

## Plenary Lecture

September 4 (Wed) 15:00-15:50 Room A (Susei Hall)

Chair: Atsushi Matsuzawa (Grad. Sch. Pharm. Sci., Tohoku Univ.)

### ***PL-1* Interaction of mercury and selenium**

○ Akira Naganuma

(Tohoku University)

## Educational Lecture

September 5 (Thu) 11:10-11:50 Room A (Susei Hall)

Chair: Atsushi Matsuzawa (Grad. Sch. Pharm. Sci., Tohoku Univ.)

### ***EL-1* The safety of so-called health foods as a basic knowledge for pharmacists**

○ Chikako Uneyama

(Natl. Inst. Health Sci.)

## Award Lectures

### Scientific Award

September 5 (Thu) 13:00-13:30 Room A (Susei Hall)

Chair: Toshiyuki Kaji (Fac. Pharm. Sci., Tokyo Univ. Sci.)

### ***AL-1* Molecular mechanisms for toxic metals-induced vascular toxicity**

○ Yasuyuki Fujiwara

(Sch. Pharm., Tokyo Univ. Pharm. Life Sci.)

### Kanehara Award

September 5 (Thu) 13:30-13:50 Room A (Susei Hall)

Chair: Shogo Misumi (Grad. Sch. Pharm. Sci., Kumamoto Univ.)

### ***AL2-1* Metabolic hijacking and the role of glycolytic enzymes in viral replication**

○ Naoki Kishimoto

(Grad. Sch. Pharm. Sci., Kumamoto Univ.)

September 5 (Thu) 13:50-14:10 Room A (Susei Hall)

Chair: Yaichiro Kotake (Grad. Sch. Biomed. Health Sci, Hiroshima Univ.)

**AL2-2 Nutritional Functions of Polyunsaturated Fatty Acids Focusing on Drug Metabolizing Enzymes**

○ Ami Oguro

(Grad. Sch. of Biomed. and Health Sci, Hiroshima Univ.)

## Invited Lecture

September 4 (Wed) 12:30-13:00 Room A (Susei Hall)

Chair: Shuntaro Hara (Sch. of Pharm., Showa Univ.)

**IL-1 Development of a convenient test for determining skin sensitization potential of chemicals *in chemico***

○ Tae Cheon Jeong, Rahul U. Nepal

(College of Pharmacy, Yeungnam University, Gyeongsan, Republic of Korea)

## Forum I : Environmental pollutants in the water and atmospheric systems –Distribution, toxicity, and countermeasure–

September 4 (Wed) 9:00-11:00 Room A (Susei Hall)

Organizer / Chair: Fumihiko Ogata (Fac. Pharm., Kindai Univ.)

Ken Tachibana (Fac. Pharm. Sanyo-Onoda City Univ.)

**F1-1 Environmental dynamics of microplastics and nanoplastics from land to seabed and atmosphere**

○ Shuhei Tanaka, Tamaki Morioka, Sachithra Imbulana

(Grad. Global Env. Stu, Kyoto Univ)

**F1-2 Development of standards of microplastics based on the real-world physical properties toward evaluation of their biological effects**

○ Kazuma Higashisaka<sup>1,2,3</sup>, Hirofumi Tsujino<sup>2,3,4</sup>, Yuya Haga<sup>2,3</sup>, Yasuo Tsutsumi<sup>2,3,5,6</sup>

(<sup>1</sup>IACS, Osaka Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Osaka Univ.,

<sup>3</sup>Sch. Pharm. Sci., Osaka Univ., <sup>4</sup>Museum Links, Osaka Univ., <sup>5</sup>MEI Ctr., Osaka Univ.,

<sup>6</sup>OTRI., Osaka Univ.)

**F1-3 Impact of Artificial Sunlight Aging on the Respiratory Effects of Polyethylene Terephthalate Microplastics through Degradation-Mediated Terephthalic Acid Release**

○ Yasuhiro Ishihara<sup>1</sup>, Mizuo Kajino<sup>2</sup>, Hiroshi Okochi<sup>3</sup>

(<sup>1</sup>Grad. Sch. Integr. Sci. Life, Hiroshima Univ,

<sup>2</sup>Meteorol. Res. Inst., Japan Meteorol. Agency,

<sup>3</sup>Sch. Creative Sci. Engineer., Waseda Univ.)

**F1-4 Environmental contamination and human exposure to per- and polyfluoroalkyl substances (PFAS)**

○ Yukiko Fujii

(Fac. Pharm. Sci., Daiichi Univ.)

## **Forum II : Toxicity testing by new approach methodologies (NAMs)**

September 4 (Wed) 16:00-18:00 Room A (Suisei Hall)

Organizer / Chair: Yasunari Kanda (Div. Pharmacol., NIHS)

Seigo Sanoh (Sch. Pharm. Sci., Wakayama Med. Univ.)

**F2-1 Utility and future perspective of chimeric mice with humanized liver for prediction of drug metabolism, pharmacokinetics, and hepatotoxicity**

○ Seigo Sanoh

(Sch. Pharm. Sci., Wakayama Med. Univ.)

**F2-2 Generation of small intestine-like tissue using microfluidic devices and human ES/iPS cells**

○ Sayaka Deguchi, Kazuo Takayama

(CiRA, Kyoto Univ.)

**F2-3 Development of machine learning models for predicting skin sensitization intensity using New Approach Methodologies (NAMs)**

○ Kaori Ambe

(Grad. Sch. Pharm. Sci., Nagoya City Univ.)

**F2-4 Current status and future perspectives on NAM-based approach**

○ Yasunari Kanda

(NIHS)

## **Forum III : Lipid metabolism and biological responses associated with health and disease**

September 5 (Thu) 9:00-11:00 Room A (Susei Hall)

Organizer / Chair: Hirotaka Imai (Sch. Pharm. Sci., Kitasato Univ.)

Atsushi Matsuzawa (Grad. Sch. Pharm. Sci., Tohoku Univ.)

### **F3-1 Analysis of preventive effects of antibiotic cefoperazone on the cardio sudden death by decrease of vitamin E**

○ Tomoko Koumura, Narumi Watanabe, Shion Nagashima, Hirotaka Imai  
(Sch. of Pharm. Sci., Kitasato Univ.)

### **F3-2 A comprehensive understanding of the mechanisms of actions of diverse *trans*-fatty acid species**

○ Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

### **F3-3 Functional analysis of long-chain acyl CoA synthetase 4 in various pathological conditions**

○ Shuntaro Hara, Yuki Tomitsuka, Tsubasa Ochiai, Hiroshi Kuwata  
(Sch. Pharm., Showa Univ.)

### **F3-4 Homeostasis of cell membrane phospholipid fatty acid composition and cellular stress**

○ Junken Aoki, Nozomu Kono  
(Grad. Sch. Pharm. Sci., Univ. Tokyo)

## **Forum IV : Cutting-edge research on redox supramolecules and reactive species**

September 5 (Thu) 14:20-16:20 Room A (Susei Hall)

Organizer / Chair: Fan-Yan Wei (IDAC, Tohoku Univ.)

Yoshiro Saito (Grad. Sch. Pharm. Sci., Tohoku Univ.)

### **F4-1 Biological defense mediated by redox supramolecule “selenoprotein” and its metabolic control**

○ Yoshiro Saito  
(Grad. Sch. Pharm. Sci., Tohoku Univ.)

### **F4-2 Elucidation of the mechanisms underlying iron-induced ferroptosis**

○ Hiroaki Fujita, Kazuhiro Iwai  
(Med., Kyoto Univ)

***F4-3* Nitric oxide in the brain involved in age-related memory impairment**

○ Ayako Tonoki  
(Grad. Sch. Pharm. Sci., Chiba Univ.)

***F4-4* The regulation of supersulfides under chronic hypoxia**

○ Hiroki Sekine  
(Grad. Sch. Med., Tohoku Univ.)

***F4-5* RNA sulfur modification in stress response**

○ Fan-Yan Wei  
(IDAC, Tohoku Univ.)

## **2024 Japan/Korea Joint Symposium on Pharmaceutical Health Science and Environmental Toxicology**

September 4 (Wed) 11:30-12:30 Room A (Susei Hall)

Chair: Kyung-Min Lim (College of Pharmacy, Ewha Womans University)

Seigo Sanoh (Sch. Pharm. Sci., Wakayama Med. Univ.)

**S-1 Challenge to elucidate the mechanism of breast cancer development caused by estrogen**

○ Yoshinori Okamoto, Akira Aoki, Hideto Jinno  
(Faculty of Pharmacy, Meijo University)

**S-2 Supersulfide for Stress Regulation**

○ Masahiro Akiyama  
(Department of Clinical Immuno Oncology, Clinical Research Institute for Clinical Pharmacology and Therapeutics, Showa University)

**S-3 An alternative animal testing model utilizing the air-liquid interface method for inhalation toxicity risk assessment**

○ Yong Joo Park  
(College of Pharmacy, Kyungsung University, Busan 48334, Republic of Korea)

**S-4 Multiple mechanisms of alcohol-associated liver injury and a novel therapeutic approach to treat liver fibrosis**

○ Wonhyo Seo  
(College of Pharmacy, Ewha Womans University, Seoul, Korea)

# 2024 Japan/Korea Joint Symposium on Pharmaceutical Health Science and Environmental Toxicology: Poster Session

September 4 (Wed) 14:10-14:50 Room C (1F)

- PS-01 Elucidation of defense response mechanism in green microalgae *Chlamydomonas reinhardtii* under copper ion exposure**  
○ Ryotaro Tsutsumi<sup>1</sup>, Risa Yoshimoto<sup>2</sup>, Jiro Miura<sup>3</sup>, Takuya Yamashita<sup>1</sup>, Kazumasa Hirata<sup>1,2</sup>, Kazuya Nagano<sup>1</sup>  
(<sup>1</sup>Sch. Pharm. Sci., Wakayama Medical Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Osaka Univ., <sup>3</sup>Grad. Sch. Dent. Sci., Osaka Univ.)
- PS-02 Perfluorooctane sulfonate (PFOS)-induced functional changes on human erythrocyte and its increased susceptibility of prothrombotic activity by a diabetic metabolite**  
○ Hanjin Park, OK-Nam Bae  
(Department of Pharmacy, Hanyang University, Republic of Korea)
- PS-03 Molecular and structural change of macrophages in mammary papilla of lactating female mice**  
○ Yukiko Marunaka, Kei Nakayama, Hiroshi Hasegawa  
(Lab. Hygienic. Sci., Kobe Pharm. Univ.)
- PS-04 Autophagy dysregulation and ferroptosis mediates BBB dysfunction after ZnO-nanoparticle exposure**  
○ Seung Mi Baek, Eun-Hye Kim, Ok-Nam Bae  
(Department of Pharmacy, Hanyang University, Republic of Korea)
- PS-05 Ambivalent role of prostacyclin synthase in inflammatory reactions**  
○ Toshiya Honsawa, Tsubasa Ochiai, Hiroshi Kuwata, Shuntaro Hara  
(Sch. of Pharm., Showa Univ.)
- PS-06 Neuroprotective effects of 5-hydroxyindole, a gut microbial metabolite, against glutamate-induced toxicity in mouse hippocampal cells**  
○ Jun Ho Cho, OK-Nam Bae  
(Department of Pharmacy, Hanyang University, Republic of Korea)
- PS-07 Maternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin induces the growth retardation in postnatal offspring: transgenerational toxicity and the restoration by aripiprazole intervention**  
○ Xing Zou<sup>1</sup>, Ming Yuan<sup>1</sup>, Tomoki Takeda<sup>1,2</sup>, Yoshitaka Tanaka<sup>1</sup>, Yuji Ishii<sup>1</sup>  
(<sup>1</sup>Grad Sch Pharmaceuti Sci., Kyushu Univ., <sup>2</sup>F-SEEDS)

