-12 >

Chairpersons: Shigeki Aoki (Graduate School of Pharmaceutical Sciences, Chiba University), Izumi Sasaki (Institute of Advanced Medicine, Wakayama Medical University)

Y-05 Carbon black nanoparticles induce cytotoxic responses in alveolar macrophages

○Tomohiro Ishihara, Atsushi Furukawa, Yuka Nagata, Ryo Suzuki Fac Pharm Sci, Kanazawa Univ

Y-06 The novel evaluation approach for the immunotoxicity of environmental particulate matters using a newly developed macrophage line

OHinata Inoue^{1,2}, Takumi Adachi¹, Etsushi Kuroda¹

¹Department of Immunology, Hyogo Medical University, ²physician-scientist training program, Hyogo Medical University

Y-07 Antagonistic activity of combined exposure to mycotoxins Nivalenol and Deoxynivalenol on the inflammatory cytokine production in dendritic cells

OReo Matsuzaka¹, Kazutoshi Sugita², Shiro Miyake³, Tomoki Fukuyama¹

¹Pharmacology lab, Vet Med, Azabu Univ., ²Public Health lab, Azabu Univ., ³Food and Hygiene lab, Azabu Univ.

Y-08 Co-culture of corneal epithelial cells and neutrophil-like cells induces synergistic production of inflammatory cytokines and chemokines

○Zirui Zeng¹, Duo Wang², Chieri Murayama³, Junnosuke Morita³, Tomoaki Okuda⁴, Tatsuva Mimura⁵, Yasuhiro Yoshida³

¹⁻³Univ. Occ. Env. Hlth., Dept. of 11st. int. med., ²radi. Manage., ³imm. and para., ⁴Dept. of Applied Chem., Fac. of Sci. and Tech., Keio Univ., ⁵Dept. of opht. Teikyo Univ.

Y-09 Analysis of the crosstalk between MyD88-TRAF6 signaling and AhR

ORyo Hakota¹, Wataru Murase¹, Ayaka Yasuda¹, Atsuhito Kubota², Tsugumi Shindo², Shirou Tsuchida², Hiroyuki Kojima^{1,2}, Koji Nakagawa^{1,2}

¹Grad. Sch. Pharm. Sci., Health Sci. Univ. Hokkaido., ²Sch. Pharm. Sci., Health Sci. Univ. Hokkaido.

Y-10 Type I IFNs attenuate efficacy of adenovirus vector-based intranasal vaccine

○Hayato Nakatani¹, Masashi Tachibana¹², Rika Onishi¹, Kahori Shimizu¹, Fuminori Sakurai¹, Hiroyuki Mizuguchi¹³,3,4,5,6

¹Grad Sch Pharm Sci, Osaka Univ, ²Col Life Sci, Ritsumeikan Univ, ³NIBIOHN, ⁴MEI cent, ⁵OTRI, ⁶CiDER, Osaka Univ

Y-11 Uncovering the role of nucleic acid sensors in innate immune responses triggered by DNA strand breaks

ONao Terakoshi¹, Keigo Yamakita¹, Manabu Yasui², Masamitsu Honma², Kei-ichi Sugiyama², Kaoru Sugasawa³, Kiyoe Ura¹, Akira Sassa¹

¹Grad. Sch. Sci., Chiba Univ., ²Div. Genome Safety Sci., Natl. Inst. Health. Sci., ³Biosignal Res. Ctr., Kobe Univ.

Y-12 Effects of per- and polyfluoroalkyl substances (PFAS) on *in vitro* cytokine and antibody production in mouse immune cells

○Wataru Murase¹, Atsuhito Kubota², Ryuta Muromoto³, Akira Kubota⁴, Kouichi Yoshinari⁵, Yu Ait Bamai⁶, Hiroyuki Kojima^{1,2}

¹Grad. Sch. Pharm. Sci., Health Sci. Univ. Hokkaido, ²Sch. Pharm. Sci., Health Sci. Univ. Hokkaido, ³Grad. Sch. Pharm. Sci., Hokkaido Univ., ⁴Dept. Vet. Med., Obihiro Univ. Agr. Vet. Med., ⁵Sch. Pharm. Sci., Univ. Shizuoka, ⁶Ctr. Env. Health Sci., Hokkaido Univ.

