

# 第30回日本免疫毒性学会学術年会プログラム

第1日目 9月11日(月)

Main Hall(S会場)

## 9:20 ~ 9:30 開会の挨拶

第30回日本免疫毒性学会学術年会 年会長 中村亮介

第81回日本産業衛生学会アレルギー・免疫毒性研究会 代表世話人 吉田貴彦

## 9:30 ~ 11:00 学生・若手プレゼンテーション <Y-01 ~ Y-07>

座長 木戸尊将(東京慈恵会医科大学)、立花雅史(大阪大学大学院薬学研究科)

### Y-01 Glyco-immune checkpoint に関する細胞膜表面のシアル酸は亜ヒ酸により増加する

○田口央基、藤代瞳、角大悟

徳島文理大・薬

### 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 Matsuzaka<sup>1</sup>, Hiroki Yamaguchi<sup>1</sup>, Chiharu Ohira<sup>1</sup>, Tomoe Kurita<sup>1</sup>, Tomomi Nishino<sup>2</sup>, Kyoko Noda<sup>2</sup>, Kazutoshi Sugita<sup>3</sup>, Masayo Kushiro<sup>4</sup>, Shiro Miyake<sup>2</sup>, Tomoki Fukuyama<sup>1</sup>

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

### Y-03 Carbon nanomaterial の形状の違いにおける Siglec-14 認識能の検討

○伊橋一花、山口慎一郎、黒岩美希、中山勝文

立命館大、薬

### Y-04 薬物過敏症と関連する HLA 分子の細胞内局在および翻訳後修飾に関する評価

○坂本尚輝<sup>1</sup>、白柳智弘<sup>1</sup>、梅澤啓太郎<sup>2</sup>、風岡顯良<sup>1</sup>、三浦ゆり<sup>2</sup>、伊藤晃成<sup>1</sup>、青木重樹<sup>1</sup>

<sup>1</sup>千葉大院、薬、<sup>2</sup>都健康長寿医セ研

### Y-05 食物アレルギー病態形成におけるケモカイン受容体 CCR4 の影響に関する検討

○大塚優里佳、本澤龍菜、松尾一彦、長尾遥佳、定村千尋、名小路美月、原雄大、中山隆志

近畿大薬

**Y-06 ケモカイン受容体 CCR4 阻害剤はアトピー性皮膚炎マウスにおいて Th2 細胞と Th17 細胞の浸潤と増殖を抑制する**

○酒井貴之<sup>1</sup>、佐藤雅子<sup>2</sup>、松尾一彦<sup>1</sup>、原雄大<sup>1</sup>、中山隆志<sup>1</sup>

<sup>1</sup>近畿大薬、<sup>2</sup>近畿大医

**Y-07 DSS 誘発大腸炎モデルにおけるケモカイン受容体 CCR4 欠損の影響**

○名小路美月、本澤龍菜、松尾一彦、大塚優里佳、原雄大、中山隆志  
近畿大薬

**11:00 ~ 11:10 フラッシュプレゼンテーション**

司会 中村亮介(国立医薬品食品衛生研究所)

一般ポスター会場(ラウンジ)、学生・若手ポスター会場(ICHIHANA Hall)

**11:10 ~ 11:50 一般ポスターディスカッション <P-01 ~ P-20>**

**P-01 ビスフェノール F の低用量経口曝露によるアレルギー性喘息マウスへの影響**

○柳澤利枝、小池英子、Tin-Tin Win-Shwe、鈴木武博

国立環境研究所、環境リスク・健康領域

**P-02 ビスフェノール F の低用量経口曝露がアレルギー性喘息マウスの腸内細菌叢に及ぼす影響**

○鈴木武博、柳澤利枝、Tin-Tin Win-Shwe、小池英子

国立環境研究所、環境リスク・健康領域

**P-03 フラボノイド複合摂取によるアレルギー性喘息への抗アレルギー効果の検討**

○定金香里<sup>1</sup>、市瀬孝道<sup>2</sup>、吉田成一<sup>1</sup>

<sup>1</sup>大分県立看護科学大学、生体反応学、<sup>2</sup>京都大学、院、環境衛生学

**P-04 亜鉛欠乏における腸管粘膜固有層に分布するヘルパーT 細胞の動態**

○木戸尊将<sup>1</sup>、柳澤裕之<sup>2</sup>、須賀万智<sup>1</sup>

<sup>1</sup>東京慈恵会医科大学 環境保健医学講座、<sup>2</sup>東京慈恵会医科大学

**P-05 肺炎における免疫毒性発現因子としての骨髄由来免疫抑制細胞**

謝 智奇<sup>1,2</sup>、周 浩洋<sup>1</sup>、尾花 理徳<sup>1,3,4,5</sup>、藤尾 慈<sup>1,3,4</sup>、岡田 直貴<sup>1</sup>、○立花 雅史<sup>1,5</sup>