- PS-08 Effects of selected pyrethroid compounds on steroidogenesis in H295R cultured cells**  
○ Darlene Mae Ortiz, Handule Lee, Juyoung Park, Ngoc Minh-Hong Hoang, Kwangsik Park  
(Dongduk Women's University, Seoul, Republic of Korea)
- PS-09 Dihydropyrazine application to prevent and treat sepsis: therapeutic effect in multiple organs**  
○ Madoka Sawai<sup>1</sup>, Yutaka Tatano<sup>1</sup>, Katsuya Miyake<sup>3</sup>, Jian-Rong Zhou<sup>2</sup>, Taku Kaitsuka<sup>1</sup>, Hisao Kansui<sup>2</sup>, Yuu Miyauchi<sup>2</sup>, Shinji Takechi<sup>2</sup>  
(<sup>1</sup>Sch. Pharm., at Fukuoka. Int. Univ. Health & Welfare.,  
<sup>2</sup> Fac. Pharmaceut. Sci., Sojo Univ., <sup>3</sup>Cbmr., at Narita. Int. Univ. Health & Welfare.)
- PS-10 Estrogen Receptor/Androgen Receptor Transcriptional Activation Assay for the Pyrethroid compounds**  
○ Handule Lee, Juyoung Park, Darlene Mae Ortiz, Ngoc Minh-Hong Hoang, Kwangsik Park  
(College of Pharmacy, Dongduk Women's University, South Korea.)
- PS-11 Elucidation of the mechanism by which the cystine transporter SLC7A11 promotes oxidative stress-induced parthanatos**  
○ Ryo Ito, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- PS-12 Effects of lysine acetylation on high-fat diet fed mouse model**  
○ Hyunchae Sim<sup>1</sup>, Yan Gao<sup>2</sup>, Ji Hyun Lee<sup>3</sup>, Ann-Yae Na<sup>4</sup>, Sunghwan Ki<sup>3</sup>, Sangkyu Lee<sup>1</sup>  
(<sup>1</sup>School of Pharmacy, Sungkyunkwan Univ.,  
<sup>2</sup>College of Pharmacy, Kyungpook Nat'l Univ., <sup>3</sup>College of Pharmacy, Chosun Univ.,  
<sup>4</sup>KNU LAMP Research Center, Kyungpook Nat'l Univ., Republic of Korea)
- PS-13 Novel induction mechanisms of Smac-independent apoptosis induced by the anti-tumor kinase LKB1**  
○ Maki Mitsuya, Yutaro Yamada, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- PS-14 Role of PCBs in respiratory diseases: Analysis of their association with asthma**  
○ Ah-Yoon Song, Hye-Jin Jeong, Yeon-Ho Kang, Hye-In Park, YooJin Lee, Yong Joo Park  
(College of Pharmacy, Kyungsung University, Busan 48334, Republic of Korea)



- PS-15 A sub-lethal dose of methylglyoxal treatment confers cellular resistance to ferroptosis**  
○ Takuya Niijima<sup>1</sup>, Yusuke Hirata<sup>1</sup>, Takuya Noguchi<sup>1</sup>, Motoharu Hamada<sup>2</sup>, Atsushi Matsuzawa<sup>1</sup>  
(<sup>1</sup> Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.,  
<sup>2</sup> Dept. of Virol., Grad. Sch. of Med. Sci., Nagoya City Univ.)
- PS-16 Toxicity of Pyrethroid Insecticides on Human Bronchial Epithelial Cells**  
○ Hye-In Park, Hye-Jin Jeong, Yeon-Ho Kang, Ah-Yoon Song, YooJin Lee, Yong Joo Park  
(College of Pharmacy, Kyungshung University, Busan 48334, Republic of Korea)
- PS-17 Elucidation of the anti-inflammatory mechanisms of new quinolone antibiotics**  
○ Kohei Otani, Tomohiro Kagi, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- PS-18 Assessing the mixture toxicity of S-421 with pyrethroid insecticides**  
Hye-Jin Jeong, Yeon-Ho Kang, Ah-Yoon Song, Hye-In Park, ○ YooJin Lee, Yong Joo Park  
(College of Pharmacy, Kyungshung University, Busan 48334, Republic of Korea)
- PS-19 A comprehensive toxicological analysis of *trans*-fatty acids (TFAs) based on a novel toxicity mechanism**  
○ Shinnosuke Kimura, Yusuke Hirata, Ryota Kojima, Naoki Kashiwabara, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- PS-20 PHMG-induced modulation of neutrophil and macrophage activation and its implications for cancer development**  
○ Hye-Jin Jeong, Ah-Yoon Song, Yeon-Ho Kang, Hye-In Park, YooJin Lee, Yong Joo Park  
(College of Pharmacy, Kyungshung University, Busan 48334, Republic of Korea)
- PS-21 Chemical knockdown of selenoprotein P by curcuminoids**  
○ Wang Yinuo<sup>1,2</sup>, Takashi Toyama<sup>1</sup>, Hiroyuki Yamakoshi<sup>3</sup>, Yoshiharu Iwabuchi<sup>3</sup>, Yoshiro Saito<sup>1</sup>  
(<sup>1</sup> Laboratory of Molecular Biology and Metabolism. Grad. Sch. Pharm. Sci., Tohoku Univ.,  
<sup>2</sup> Medicine in Traditional Chinese Medicine, Xiamen University, Malaysia,  
<sup>3</sup> Laboratory of Synthetic Chemistry. Grad. Sch. Pharm. Sci., Tohoku Univ.)

- PS-22 Toxicity of household chemicals in human bronchial epithelial cell associated with autophagy and apoptosis**  
○ Yeon-Ho Kang, Hye-Jin Jeong, Ah-Yoon Song, Hye-In Park, YooJin Lee, Yong Joo Park  
(College of Pharmacy, Kyungsung University, Busan 48334, Republic of Korea)
- PS-23 Search for genes affecting the toxicity of the dopaminergic neurotoxin MPP<sup>+</sup>**  
○ Futa Suzuki, Masatsugu Miyara, Yaichiro Kotake  
(Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)
- PS-24 Endoplasmic reticulum stress as a key factor in bisphenol A-induced cytotoxicity in keratinocyte HaCaT cells**  
○ Sou Hyun Kim<sup>1,2</sup>, Young-Suk Jung<sup>1,2</sup>  
(<sup>1</sup>College of Pharmacy, Pusan Nat'l Univ.,  
<sup>2</sup>Research Institute for Drug Development, Pusan Nat'l Univ. Republic of Korea)
- PS-25 Evaluation of the activity of selenosugar synthase SenB by speciation and its docking simulation**  
○ Karin Takahashi<sup>1</sup>, Yasunori Fukumoto<sup>2</sup>, Noriyuki Suzuki<sup>3</sup>, Yu-ki Tanaka<sup>2</sup>, Yasumitsu Ogra<sup>2</sup>  
(<sup>1</sup>Graduate School of Medical and Pharmaceutical Sciences,  
<sup>2</sup>Graduate School of Pharmaceutical Sciences, Chiba University,  
<sup>3</sup>Faculty of Pharmaceutical Sciences, Toho University)
- PS-26 Isoquercitrin alleviates NAFLD by modulating lipid metabolism in HepG2 cells via AMPK activation**  
○ Seung Jun Noh<sup>1,2</sup>, Chawon Yun<sup>1,2</sup>, Myeong Su Choi<sup>1,2</sup>, Jae Min Jung<sup>1,2</sup>, Young-Suk Jung<sup>1,2</sup>  
(<sup>1</sup>College of Pharmacy, Pusan Nat'l Univ.,  
<sup>2</sup>Research Institute for Drug Development, Pusan Nat'l Univ. Republic of Korea)
- PS-27 Regulation of ferroptosis via increased expression of the selenoprotein P receptor ApoER2 by Nrf2 in glioblastoma**  
○ Stephanie Siu, Xi Zheng, Takashi Toyama, Yoshiro Saito  
(Grad. Sch. Pharm. Sci., Tohoku Univ.)
- PS-28 Autophagy is crucial for the hepatoprotective effects of betaine in non-alcoholic fatty liver disease in Mice**  
○ RanJu Woo<sup>1,2</sup>, Ji Yeon Song<sup>1,2</sup>, Maziyar Veisi<sup>1,2</sup>, Young-Suk Jung<sup>1,2</sup>  
(<sup>1</sup>College of Pharmacy, Pusan Nat'l Univ.,  
<sup>2</sup>Research Institute for Drug Development, Pusan Nat'l Univ. Republic of Korea)

**PS-29 Involvement of long-chain acyl CoA synthetase 4 in idiopathic pulmonary fibrosis**  
○ Yuki Tomitsuka, Hiroshi Kuwata, Shuntaro Hara  
(Graduate Sch. of Pharmacy, Showa Univ.)

**PS-30 Effects of deep ocean-derived magnesium-enhanced Water on Cardiovascular Diseases with Microbiome Changes**  
○ Mihi Yang<sup>1,2</sup>  
(<sup>1</sup>College of Pharm. Sookmyung Women's Univ.,  
<sup>2</sup>Goodbeing Center C. Ltd., Republic of Korea)

**PS-31 Molecular mechanisms of cellular dysfunction caused by antibacterial cephalosporins**  
○ Christian Spadini<sup>1</sup>, Tomohiro Kagi<sup>2</sup>, Wakana Suzuki<sup>2</sup>, Yusuke Hirata<sup>2</sup>,  
Takuya Noguchi<sup>2</sup>, Atsushi Matsuzawa<sup>2</sup>  
(<sup>1</sup>Dep. Biochem., Univ. Lausanne,  
<sup>2</sup>Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

## Award Candidates Presentation Candidates for Rookie of the Year Award

September 4 (Wed) 9:00-10:10 Room B (Lecture Room 1)

Chair: Hitomi Fujishiro (Fac. Pharm. Sci., Tokushima Bunri Univ.)

**A-1 Inhibition of ferroptosis by environmental pollutants 1,2-naphthoquinone and (P-067) 1,4-naphthoquinone through FSP1**

○ Kei Ishida<sup>1</sup>, Takashi Toyama<sup>1</sup>, Eikan Mishima<sup>2</sup>, Marcus Conrad<sup>2</sup>, Yoshiro Saito<sup>1</sup>  
(<sup>1</sup> Fac. Pharm. Sci., Tohoku Univ. <sup>2</sup> Helmholtz Zentrum München)

**A-2 Kinetic study of the methylation of glutathione persulfide by thiopurine (P-094) S-methyltransferase**

○ Momoka Uchida<sup>1</sup>, Yasunori Fukumoto<sup>2</sup>, Yoshikazu Yamagishi<sup>3</sup>, Yu-ki Tanaka<sup>2</sup>, Noriyuki Suzuki<sup>4</sup>, Yasumitsu Ogra<sup>2</sup>  
(<sup>1</sup>Fac. Pharm. Sci., <sup>2</sup>Grad. Sch. Pharm. Sci., <sup>3</sup>Grad. Sch. Med., Chiba Univ, <sup>4</sup>Fac. Pharm. Sci., Toho Univ.)

**A-3 Determination of Acylcarnitines as a Biomarker of Insulin Poisoning by LC- (P-090) QTOF/MS**

○ Manami Katayama<sup>1</sup>, Sayaka Nagasawa<sup>2</sup>, Hirotaro Iwase<sup>3</sup>, Yasumitsu Ogra<sup>2</sup>  
(<sup>1</sup>Faculty of Pharmaceutical Sciences, <sup>2</sup>Graduate School of Pharmaceutical Sciences, <sup>3</sup>Graduate School of Medicine, Chiba University)

**A-4 Research on the search for new therapeutic agents by suppressing glioblastoma (P-064) malignant factor selenoprotein P**

○ Kenya Takahashi<sup>1</sup>, Xi Zheng<sup>2</sup>, Takashi Toyama<sup>1,2</sup>, Yoshiro Saito<sup>1,2</sup>  
(<sup>1</sup> Fac. Sch. Pharm. Sci., <sup>2</sup> Grad. Sch. Pharm. Sci., Tohoku Univ.)

**A-5 Involvement of mitochondrial dysfunction in cadmium-induced impairment of (P-016) proximal tubular reabsorption**

○ Miku Takahashi<sup>1</sup>, Hitomi Fujishiro<sup>1</sup>, Kanako Matsumoto<sup>1</sup>, Seiichiro Himeno<sup>2</sup>, Daigo Sumi<sup>1</sup>  
(<sup>1</sup>Fac. Pharm. Sci., Tokushima Bunri Univ, <sup>2</sup> Fac. Pharm., Showa Univ.)

**A-6 Role of ACSL4-dependent ferroptosis in inflammation-related colorectal cancer (P-080)**

○ Moe Tanaka, Tsubasa Ochiai, Toshiya Honsawa, Hiroshi Kuwata, Shuntaro Hara  
(Sch. Pharm., Showa Univ.)

**A-7 In situ label-free Raman imaging analyses of the intracellular environment during (P-055) ferroptosis**

○ Ryota Dobashi<sup>1</sup>, Masato Machida<sup>2</sup>, Shinji Kajimoto<sup>1,2</sup>, Takakazu Nakabayashi<sup>1,2</sup>  
(<sup>1</sup>Fac. Pharm. Sci., Tohoku Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Tohoku Univ.)

**A-8 Selenoprotein P Transcriptional Regulation in the Liver**

**(P-059)** ○ Mei Hanaki<sup>1</sup>, Mayu Yamashita<sup>2</sup>, Takayuki Kaneko<sup>2</sup>, Takashi Toyama<sup>2</sup>, Yoshiro Saito<sup>2</sup>  
(<sup>1</sup>Fac. Pharm. Sci., Tohoku Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Tohoku Univ.)

**A-9 Decrease in blood flow to fetus disturbs GABAergic neural subtype composition in the prefrontal cortex**

**(P-031)** ○ Saki Fujimura, Ken Takeda, Ken Tachibana, Atsuto Onoda  
(Fac. Pharm. Sanyo-Onoda City Univ.)

**A-10 Development of inverse-BPML, a high sensitive detection method for reversible modification of cysteine residues**

**(P-063)** ○ Reiko Makino, Takashi Toyama, Yoshiro Saito  
(Grad. Sch. Pharm. Sci., Tohoku Univ.)

## Award Candidates Presentation Candidates for Young Investigator Award

September 4 (Wed) 10:10-11:30 Room B (Lecture Room 1)

Chair: Hideto Jinno (Fac. Pharm., Meijo Univ.)