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$10:40 \sim 11:10$ Oral Presentation 1 < 0-01 \sim 0-02 >

Chairperson: Atsuhito Kubota (School of Pharmaceutical Sciences, Health Sciences University of Hokkaido)

O-01 Pulmonary adenoviral vectors induce persistent non-inflammatory immune responses in lung that correlate with protective antibody responses

○Toshiro Hirai^{1,2,3,4}, Koki Ueda^{2,3}, Mako Kakihara^{2,3}, Kazuo Takayama⁵, Yasuo Yoshioka^{1,2,3,4,6,7,8}

¹OTRI, Osaka Univ, ²RIMD, Osaka Univ, ³Pharm Sci, Osaka Univ, ⁴CAMaD, Osaka Univ, ⁵CiRA, Kyoto Univ, ⁶BIKEN, ⁷MEI, Osaka Univ, ⁸CiDER, Osaka Univ

0-02 Imaging inflammatory response of mouse alveolar macrophage induced by environmental particulates using Live FluoroSpot

○Zhuohao Yang¹, Takumi Adachi², Nobutake Suzuki¹, Mai Yamagishi³, Takashi Funatsu³, Etsushi Kuroda², Yoshitaka Shirasaki¹

¹RCAST, The University of Tokyo, ²Department of Immunology, Hyogo College of Medicine, ³Live Cell Diagnosis, Ltd.

11:10 ~ 11:20 Flash Presentation

11:20 ~ 11:55 General Assembly

11:55 ~ 12:55 Luncheon Seminar < LS-01 >

Chairperson: Etsushi Kuroda (Hyogo Medical University)

LS-01 Current perspectives of asbestos-related disease as chronic inflammatory disorders.

○Toshiyuki Minami^{1,2}, Akio Tada¹, Yoshiki Negi^{1,2}, Daichi Fujimoto^{1,2}, Taiichiro Otsuki^{1,2}, Koji Mikami^{1,2}, Ryo Takahashi^{1,2}, Kozo Kuribayashi^{1,2}, Takashi Kijima^{1,2}

¹Department of Respiratory Medicine and Hematology, Hyogo Medical University,

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Heisei Memorial Hall. Poster Venue

$13:00 \sim 13:50$ Poster Discussion Session $\langle P-01 \sim P-22 \rangle$

P-01 Siglec-14 recognition of carbon nanomaterials

OShin-Ichiro Yamaguchi, Miki Takemura, Karen Miwa, Masafumi Nakayama Grad. Sch. Pharm. Sci., Ritsumeikan Univ.

P-02 Effects of intratracheal exposure to polyurethane membrane microcapsules in mice.

ORie Yanagisawa, Eiko Koike, Yuji Fujitani, Yoshikatsu Takazawa, Go Suzuki National Institute for Environmental Studies

P-03 Effects of microplastic particles on bronchial asthma via innate and acquired immunity and visualization of particle localization

○Megumi Nagao¹, Natsuko Miyasaka¹, Ryoko Ohata², Akiko Honda³, Raga Ishikawa¹, Kenichiro Inoue⁴, Takamichi Ichinose¹, Hirohisa Takano¹²

¹Grad. Sch. of Global Environ. Studies, Kyoto Univ., ²Inst. for Int. Acad. Res., Kyoto Univ. of Adv. Sci., ³Grad. Sch. of Eng., Kyoto Univ., ⁴Sch. of Nursing, Shizuoka Pref. Univ.

²Department of Thoracic Oncology, Hyogo Medical University

P-04 Lung disorder of cross-linked polyacrylic acid in long-term inhalation exposure using club cell-ablated mice

OChinatsu Nishida¹, Hidenori Higashi¹, Taisuhe Tomonaga², Yasuyuki Higashi³, Toshiki Morimoto³, Kazuma Sato², Yuiko Nakamura², Hiroto Izumi², Kazuhiro Yatera³, Yasuo Morimoto²

¹Department of Environmental Health Engineering, Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health, Japan, ²Department of Occupational Pneumology, Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health, Japan, ³Department of Respiratory Medicine, University of Occupational and Environmental Health, Japan.

