

Plenary Lecture

September 9 (Tue) 15:00-15:50 Room A (705)

Chair: Seiichiro Himeno (Sch. Pharm., Showa Med. Univ.)

***PL-1* A path forward for the environmental health: towards a better chemical substance management**

○ Shoji F Nakayama

(National Institute for Environmental Studies)

Educational Lecture

September 10 (Wed) 11:10-11:50 Room A (705)

Chair: Yoshiro Saito (NIHS)

***EL-1* “Pharmaceutical hygiene science” and “Regulatory science”**

○ Yukihiro Goda

(Emeritus Director General, National Institute of Health Sciences, Japan; Director General, Toyama Prefectural Institute for Pharmaceutical Research)

Scientific Award

September 10 (Wed) 13:00-13:30 Room A (705)

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

***AL-1* Mechanistic understanding of chemical carcinogenesis and the development of predictive and evaluative systems**

○ Kouichi Yoshinari

(School. Pharm. Sci, Univ. Shizuoka)

Kanehara Award

September 10 (Wed) 13:30-13:50 Room A (705)

Chair: Ken Takeda (Fac. Pharm. Sci., Yamaguchi Univ. Pharm. Sci.)

***AL2-1* Key Events in Nanoparticle-Specific Adverse Outcome Pathways: Connection between Protein Misfolding Induced by Particle-Surface Interactions and Brain Health Risks**

○ Atsuto Onoda

(Dep. Pharm., Sanyo-Onoda City Univ.)

September 10 (Wed) 13:50-14:10 Room A (705)
Chair: Nobuhiko Miura (Yokohama Univ. Pharm.)

AL2-2 Comprehensive investigation into the mechanism of hepatic and renal injury and circadian variations in their susceptibility

○ Hiroki Yoshioka
(Kitasato Med Univ.)

Invited Lecture

September 9 (Tue) 11:30-12:00 Room A (705)
Chair: Yasumitsu Ogra (Fac. Pharm. Sci., Chiba Univ.)

IL-1 Understanding Molecular Etiology of Ovarian Cancer

○ Jeehyeon Bae¹, Kangseok Lee²
(¹Fac. Pharm., Chung-Ang Univ., ²Fac. Life Sci., Chung-Ang Univ.)

Forum I : Pathophysiological Insights through Inter-Organ Network Analysis and Its Modulation by Chemical Agents

September 9 (Tue) 9:00-11:00 Room A (705)
Organizer / Chairs: Yoshinori Okamoto (Fac. Pharm., Meijo Univ.)
Mamoru Tanida (Fac. Med., Kanazawa Med. Univ.)

F1-1 Reduction of estrogen-associated carcinogenic risk via targeting DNA damage and its therapeutic implications in hormone replacement

○ Yoshinori Okamoto, Akira Aoki, Hideto Jinno
(Fac. Pharm., Meijo Univ.)

F1-2 Role of NAD⁺ metabolism in the lateral hypothalamus for skeletal muscle functions and the pathogenesis of sarcopenia

○ Naoki Ito
(National Center for Geriatrics and Gerontology)

***F1-3* Gut hormone GLP-1 regulates feeding behavior and glucose metabolism via vagal afferents – brain axis**

○ Yusaku Iwasaki

(Grad. Sch. Life Environ. Sci., Kyoto Prefectural Univ.)

***F1-4* Autonomic nerves form organ connections in response to endocrine hormones**

○ Mamoru Tanida

(Dept. Physi2., Kanazawa Med. Univ)

Forum II : The Cutting Edge of Science on Fragrance and Human Health

September 9 (Tue) 16:00-18:00 Room A (705)

Organizer / Chairs: Shinobu Sakai (NIHS)

Toshiko Tanaka-Kagawa (Yokohama Univ. Pharm.)

***F2-1* Environment and Health through the Lens of Human Skin Gas**

○ Yoshika Sekine

(Sch. Sci., Tokai Univ.)

***F2-2* Aromatherapy and advanced medical care and therapy**

○ Seiji Shioda¹, Michio Yamashita², Fumiko Takenoya²

(¹Fac. Pharm., Shonan Univ. Med Sci, ²Fac. Pharm., Hoshi Univ. Pharma. Sci.)