**B-1 HIV incorporated triosephosphate isomerase suppresses the early stage of reverse transcription**  
(P-041)

○ Towa Abe<sup>1</sup>, Naoki Kishimoto<sup>1</sup>, Satoshi Miura<sup>1</sup>, Tae Yasutake<sup>1</sup>, Nobutoki Takamune<sup>2</sup>, Shogo Misumi<sup>1</sup>

(<sup>1</sup>Grad. Sch. Pharm. Sci., Kumamoto Univ. <sup>2</sup>KIDO, Kumamoto Univ.)

**B-2 Elucidation of the mechanism by which cystine transporter SLC7A11 promotes oxidative stress-induced parthanatos**  
(P-052)

○ Ryo Ito, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa

(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

**B-3 Elucidation of the regulatory mechanism of extraembryonic endoderm differentiation by arachidonic acid**  
(P-085)

○ Taiga Iwama, Kuniyuki Kano, Nozomu Kono, Junken Aoki

(Grad. Sch. Pharm. Sci., Univ. Tokyo)

**B-4 A novel selenium acceptor molecule for selenium metabolism; inhibition of selenium metabolism by electrophilic modification of peroxiredoxin 6**  
(P-066)

○ Hayato Takashima<sup>1</sup>, Takashi Toyama<sup>1</sup>, Junya Ito<sup>2</sup>, Eikan Mishima<sup>2</sup>, Marcus Conrad<sup>2</sup>, Yoshiro Saito<sup>1</sup>

(<sup>1</sup>Grad. Sch. Pharm. Sci., Tohoku Univ. <sup>2</sup>Helmholtz Munich)

**B-5 Elucidating the role of polysulfidation in the iron transport protein transferrin**

(P-050) ○ Miyuki Nara, Takashi Toyama, Reona Tobita, Takakazu Nakabayashi, Yoshiro Saito  
(Grad. Sch. Pharm. Sci., Tohoku Univ.)

**B-6 The role of Lysophosphatidylserine in the tumor microenvironment**

(P-084) ○ Shun Nishikado<sup>1</sup>, Junpei Omi<sup>1</sup>, Akiharu Uwamizu<sup>1</sup>, Tomohiko Ohwada<sup>2</sup>, Junken Aoki<sup>1</sup>

(<sup>1</sup>Department of Health Chemistry, Grad. Sch. Pharm. Sci., The Univ. of Tokyo,

<sup>2</sup>Laboratory of Organic and Medical Chemistry, Grad. Sch. Pharm. Sci., The Univ. of Tokyo)

**B-7 Exhalation omics based on sulfur metabolites in chronic kidney disease**

(P-054) ○ Yoshinobu Henmi<sup>1</sup>, Seiryō Ogata<sup>2</sup>, Tsuyoshi Takata<sup>2</sup>, Daisuke Saigusa<sup>3</sup>, Eikan Mishima<sup>4</sup>, Wei Fanyan<sup>5</sup>, Takaaki Akaike<sup>2</sup>, Nobuyuki Takahashi<sup>1</sup>, Emiko Sato<sup>1</sup>

(<sup>1</sup>Grad. Sch. Pharm. Sci., Tohoku Univ., <sup>2</sup>Grad. Sch. Med., Tohoku Univ.,

<sup>3</sup>Fac. Pharm. Sci., Teikyo Univ., <sup>4</sup>Tohoku Univ. Hospital.

<sup>5</sup>Ins. Dev. Aging and Cancer., Tohoku Univ.)

***B-8***      **Anti-inflammatory role of prostacyclin synthase in lipopolysaccharide-induced  
(*P-078*) inflammation**

○ Toshiya Honsawa, Tsubasa Ochiai, Hiroshi Kuwata , Shuntaro Hara  
(Sch. of Pharm., Showa Univ.)

***B-9***      **PS-PLA<sub>1</sub>-LysoPS AXIS IN INFECTIOUS IMMUNITY**

**(*P-077*)**      ○ Shun Yaginuma, Jumpei Omi, Kuniyuki Kano, Junken Aoki  
(Grad. Sch. Pharm. Sci., Tokyo Univ.)

## Oral Session 1

September 4 (Wed) 16:00-17:00 Room B (Lecture Room 1)

Chairs: Shusuke Kuge (Fac. Pharm. Sci., Tohoku Med. Pharm. Univ.)

Masaki Matsuoka (Sch. of pharm., Kitasato Univ.)

**01-1 Transcription factor SOX10 regulates melanoma growth through RXR gamma expression**

○ Hana Ishizuka, Yue Zhou, Hiroaki Sakurai, Satoru Yokoyama  
(Grad. Sch. Pharm. Sci., Toyama Univ.)

**01-2 Effect of extracellular vesicles derived from the serum of fish on human umbilical vein endothelial cells**

○ Akiha Onuma, Takuya Yamashita, Ryotaro Tsutsumi, Kazuya Nagano  
(Sch. Pharm. Sci., Wakayama Med. Univ.)

**01-3 Effect of nursing burden on the thymic recovery in lactating female mice**

○ Kei Nakayama, Hiroshi Hasegawa  
(Lab. Hygienic Sci., Kobe Pharm. Univ.)

**01-4 Acidic sophorose lipid exhibits the lower cell toxicity and wider safety range in comparison to other biosurfactants such as surfactin and rhamnolipid**

○ Yuki Miyazaki<sup>1</sup>, Ryotaro Tsutsumi<sup>1</sup>, Erika Kunimi<sup>2</sup>, Michiaki Araki<sup>3</sup>,  
Yoshihiko Hirata<sup>3</sup>, Misa Muraoka<sup>2</sup>, Hirofumi Tsujino<sup>2</sup>, Masayoshi Arai<sup>2</sup>,  
Kazumasa Hirata<sup>1,2</sup>, Takuya Yamashita<sup>1</sup>, Kazuya Nagano<sup>1</sup>  
(<sup>1</sup>Sch. Pharm. Sci., Wakayama Medical Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Osaka Univ.,  
<sup>3</sup>Saraya Co., Ltd)

**01-5 Elucidation of the mechanism of lysosomal hydrolase insolubilization during lysosomal membrane damage**

○ Futa Suzuki<sup>1</sup>, Natsumi Fujiwara<sup>1</sup>, Kanae Miyara<sup>1,2</sup>, Ayaka Yabuki<sup>1</sup>, Shuhei Hamano<sup>3,4</sup>,  
Takuya Noguchi<sup>3</sup>, Atsushi Matsuzawa<sup>3</sup>, Masatsugu Miyara<sup>1</sup>, Yaichiro Kotake<sup>1</sup>  
(<sup>1</sup>Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., <sup>2</sup>JSPS Research Fellow RPD.,  
<sup>3</sup>Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., <sup>4</sup>JSPS Research Fellow DC.)



## Oral Session 2

September 4 (Wed) 17:00-18:00 Room B (Lecture Room 1)

Chairs: Kuniyuki Kano (Grad. Sch. Pharm. Sci., Univ. Tokyo)

Ryota Shizu (Sch. Pharm. Sci., Univ. of Shizuoka)

**02-1 Time-resolved transcriptomic profiling of senescence-associated secretory phenotype (SASP) in multiple senescent cell subtypes**

○ Nurhanani Razali<sup>1,2</sup>, Yohsuke Moriyama<sup>1</sup>, Yatzu Chiu<sup>1</sup>, Kojiro Suda<sup>1</sup>,  
Mari Kondo<sup>2</sup>, Hiroshi Hasegawa<sup>2</sup>, Keiko Kono<sup>1</sup>

(<sup>1</sup>Membranology Unit, Okinawa Ins. of Sci. and Tech. Graduate Univ.,

<sup>2</sup>Lab. of Hygienic Sci., Kobe Pharm. Univ.)

**02-2 Phenotypic analysis of cartilage-specific vitamin K converting enzyme UBIAD1 knockout mice**

○ Shunsuke Hirashima, Anna Koiso, Takuzi Takayama, Eri Kuboki, Karin Okumura,  
Takashi Kimoto, Kimie Nakagawa

(Fac. Pharm. Sci., Kobegakuin Univ.)

**02-3 The Importance of the Methyl Group at the 2-Position of the Naphthoquinone Ring in Vitamin K Conversion Reactions**

○ Kurumi Nakagawa<sup>1</sup>, Kohei Murata<sup>1</sup>, Syunta Sudo<sup>2</sup>, Yoshitomo Suhara<sup>1,2</sup>,  
Yoshihisa Hirota<sup>1,2</sup>

(<sup>1</sup>Grad. Sch. Pharm. Sci., Shibaura Inst. of Tech., <sup>2</sup>Dep. Life. Sci., Shibaura Inst. of Tech.)

**02-4 Establishment of Menadione and its conjugates assay for application as a urinary biomarker for vitamin K-related diseases**

○ Shintaro Tagami<sup>1</sup>, Satoshi Asano<sup>1</sup>, Maya Kamao<sup>2</sup>, Yoshitomo Suhara<sup>1</sup>,  
Miyuu Nishikawa<sup>3</sup>, Shinichi Ikushiro<sup>3</sup>, Yoshihisa Hirota<sup>1</sup>

(<sup>1</sup>Grad. Sch. Pharm. Sci., Shibaura Inst. of Tech., <sup>2</sup>Ex. Center, Kobe Pharmaceutical Univ.,

<sup>3</sup>Faculty of Engineering, Toyama Prefectural Univ.)

**02-5 Pharmacokinetics of Hybrid Vitamin K Derivatives Incorporating Retinoic Acid Structure Oriented for the Treatment of Neurodegenerative Diseases**

○ Yoshihisa Hirota<sup>1</sup>, Rina Watanabe<sup>1</sup>, Kazuki Takeda<sup>2</sup>, Yoshitomo Suhara<sup>1</sup>

(<sup>1</sup> Grad. Sch. Pharm. Sci., Shibaura Inst. Tec., <sup>2</sup> Sch. Vet. Med., Kitasato Univ.)

## Oral Session 3

September 5 (Thu) 9:00-10:00 Room B (Lecture Room 1)

Chairs: Takamitsu Unoki (Dept. Basic Med. Sci., Nat. Inst. Minamata Dis.)

Maki Tokumoto (Sch. Pharm., Aichi Gakuin Univ.)

**O3-1 Overlap of Genetic Predisposition and Maternal Exposure to Nanoparticles Synergistically Increases Risk of Autism spectrum disorder-like behavior**

○ Atsuto Onoda, Risa Fuku, Tadashi Nakagawa, Ken Tachibana, Ken Takeda  
(Fac. Pharm. Sanyo-Onoda city Univ.)

**O3-2 Mechanistic analysis of tolerance/recovery response in green microalgae *Chlamydomonas reinhardtii* under copper ion exposure**

○ Shunsuke Hatano<sup>1</sup>, Ryotaro Tsutsumi<sup>1</sup>, Risa Yoshimoto<sup>2</sup>, Jiro Miura<sup>3</sup>,  
Takuya Yamashita<sup>1</sup>, Kazumasa Hirata<sup>1,2</sup>, Kazuya Nagano<sup>1</sup>  
(<sup>1</sup>Sch. Pharm. Sci., Wakayama Medical Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Osaka Univ.,  
<sup>3</sup>Grad. Sch. Dent. Sci., Osaka Univ.)

**O3-3 Effect of multiple concomitant drugs for hyperphosphatemia on phosphorus adsorption capacity**

○ Kaito Yamashiro<sup>1,2</sup>, Kazuma Kimata<sup>2</sup>, Fumihiko Ogata<sup>2</sup>, Yasuyuki Fujiwara<sup>1</sup>,  
Naohito Kawasaki<sup>2,3</sup>  
(<sup>1</sup>School of Pharmacy, Tokyo University of Pharmacy and Life Sciences,  
<sup>2</sup>Faculty of Pharmacy, Kindai University, <sup>3</sup>Anti-aging Center, Kindai University)

**O3-4 Analysis of mole removal creams with reported health hazards**

○ Tsuyoshi Kawakami, Maiko Tahara, Sachie Kawano, Nahoko Uchiyama  
(NIHS)

**O3-5 Repeated exposure to MBP, a metabolite of bisphenol A, stimulates ligand-independent estrogen receptors-mediated transcription in long-term estrogen-deprived breast cancer cells**

○ Masayo Hirao-Suzuki<sup>1</sup>, Masufumi Takiguchi<sup>1</sup>, Shuso Takeda<sup>2</sup>  
(<sup>1</sup>Fac. Pharm. Sci., Hiroshima Intl. Univ., <sup>2</sup>Fac. Pharm. Pharmaceut. Sci., Fukuyama Univ.)

## Oral Session 4

September 5 (Thu) 10:00-11:00 Room B (Lecture Room 1)

Chairs: Kotoko Arisawa (Grad. Sch. Pharm. Sci., Tohoku Univ.)

Naoki Kishimoto (Grad. Sch. Pharm. Sci., Kumamoto Univ.)

**04-1 Functional analysis of long-chain acyl CoA synthetase 4 in idiopathic pulmonary fibrosis**

○ Yuki Tomitsuka, Hiroshi Kuwata, Shuntaro Hara  
(Graduate Sch. of Pharmacy, Showa Univ.)