<sup>1</sup>阪大、薬、<sup>2</sup>浙大城市、薬、<sup>3</sup>阪大、先端学際、<sup>4</sup>阪大、感染症総合、<sup>5</sup>阪大、国際医工

**P-06 成分栄養療法の制御性 T 細胞誘導に及ぼす抗菌薬併用の影響**

○窪田篤人<sup>1</sup>、村瀬渉<sup>1</sup>、今井俊吾<sup>2</sup>、菅原満<sup>3</sup>、武隈洋<sup>3</sup>、小島弘幸<sup>1</sup>  
<sup>1</sup>北医療大、薬、<sup>2</sup>慶応大、薬、<sup>3</sup>北大病院、薬

**P-07 タンパク質 NEDD 化修飾機構と Regnase-1 活性調節の関係の解析**

庾庭馳、小森雄喜、○室本竜太、松田正  
北海道大学大学院薬学研究院 衛生化学研究室

**P-08 微粒子により誘導されるパイロトーシスを抑える薬剤 Dasatinib の作用機序の解析**

○武村直紀<sup>1</sup>、潘逸羲<sup>1</sup>、齊藤達哉<sup>1,2,3</sup>  
<sup>1</sup>阪大院、薬、<sup>2</sup>阪大、MEIセ、<sup>3</sup>阪大、CiDER

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

○Takumi Adachi<sup>1</sup>、Hinata Inoue<sup>1</sup>、Hiroto Izumi<sup>2</sup>、Etsushi Kuroda<sup>1</sup>  
<sup>1</sup> Department of immunology, Hyogo Medical University School of Medicine, <sup>2</sup> Department of Occupational Pneumology, Institute of Industrial Ecological Sciences, University of Occupational and Environmental Health

**P-10 加齢によって産生増大した IL-18 は Th17 型気道炎症を増強する**

○中平雅清、黒田悦史  
兵庫医科大、医学部、免疫学

**P-11 タンパク質による呼吸器アレルギーの新たな評価法の樹立**

○頼 怡廷、中山 叶子、水町 秀之、行 卓男、宮澤 正明  
花王株式会社 安全性科学研究所

**P-12 ヒト IgE 架橋活性で評価する環境中アレルギー増悪物質のハイスループットスクリーニング法の開発**

○秋山晴代<sup>1</sup>、栗坂知里<sup>1</sup>、渡部明日香<sup>1</sup>、大橋知子<sup>1</sup>、原田佳英<sup>1</sup>、中村亮介<sup>2</sup>  
<sup>1</sup>帝京平成大学、<sup>2</sup>国立医薬品食品衛生研究所

**P-13 パーソナルケア製品の皮膚局在の可視化手法に関する検討**

長尾慧<sup>1</sup>、○本田晶子<sup>2</sup>、丹嵯織<sup>2</sup>、宮坂奈津子<sup>1</sup>、邱彬洋<sup>2</sup>、石川良賀<sup>1</sup>、高野裕久<sup>1,3</sup>  
<sup>1</sup>京大院・地球環境学堂、<sup>2</sup>京大院・工、<sup>3</sup>京先端大・国際学術

**P-14 THP-1 細胞を用いたナノマテリアルの抗原提示細胞活性化能の評価法の開発とその活性化メカニズムの解析**

○山城真輝<sup>1</sup>、大野彰子<sup>2</sup>、足利太可雄<sup>2</sup>、飯島一智<sup>3</sup>

<sup>1</sup>横浜国大院、理工、<sup>2</sup>国立医薬品食品衛生研究所、<sup>3</sup>横浜国大院、工

**P-15 気管支上皮モデルと THP-1 細胞を組み合わせたナノマテリアルの吸入毒性評価法の開発に向けた気管支上皮分泌サイトカインの解析**

○荒井りおん<sup>1</sup>、西田明日香<sup>1</sup>、高橋遙<sup>1</sup>、中浜美月<sup>1</sup>、大野彰子<sup>2</sup>、足利太可雄<sup>2</sup>、飯島一智<sup>3</sup>