***F2-3* Molecular networks involved in signal transduction in olfactory neurons and olfactory characteristics**

○ Hiroko Takeuchi

(Frontier Biosci., U Osaka.)

***F2-4* Aroma Evaluation and Applications Using GC-MS**

○ Natsuko Kanno

(Shimadzu corporation)

Forum III : Developmental Study of Functional and Safe Foods with Health Claims

September 10 (Wed) 9:00-11:00 Room A (705)

Organizer / Chairs: Keiichi Motoyama (Grad. Sch. Life Sci., Kumamoto Univ.)

Kazuya Nagano (Fac. Pharm., Wakayama Med. Univ.)

F3-1 Usability evaluation of amorphous curcumin with high water solubility as a functional food

○ Takuya Yamashita, Kazuya Nagano
(Sch. Pharm. Sci., Wakayama Medical Univ.)

F3-2 Development of salt absorption control technology to prevent lifestyle-related diseases

○ Keiichi Motoyama
(Grad. Sch. Pharm. Sci., Kumamoto Univ.)

F3-3 Development of an *in vitro* evaluation system for chemical-induced renal injury using proximal tubular epithelial cell spheroids

○ Hiroshi Arakawa
(Grad. Sch. Pharm. Sci., Nagoya City Univ.)

F3-4 Visualization of the Gut Environment for the Realization of Precision Nutrition and Its New Developments Toward a Healthy Society

○ Jun Kunisawa^{1,2,3,4,5}
(¹NIBN, ²Osaka Univ, ³IMSUT, ⁴Kobe Univ, ⁵Waseda Univ)

Forum IV : Recent Developments in Biometal Science and its Beyond

September 10 (Wed) 14:20-16:20 Room A (705)

Organizer / Chairs: Yoshiro Saito (Fac. Pharm. Sci., Tohoku Univ.)

Yasumitsu Ogra (Fac. Pharm. Sci., Chiba Univ.)

F4-1 Chemical tools for visualization of labile iron and heme: from development to application

○ Tasuku Hirayama
(Gifu Pharm. Univ.)

F4-2 Protein-Labeling Reagents Selectively Activated by Copper(I)

○ Tomonori Tamura, Rong Cheng, Itaru Hamachi
(Grad. Sch. Eng., Kyoto Univ.)

F4-3 Discovery and evaluation of selective inhibitors targeting metal transporter ZIP14

○ Toshiyuki Fukada¹, Takafumi Hara¹, Gen Tanaka², Tomonori Tamura³,
Masaomi Terajima⁴, Kengo Hamamura⁵, Yuya Yoshida⁵, Yusuke Kasai¹,
Kazuto Nunomura⁶, Toru Kimura⁷, Hiroki Taguchi¹, Hitomi Fujishiro¹,
Yuta Nakayama¹, Takumi Umeyama¹, Ayaka Noguchi¹, Yasuno Nakai¹,
Emi Yoshigai¹, Naoya Matsunaga⁵, Shigehiro Ohdo⁵, Mitchell D. Knutson⁸,
Hiroshi Imagawa¹, Itaru Hamachi³, Hiroyuki Sakurai²
(¹Tokushima Bunri Univ., ²Kyorin Univ., ³Kyoto Univ., ⁴Astellas Pharma,
⁵Kyushu Univ., ⁶Osaka Univ., ⁷Josai Univ., ⁸Univ. of Florida)

F4-4 Understanding and Application of Bio-metal Metabolism Based on Selenoprotein P

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

2025 Japan/Korea Joint Symposium on Pharmaceutical Health Science and Environmental Toxicology

September 9 (Tue) 13:00-14:00 Room A (705)

Chairs: Joohee Jung (Coll. Pharm., Duksung Women's Univ.)

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

***S-1* Crosstalk between gut bacteria-derived small molecules and human immune system**

○ Munhyung Bae

(College of Pharmacy, Gachon Univ.)

***S-2* The new roles of G12 family proteins in cellular toxic response against metabolic stress**

○ Tae Hyun Kim

(College of Pharmacy, Sookmyung Women's University, Seoul 04310, Republic of Korea)

***S-3* Removal of lead ions onto potassium-type fine-grained zeolite prepared from dry or wet milling treatment**

○ Fumihiko Ogata

(Fac. Pharm., Kindai Univ.)