P-05 Development of a two-step DC/T cell coculture system to discriminate respiratory sensitizers from skin sensitizers

OIzuru Mizoguchi, Yasuhiro Katahira, Hideaki Hasegawa, and Takayuki Yoshimoto Department of Immunoregulation, Institute of Medical Science, Tokyo Medical University

P-06 Study of the inflammatory response of silica nanoparticles in trophoblast cells

○Kazuma Higashisaka^{1,2,3}, Rena Yamamoto³, Momoe Serizawa³, Yuya Haga^{2,3}, Yasuo Tsutsumi^{2,3,4,5}

¹IACS., Osaka Univ., ²Grad. Sch. Pharm. Sci., Osaka Univ., ³ Sch. Pharm. Sci., Osaka Univ., ⁴MEI Ctr, Osaka Univ., ⁵OTRI., Osaka Univ.

P-07 Clinical characteristics of patients with severe cutaneous adverse reactions - An analysis from a national case collection network

Eri Tsukagoshi, Ryosuke Nakamura, Kimie Sai, Ruri Kikura-Hanajiri, ○Yoshiro Saito Natl Inst Health Sci

P-08 Consideration of the impact of the differences in HLA expression patterns due to the presence or absence of β_2 -microglobulin binding on immunotoxicity

Mai Nonaka¹, Yuki Toda¹, Keitaro Umezawa², Ryosuke Nakamura³⁴, Noriaki Arakawa³, Yuchen Sun³, Yuri Miura², Kousei Ito¹, ⊙Shigeki Aoki¹

¹Grad Sch of Pharm Sci, Chiba Univ, ²Proteome, TMIG, ³Natl Inst Health Sci, ⁴Pharm Sci, Teikyo Univ

P-09 Development of a Simple Analysis System for HLA Class I-Presented Peptides

Aoi Ito^{1,2}, ORyosuke Nakamura^{1,2,3}, Noriaki Arakawa¹, Yuya Hashimoto¹, Shigeki Aoki⁴, Kousei Ito⁴, Ruri Kikura-Hanajiri¹, Yoshiro Saito^{1,2}

¹Natl Inst Health Sci, ²Okayama Univ, ³Teikyo Univ, ⁴Chiba Univ.

P-10 Non-specific binding of antibodies induces immunogenicity via unintended immune activation

○Eiichi Hashimoto¹, Shohei Kawarada², Shunsuke Ito¹, Nobuo Sekiguchi², Hikaru Koga², Shiho Ohtsu², Jumpei Kiyokawa¹, Hiromi Suzuki¹, Chiyomi Kubo¹

¹Translational Research Division, Chugai Pharmaceutical Co., Ltd, Kanagawa, Japan,

P-11 T-cell activation by CD137 contributes to decreased cytokine release of CD3/CD137 T-cell engager, GPC3-Dual

○Asako Harada, Nozomi Fujisawa, Tomochika Matsushita, Yoshika Iwata, Hisashi Ikegami

Chugai Pharmaceutical Co., Ltd.

P-12 Changes in Expression of Specific mRNA Transcripts in Mouse Testes after Singleor Re-Irradiation

ONing Qu^{1,2}, Kenta Nagahori², Kaori Suyama², Hayato Terayama^{2,3}, Daisuke Kiyoshima², Shogo Hayashi², Kou Sakabe³, Takayuki Yoshimoto¹

¹Department of Immunoregulation, Institute of Medical Science, Tokyo Medical University, ²Department of Anatomy, Division of Basic Medical Science, Tokai University School of Medicine, ³Department of Environmental Preventive Medicine (Yamada Bee Company, Inc.), Center for Preventive Medical Sciences, Chiba University

P-13 Self-assembling peptide CK2 contributes to the induction of antigen-specific cytotoxic Tlymphocyte as a carrier of adjuvant and antigen

○Koubun Yasuda¹, Miya Fujimoto², Etsushi Kuroda¹

¹Dept Immunol., Hyogo Med Univ, ²Menicon Co., Ltd.