**04-2 Effect of supersulfides in lipid oxidation dependent cell death by lipoxytosis inducers**

○ Shu Yasuda<sup>1</sup>, Ayaka Enomoto<sup>1</sup>, Takara Hashimoto<sup>1</sup>, Maho Morita<sup>1</sup>, Tomohiro Sawa<sup>2</sup>,  
Tomoko Koumura<sup>1</sup>, Masaki Matsuoka<sup>1</sup>, Hirotaka Imai<sup>1</sup>  
(<sup>1</sup>Grad. Sch. Pharm. Sci., Kitasato Univ, <sup>2</sup>Grad. Sch. Med. Sci., Kumamoto Univ.)

**04-3 Mechanism of 1,2-dichloropropane for induction of DNA damage in human cholangiocytes co-cultured with macrophages**

○ Mst. Mahfuza Rahman<sup>1</sup>, Cai Zong<sup>1</sup>, Kyoshiro Kusagaya<sup>1</sup>, Yusuke Kimura<sup>2</sup>,  
Abigail Ekuban<sup>1</sup>, Ryouya Takizawa<sup>2</sup>, Sahoko Ichihara<sup>2</sup>, Gaku Ichihara<sup>1</sup>  
(<sup>1</sup>Department of Occupational and Environmental Health, Faculty of Pharmaceutical  
Sciences, Tokyo University of Science, Noda, Japan,  
<sup>2</sup>Department of Environmental and Preventive Medicine, Jichi Medical University  
School of Medicine, Shimotsuke 329-0498, Japan)

**04-4 Functional analysis of Lipo-2 gene in Lipoxytosis pathway**

○ Masaki Matsuoka, Ryuya Kobayashi, Hirotaka Imai  
(Kitasato univ. Sch. of pharm.)

**04-5 Development of broad-spectrum antiviral drugs effective against human coronaviruses and influenza A virus**

○ Shusuke Kuge<sup>1</sup>, Ryoya Sekine<sup>1</sup>, Tsukasa Suenaga<sup>1</sup>, Maki Kiso<sup>2</sup>, Seiya Yamayoshi<sup>2</sup>,  
Yoshihiro Kawaoka<sup>2</sup>, Hidekazu Nishimura<sup>3</sup>, Kouki Takeda<sup>1</sup>  
(<sup>1</sup> Fac. Pharm. Sci, Tohoku Med. Pharm. Univ., <sup>2</sup>Inst. Med. Sci., Univ. Tokyo,  
<sup>3</sup>Sendai Med. Center)

## Oral Session 5

September 5 (Thu) 14:20-15:20 Room B (Lecture Room 1)

Chairs: Hayato Irokawa (Fac. Pharm. Sci., Tohoku Med. Pharm. Univ.)

Tsutomu Takahashi (Sch. Pharm., Tokyo Univ. Pharm. Life Sci.)

- 05-1 Mitochondrial H<sub>2</sub>O<sub>2</sub>-Zn<sup>2+</sup> signaling induces nigral dopaminergic degeneration**  
○ Atsushi Takeda<sup>1</sup>, Takato Chinen<sup>1</sup>, Miki Sasaki<sup>1</sup>, Haruna Tamura<sup>1</sup>, Ryusuke Nishio<sup>1</sup>, Haruna Tamano<sup>1,2</sup>  
(<sup>1</sup> Sch. Pharm. Sci., Univ. Shizuoka,<sup>2</sup> Shizuoka Tohto Med. Col.)
- 05-2 Neuroprotective effects of sulforaphane on benzo[a]pyrene-induced neurotoxicity in mice**  
○ Yousra Reda<sup>1,2</sup>, Cai Zong<sup>1</sup>, Ikoma Akane<sup>1</sup>, Saleh Ahmed<sup>1</sup>, Alzahraa Fergany<sup>1</sup>, Sahoko Ichihara<sup>3</sup>, Gaku Ichihara<sup>1</sup>  
(<sup>1</sup> Department of Occupational and Environmental Health, Faculty of Pharmaceutical Sciences, Tokyo University of Science, Noda 278-8510, Japan,  
<sup>2</sup> Department of Forensic Medicine and Toxicology, Faculty of Veterinary Medicine, Suez Canal University, Ismailia, Egypt,  
<sup>3</sup> Department of Environmental and Preventive Medicine, Jichi Medical University School of Medicine, Shimotsuke, Japan.)
- 05-3 Impact of Benzo[a]pyrene Exposure on Central Nervous System of Mice**  
Walaa Slouma Hamouda Abd El Naby<sup>1,2</sup>, Cai Zong<sup>1</sup>, Yousra Reda<sup>1,3</sup>, Sahoko Ichihara<sup>4</sup>, Natsuko Kubota<sup>5</sup>, Shinya Yanagita<sup>5</sup>, ○ Gaku Ichihara<sup>1</sup>  
(<sup>1</sup>Department of Occupational and Environmental Health, Faculty of Pharmaceutical Sciences, Tokyo University of Science, Noda 278-8510, Japan,  
<sup>2</sup>Genetics and Genetic Engineering in Department of Animal Husbandry and Animal Wealth Development, Faculty of Veterinary Medicine, Alexandria University, Alexandria 21500, Egypt,  
<sup>3</sup>Department of Forensic Medicine and Toxicology, Faculty of Veterinary Medicine, Suez Canal University, Ismailia, Egypt.,  
<sup>4</sup>Department of Environmental and Preventive Medicine, Jichi Medical University School of Medicine, Shimotsuke, Japan,  
<sup>5</sup>Faculty of Science and Technology, Tokyo University of Science, Noda 278-8510, Japan.)
- 05-4 The ATX-LPA-LPA<sub>2</sub> Axis Suppresses Apoptosis of Spermatogenic Cells and Determines Sperm Count**  
○ Kuniyuki Kano<sup>1</sup>, Takumi Sugawara<sup>2</sup>, Nozomu Kono<sup>1</sup>, Junken Aoki<sup>1</sup>  
(<sup>1</sup>Grad. Sch. Pharm. Sci., The Univ of Tokyo., <sup>2</sup>Grad. Sch. Pharm. Sci., Tohoku Univ)

**O5-5 Involvement of N-nitroso bile acid conjugates in the occupational cholangiocarcinoma of 1,2-dichloropropane**

○ Shinya Hasegawa<sup>1</sup>, Asmaa Elzawahry<sup>2</sup>, Momoko Nagai<sup>2</sup>, Mamoru Kato<sup>2</sup>, Tomonari Matsuda<sup>3</sup>, Yukari Totsuka<sup>1</sup>  
(<sup>1</sup> Hoshi Univ., <sup>2</sup> Natl. Cancer Ctr. Res. Inst., <sup>3</sup> Kyoto Univ.)

## Oral Session 6

September 5 (Thu) 15:20-16:20 Room B (Lecture Room 1)

Chairs: Akinori Sugiyama (Sch. Pharm., Iwate Medical Univ.)

Yasukazu Takanezawa (Sch. of pharm., Kitasato Univ.)

**O6-1 Efficient evaluation of male reproductive toxicity focused on seminiferous epithelium cycle**

○ Satoshi Yokota<sup>1,2</sup>, Tomohiko Wakayama<sup>2</sup>, Hirokatsu Saito<sup>1</sup>, Satoshi Kitajima<sup>1</sup>  
(<sup>1</sup> NIHS, <sup>2</sup> Grad. Sch. Med. Sci., Kumamoto Univ.)

**O6-2 Effect of co-intake with indigestible dextrin and the other food ingredients on the triglyceride-lowering function by indigestible dextrin**

○ Ayumi Kano<sup>1</sup>, Miki Harada<sup>2</sup>, Tomohiro Nakao<sup>3</sup>, Makoto Sakata<sup>3</sup>, Masayuki Nishino<sup>3</sup>, Kazumasa Hirata<sup>1,2</sup>, Ryotaro Tsutsumi<sup>1</sup>, Takuya Yamashita<sup>1</sup>, Kazuya Nagano<sup>1</sup>  
(<sup>1</sup>Sch. Pharm. Sci., Wakayama Med. Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Osaka Univ., <sup>3</sup>San-Ei Gen F. F. I)

**O6-3 A comprehensive toxicological assessment of *trans*-fatty acids based on a novel mechanism of their toxic actions**

○ Naoki Kashiwabara, Yusuke Hirata, Ryota Kozhima, Shinnosuke Kimura, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

**O6-4 Mechanistic analysis of breast cancer metastasis using our quantification method for urinary prostanoid metabolites**

○ Yuma Kawamura<sup>1</sup>, Takuya Yamashita<sup>1</sup>, Tian-Qi Zhang<sup>2</sup>, Yasuo Tsutsumi<sup>2</sup>, Soshi Terada<sup>2</sup>, Kazumasa Hirata<sup>1,2</sup>, Ryotaro Tsutsumi<sup>1</sup>, Kazuya Nagano<sup>1</sup>  
(<sup>1</sup>Sch. Pharm. Sci., Wakayama Med. Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Osaka Univ.)

**O6-5 The activity of curcumin, a poorly water-soluble bioactive substance, depends on initial dispersion solvent**

○ Kodai Hattori<sup>1</sup>, Hikaru Maekita<sup>2</sup>, Tomohiro Nakao<sup>3</sup>, Makoto Sakata<sup>3</sup>, Masayuki Nishino<sup>3</sup>, Yasuo Tsutsumi<sup>2</sup>, Ryotaro Tsutsumi<sup>1</sup>, Takuya Yamashita<sup>1</sup>, Kazuya Nagano<sup>1</sup>  
(<sup>1</sup>Sch. Pharm. Sci., Wakayama Med. Univ., <sup>2</sup> Grad. Sch. Pharm. Sci., Osaka Univ., <sup>3</sup> San-Ei Gen F. F. I.)

## Poster Session

September 4 (Wed) 14:10-14:50 Room C (1F)

- P-001 Metabolism of volatile aromatic compounds by CYP and UGT expressed in the mouse olfactory epithelium and their inhibition by drugs**  
○ Naoki Takaoka, Ayana Nishide, Seigo Sanoh, Shigeru Ohta  
(Sch. Pharm. Sci., Wakayama Med. Univ.)
- P-002 Silver nanoparticles change their form during the process of oral absorption**  
○ Takuya Yamashita<sup>1</sup>, Ikkei Tasaki<sup>1</sup>, Yasuo Tsutsumi<sup>2</sup>, Kazuya Nagano<sup>1</sup>  
(<sup>1</sup>School of Pharmaceutical Sciences, Wakayama Medical University,  
<sup>2</sup>Graduate School of Pharmaceutical Sciences, Osaka University)
- P-003 Analysis of the Effect of Statins on MK-4 Synthesis by Vitamin K Converting Enzyme UBIAD1**  
○ Takashi Kimoto, Shunsuke Hirashima, Yuina Nakagami, Yoshiaki Nishino, Ami Hamade, Kimie Nakagawa  
(Fac. Pharm., Kobe Gakuin Univ.)
- P-004 Inhibitory effect of phthalate esters on the migration of human trophoblast-derived HTR-8/SVneo cells**  
○ Shoko Ogushi<sup>1</sup>, Seira Mori<sup>1</sup>, Takehiro Nakamura<sup>1</sup>, Tsuyoshi Nakanishi<sup>2</sup>, Tomoki Kimura<sup>1</sup>  
(<sup>1</sup>Fac. Farm. Sci., Setsunan Univ., <sup>2</sup>Gifu Pharm. Univ.)
- P-005 Inhibitory effect of an extract from the peel of *Akebia quinata* (Lardizabalaceae) on proliferation of human breast cancer MCF-7 cells**  
○ Sakura Masaka<sup>1</sup>, Aoi Aisaka<sup>1</sup>, Makoto Ohira<sup>1</sup>, Tsukasa Matsumoto<sup>1,2</sup>, Keiichi Matsuzaki<sup>3</sup>, Yasushi Kawasaki<sup>1</sup>, Akira Sato<sup>1,4</sup>  
(<sup>1</sup> Fac. Pharm., Iryo Sosei Univ., <sup>2</sup>Grad. Sch. Life Sci. Tech., Iryo Sosei Univ.,  
<sup>3</sup>Sch. Pharm., Nihon Univ., <sup>4</sup> Fac. Human Life Sci., Miyagi Gakuin Women's Univ.)
- P-006 Enrichment effect on urinary function in drug-induced menopause model mice and the relationship between brain molecules in the hippocampus**  
○ Fumio Soeda, Ryo Yokoo, Mayo Kubota, Tatsuya Oda, Takayuki Koga, Yuko Kobuke  
(Daiichi Univ. Pharm.)
- P-007 Effect of PPARA on mitochondrial DNA gene expression**  
○ Daisuke Aibara, Kimihiko Matsusue  
(Faculty of Pharmaceutical Science, Fukuoka University)