<sup>1</sup>横浜国大院、理工、<sup>2</sup>国立医薬品食品衛生研究所、<sup>3</sup>横浜国大院、工

**P-16 遺伝子検出をベースとした新型コロナウイルスに対する細胞性免疫検査法の開発とその応用可能性**

○東久世裕太、齊藤太郎、片山有基

ミナリスメディカル株式会社

**P-17 インフリキシマブとアダリムマブに対する抗薬物抗体パネルの作製と IgE 型抗薬物抗体の評価**

○鈴木琢雄、多田稔、石井明子

国立医薬品食品衛生研究所

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

○Hiroko Shibata<sup>1</sup>, Kazuko Nishimura<sup>1</sup>, Eri Tsukagoshi<sup>1</sup>, Emu Ikarigawa<sup>2</sup>, Yasuo Suzuki<sup>2</sup>, Yoshiro Saito<sup>1</sup>, Akiko Ishii-Watabe<sup>1</sup>

<sup>1</sup>Natl Inst Health Sci, <sup>2</sup>Ginza Central Clinic

**P-19 バイオ医薬品の免疫原性評価における抗体価測定法に関する留意事項**

○西村和子<sup>1</sup>、柴田寛子<sup>1</sup>、碓川絵夢<sup>2</sup>、鈴木琢雄<sup>1</sup>、鈴木康夫<sup>2</sup>、齋藤嘉朗<sup>3</sup>、石井明子<sup>1</sup>

<sup>1</sup>国立衛研・生物薬品部、<sup>2</sup>銀座セントラルクリニック、<sup>3</sup>国立衛研

**P-20 バイオ医薬品の免疫原性予測のための T cell assay の標準化に向けた基礎的検討**

○青山道彦、多田稔、石井明子

国立医薬品食品衛生研究所 生物薬品部

11:10 ~ 11:50 学生・若手ポスターディスカッション <Y-01 ~ Y-07>

学生・若手プレゼンテーション <Y-01 ~ Y-07> にて口頭発表される内容を、ポスターでもご発表いただきます。学生・若手優秀発表賞は、口頭とポスター両方の内容を考慮して選考されます。

<小休憩>

Main Hall(S会場)

12:00 ~ 12:50 ランチョンセミナー1 (株式会社島津製作所) <LS-01>

LS-01 バイオ医薬品中の不溶性微粒子の評価

○前田 裕貴<sup>1</sup>、十時 慎一郎<sup>2</sup>

<sup>1</sup>株式会社 島津製作所 分析計測事業部 Solutions COE マテリアル インフラストラクチャーソリューションユニット インストルメンツエキスパートグループ、<sup>2</sup>株式会社 島津製作所 分析計測事業部 試験機ビジネスユニット

<小休憩>

13:00 ~ 13:40 日本免疫毒性学会総会(兼評議員会)

13:40 ~ 14:25 第30回記念講演 <ML-01 ~ ML-02>

「免疫毒性学の継往開来」

座長 齋藤嘉朗(国立医薬品食品衛生研究所)

ML-01 免疫毒性学の黎明期 ~ 毒性発現標的としての免疫機構と環境因子による免疫変容 ~

○吉田貴彦

旭川医科大学 名誉教授(第4代理事長)

ML-02 ICH S8 ガイドラインの意義と新たな課題

○中村和市

北海道大学獣医学研究院(第5代理事長)

<小休憩>

**14:30 ~ 15:20 特別講演1 <SL-01>**

座長 中村亮介(国立医薬品食品衛生研究所)

**SL-01 日本におけるワクチン開発:SCARDA の取り組み**

○古賀淳一

国立医療研究開発機構、先進的研究開発戦略センター(SCARDA)

<小休憩>

**15:30 ~ 17:30 シンポジウム <S-01 ~ S-05>**

**「新規モダリティ医薬品・ワクチン開発における免疫毒性」**

座長 石井明子(国立医薬品食品衛生研究所)、松村匠悟(アステラス製薬株式会社)