P-14 Analysis of a novel necroptosis-inducing mucosal adjuvant

○Takumi Adachi¹, Kazufumi Matsushita¹, Koubun Yasuda¹, Masakiyo Nakahira¹, Mai Imasaka², Zhuohao Yang³, Masaki Ohmuraya², Yoshitaka Shirasaki³, Etsushi Kuroda¹

¹Department of Immunology, School of Medicine, Hyogo Medical University, Hyogo, Japan,

²Department of Genetics, School of Medicine, Hyogo Medical University, Hyogo, Japan,

³RCAST, The University of Tokyo, Meguro-ku, Tokyo, Japan

P-15 Introduction of sugar-modified nucleotides into CpG-containing antisense oligonucleotides inhibits TLR9 activation

○Tokuyuki Yoshida¹, Tomoko Hagihara², Yasunori Uchida¹, Yoshiyuki Horiuchi², Kiyomi Sasaki¹, Takenori Yamamoto¹, Takuma Yamashita¹, Yukihiro Goda¹, Yoshiro Saito¹, Takao Yamaguchi³, Satoshi Obika³, Seiji Yamamoto², Takao Inoue¹ NIHS, ²Fuso Pharmaceutical Industries, ³ Grad. Sch. Pharm. Sci., Osaka Univ

²Research Division, Chugai Pharmaceutical Co., Ltd, Kanagawa, Japan

P-16 Development of new method for the evaluation of the safety and quality control of SARS-Cov-2 mRNA vaccine

○Kou Hiraga, Haruka Momose, Sayuri Sakuragi, Kiyoko Nojima, Mieko Ishii, Keiko Imai, Junichi Maeyama, Yohei Seki, Madoka Kuramitsu, Takuo Mizukami

Research Center for Biological Products in the Next Generation, National Institute of Infectious Diseases

P-17 Development of an *In Vitro* Alternative Method for Rabbit Pyrogen Test Using Genetic Biomarkers

○Eita Sasaki¹, Jun-ichi Maeyama², Hideki Asanuma³, Isao Hamaguchi², Yoshimasa Takahashi¹

¹Research Center for Drug and Vaccine Development, NIID, ²Research Center for Biological Products in the Next Generation, NIID, ³Center for Influenza and Respiratory Virus Research, NIID

P-18 Effect of OVA-specific antibody production in the zinc deficiency

○Takamasa Kido, Hiroyuki Yanagisawa, Saburo Saito, Machi Suka The Jikei University School of Medicine

P-19 Augmentation of Th17 cells-mediated airway inflammation by aging-related IL-18 production

OMasakivo Nakahira, Etsushi Kuroda

Department of Immunology, Hyogo Medical University

P-20 Comparison of gene expression levels of SASP factors between hepatoma cell line Huh-7 and hepatic stellate cell line LX-2 by arsenite exposure

○Kazuyuki Okamura¹, Takehiro Suzuki¹, Nobuyoshi Nakajima²

¹Health and Environmental Risk Division, National Institute for Environmental Studies, ²Biodiversity Division, National Institute for Environmental Studies

P-21 Enhanced resistance to glycative stress in Tyk2-deficient macrophages

ORyuta Muromoto, Hiroya Minoguchi, Joichiro Abe, Tadashi Matsuda Grad. Sch. Pharm. Sci., Hokkaido Univ.

P-22 Characteristic gene expression kinetics of NK cells involved in treatment response to malignant mesothelioma and NKp46 ligand expression in tumor cells

○Yasumitsu Nishimura¹, Akira Yamauchi², Ayasa Kamezaki¹, Tatsuo Ito¹

¹Dept. of Hygiene, Kawasaki Medical School, ²Dept. of Biochemistry, Kawasaki Medical School

$13:00 \sim 13:50$ Poster Discussion Session $< Y-01 \sim Y-12 >$

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

Y-01Novel titanium-allergy mouse model using water-soluble Ti-lactic acid complex

OSaeko Saito^{1,2}, Toshinobu Kuroishi¹, Hiroshi Egusa², Shunji Sugawara¹

¹Division of Oral Immunology, ²Division of Molecular and Regenerative Prosthodontics, Tohoku University Graduate School of Dentistry