***S-4* Comparison of the efficacy of glutathione and metallothionein as protective factors against acute cadmium toxicity**

○ Maki Tokumoto, Chikage Mori, Jin-Yong Lee, Masahiko Satoh

(Sch. Pharm., Aichi Gakuin Univ.)

2025 Japan/Korea Joint Symposium on Pharmaceutical Health Science and Environmental Toxicology: Poster Session

September 9 (Tue) 14:10-14:50 Room C (6F Exhibition Room)

- PS-01** Usefulness evaluation of acidic sophorolipid produced by *Starmerella bombicola*, as a transdermal delivery carrier of minoxidil
○ Ryotaro Tsutsumi¹, Yuki Miyazaki¹, Erika Kunimi², Misa Muraoka², Hirofumi Tsujino², Masayoshi Arai², Kazumasa Hirata^{1,2}, Masako Nakanishi³, Shogo Ehata³, Takuya Yamashita¹, Kazuya Nagano¹
(¹Sch. Pharm. Sci., Wakayama Medical Univ., ²Grad. Sch. Pharm. Sci., Osaka Univ., ³Sch. Med. Sci., Wakayama Medical Univ.)
- PS-02** A novel fluorescent probe for simultaneous detection of ROS and ATP in a murine MASLD model
○ Chaewon Park, Tae Hyun Kim
(College of Pharmacy, Sookmyung Women's University, Seoul 04310, Republic of Korea)
- PS-03** Phase I and phase II drug metabolism of volatile chemicals in the mouse olfactory epithelium
○ Naoki Takaoka, Ayana Nishide, Sayomi Ishihara, Hiroki Kanda, Shigeru Ohta, Seigo Sanoh
(Sch. Pharm. Sci., Wakayama Med. Univ.)
- PS-04** *In vitro* acute respiratory toxicity test method using an artificial airway tissue model, SoluAirwayTM
○ Ji-Woo Choe^{1,2}, Geon-Hee Lee³, Su-Hyun Lee³, Ga-Eun Kim⁴, Ha-Ryong Kim^{4,*}, Kyung-Min Lim^{1,2,*}
(¹College of Pharmacy and Graduate School of Pharmaceutical Sciences, Ewha Womans University, Seoul 03760, Korea, ²Graduate Program in Innovative Biomaterials Convergence, Ewha Womans University, Seoul 03760, Korea, ³R&D Institute, Biosolution Co., Ltd., Seoul 06746, Korea, ⁴ College of Pharmacy, Korea University, Sejong 30019, Korea)
- PS-05** Comprehensive toxicological evaluation of *trans*-fatty acids based on *in vivo* metabolic profiling
○ Shinnosuke Kimura¹, Yusuke Hirata¹, Ryota Kojima¹, Takuya Noguchi^{1,2}, Atsushi Matsuzawa¹
(¹Lab. of Health Chem., Grad. Sch. of Pharm. Sci., Tohoku Univ., ²Dep. of Med. Biochem., Sch. of Pharm., Iwate Med. Univ.)