**S-01 新規モダリティ医薬品・ワクチン開発における免疫毒性**

○石井明子

国立医薬品食品衛生研究所 生物薬品部

**S-02 AAV ベクター製品の免疫毒性評価の課題**

○松村匠悟

アステラス製薬株式会社、開発研究、非臨床バイオメディカルサイエンス、探索病態生理

**S-03 CAR-T 細胞製品の非臨床評価～免疫毒性を中心に～**

○藤原由佳理

ノバルティス ファーマ株式会社 グローバル医薬品開発本部 探索開発

**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 (R 会場)

**18:00 ~ 20:00 懇親会**

学生・若手優秀発表賞授賞式

9:05 ~ 9:35 一般演題1 <O-01 ~ O-02>

座長 久保千代美(中外製薬株式会社)

**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 Tsukagoshi<sup>1</sup>, Ryosuke Nakamura<sup>1</sup>, Hideo Asada<sup>2</sup>, Yoshiro Saito<sup>1</sup>

<sup>1</sup>National Institute of Health Sciences, <sup>2</sup>Nara Medical University

**O-02 HLA 多型の関与する薬物過敏症の発症における解糖系代謝の重要性**

○薄田健史<sup>1</sup>、青木重樹<sup>2</sup>、孫雨晨<sup>3</sup>、早川芳弘<sup>1</sup>

<sup>1</sup>富大院薬・生体防御学領域 がん免疫ユニット、<sup>2</sup>千葉大院薬・生物薬剤、<sup>3</sup>国立衛研

<小休憩>

9:40 ~ 10:30 特別講演2 <SL-02> – オンライン –

座長 西村泰光(川崎医科大学)

**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

<小休憩>

10:35 ~ 11:35 一般演題1 <O-03 ~ O-06>

座長 佐々木泉(和歌山県立医科大学)、室本竜太(北海道大学)

**O-03 A stress sensor *IRE1α* is required for bacterial exotoxin-induced inflammasome activation in tissue resident macrophages**

○Izumi Sasaki<sup>1</sup>, Naoko Wakaki-Nishiyama<sup>1</sup>, Daisuke Okuzaki<sup>2</sup>, Shuhei Morita<sup>3</sup>, Takashi Kato<sup>1</sup>, Asumi Yamamoto<sup>1</sup>, Koichi Furukawa<sup>4</sup>, Tsuneyasu Kaisho<sup>1</sup>

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

**O-04 生体内マクロファージにおけるパイリンインフラマソーム活性化機構の解明**

○加治汐梨<sup>1</sup>、佐々木泉<sup>2</sup>、古田有希<sup>3</sup>、加藤喬<sup>2</sup>、西山奈央子<sup>2</sup>、山本明日美<sup>2</sup>、北野雅之<sup>1</sup>、改正恒康<sup>2</sup>

<sup>1</sup>和歌山県立医科大学内科学第二講座、<sup>2</sup>和歌山県立医科大学先端医学研究所生体調節機構研究部、<sup>3</sup>和歌山県立医科大学外科学第一講座

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

○Hideki Hara<sup>1,2</sup>, Yasuyuki Matsuda<sup>1</sup>, Akihiko Yoshimura<sup>2</sup>, Gabriel Nunez<sup>3</sup>

<sup>1</sup>Infect Dis, Asahikawa Med Univ, <sup>2</sup>Microbiol Immunol, Keio Univ Med, <sup>3</sup>Pathol, Med Univ Michi.

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

○Yuka Nagata<sup>1</sup>, Risa Kohno<sup>1</sup>, Tomohiro Ishihara<sup>1</sup>, Chisato Amma<sup>1</sup>, Yayoi Inomata<sup>2</sup>, Takafumi Seto<sup>3</sup> and Ryo Suzuki<sup>1</sup>

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

<移動>

大会議室(L会場)

**11:50 ~ 12:40 ランチョンセミナー2 (フォーネスライフ株式会社) <LS-02>**

**LS-02 SomaScan を用いた新規タンパク質バイオマーカー探索と臨床応用**

○荒川憲昭

国立医薬品食品衛生研究所 医薬安全科学部

<移動>

Main Hall(S会場)

**12:55 ~ 13:50 表彰式・受賞講演 <AL-01 ~ AL-02>**

表彰式プレゼンター 齋藤嘉朗(国立医薬品食品衛生研究所)

座長 吉岡靖雄(大阪大学微生物病研究所)

**学会賞受賞講演**

**AL-01 生殖免疫毒性という新たな概念の確立**

○中村和市

北海道大学獣医学研究院トランスレーショナルリサーチ推進室(附属動物病院)