Y-02Differential Impacts of Various Environmental Particles on Bronchus-Associated Lymphoid Tissue Formation in Asthmatic Mice Model

○Wei Liu¹, Raga Ishikawa², Akiko Honda¹, Takamichi Ichinose², Binyang Qiu¹,

Oluwatoyin Hannah Owokoniran², Tomonari Matsuda^{1,3}, Hirohisa Takano^{2,4}

¹Grad. Sch. of Eng., Kyoto Univ., ²Grad. Sch. of Global Environ. Studies, Kyoto Univ., ³Res. Ctr. for Environ. Qual. Mgmt., Kyoto Univ., ⁴Inst. for Int. Acad. Res., Kyoto Univ. of Adv. Sci.

Y-03 Mechanism of innate immun response without DNA strand breaks due to dysfunctional DNA repair

○Hina Tanaka¹, Keigo Yamakita¹, Manabu Yasui², Masamitsu Honma², Kei-ichi Sugiyama², Ryoji Fujiki³, Atsushi Kaneda^{3,4}, Kaoru Sugasawa⁵, Kiyoe Ura¹, Akira Sassa¹

¹ Grad. Sch. Sci., Chiba Univ., ² Div. Genome Safety Sci., Natl. Inst. Health. Sci., ³Grad. Sch. Med., Chiba Univ., ⁴Health and Disease Omics Center., Chiba Univ., ⁵ Biosignal Res. Ctr. Kobe Univ.

Y-04 Deoxynivalenol detoxification by *Chlorella sorokiniana* leads to inhibitory effects on the Deoxynivalenol induced allergic contact dermatitis symptoms in a mouse model.

OTetta Hiwatashi¹, Reo Matuzaka¹, Chiharu Ohira¹, Mao Kaneki¹, Taro Ogawa²,

Ayaka Nakashima², Tomoki Fukuyama¹

¹Pharmacology lab, Vet Med, Azabu Univ, ²Euglena Co., Ltd.

Heisei Memorial Hall, Main Hall

$13.55 \sim 14.55$ Special Lecture 1 < SL-01 >

Chairperson: Takao Ashikaga (National Institute of Health Sciences)

SL-01 Development of methods for assessing respiratory sensitizing potential

OTakayuki Yoshimoto, Yasuhiro Katahira, Hideaki Hasegawa, Izuru Mizoguchi Department of Immunoregulation, Institute of Medical Science, Tokyo Medical University

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$15:05 \sim 16:35$ Symposium 1 < S-01 \sim S-03 >

[Environment and Allergy: Latest Findings]

Chairpersons: Rie Yanagisawa (National Institute for Environmental Studies), Tomoki Fukuyama (Department of Veterinary Medicine, Azabu University)

S-01 Environmental factors that disrupt the epithelial barrier, leading to allergic inflammation

OHideaki Morita^{1,2}

¹Department of Allergy and Clinical Immunology, National Research Institute for Child Health and Development, ²Allergy Center, National Center for Child Health and Development

S-02 Molecular and cellular mechanisms through which tissue-resident memory T cells drive refractory disease formation

OKiyoshi Hirahara

Department of Immunology, Graduate School of Medicine, Chiba University

S-03 Exploration of prevention/exacerbation factors for allergic rhinitis using mouse models

OKazufumi Matsushita

Department of Immunology, Hyogo Medical University School of Medicine

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$16:45 \sim 17:45$ Special Lecture 2 < SL-02 >

Chairperson: Yasumitsu Nishimura (Kawasaki Medical School)

SL-02 Regulation of Intestinal Macrophage and CD4 T Cell Differentiation in Autoimmunity: The Role of Aryl Hydrocarbon Receptor-Microbiome Interactions.