- P-008 Regulation of hepatic *Sprr1a* expression by PPAR $\gamma$**   
 ○ Daisuke Aibara, Ai Sakaguchi, Kohei Matsuo, Kimihiko Matsusue  
 (Faculty of Pharmaceutical Science, Fukuoka University)
- P-009 Novel inhibitory mechanisms of hepatic fat accumulation through PPAR $\gamma$ -responsive hepatic microRNA 4**  
 ○ Kohei Matsuo, Daisuke Sakamoto, Ai Sakaguchi, Daisuke Aibara, Nobuhiro Kashige, Kimihiko Matsusue  
 (Fac. Pharmaceut. Sci., Fukuoka Univ.)
- P-010 Ablation of SBP1 suppresses high-fat diet-induced obesity**  
 ○ Takayuki Koga<sup>1</sup>, Makoto Hiromura<sup>1</sup>, Syota Kagawa<sup>1</sup>, Masayo Hirao-Suzuki<sup>2</sup>, Shuso Takeda<sup>3</sup>, Yuji Ishii<sup>4</sup>, Takumi Ishida<sup>5</sup>, Fumihiko Nagashima<sup>1</sup>, Yuko Kobuke<sup>1</sup>, Akihisa Toda<sup>6</sup> Fumio Soeda<sup>1</sup>  
 (<sup>1</sup>Daiichi Univ. Pharm., <sup>2</sup>Fac. Pharm. Sci., Hiroshima Intl. Univ., <sup>3</sup>Fac. Pharm. Pharmaceut. Sci., Fukuyama Univ., <sup>4</sup>Grad. Sch. Pharmaceut. Sci., Kyushu Univ., <sup>5</sup>Sch. Pharm. Fukuoka, Int. Univ. Health & Welfare, <sup>6</sup>Kyushu Nutrition Welfare Univ.)
- P-011 Interaction with phosphate ion using adsorbents derived from magnesium or calcium**  
 ○ Yugo Uematsu, Natsuki Hiroe, Fumihiko Ogata, Naohito Kawasaki  
 (Fac. Pharm., Kindai Univ.)
- P-012 Preparation of the carbonaceous material produced from waste basil seed and its adsorption capacity of gadolinium ions from aqueous phase**  
 ○ Fumihiko Ogata, Nanami Matsumoto, Yugo Uematsu, Naohito Kawasaki  
 (Fac. Pharm., Kindai Univ.)
- P-013 Role of SeBP1 in acetaminophen-induced liver injury**  
 ○ Shuangli Zhao<sup>1</sup>, Yingxia Song<sup>1</sup>, Renshi Li<sup>2</sup>, Takayuki Koga<sup>3</sup>, Takumi Ishida<sup>4</sup>, Yoshitaka Tanaka<sup>1</sup>, Yuji Ishii<sup>1</sup>  
 (<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Kyushu Univ., <sup>2</sup>China Pharmaceut. Univ., <sup>3</sup>Daiichi Univ. Pharm., <sup>4</sup>Int. Univ. Health Welfare Fukuoka)
- P-014 Possible mechanism underlying disruption of the folate metabolism in the fetal hypothalamus caused by maternal exposure to TCDD**  
 ○ Yuki Ishiiyama<sup>1</sup>, Mana Fujimoto<sup>2</sup>, Hiroe Sano<sup>2</sup>, Takayuki Koga<sup>3</sup>, Yoshitaka Tanaka<sup>2</sup>, Yuji Ishii<sup>2</sup>  
 (<sup>1</sup>Fac. Pharmaceut. Sci. & <sup>2</sup>Grad. Sch. Pharmaceut. Sci., Kyushu Univ., <sup>3</sup>Daiichi Univ. Pharm.)

- P-015 Nobiletin ameliorates dioxin-induced male and female fetal growth hormone suppression: possible involvement of attenuation of the CYP3A induction**  
 ○ Ryoto Hiyama<sup>1</sup>, Hongbin Chen<sup>1</sup>, Chiho Ohta<sup>2</sup>, Nobuyuki Koga<sup>2</sup>, Yoshitaka Tanaka<sup>1</sup>, Yuji Ishii<sup>1</sup>  
 (<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Kyushu Univ., <sup>2</sup>Nakamura Gakuen Univ.)
- P-016 Involvement of mitochondrial dysfunction in cadmium-induced impairment of proximal tubular reabsorption**  
 ○ Miku Takahashi<sup>1</sup>, Hitomi Fujishiro<sup>1</sup>, Kanako Matsumoto<sup>1</sup>, Seiichiro Himeno<sup>2</sup>, Daigo Sumi<sup>1</sup>  
 (<sup>1</sup>Fac. Pharm. Sci., Tokushima Bunri Univ., <sup>2</sup> Fac. Pharm., Showa Univ.)
- P-017 Investigation of cadmium injury models using metallothionein-knockout mice**  
 ○ Kanako Matsumoto<sup>1</sup>, Hitomi Fujishiro<sup>1</sup>, Shota Hori<sup>1</sup>, Takashige Kawakami<sup>1</sup>, Seiichiro Himeno<sup>2</sup>, Daigo Sumi<sup>1</sup>  
 (<sup>1</sup> Fac. Pharm. Sci., Tokushima Bunri Univ, <sup>2</sup> Sch. Pharm. Sci., Showa Univ.)
- P-018 Investigation of underlying mechanisms of delayed renal injury by short-term cisplatin exposure**  
 ○ Hiroki Taguchi<sup>1</sup>, Hitomi Fujishiro<sup>1,2</sup>, Ayumi Uemura<sup>2</sup>, Daigo Sumi<sup>1,2</sup>  
 (<sup>1</sup> Grad. Sch. Pharm. Sci., Tokushima Bunri Univ., <sup>2</sup> Fac. Pharm. Sci., Tokushima Bunri Univ.)
- P-019 Decrease of endotoxin in brown rice by polishing and cooking**  
 ○ Ruri Hamada, Yuya Deguchi, Hiroaki Nagaoka  
 (Fac. Pharm. Sci., Nagasaki Intl. Univ.)
- P-020 Kahweol inhibits renal fibroblast transdifferentiation through phosphorylation of STAT3**  
 ○ Minatsu Iyogi<sup>1</sup>, Mana Nagasawa<sup>1</sup>, Yasushi Kawasaki<sup>2</sup>, Akinori Sugiyama<sup>1</sup>  
 (<sup>1</sup> Sch. Pharm., Iwate Medical Univ., <sup>2</sup> Fac. Pharm., Iryo Sosei Univ.)
- P-021 Cafestol inhibits renal fibroblast transdifferentiation and is involved in STAT3 inactivation**  
 ○ Mana Nagasawa<sup>1</sup>, Minatsu Iyogi<sup>1</sup>, Yasushi Kawasaki<sup>2</sup>, Akinori Sugiyama<sup>1</sup>  
 (<sup>1</sup> Sch. Pharm., Iwate Medical Univ., <sup>2</sup> Fac. Pharm., Iryo Sosei Univ.)
- P-022 Green tea catechin protects vascular endothelial barrier function**  
 ○ Rio Wakasugi<sup>1</sup>, Saki Ishii<sup>2</sup>, Yuri Sagara<sup>2</sup>, Kenji Suzuki<sup>1,2</sup>, Takako Kaneko-Kawano<sup>1,2</sup>  
 (<sup>1</sup>Grad. Sch. Pharm., Ritsumeikan Univ., <sup>2</sup> Col. Pharm. Sci., Ritsumeikan Univ.)



- P-023 Advanced Quality Assessment of Sanshishi (*Gardenia jasminoides* Ellis) and Kampo Medicines Using a Monoclonal Antibody Against Geniposide**  
○ Riko Nishiura<sup>1</sup>, Kanta Noguchi<sup>2</sup>, Nuntawong Poomraphie<sup>2</sup>, Daisuke Imahori<sup>1</sup>, Hiroyuki Tanaka<sup>1</sup>, Seiichi Sakamoto<sup>2</sup>  
(<sup>1</sup>Fac. Pharm. Sci., Sanyo-Onoda City Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Kyushu Univ.)
- P-024 Brain dynamics of abnormally structured proteins induced by nanoparticles**  
○ Yutaro Yagi<sup>1</sup>, Naoya Sakaguchi<sup>2</sup>, Masakazu Umezawa<sup>2</sup>, Ken Tachibana<sup>1</sup>, Ken Takeda<sup>1</sup>, Atsuto Onoda<sup>1</sup>  
(<sup>1</sup>Dep. Pharm., Sanyo-Onoda City Univ, <sup>2</sup>Dep. Materials and Technology, Tokyo Univ of Science)
- P-025 Simultaneous high-performance liquid chromatography analysis of anthraquinones in sicklepod sprouts with  $\alpha$ -glucosidase inhibitory activity**  
○ Sachiko Katayama, Takuya Muraoka, Daisuke Imahori, Hiroyuki Tanaka  
(Fac. Pharm. Sci., Sanyo-Onoda City Univ.)
- P-026 Chemical structure of constituents obtained from the seeds of *Citrus junos***  
○ Daisuke Imahori, Miharu Kubota, Takuya Muraoka, Hiroyuki Tanaka  
(Fac. Pharm. Sci., Sanyo-Onoda City Univ.)
- P-027 Effects of acrylamide exposure on mouse neural stem cells**  
○ Ayano Kaida, Atsuto Onoda, Ken Takeda, Ken Tachibana  
(Fac. Pharm. Sci., Sanyo-Onoda City Univ.)
- P-028 Effects of exposure to paroxetine on mouse neural stem cells**  
○ Yuki Yoshimoto, Atsuto Onoda, Ken Takeda, Ken Tachibana  
(Fac. Pharm. Sci., Sanyo-Onoda City Univ.)
- P-029 Effects of acetaminophen and its metabolites on mouse neural stem cells**  
○ Sachi Horike, Atsuto Onoda, Ken Takeda, Ken Tachibana  
(Fac. Pharm. Sci., Sanyo-Onoda City Univ.)
- P-030 Effect of Fetal Growth Restriction on the Cerebellar Development: Localization and Morphology of Purkinje Cells during Developmental Period**  
○ Wakana Yamada, Ken Tachibana, Ken Takeda, Atsuto Onoda  
(Fac. Pharm. Sci., Sanyo-Onoda City Univ.)
- P-031 Decrease in blood flow to fetus disturbs GABAergic neural subtype composition in the prefrontal cortex**  
○ Saki Fujimura, Ken Takeda, Ken Tachibana, Atsuto Onoda  
(Fac. Pharm. Sanyo-Onoda City Univ.)

- P-032 Analysis of the transcriptional regulatory region of the mouse aldehyde oxidase 3 gene**  
○ Hiroya Mitsuduka<sup>1</sup>, Yoshitaka Tayama<sup>2</sup>, Kazumi Sugihara<sup>2</sup>, Seigo Sanoh<sup>3</sup>, Atsuto Onoda<sup>1</sup>, Ken Takeda<sup>1</sup>, Ken Tachibana<sup>1</sup>  
(<sup>1</sup>Fac. Pharm. Sanyo-Onoda city Univ., <sup>2</sup>Fac. Pharm. Sci., Hiroshima Intl. Univ., <sup>3</sup>Sch. Pharm. Sci., Wakayama Med. Univ.)
- P-033 Study on the cardiac extrasystoles induced by heated tobacco aerosol exposure in mice**  
○ Akira Ushiyama<sup>1</sup>, Yohei Inaba<sup>1</sup>, Sawako Shindo<sup>2</sup>, Kenji Hattori<sup>2</sup>  
(<sup>1</sup> Dep. Env. Health, National Institute of Public Health., <sup>2</sup> Fac. Pharm. Sci., Meiji Pharm. Univ.)
- P-034 Elucidation of the direct effects of fragrance substances on the brain**  
○ Ami Oguro, Hideaki Sato, Taichi Fujiyama, Saki Nagai, Nozomi Mizutani, Yaichiro Kotake  
(Grad. Sch. of Biomed. and Health Sci, Hiroshima Univ.)
- P-035 Transcriptome analysis in the substantia nigra of a chronic MPTP mouse model of Parkinson's disease**  
○ Masatsugu Miyara, Monami Yada, Natsumi Okada, Futa Suzuki, Natsumi Fujiwara, Honoka Hashimoto, Kanae Miyara, Shunichi Hatamiya, Saya Takao, Yusuke Kojima, Yaichiro Kotake  
(Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)
- P-036 Detection of phytohormone disrupting effects of PPCPs using *Arabidopsis thaliana* T87 cells**  
Taro Imura, Keisei Ohnishi, Reiji Sadamatsu, Ryo Ujihara, Ryo Shimizu,  
○ Kazumi Sugihara  
(Faculty of Pharmaceutical Sciences, Hiroshima International University)
- P-037 Effects of bisphenol A metabolite on progesterone receptor (PR) expression of breast cancer cells: A comparative study between single and repeated exposure system**  
○ Michitaka Tanaka<sup>1</sup>, Masayo Hirao-Suzuki<sup>1</sup>, Sawa Kawanami<sup>1</sup>, Shuso Takeda<sup>2</sup>, Masufumi Takiguchi<sup>1</sup>  
(<sup>1</sup>Fac. Pharm. Sci., Hiroshima Intl. Univ., <sup>2</sup>Fac. Pharm. Pharmaceut. Sci., Fukuyama Univ.)