## 奨励賞受賞講演

### AL-02 金属アレルギーの発症メカニズムと予防・治療法に関する研究

○黒石智誠

東北大院歯、口腔分子制御

### 13:50 ~ 14:35 教育講演 <EL-01>

座長 青木重樹(千葉大学大学院薬学研究院)

### EL-01 重症薬疹の発症メカニズム

○阿部理一郎

新潟大学医歯学総合研究科皮膚科

<小休憩>

### 14:40 ~ 16:40 試験法ワークショップ <WS-01 ~ WS-04>

#### 「ヒト免疫系を模した評価モデルの現状と将来展望」

座長 間 哲生(第一三共株式会社)、坂入鉄也(田辺三菱製薬株式会社)

### WS-01 HLA トランスジェニックマウスを活用した薬物毒性研究の現状と展望

○青木重樹

千葉大院、薬

### WS-02 ヒト化マウスやゲノミクス技術を用いたワクチンアジュバントの安全性評価

○佐々木 永太

国立感染症研究所 治療薬・ワクチン開発研究センター

### 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 老化促進モデルマウス(SAM)の老化病態に関わる免疫学的特徴 ~高齢者免疫毒性評価モデルとしての意義~

○西村泰光

川崎医科大学衛生学

16:40 ~ 16:50 年会賞授賞式、閉会の挨拶

第3日目 9月13日(水)

大会議室(L会場)

9:10 ~ 9:15 開会の挨拶

第30回日本免疫毒性学会学術年会

年会長

中村亮介

9:15 ~ 11:50 公開シンポジウム <OS-01 ~ OS-04>

「環境中化学物質の免疫毒性リスク評価」

座長 大野浩一(国立環境研究所)

OS-01 環境から曝露される化学物質の健康リスク評価

○青木康展

国立環境研究所

OS-02 医薬部外品及び食品中化学物質のリスク評価

○手島玲子

岡山理科大学獣医学部食品衛生講座

OS-03 疫学研究からみた化学物質曝露とアレルギー疾患の関係

○山本貴和子、大矢幸弘

国立成育医療研究センターエコチル調査研究部・アレルギーセンター

OS-04 免疫毒性に基づく化学物質の健康有害性とリスク評価

○小池英子<sup>1</sup>、大野浩一<sup>1</sup>、中島孝幸<sup>2</sup>、鈴木規之<sup>1</sup>、青木康展<sup>1</sup>

<sup>1</sup>国立環境研究所、<sup>2</sup>地球・人間環境フォーラム

11:50 ~ 11:55 閉会の挨拶

国立環境研究所企画部

フェロー

鈴木規之

# Program

## Day 1: September 11<sup>th</sup> (Monday)

### Main Hall (Venue S)

#### 9:20 ~ 9:30 Opening Remarks

The 30<sup>th</sup> Annual Meeting of the Japanese Society of Immunotoxicology

President: Ryosuke Nakamura

The 81<sup>st</sup> 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 Matsuzaka<sup>1</sup>, Hiroki Yamaguchi<sup>1</sup>, Chiharu Ohira<sup>1</sup>, Tomoe Kurita<sup>1</sup>, Tomomi Nishino<sup>2</sup>, Kyoko Noda<sup>2</sup>, Kazutoshi Sugita<sup>3</sup>, Masayo Kushiro<sup>4</sup>, Shiro Miyake<sup>2</sup>, Tomoki Fukuyama<sup>1</sup>

<sup>1</sup> Pharmacology lab, Vet Med, Azabu Univ, <sup>2</sup> Food and Hygiene lab, Azabu Univ, <sup>3</sup> Public Health lab, Azabu Univ, <sup>4</sup> 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 Sakamoto<sup>1</sup>, Tomohiro Shirayanagi<sup>1</sup>, Keitaro Umezawa<sup>2</sup>, Akira Kazaoka<sup>1</sup>, Yuri Miura<sup>2</sup>, Kousei Ito<sup>1</sup>, Shigeki Aoki<sup>1</sup>

<sup>1</sup>Grad Sch of Pharm Sci, Chiba Univ, <sup>2</sup>TMIG

**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 Sakai<sup>1</sup>, Masako Sato<sup>2</sup>, Kazuhiko Matsuo<sup>1</sup>, Yuta Hara<sup>1</sup>, Takashi Nakayama<sup>1</sup>