OAllison K Ehrlich

Department of Environmental Toxicology, University of California Davis

Nihonsakari Sakagura Dori Rengakan Hanasakari

18:30 ~ 20:30 Banquet

Award Ceremony for Students and Young Scientists

Day 2: September 20th (Friday)

Heisei Memorial Hall, Main Hall

$8:50 \sim 9:50$ Oral Presentation 2 < 0.03 \sim 0.06 >

Chairpersons: Takamasa Kido (The Jikei University School of Medicine),
Ryuta Muromoto (Faculty of Pharmaceutical Sciences, Hokkaido University)

0-03 Development of a novel image analysis of microglia in zebrafish to assess neurotoxicity of chemicals

OYuhei Nishimura, Mizuki Yuge, Takashi Shiromizu, Junko Koiwa Department of Integrative Pharmacology, Mie University Graduate School of Medicine

0-04 CCL3-CCR5 axis in Kupffer cells plays a detrimental role in acetaminophen-induced acute liver injury

○Yuko Ishida, Yumi Kuninaka, Mizuho Nosaka, Akihiko Kimura, Naofumi Mukaida, Toshikazu Kondo

Department of Forensic Medicine, Wakayama Medical University, Wakayama, Japan

0-05 Study of the effect of 15-hydroxyprostaglandin dehydrogenase inhibition on acetaminophen-induced acute liver injury

OHiroaki Shimada, Akito Yokotobi, Atsushi Kawase, Fuminori Sakurai Biopharm, Kindai Univ.

0-06 Immunological characterization of peritoneal exudate cells in liver cirrhosis patients

○Shiori Kaji¹, Izumi Sasaki², Satoko Kunimoto³, Emi Tosuji⁴, Takashi Kato⁵, Daisuke Okuzaki⁶, Masayuki Kitano¹, Tsuneyasu Kaisho²

¹Second Department of Internal Medicine, Wakayama Med Univ, ²Department of Immunology, Institute of Advanced Medicine, Wakayama Med Univ, ³Department of Nephrology, Wakayama Med Univ, ⁴Department of Dermatology, Wakayama Med Univ, ⁵Department of Rheumatology and Clinical Immunology, Wakayama Med Univ, ⁶WPI-Immunology Frontier Research Center, Osaka Univ

$9:50 \sim 10:50$ Oral Presentation $3 < 0.07 \sim 0.10 >$

Chairpersons: Toshinobu Kuroishi (Tohoku University Graduate School of Dentistry), Masafumi Nakayama (College of Pharmaceutical Sciences, Ritsumeikan University)

O-07 The specificity of pyrin inflammasome activation in murine resident peritoneal macrophages

○Emi Tosuji¹, Shiori Kaji², Izumi Sasaki³, Naoko Nishiyama³ and Tsuneyasu Kaisho³ ¹Department of Dermatology, Wakayama Medical Univ (WMU), ²Second Department of Internal Medicine, WMU, ³Department of Immunology, Institute of Advanced Medicine, WMU

0-08 Inhibition of AIM2 inflammasome improves antimicrobial-resistant Staphylococcus aureus infection

OHideki Hara

Infect Dis. Asahikawa Med Univ

0-09 Study on the mechanism of acute lung inflammation caused by Asian sand dust particles

O Tomoya Sagawa^{1,2}, Takamichi Ichinose¹, Akiko Honda³, Etsushi Kuroda⁴, Raga Ishikawa¹, Natsuko Miyasaka¹, Megumi Nagao¹, Tomoaki Okuda⁵, Hirohisa Takano^{1,6} ¹Grad. Sch. of Global Environ. Studies, Kyoto Univ., ²Infl. and Immun., Grad. Sch. of Med. Sci., Kyoto Pref. Univ. of Med., ³Grad. Sch. of Eng., Kyoto Univ., ⁴Dep. of Immun., Sch. of Med., Hyogo Med. Univ., ⁵Facul., of Sci. and Tech., Keio Univ., ⁶Inst. for Int. Acad. Res., Kyoto Univ. of Adv. Sci.