- P-038 Changes in general symptoms and increased mortality after cerebral ischemic stroke due to long-term exposure to fine particulate matter (PM2.5)**  
 ○ Nami Ishihara, Naoyuki Nezu, Kaede Namba, Shinji Kawano, Miki Tanaka, Yasuhiro Ishihara  
 (Grad. Sch. Integr. Sci. Life, Hiroshima Univ.)
- P-039 Influence of *Neopyropia yezoensis* on the growth of indigenous bacteria related to skin condition**  
 ○ Narumi Sugihara<sup>1</sup>, Akihiro Michihara<sup>1</sup>, Yuka Nagatsuka<sup>1</sup>, Kengo Banshoya<sup>1</sup>, Yuuki Satou<sup>1</sup>, Yukimasa Yamagishi<sup>2</sup>, Yasuhiko Miwa<sup>2</sup>, Koki Kanameda<sup>1</sup>, Masayo Hirao-Suzuki<sup>3</sup>, Shuso Takeda<sup>1</sup>  
 (<sup>1</sup>Fac. Pharm. Pharmaceut. Sci., Fukuyama Univ., <sup>2</sup>Fac. Life Sci., Fukuyama Univ., <sup>3</sup>Fac. Pharm. Sci., Hiroshima Intl. Univ.)
- P-040 Regulation of conjugation activity of UDP-glucuronosyltransferase through the C-terminal lysine residue(s)**  
 ○ Yuu Miyauchi<sup>1</sup>, Madoka Sawai<sup>2</sup>, Shinji Takechi<sup>1</sup>, Yuji Ishii<sup>3</sup>  
 (<sup>1</sup>Fac. Pharmaceut. Sci., Sojo Univ., <sup>2</sup>Sch. Pharm. at Fukuoka, Int. Univ. Health & Welfare, <sup>3</sup>Grad. Sch. Pharm. Sci., Kyushu Univ.)
- P-041 HIV incorporated triosephosphate isomerase suppresses the early stage of reverse transcription**  
 ○ Towa Abe<sup>1</sup>, Naoki Kishimoto<sup>1</sup>, Satoshi Miura<sup>1</sup>, Tae Yasutake<sup>1</sup>, Nobutoki Takamune<sup>2</sup>, Shogo Misumi<sup>1</sup>  
 (<sup>1</sup>Grad. Sch. Pharm. Sci., Kumamoto Univ. <sup>2</sup>KIDO, Kumamoto Univ.)
- P-042 Vaccine immunogenicity influenced by nutritional status of infected cells**  
 ○ Shunsuke Sasaki<sup>1</sup>, Naoki Kishimoto<sup>1</sup>, Nobutoki Takamune<sup>2</sup>, Shogo Misumi<sup>1</sup>  
 (<sup>1</sup>Grad. Sch. Pharm. Sci., Kumamoto Univ. <sup>2</sup>Kumamoto innovative development organization)
- P-043 Analysis of the mechanism of autophagy suppression by the glycation product dihydropyrazine**  
 ○ Yuka Orita<sup>1</sup>, Yuu Miyauchi<sup>1</sup>, Madoka Sawai<sup>2</sup>, Shinji Takechi<sup>1</sup>  
 (<sup>1</sup>Fac. Pharmaceut. Sci., Sojo Univ., <sup>2</sup>Sch. Pharm., at Fukuoka. Int. Univ. Health & Welfare)
- P-044 Analysis of cell death by the glycation product dihydropyrazine**  
 ○ Moeka Iwayama<sup>1</sup>, Yuu Miyauchi<sup>1</sup>, Madoka Sawai<sup>2</sup>, Shinji Takechi<sup>1</sup>  
 (<sup>1</sup>Fac. Pharmaceut. Sci., Sojo Univ., <sup>2</sup>Sch. Pharm., at Fukuoka. Int. Univ. Health & Welfare)

**P-045 Functional analysis of metallothionein (MT) against lung injury caused by air pollutants and establishment of preventive methods**

○ Ken-ichiro Tanaka<sup>1</sup>, Yui Uehara<sup>1</sup>, Rioko Funayama<sup>1</sup>, Mikako Shimoda<sup>1</sup>, Akio Sugimoto<sup>2</sup>, Masaki Ichitani<sup>2</sup>, Yoshito Kadota<sup>3</sup>, Takashige Kawakami<sup>3</sup>, Shinya Suzuki<sup>3</sup>, Masahiro Kawahara<sup>1</sup>,  
(<sup>1</sup>Fac. Pharm., Musashino Univ., <sup>2</sup>Central Research Institute, ITO EN.,  
<sup>3</sup>Fac. Pharm. Sci., Tokushima Bunri Univ.)

**P-046 Decreased protein supersulfides in neurons exposed to methylmercury**

○ Takamitsu Unoki<sup>1</sup>, Masahiro Akiyama<sup>2</sup>, Yoshito Kumagai<sup>3</sup>, Masatake Fujimura<sup>1</sup>  
(<sup>1</sup>Dept. Basic Med. Sci., Nat. Inst. Minamata Dis.,  
<sup>2</sup>Clin. Res. Inst. Clin. Pharm. Ther., Showa Univ., <sup>3</sup>Grad. Sch. Pharm. Sci., Kyushu Univ.)

September 5 (Thu) 16:30-17:10 Room C (1F)

**P-047 Analysis of the Inhibitory Mechanism of Selenium Metabolism in Inflammatory Macrophages and Its Physiological Significance**

○ Mayumi Sugawara<sup>1</sup>, Kotoko Arisawa<sup>2</sup>, Hayato Takashima<sup>2</sup>, Yoshiro Saito<sup>1,2</sup>  
(<sup>1</sup> Fac. Pharm. Sci., Tohoku Univ., <sup>2</sup> Grad. Sch. Pharm. Sci., Tohoku Univ.)

**P-048 Elucidation of the anti-inflammatory mechanisms of new quinolone antibiotics**

○ Kohei Otani, Tomohiro Kagi, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

**P-049 Development of new therapeutics for inflammation using novel selenium-containing compounds**

○ Shunsuke Yogiashi<sup>1</sup>, Takashi Toyama<sup>1</sup>, Masana Yazaki<sup>2</sup>, Mieko Arisawa<sup>2</sup>, Yoshiro Saito<sup>1</sup>  
(<sup>1</sup> Fac. Pharm. Sci., Tohoku Univ. <sup>2</sup> Fac. Agri. Kyushu Univ.)

**P-050 Elucidating the role of polysulfidation in the iron transport protein transferrin**

○ Miyuki Nara, Takashi Toyama, Reona Tobita, Takakazu Nakabayashi, Yoshiro Saito  
(Grad. Sch. Pharm. Sci., Tohoku Univ.)

**P-051 Mechanism of intracellular selenium storage by the selenium transport protein Selenoprotein P**

○ Atsuya Ichikawa, Takashi Toyama, Kotoko Arisawa, Yoshiro Saito  
(Grad. Sch. Pharm. Sci., Tohoku Univ.)

- P-052 Elucidation of the mechanism by which cystine transporter SLC7A11 promotes oxidative stress-induced parthanatos**  
○ Ryo Ito, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-053 Analysis of redox regulation of pyruvate kinase (PK) in hepatocytes**  
○ Hayato Irokawa, Kouki Takeda, Shusuke Kuge  
(Fac. Pharm. Sci., Tohoku Med. Pharm. Univ.)
- P-054 Exhalation omics based on sulfur metabolites in chronic kidney disease**  
○ Yoshinobu Henmi<sup>1</sup>, Seiryō Ogata<sup>2</sup>, Tsuyoshi Takata<sup>2</sup>, Daisuke Saigusa<sup>3</sup>, Eikan Mishima<sup>4</sup>, Wei Fanyan<sup>5</sup>, Takaaki Akaike<sup>2</sup>, Nobuyuki Takahashi<sup>1</sup>, Emiko Sato<sup>1</sup>  
(<sup>1</sup>Grad. Sch. Pharm. Sci., Tohoku Univ., <sup>2</sup>Grad. Sch. Med., Tohoku Univ., <sup>3</sup>Fac. Pharm. Sci., Teikyo Univ., <sup>4</sup>Tohoku Univ. Hospital, <sup>5</sup>Ins. Dev. Aging and Cancer., Tohoku Univ.)
- P-055 In situ label-free Raman imaging analyses of the intracellular environment during ferroptosis**  
○ Ryota Dobashi<sup>1</sup>, Masato Machida<sup>2</sup>, Shinji Kajimoto<sup>1,2</sup>, Takakazu Nakabayashi<sup>1,2</sup>  
(<sup>1</sup>Fac. Pharm. Sci., Tohoku Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Tohoku Univ.)
- P-056 The functional role of the cleavage of the multifunctional protein p62 by caspase-8**  
○ Ryuto Komatsu, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-057 A unique anti-ferroptotic mechanism of a food-derived compound**  
○ Ryota Kojima<sup>1</sup>, Yusuke Hirata<sup>1</sup>, Takuya Noguchi<sup>1</sup>, Yoshiro Saito<sup>2</sup>, Yoichi Kurokawa<sup>3</sup>, Atsushi Matsuzawa<sup>1</sup>  
(<sup>1</sup>Lab. of Health Chem., <sup>2</sup>Lab. of Mol. Biol. and Metab., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., <sup>3</sup>Dept. of Biosci. and Biotech., Fukui Prefect. Univ.)
- P-058 Chemical knockdown of selenoprotein P by curcuminoids**  
○ Wang Yinuo<sup>1</sup>, Takashi Toyama<sup>1</sup>, Hiroyuki Yamakoshi<sup>2</sup>, Yoshiharu Iwabuchi<sup>2</sup>, Yoshiro Saito<sup>1</sup>  
(<sup>1</sup>Laboratory of Molecular Biology and Metabolism. Grad. Sch. Pharm. Sci., Tohoku Univ., <sup>2</sup>Laboratory of Synthetic Chemistry. Grad. Sch. Pharm. Sci., Tohoku Univ.)
- P-059 Selenoprotein P Transcriptional Regulation in the Liver**  
○ Mei Hanaki<sup>1</sup>, Mayu Yamashita<sup>2</sup>, Takayuki Kaneko<sup>2</sup>, Takashi Toyama<sup>2</sup>, Yoshiro Saito<sup>2</sup>  
(<sup>1</sup>Fac. Pharm. Sci., Tohoku Univ., <sup>2</sup>Grad. Sch. Pharm. Sci., Tohoku Univ.)

- P-060 Regulation of ferroptosis via increased expression of the selenoprotein P receptor ApoER2 by Nrf2 in glioblastoma**  
 ○ Stephanie Siu, Xi Zheng, Takashi Toyama, Yoshiro Saito  
 (Grad. Sch. Pharm. Sci., Tohoku Univ.)
- P-061 Pb induces a novel cell death in neuronal differentiating cells via endoplasmic reticulum stress**  
 ○ Satoru Shiina, Takayuki Kaneko, Takashi Toyama, Yoshiro Saito  
 (Grad. Sch. Pharm. Sci., Tohoku Univ.)
- P-062 Role of TXNIP in neuronal cell death induced by methylmercury**  
 ○ Naoya Yamashita, Sojun Yadoya, Ryota Yamagata, Gi-Wook Hwang  
 (Fac. Pharmaceut. Sci., Tohoku Med. Pharmaceut. Univ.)
- P-063 Development of inverse-BPML, a high sensitive detection method for reversible modification of cysteine residues**  
 ○ Reiko Makino, Takashi Toyama, Yoshiro Saito  
 (Grad. Sch. Pharm. Sci., Tohoku Univ.)
- P-064 Research on the search for new therapeutic agents by suppressing glioblastoma malignant factor selenoprotein P**  
 ○ Kenya Takahashi<sup>1</sup>, Xi Zheng<sup>2</sup>, Takashi Toyama<sup>1,2</sup>, Yoshiro Saito<sup>1,2</sup>  
 (<sup>1</sup> Fac. Sch. Pharm. Sci., <sup>2</sup> Grad. Sch. Pharm. Sci., Tohoku Univ.)
- P-065 Mechanisms of correlation between selenoprotein P and iron metabolism**  
 ○ An Masuda<sup>1</sup>, Moeka Natori<sup>1</sup>, Kotoko Arisawa<sup>2</sup>, Yoshiro Saito<sup>2</sup>  
 (<sup>1</sup> Fac. Pharm. Sci., Tohoku Univ., <sup>2</sup> Grad. Sch. Pharm. Sci., Tohoku Univ.)
- P-066 A novel selenium acceptor molecule for selenium metabolism;inhibition of selenium metabolism by electrophilic modification of peroxiredoxin 6**  
 ○ Hayato Takashima<sup>1</sup>, Takashi Toyama<sup>1</sup>, Junya Ito<sup>2</sup>, Eikan Mishima<sup>2</sup>, Marcus Conrad<sup>2</sup>, Yoshiro Saito<sup>1</sup>  
 (<sup>1</sup>Grad. Sch. Pharm. Sci., Tohoku Univ. <sup>2</sup> Helmholtz Munich)
- P-067 Inhibition of ferroptosis by environmental pollutants 1,2-naphthoquinoen and 1,4-naphthoquinoen through FSP1**  
 ○ Kei Ishida<sup>1</sup>, Takashi Toyama<sup>1</sup>, Eikan Mishima<sup>2</sup>, Marcus Conrad<sup>2</sup>, Yoshiro Saito<sup>1</sup>  
 (<sup>1</sup> Fac. Pharm. Sci., Tohoku Univ. <sup>2</sup> Helmholtz Zentrum München)
- P-068 Neurobehavioral changes in offspring mice exposed to methylmercury in the prenatal and postnatal stages**  
 ○ Ryota Yamagata, Natsuko Kayama, Naoya Yamashita, Gi-Wook Hwang  
 (Fac. of Pharmaceut. Sci., Tohoku Med. Pharmaceut. Univ.)