- PS-06 Oxaliplatin can induce the externalization of phosphatidylserine in erythrocytes promoting nephrotoxicity via erythrophagocytosis in HK-2 cells**
 ○ Jong-In Park, Ok-Nam Bae
 (Coll. Pharm., Hanyang Univ.)
- PS-07 Elucidation of the anti-inflammatory mechanisms by the cephem antibiotics**
 ○ Sara Suzuki¹, Yusuke Hirata¹, Takuya Noguchi^{1,2}, Atsushi Matsuzawa¹
 (¹Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., ²Fac. of Pharm., Iwate Med. Univ.)
- PS-08 Exploring hybrid molecular descriptors: A feature extraction strategy combining Zernike moments and scalar descriptors**
 ○ Yusun Shin, Ok-Nam Bae
 (Coll. Pharm., Hanyang Univ.)
- PS-09 Maternal exposure to TCDD elicits megaloblastic anemia in the fetus due to insufficient active cobalamin that disrupts one-carbon metabolism**
 ○ Yuki Ishiiyama¹, Mana Fujimoto¹, Xing Zou¹, Hiroe Sano¹, Takayuki Koga², Yoshitaka Tanaka¹, Yuji Ishii¹
 (¹Grad. Sch. Pharmaceut. Sci., Kyushu Univ., ²Daiichi Univ. Pharm.)
- PS-10 Functional consequences of soluble epoxide hydrolase inhibition in platelets**
 ○ Jae-Hyeong Kim, Jung-Min Park, Moo-Yeol Lee
 (BK21 FOUR Team and Integrated Research Institute of Drug Development, College of Pharmacy, Dongguk University, Republic of Korea)
- PS-11 AhR-Ligand induced expression of SELENBP1 in human cells: involvement of hESR1**
 ○ Shuangli Zhao^{1,2}, Yingxia Song^{1,3}, Ren-shi Li⁴, Takayuki Koga⁵, Yoshitaka Tanaka¹, Yuji Ishii¹
 (¹Div Pharmaceuti Cell Biol, Grad Sch Pharmaceuti Sci, Kyushu Univ,
²JSPS Fellow DC2,
³Shanghai Lu Daopei Hematology Hospital, ⁴China Pharmaceutical University,
⁵Daiichi Univ. Pharmacy)
- PS-12 Reproductive and developmental toxicity prediction of chemicals using OECD test guideline data and Tox21 program**
 ○ Hee Jung Kwon¹, Sunyi Lee¹, Woori Ko², Shin Jea Yun², Hyomin Lee², Yoshihiro Uesawa³, Joohee Jung¹
 (¹Coll. Pharm., Duksung Women's Univ., ²RA&M Consulting,
³Dept. Med. Mol. Info., Meiji Pharm. Univ.)

- PS-13 Suppression of perlecan, a heparan sulfate proteoglycan, in vascular endothelial cells via ATP-P2Y2R-Akt signaling by extracellular ATP**
 ○ Lihito Ikeuchi¹, Tsuyoshi Nakano², Takato Hara², Kazuki Kitabatake¹, Chika Yamamoto², Mitsutoshi Tsukimoto¹, Tomoya Fujie¹, Toshiyuki Kaji¹
 (¹Fac. Pharm. Sci., Tokyo Univ. Sci., ²Fac. Pharm. Sci., Toho Univ.)
- PS-14 Predictive evaluation of skin toxicity using QSAR tools: alignment with regulatory classifications**
 ○ Sooyeon Kim^{1,2}, Hee Jung Kwon¹, Sunyi Lee¹, Sanghyeon Yeon², Joohee Jung¹
 (¹Coll. Pharm., Duksung Women's Univ., ²Chemtopia)
- PS-15 Selenoprotein P attenuates cisplatin-induced cytotoxicity in proximal tubular cells**
 ○ Hiroki Taguchi¹, Nanae Matsubara¹, Takashi Toyama¹, Hitomi Fujishiro², Daigo Sumi², Yoshiro Saito¹
 (¹Grad. Sch. Pharm. Sci., Tohoku Univ., ²Fac. Pharm. Sci., Tokushima Bunri Univ.)
- PS-16 Impaired chaperone-mediated autophagy induces Trim44 accumulation in the liver**
 Ji Ye Hyun¹, You-Jin Choi², ○ Yujeong Choi¹, Zhang Yunfan¹, Juseo Kim¹, Ji Min Lee¹, Wonseok Lee³, Byung-Hoon Lee^{1*}
 (¹Coll. Pharm., Seoul National Univ., ²Coll. Pharm., Daegu Catholic Univ., ³Coll. Pharm., Gachon Univ.)
- PS-17 Elucidation of methylmercury-induced inhibition of Selenium metabolism and identification of sensitivity determinants using stepwise knockout strains of the Selenium metabolic pathway**
 ○ Hayato Takashima¹, Hiroki Taguchi¹, Takashi Toyama¹, Junya Ito², Eikan Mishima², Yoshiro Saito¹
 (¹Grad. Sch. Pharm. Sci., Tohoku Univ., ²Helmholtz Munich)
- PS-18 Novel insight into etiology of ovarian cancer**
 ○ Jeehyeon Bae¹, Kangseok Lee²
 (¹Fac. Pharm., Chung-Ang Univ., ²Fac. Life Sci., Chung-Ang Univ.)
- PS-19 MEK1/ERK2 activation mediates slow cell death following iron-independent lipid peroxidation in GPx4-deficient cells**
 ○ Kahori Tsuruta^{1,2}, Non Miyata¹, Masaki Matsuoka², Masayoshi Fukasawa¹, Hirotaka Imai²
 (¹Biochem. Cell Biol., NIID, JIHS, ²Sch. Parm Sci, Kitasato Univ.)