O-10 Bisphenol A Triggers the Activation of Ocular Immune System and Induces Allergic Airway Inflammation

○Tatsuo Ueda^{1,2}, Takumi Adachi¹, Eiko Koike³, Rie Yanagisawa³, Kenzo Tsuzuki², Etsushi Kuroda¹

¹Department of immunology, Hyogo Medical University, ²Department of Otorhinolaryngology-Head and Neck Surgery, Hyogo Medical University, ³Health and Environmental Risk Division, National Institutes for Environmental Studies

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$11:05 \sim 12:05$ Special Lecture 3 < SL-03 >

Chairperson: Yasuo Yoshioka (Research Institute for Microbial Diseases, Osaka University)

SL-03 Development of AIDS prevention and treatment vaccines using live attenuated vaccines expressing adjuvant molecules

○Yasuhiro Yasutomi^{1,2,3,4,5}

¹National Institutes of Biomedical Innovation, Health and Nutrition, ²School of Integrative and Global Majors, University of Tsukuba, ³Mie University Graduate School of Medicine, ⁴Osaka University Graduate School of Pharmaceutical Science, ⁵Tokyo Medical and Dental University Graduate School of Medical and Dental Science

 $12:05 \sim 12:50$ Lunch Time & Business Time

 $12:50 \sim 12:55$ Awards Ceremony

$12:55 \sim 13:20$ JSIT Award Lecture $\langle AL-01 \rangle$

Chairperson: Ryosuke Nakamura (Faculty of Pharmacology, Teikyo University)

AL-01 Immunotoxicology; the origins of medicine that protects lives in interaction with environment – From segmented research to research with an integrated perspective –

OTakahiko Yoshida

Asahikawa Medical University

$13:20 \sim 13:45$ JSIT Young Investigator Award Lecture \langle AL-02 \rangle

Chairperson: Ryosuke Nakamura (Faculty of Pharmacology, Teikyo University)

AL-02 Molecular mechanisms of pathogen sensors-mediated cytokine production from innate immune cells

OIzumi Sasaki

Department of Immunology, Institute of Advanced Medicine, Wakayama Medical University.

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$13:50 \sim 15:20$ Symposium 2 < S-04 ~ S-06 >

The Efficacy and Safety of New Vaccines and Immunotherapies

Chairpersons: Masashi Tachibana (Department of Biomedical Sciences, College of Life Sciences, Ritsumeikan University),

Naoki Takemura (Graduate School of Pharmaceutical Sciences, Osaka University)

S-04 CpG ODN-mediated immunoprophylaxis against viral infection

○Kouji Kobiyama^{1,2}

¹Division of Vaccine Science, The Institute of Medical Science, The University of Tokyo, ²International Vaccine Design Center, The Institute of Medical Science, The University of

Tokyo

S-05 Disease modifying treatments: Allergy immunotherapy for type-1 allergy

OKatsuyo Ohashi-Doi

Innovation Research Dep. Torii Pharmaceutical Co Ltd.

S-06 Preclinical immunogenicity and protective efficacy of new mRNA vaccines against SFTS

○Shiori Egashira^{1,2}, Rokusuke Yoshikawa³, Shoko Nogusa¹, Aya Yamaguchi¹, Yoshikuni Onodera¹, Nao Jonai¹, Fumihiko Takeshita¹, Etsushi Kuroda², Jiro Yasuda³

¹Daiichi Sankyo Co., Ltd., ²Hyogo Medical University, ³Nagasaki University

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$15:30 \sim 16:50 \;\; \text{Workshop} < \text{WS-01} \sim \text{WS-03} >$

[Immunogenicity Assessment]

Chairpersons: Shogo Matsumura (Astellas Pharma Inc.), Tetsuya Sakairi (Mitsubishi Tanabe Pharma Corporation)

WS-01 Current status and issues in prediction and evaluation of immunogenicity of biopharmaceuticals

OAkiko Ishii-Watabe, Michihiko Aoyama, Takuo Suzuki, Hiroko Shibata Division of Biological Chemistry and Biologicals, National Institute of Health Sciences

WS-02 Strategy and case studies for assessing immunogenicity of biopharmaceuticals

○Eri Hamamura-Yasuno, Tetsuo Aida, Koichi Goto, Yoshimi Tsuchiya Medicinal Safety Research Laboratories, Daiichi Sankyo Co., Ltd.

WS-03 Immunogenicity assessment and de-immunization strategy of engineered therapeutic antibodies

OEiichi Hashimoto

Translational Research Division, Chugai Pharmaceutical Co., Ltd, Kanagawa, Japan

Discussion

$16:50 \sim 17:00$ Award Ceremony for the Best Presenter of 31st Annual Meeting Closing Remarks