Kindai University Faculty of Pharmacy

<sup>1</sup>Kindai University Faculty of Pharmacy, <sup>2</sup>Kindai 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 anti-allergic effects of combined intake of flavonoids on allergic asthma**

○Kaori Sadakane<sup>1</sup>, Takamichi Ichinose<sup>2</sup>, Seiichi Yoshida<sup>1</sup>

<sup>1</sup> Oita University of Nursing and Health Sciences, <sup>2</sup> 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<sup>1,2</sup>, Haoyang Zhou<sup>1</sup>, Masanori Obana<sup>1,3,4,5</sup>, Yasushi Fujio<sup>1,3,4</sup>, Naoki Okada<sup>1</sup>, ○Masashi Tachibana<sup>1,5</sup>

<sup>1</sup> Pharm Sci, Osaka Univ, <sup>2</sup> Pharm, Hangzhou City Univ, <sup>3</sup> OTRI, <sup>4</sup> CiDER, <sup>5</sup> MEIC, Osaka, Univ

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

○Atsuhito Kubota<sup>1</sup>, Wataru Murase<sup>1</sup>, Syungo Imai<sup>2</sup>, Mitsuru Sugawara<sup>3</sup>, Yho Takekuma<sup>3</sup>, Hiroyuki Kojima<sup>1</sup>

<sup>1</sup> Pharm Sci, Helth Sci Uni Hokkaido, <sup>2</sup> Pharm Sci, Keio Uni, <sup>3</sup> Department 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 Takemura<sup>1</sup>, Yixi Pan<sup>1</sup>, Tatsuya Saitoh<sup>1,2,3</sup>

<sup>1</sup> Grad Sch Pharm Sci, Osaka Univ, <sup>2</sup> Global Ctr, Med Eng Inform, Osaka Univ, <sup>3</sup> CiDER, 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 Adachi<sup>1</sup>, Hinata Inoue<sup>1</sup>, Hiroto Izumi<sup>2</sup>, Etsushi Kuroda<sup>1</sup>

<sup>1</sup> Department of immunology, Hyogo Medical University School of Medicine, <sup>2</sup> 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 Akiyama<sup>1</sup>, Chisato Kurisaka<sup>1</sup>, Asuka Watabe<sup>1</sup>, Tomoko Ohashi<sup>1</sup>, Kae Harada<sup>1</sup>, Ryosuke Nakamura<sup>2</sup>

<sup>1</sup>Teikyo Heisei Univ, <sup>2</sup>Natl Inst Health Sci

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

Megumi Nagao<sup>1</sup>, ○Akiko Honda<sup>2</sup>, Saori Tan<sup>2</sup>, Natsuko Miyasaka<sup>1</sup>, Binyang Qiu<sup>2</sup>, Raga Ishikawa<sup>1</sup>, Hirohisa Takano<sup>1,3</sup>

<sup>1</sup> Grad. Sch. of Global Environ. Studies, Kyoto Univ., <sup>2</sup> Grad. Sch. of Eng., Kyoto Univ., <sup>3</sup> 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 Yamashiro<sup>1</sup>, Akiko Ohno<sup>2</sup>, Takao Ashikaga<sup>2</sup>, Kazutoshi Iijima<sup>3</sup>

<sup>1</sup>Grad Sch Eng Sci, Yokohama National Univ, <sup>2</sup>Natl Inst Health Sci, <sup>3</sup>Fac 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 Arai<sup>1</sup>, Asuka Nishida<sup>1</sup>, Haruka Takahashi<sup>1</sup>, Mizuki Nakahama<sup>1</sup>, Akiko Ohno<sup>2</sup>, Takao Ashikaga<sup>2</sup>, Kazutoshi Iijima<sup>3</sup>  
<sup>1</sup>Grad Sch Eng Sci, Yokohama National Univ, <sup>2</sup>Natl Inst Health Sci, <sup>3</sup>Fac 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 Shibata<sup>1</sup>, Kazuko Nishimura<sup>1</sup>, Eri Tsukagoshi<sup>1</sup>, Emu Ikarigawa<sup>2</sup>, Yasuo Suzuki<sup>2</sup>, Yoshiro Saito<sup>1</sup>, Akiko Ishii-Watabe<sup>1</sup>  
<sup>1</sup>Natl Inst Health Sci, <sup>2</sup>Ginza Central Clinic
- P-19 Points to consider in antibody titer assay for immunogenicity assessment**  
○Kazuko Nishimura<sup>1</sup>, Hiroko Shibata<sup>1</sup>, Emu Ikarigawa<sup>2</sup>, Takuo Suzuki<sup>1</sup>, Yasuo Suzuki<sup>2</sup>, Yoshiro Saito<sup>3</sup>, Akiko Ishii-Watabe<sup>1</sup>  
<sup>1</sup>DBC, Natl Inst Health Sci, <sup>2</sup>Ginza Central Clinic, <sup>3</sup>Natl 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 Maeda<sup>1</sup>, Shinichiro Totoki<sup>2</sup>