- P-069 Association between the use of antifungal medication during pregnancy and major congenital malformations in infants**  
 ○ Tadaharu Kunitoki<sup>1</sup>, Taku Obara<sup>2</sup>, Yuna Yoshida<sup>1</sup>, Haruto Watanabe<sup>3</sup>,  
 Seiko Yamakoshi<sup>1,3</sup>, Emiko Sato<sup>1,3</sup>, Nobuyuki Takahashi<sup>1,3</sup>  
 (<sup>1</sup>Grad. Sch. Pharm. Sci., Tohoku Univ., <sup>2</sup>Grad. Sch. Med. Sci., Tohoku Univ.,  
<sup>3</sup>Fac. Pharm. Sci., Tohoku Univ.)
- P-070 Association between the use of SSRI during pregnancy and MCMs in infants**  
 ○ Haruto Watanabe<sup>1</sup>, Taku Obara<sup>2</sup>, Tadaharu Kunitoki<sup>3</sup>, Yuna Yoshida<sup>3</sup>,  
 Seiko Yamakoshi<sup>1,3</sup>, Emiko Sato<sup>1,3</sup>, Nobuyuki Takahashi<sup>1,3</sup>  
 (<sup>1</sup> Fac. Pharm. Sci., Tohoku Univ., <sup>2</sup>Grad. Sch. Med. Sci., Tohoku Univ.,  
<sup>3</sup>Grad. Sch. Pharm. Sci., Tohoku Univ.)
- P-071 Evaluation of the effects of perinatal chlorpyrifos exposure on brain development using neuronal differentiation reporter mice**  
 ○ Masaki Tanaka, Keishi Ishida, Daisuke Matsumaru, Tsuyoshi Nakanishi  
 (Gifu Pharm. Univ.)
- P-072 Effects of prenatal fluorene-9-bisphenol exposure on maternal thyroid-related parameters and fetal development**  
 ○ Keishi Ishida, Kyoko Mekada, Daisuke Matsumaru, Tsuyoshi Nakanishi  
 (Gifu Pharm. Univ.)
- P-073 Investigation of cleft palate induced by PFAS**  
 ○ Hiroki Yoshioka<sup>1</sup>, Yosuke Tsukiboshi<sup>1</sup>, Hanane Horita<sup>1</sup>, Aya Ogata<sup>1</sup>, Kenichi Ogata<sup>2</sup>  
 (<sup>1</sup> Fac. Pharm., Gifu Univ. Med. Sci., <sup>2</sup> Fac.Dent., Kyushu. Univ.)
- P-074 Activation of the perforin-granzyme B system in cytotoxic T-lymphocytes as a mechanism underlying the selective damage of granule cells in the cerebellum by methylmercury**  
 ○ Toshiyuki Kaji<sup>1</sup>, Tsuyoshi Nakano<sup>2</sup>, Junko Kim<sup>1</sup>, Eiko Yoshida<sup>3</sup>, Ke Du<sup>4</sup>,  
 Tomoya Fujie<sup>1</sup>, Chika Yamamoto<sup>2</sup>, Takato Hara<sup>2</sup>, Tsutomu Takahashi<sup>5</sup>,  
 Yasuyuki Fujiwara<sup>5</sup>, Komyo Eto<sup>6</sup>, Yo Shinoda<sup>5</sup>  
 (<sup>1</sup>Fac. Pharm. Sci., Tokyo Univ. Sci., <sup>2</sup>Fac. Pharm. Sci., Toho Univ.,  
<sup>3</sup>Central Res. Inst. Elec. Power Ind., <sup>4</sup>Sch. Pharm., China Med. Univ.,  
<sup>5</sup>Sch. Pharm., Tokyo Univ. Pharm. Life Sci., <sup>6</sup>Jushindai)
- P-075 Suppressive effects of effusol and dehydroeffusol from *Juncus effusus* on nigral dopaminergic degeneration in rats induced by exposure to 6-hydroxydopamine**  
 ○ Haruna Tamano<sup>1,2</sup>, Misa Katahira<sup>2</sup>, Nana Saeki<sup>2</sup>, Atsushi Takeda<sup>2</sup>  
 (<sup>1</sup>Shizuoka Tohto Med. Col., <sup>2</sup>Pharm. Sci., Univ. Shizuoka)

- P-076 Effects of Exposure to Heated Tobacco Aerosol on Hepatic Lipid Metabolism in Mice Fed a High-Fat Diet**  
○ Sawako Shindo<sup>1</sup>, Kodai Tsukada<sup>1</sup>, Madoka Nihei<sup>1</sup>, Yohei Inaba<sup>2</sup>, Akira Ushiyama<sup>2</sup>, Kenji Hattori<sup>1</sup>  
(<sup>1</sup>Fac. Pharm. Sci., Meiji Pharm. Univ., <sup>2</sup>Dep. Env. Health, NIPH)
- P-077 PS-PLA<sub>1</sub>-LysoPS AXIS IN INFECTIOUS IMMUNITY**  
○ Shun Yaginuma, Jumpei Omi, Kuniyuki Kano, Junken Aoki  
(Grad. Sch. Pharm. Sci., Tokyo Univ.)
- P-078 Anti-inflammatory role of prostacyclin synthase in lipopolysaccharide-induced inflammation**  
○ Toshiya Honsawa, Tsubasa Ochiai, Hiroshi Kuwata, Shuntaro Hara  
(Sch. of Pharm., Showa Univ.)
- P-079 Cell dynamics of satellite glial cells in the dorsal root ganglion of methylmercury-exposed rat**  
○ Misaki Ozawa<sup>1</sup>, Sawa Soneda<sup>2</sup>, Yuka Sekiguchi<sup>2</sup>, Ayaka Matsuki<sup>2</sup>, Kaito Yamashiro<sup>2</sup>, Tsutomu Takahashi<sup>2</sup>, Yasuyuki Fujiwara<sup>2</sup>, Eiko Yoshida<sup>3</sup>, Toshiyuki Kaji<sup>4</sup>, Yo Shinoda<sup>2</sup>  
(<sup>1</sup>Hiroo-gakuen Senior High Sch., <sup>2</sup>Sch. Pharm., Tokyo Univ. Pharm. Life Sci., <sup>3</sup>CRIEPI, <sup>4</sup>Fac. Pharm., Tokyo Univ. Sci.)
- P-080 Role of ACSL4-dependent ferroptosis in inflammation-related colorectal cancer**  
○ Moe Tanaka, Tsubasa Ochiai, Toshiya Honsawa, Hiroshi Kuwata, Shuntaro Hara  
(Sch. Pharm., Showa Univ.)
- P-081 Role of TIRAP/Mal on oxidative stress-induced NF-κB activation**  
○ Toshiyuki Oshima, Daisuke Watanabe, Haruka Takahashi, Keigo Tokuyama, Yuto Wachi, Ritomu Tsuji, Mirai Toyama, Atsumi Koike, Tomofumi Fujino, Makio Hayakawa  
(Sch. Pharm., Tokyo Univ. Pharm. Life Sci.)
- P-082 Analysis of a new function of EPC to prevent cell death**  
○ Saki Furusato<sup>1</sup>, Yukie Suto<sup>1</sup>, Masaki Matsuoka<sup>1</sup>, Asuka Shimomura<sup>2</sup>, Toshihiro Mori<sup>2</sup>, Hirotaka Imai<sup>1</sup>  
(<sup>1</sup>Grad. Pharm. Sci., Kitasato Univ., <sup>2</sup>Mandom corp.)
- P-083 Analysis of the execution pathway of cold-induced cell death (CICD)**  
○ Kenta Tanaka, Masaki Matsuoka, Hirotaka Imai  
(Sch. Pharm. Sci. Kitasato Univ.)



- P-084 The role of Lysophosphatidylserine in the tumor microenvironment**  
○ Shun Nishikado<sup>1</sup>, Junpei Omi<sup>1</sup>, Akiharu Uwamizu<sup>1</sup>, Tomohiko Ohwada<sup>2</sup>,  
Junken Aoki<sup>1</sup>  
(<sup>1</sup>Department of Health Chemistry, Grad. Sch. Pharm. Sci., The Univ. of Tokyo,  
<sup>2</sup>Laboratory of Organic and Medical Chemistry, Grad. Sch. Pharm. Sci., The Univ. of  
Tokyo)
- P-085 Elucidation of the regulatory mechanism of extraembryonic endoderm  
differentiation by arachidonic acid**  
○ Taiga Iwama, Kuniyuki Kano, Nozomu Kono, Junken Aoki  
(Grad. Sch. Pharm. Sci., Univ. Tokyo)
- P-086 Role of cysteine residues in mercury transport by the mercury transporter MerC**  
○ Yuka Ohshiro, Ikumi Nakayama, Shimpei Uruguchi, Ryosuke Nakamura,  
Yasukazu Takanezawa, Masako Kiyono  
(Dept. of public Health, School of pharmacy, Kitasato Univ.)
- P-087 Role of cystine transporter inhibitor in Darinaparsin-induced cytotoxicity**  
○ Rio Inayoshi<sup>1</sup>, Kayoko Kita<sup>1</sup>, Maki Hatakeyama<sup>1</sup>, Taro Honma<sup>1</sup>, Kozo Yao<sup>2</sup>,  
Toshihide Suzuki<sup>1</sup>  
(<sup>1</sup>Fac. Pharm. Sci., Teikyo Univ., <sup>2</sup>Solasia Pharma K.K.)
- P-088 Therapeutic effect of onji extract on methylmercury toxicity in mice**  
○ Ryosuke Nakamura, Yasukazu Takanezawa, Yuka Ohshiro, Shimpei Uruguchi,  
Masako Kiyono  
(Sch. Pharm., kitasato Univ.)
- P-089 Conversion of methylmercury into inorganic mercury via organomercurial lyase  
(MerB) activates autophagy and aggresome formation**  
○ Yasukazu Takanezawa, Kohei Ishikawa, Ryosuke Nakamura, Yuka Ohshiro,  
Shimpei Uruguchi, Masako Kiyono  
(Dept. of Public Health, School of Pharmacy, Kitasato Univ.)
- P-090 Determination of Acylcarnitines as a Biomarker of Insulin Poisoning by LC-  
QTOF/MS**  
○ Manami Katayama<sup>1</sup>, Sayaka Nagasawa<sup>2</sup>, Hirotaro Iwase<sup>3</sup>, Yasumitsu Ogra<sup>2</sup>  
(<sup>1</sup>Faculty of Pharmaceutical Sciences, <sup>2</sup>Graduate School of Pharmaceutical Sciences,  
<sup>3</sup>Graduate School of Medicine, Chiba University)
- P-091 Post-mortem degradation of flunitrazepam in blood**  
○ Yoshikazu Yamagishi<sup>1</sup>, Hiroyuki Inoue<sup>1</sup>, Sayaka Nagasawa<sup>1,2</sup>, Hirotaro Iwase<sup>1</sup>,  
Yasumitsu Ogra<sup>1,2</sup>  
(<sup>1</sup> Grad. Sch. of Med., Chiba Univ., <sup>2</sup> Grad. Sch. of Pharm. Sci., Chiba Univ.)

- P-092 Effect of human serum albumin on post-mortem degradation of carbamate pesticides**  
 ○ Momona Ikeda<sup>1</sup>, Yoshikazu Yamagishi<sup>2</sup>, Yasumitsu Ogra<sup>3</sup>  
 (<sup>1</sup>Faculty of Pharmaceutical Sciences, Chiba University,  
<sup>2</sup>Graduate School of Medicine, Chiba University,  
<sup>3</sup>Graduate School of Pharmaceutical Sciences, Chiba University)
- P-093 Evaluation of the activity of selenosugar synthase SenB by speciation and its docking simulation**  
 ○ Karin Takahashi<sup>1</sup>, Yasunori Fukumoto<sup>2</sup>, Noriyuki Suzuki<sup>3</sup>, Yu-ki Tanaka<sup>2</sup>,  
 Yasumitsu Ogra<sup>2</sup>  
 (<sup>1</sup>Graduate School of Medical and Pharmaceutical Sciences,  
<sup>2</sup>Graduate School of Pharmaceutical Sciences, Chiba University,  
<sup>3</sup>Faculty of Pharmaceutical Sciences, Toho University)
- P-094 Kinetic study of the methylation of glutathione persulfide by thiopurine S-methyltransferase**  
 ○ Momoka Uchida<sup>1</sup>, Yasunori Fukumoto<sup>2</sup>, Yoshikazu Yamagishi<sup>3</sup>, Yu-ki Tanaka<sup>2</sup>,  
 Noriyuki Suzuki<sup>4</sup>, Yasumitsu Ogra<sup>2</sup>  
 (<sup>1</sup>Fac. Pharm. Sci., <sup>2</sup>Grad. Sch. Pharm. Sci., <sup>3</sup>Grad. Sch. Med., Chiba Univ,  
<sup>4</sup>Fac. Pharm. Sci., Toho Univ.)
- P-095 Effect of oleanolic acid on lipid metabolism in mice fed a high-fat diet**  
 ○ Tohru Yamazaki, Rieko Ueda, Haruna Hachikawa, Haruka Noda, Kaoruko Endo,  
 Atsushi Mitsumoto  
 (Fac. Pharm. Sci., Josai International Univ.)
- P-096 Extracellular ATP Suppresses the Expression of Heparan Sulfate Proteoglycan Perlecan in Vascular Endothelial Cells via the P2Y2R-Akt Signaling Pathway**  
 ○ Lihito Ikeuchi<sup>1</sup>, Tsuyoshi Nakano<sup>2</sup>, Takato Hara<sup>2</sup>, Kazuki Kitabatake<sup>1</sup>,  
 Chika Yamamoto<sup>2</sup>, Mitsutoshi Tsukimoto<sup>1</sup>, Tomoya Fujie<sup>1</sup>, Toshiyuki Kaji<sup>1</sup>  
 (<sup>1</sup>Fac. Pharm. Sci., Tokyo Univ. of Sci., <sup>2</sup>Fac. Pharm. Sci., Toho Univ.)
- P-097 A Pilot Test of Olive Weevil Repellents in an Olive Orchard**  
 ○ Atsushi Mitsumoto, Tohru Yamazaki  
 (Fac. Pharm. Sci., Josai Intl' Univ.)
- P-098 Mechanism of cold stress response in human hepatocarcinoma cells (HepG2)**  
 ○ Ayano Fukuda<sup>1</sup>, Yoshikazu Yamagishi<sup>2</sup>, Sayaka Nagasawa<sup>2,3</sup>, Yasumitsu Ogra<sup>2,3</sup>  
 (<sup>1</sup>Graduate School of Medicine and Pharmaceutical Sciences,  
<sup>2</sup>Graduate School of Medicine,  
<sup>3</sup>Graduate School of Pharmaceutical Sciences, Chiba University)

- P-099 The core protein expression of proteoglycans does not reflect their mRNA levels in cultured vascular endothelial cells under hypoxic conditions**  
○ Misaki Shirai<sup>1,2</sup>, Takato Hara<sup>1</sup>, Toshiyuki Kaji<sup>3</sup>, Chika Yamamoto<sup>3</sup>  
(<sup>1</sup>Fac. Pharm. Sci., Toho Univ, <sup>2</sup>JSPS Research Fellow,  
<sup>3</sup>Fac. Pharm. Sci., Tokyo Univ. Sci.)
- P-100 Evaluation of specificity and capability of SPL2 protein for metal ions**  
○ Li Enhui<sup>1</sup>, Yasunori Fukumoto<sup>2</sup>, Yu-Ki Tanaka<sup>2</sup>, Yasumitsu Ogra<sup>2</sup>  
(<sup>1</sup>Grad. Sch. Med & Pharm. Sci., <sup>2</sup>Grad. Sch. Pharm. Sci., Chiba Univ.)
- P-101 Effects of microplastics/nanoplastics with different surface properties and sizes on microglia and astrocytes**  
○ Cai Zong<sup>1</sup>, Emi Kato<sup>1</sup>, Risa Tsuyuki<sup>1</sup>, Sonja Boland<sup>2</sup>, Yuki Kitamura<sup>3</sup>,  
Sahoko Ichihara<sup>3</sup>, Gaku Ichihara<sup>1</sup>  
(<sup>1</sup>Faculty of Pharm. Sci., Tokyo Univ. of Sci.; <sup>2</sup>Université Paris Cité, CNRS;  
<sup>3</sup>School of Med., Jichi Med. Univ.)
- P-102 Analysis of structure-activity relationships and cell type-dependency for PFAS toxicity in vascular endothelial cells**  
○ Sayori Ichijo, Toshiyuki Kaji, Tomoya Fujie  
(Fac. Pharm. Sci., Tokyo Univ. of Sci.)
- P-103 Study of NF-κB activator/inhibitor detection method for screening of toxic substances in textile products**  
○ Iwaki Nishi<sup>1</sup>, Taichi Yoshitomi<sup>1</sup>, Tsuyoshi Kawakami<sup>2</sup>  
(<sup>1</sup> Kanagawa Prefectural Institute of Public Health, <sup>2</sup> NIHS)
- P-104 Prediction of hTRPA1 activation by fragrance allergens regulated by the revised EU cosmetics regulation**  
○ Yui Okino<sup>1</sup>, Miyu Takahashi<sup>1</sup>, Yoko Mori<sup>2</sup>, Susumu Ohkawara<sup>1</sup>, Yasuyuki Kitagawa<sup>1</sup>,  
Noriyuki Kitagawa<sup>1</sup>, Takashi Isobe<sup>1</sup>, Nobumitsu Hanioka<sup>1</sup>, Hideto Jinno<sup>3</sup>,  
Toshiko Tanaka-Kagawa<sup>1</sup>  
(<sup>1</sup>Yokohama Univ. Pharm., <sup>2</sup>Natl. Inst. Health. Sci, <sup>3</sup>Facul. Pharm., Meijo Univ.)
- P-105 International standardization of Methods of Analysis in Health Science and their administrative utilization/application**  
○ Shinobu Sakai<sup>1</sup>, Shin-ichi Tanabe<sup>2</sup>, Kazuhide Ito<sup>3</sup>, Maiko Tahara<sup>1</sup>,  
Toshiko Tanaka-Kagawa<sup>4</sup>, Hideto Jinno<sup>5</sup>  
(<sup>1</sup>NIHS, <sup>2</sup>Waseda Univ., <sup>3</sup>Kyushu Univ., <sup>4</sup>Yokohama Univ. Pharm., <sup>5</sup>Meijo Univ.)

- P-106 Species differences in TRPA1 activation by the alternative plasticizers to phthalates**  
 ○ Ryuto Yuasa<sup>1</sup>, Yoko Mori<sup>2</sup>, Akira Aoki<sup>1</sup>, Yoshinori Okamoto<sup>1</sup>, Takashi Isobe<sup>3</sup>,  
 Susumu Ohkawara<sup>3</sup>, Nobumitsu Hanioka<sup>3</sup>, Toshiko Tanaka-Kagawa<sup>3</sup>, Hideto Jinno<sup>1</sup>  
 (<sup>1</sup> Faculty of Pharmacy, Meijo University, <sup>2</sup>National Institute of Health Sciences,  
<sup>3</sup>Yokohama University of Pharmacy)
- P-107 Effects of drugs with reported immune-mediated disorder on Dendritic Cell-immune responses**  
 ○ Kazuki Sasano<sup>1</sup>, Satoshi Ishikawa<sup>2</sup>, Haruka Mizuno<sup>1</sup>, Kanon Murase<sup>1</sup>, Isamu Ogawa<sup>2</sup>  
 Saotomo Itoh<sup>2</sup>, Shinsuke Taki<sup>3</sup>, Shigeaki Hida<sup>2</sup>  
 (<sup>1</sup>Fac. Pharmaceut. Sci. Nagoya-City Univ.,  
<sup>2</sup>Grad. Sch. Pharmaceut. Sci. Nagoya-City Univ., <sup>3</sup>Sch. Med, Shinshu Univ)
- P-108 Examination of the suppressive effect of Indian mulberry (noni) juice on the AGEs formation caused by glycation of albumin and collagen**  
 ○ Masaki Takaishi<sup>1</sup>, Miharu Fukasawa<sup>1</sup>, Ichiro Kawano<sup>2</sup>, Sayoko Nishioka<sup>3</sup>,  
 Akio Kobayashi<sup>1</sup>, Satoshi Asano<sup>4</sup>  
 (<sup>1</sup>Pharm. Sci., IUHW., <sup>2</sup>MARURU, <sup>3</sup>Pharmakion Plan., <sup>4</sup>FSC.)
- P-109 Analysis of SARS-CoV-2 isolated from the persistent COVID-19 patient**  
 ○ Hiroki Futatsusako<sup>1</sup>, Rina Hashimoto<sup>1</sup>, Masaki Yamamoto<sup>2</sup>, Jumpei Ito<sup>3</sup>,  
 Yasufumi Matsumura<sup>2</sup>, Genotype to Phenotype Japan (G2P-Japan) Consortium,  
 Kei Sato<sup>3</sup>, Miki Nagao<sup>2</sup>, Kazuo Takayama<sup>1</sup>  
 (<sup>1</sup>CiRA, Kyoto Univ., <sup>2</sup>Grad. Sch. of Med., Kyoto Univ.,  
<sup>3</sup>The Inst. of Med. Sci., The Univ. of Tokyo.)
- P-110 Functional analysis of amino acid transporter *SLC6A19* in placenta**  
 ○ Momoe Serizawa<sup>1</sup>, Kazuma Higashisaka<sup>1,2,3</sup>, Yurina Nakamoto<sup>1</sup>, Rena Yamamoto<sup>1</sup>,  
 Yuya Haga<sup>1,3</sup>, Yasuo Tsutsumi<sup>1,3,4,5</sup>  
 (<sup>1</sup>Sch. Pharm. Sci., Osaka Univ., <sup>2</sup>IACS., Osaka Univ.,  
<sup>3</sup>Grad. Sch. Pharm. Sci., Osaka Univ., <sup>4</sup>MEI Ctr., Osaka Univ., <sup>5</sup>OTRI., Osaka Univ.)
- P-111 Evaluation of placental transmission of plastic nanoparticles**  
 ○ Mizuki Muranaka<sup>1</sup>, Kazuma Higashisaka<sup>1,2,3</sup>, Jundai Kobayashi<sup>3</sup>, Yankun Xie<sup>3</sup>,  
 Wakako Okuno<sup>1</sup>, Yuya Haga<sup>1,3</sup>, Yasuo Tsutsumi<sup>1,3,4,5</sup>  
 (<sup>1</sup>Sch. Pharm. Sci., Osaka Univ., <sup>2</sup>IACS., Osaka Univ.,  
<sup>3</sup>Grad. Sch. Pharm. Sci., Osaka Univ., <sup>4</sup>MEI Ctr, Osaka Univ., <sup>5</sup>OTRI., Osaka Univ.)
- P-112 Maternal exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin induces the growth retardation in postnatal offspring: transgenerational toxicity and the restoration by aripiprazole intervention**  
 ○ Xing Zou<sup>1</sup>, Ming Yuan<sup>1</sup>, Tomoki Takeda<sup>1,2</sup>, Yoshitaka Tanaka<sup>1</sup>, Yuji Ishii<sup>1</sup>  
 (<sup>1</sup>Grad Sch Pharmaceuti Sci., Kyushu Univ., <sup>2</sup>F-SEEDS)

- P-113 Application of the dihydropyrazine for prevention and treatment of sepsis: therapeutic effect in multiple organs**  
○ Madoka Sawai<sup>1</sup>, Yutaka Tatano<sup>1</sup>, Katsuya Miyake<sup>3</sup>, Jian-Rong Zhou<sup>2</sup>, Taku Kaitsuka<sup>1</sup>, Hisao Kansui<sup>2</sup>, Yuu Miyauchi<sup>2</sup>, Shinji Takechi<sup>2</sup>  
(<sup>1</sup>Sch. Pharm., at Fukuoka. Int. Univ. Health & Welfare.,  
<sup>2</sup> Fac. Pharmaceut. Sci., Sojo Univ., <sup>3</sup>Cbmr., at Narita. Int. Univ. Health & Welfare.)
- P-114 Molecular and structural change of macrophages in mammary papilla of lactating female mice**  
○ Yukiko Marunaka, Kei Nakayama, Hiroshi Hasegawa  
(Lab. Hygienic. Sci., Kobe Pharm. Univ.)
- P-115 Elucidation of the anti-inflammatory mechanisms of the cephem antibiotics**  
○ Sara Suzuki, Tomohiro Kagi, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-116 Novel induction mechanisms of Smac-independent apoptosis induced by the anti-tumor kinase LKB1**  
○ Maki Mitsuya, Yutaro Yamada, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-117 Conjugated fatty acids (CFAs) induce ferroptosis by promoting degradation of GPX4 through chaperone-mediated autophagy**  
○ Soma Taguchi, Yusuke Hirata, Ryota Kojima, Shinnosuke Kimura, Haruka Masumoto, Takuya Nijima, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-118 The regulatory mechanism of TRIM48, a positive regulator of ASK1, through ubiquitination-dependent degradation and its role in oxidative stress responses**  
○ Haruka Masumoto, Naoki Kashiwabara, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)