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

<Break>

**13:00 ~ 13:40 General Assembly**

**13:40 ~ 14:25 30<sup>th</sup> 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 12<sup>th</sup> (Tuesday)**

**Main Hall (Venue S)**

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

Chairperson: Chiyomi 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 Tsukagoshi<sup>1</sup>, Ryosuke Nakamura<sup>1</sup>, Hideo Asada<sup>2</sup>, Yoshiro Saito<sup>1</sup>

<sup>1</sup>National Institute of Health Sciences, <sup>2</sup>Nara Medical University

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

○Takeshi Susukida<sup>1</sup>, Shigeki Aoki<sup>2</sup>, Yuchen Sun<sup>3</sup>, Yoshihiro Hayakawa<sup>1</sup>

<sup>1</sup> Grad School of Pharm Sci, Univ of Toyama, <sup>2</sup> Grad School of Pharm Sci, Chiba Univ, <sup>3</sup> 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 $\alpha$  is required for bacterial exotoxin-induced inflammasome activation in tissue resident macrophages**

○Izumi Sasaki<sup>1</sup>, Naoko Wakaki-Nishiyama<sup>1</sup>, Daisuke Okuzaki<sup>2</sup>, Shuhei Morita<sup>3</sup>, Takashi Kato<sup>1</sup>, Asumi

Yamamoto<sup>1</sup>, Koichi Furukawa<sup>4</sup>, Tsuneyasu Kaisho<sup>1</sup>

<sup>1</sup>Department of Immunology, Institute of Advanced Medicine, Wakayama Medical University, <sup>2</sup>Genome Information Research Center, Research Institute for Microbial Diseases, Osaka University, <sup>3</sup>First Department of Medicine, Wakayama Medical University, <sup>4</sup>Department 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 Kaji<sup>1</sup>, Izumi Sasaki<sup>2</sup>, Yuki Furuta<sup>3</sup>, Takashi Kato<sup>2</sup>, Naoko Nishiyama<sup>2</sup>, Asumi Yamamoto<sup>2</sup>, Masayuki Kitano<sup>1</sup> and Tsuneyasu Kaisho<sup>2</sup>

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

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

○Hideki Hara<sup>1,2</sup>, Yasuyuki Matsuda<sup>1</sup>, Akihiko Yoshimura<sup>2</sup>, Gabriel Nunez<sup>3</sup>

<sup>1</sup>Infect Dis, Asahikawa Med Univ, <sup>2</sup>Microbiol Immunol, Keio Univ Med, <sup>3</sup>Pathol, Med Univ Michi.

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

○Yuka Nagata<sup>1</sup>, Risa Kohno<sup>1</sup>, Tomohiro Ishihara<sup>1</sup>, Chisato Amma<sup>1</sup>, Yayoi Inomata<sup>2</sup>, Takafumi Seto<sup>3</sup> and Ryo Suzuki<sup>1</sup>

<sup>1</sup>Fac Pharm Sci, Inst Med Pharm Sci & Health Sci, Kanazawa Univ, <sup>2</sup>Inst Nat & Environ Technol, Kanazawa Univ, <sup>3</sup>Fac 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

<Move>

**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 30<sup>th</sup> Annual Meeting**

**Closing Remarks**

**Day 3: September 13<sup>th</sup> (Wednesday)**

**Large Conference Room (Venue L)**

**9:10 ~ 9:15 Opening Remarks**

The 30<sup>th</sup> 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 Koike<sup>1</sup>, Koichi Ohno<sup>1</sup>, Takayuki Nakajima<sup>2</sup>, Noriyuki Suzuki<sup>1</sup>, Yasunobu Aoki<sup>1</sup>

<sup>1</sup>National Institute for Environmental Studies, <sup>2</sup>Global Environmental Forum

**11:50 ~ 11:55 Closing Remarks**

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