***PS-20* Molecular mechanism for the effect of gut bacteria on human immune system**

○ Munhyung Bae
(College of Pharmacy, Gachon Univ.)

***PS-21* Loss of function of GPx4 in cartilage induce metaphyseal dysplasia**

○ Shu Nakajima, Mayu Ohta, Kahori Tsuruta, Masaaki Matsuoka, Shu Yasuda,
Tomoko Koumura, Hirotaka Imai
(Sch. Pharm. Sci. Kitasato Univ.)

***PS-22* Effect of the nuclear receptor pathway on the cadmium toxicity**

○ Jin-Yong Lee, Chikage Mori, Maki Tokumoto, Laurie H.M. Chan, Masahiko Satoh
(¹Aichi Gakuin Univ., Japan, ²Univ. Ottawa, Canada)

Award Candidates Presentation Candidates for Rookie of the Year Award

September 9 (Tue) 9:00-10:10 Room B (702 • 703 • 704)

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

A-1 Comprehensive toxicological evaluation of *trans*-fatty acids based on *in vivo* metabolic profiling
(P-008)

○ Shinnosuke Kimura¹, Yusuke Hirata¹, Ryota Kojima¹, Takuya Noguchi^{1,2},
Atsushi Matsuzawa¹

(¹Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.,

²Dep. of Med. Biochem., Sch. of Pharm., Iwate Med. Univ.)

A-2 Maternal DHA Intake in mice Increased DHA Metabolites in the Fetal Brain and Regulated Brain Functions
(P-056)

○ Shinji Fujimoto¹, Ami Oguro², Megumi Yamamoto³, Yaichiro Kotake²

(¹Sch. Pharm. Sci., Hiroshima Univ.,

²Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.,

³National Institute for Minamata Disease)

A-3 Involvement of PRDX6, a chalcogen receptor, in metabolic remodeling of selenium
(P-068)

○ Ryui Miyazaki¹, Takashi Toyama², Yoshiro Saito²

(¹Lab of MB & M, Fac, Pharm, Tohoku Univ.,

²Lab of MB & M, Grad. Sch. Pharm. Sci., Tohoku Univ.)

A-4 Mechanism of p62 nuclear accumulation induced by a Parkinson's disease-related neurotoxins
(P-057)

○ Chihiro Suto¹, Masatsugu Miyara^{1,2}, Honoka Hashimoto², Yaichiro Kotake^{1,2}

(¹Sch. Pharm. Sci., Hiroshima Univ.,

²Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)

A-5 Cyclic mechanical stretching potentiates cadmium-induced toxicity in vascular endothelial cells
(P-103)

○ Sara Ogawa¹, Yukino Kasama¹, Hikaru Fujimori², Takato Hara², Chika Yamamoto²,
Toshiyuki Kaji¹, Tomoya Fujie¹

(¹Fac. Pharm. Sci., Tokyo Univ. Sci., ²Fac. Pharm. Sci., Toho Univ.)

A-6 Formation and degradation mechanisms of γ -glutamyl- β -cyanoalanylglycine in human hepatocarcinoma cell line, HepG2
(P-133)

○ Tomoya Taguchi¹, Yoshikazu Yamagishi², Yasumitsu Ogra³

(¹Fac. Pharm., Chiba Univ., ²Grad. Sch. Med. Sci., Chiba Univ.,

³Grad. Sch. Pharm. Sci., Chiba Univ.)

- A-7 Elucidation of the anti-inflammatory mechanisms by the cephem antibiotics**
(P-058) ○ Sara Suzuki¹, Yusuke Hirata¹, Takuya Noguchi^{1,2}, Atsushi Matsuzawa¹
 (¹Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., ²Fac. of Pharm., Iwate Med. Univ.)
- A-8 Analysis of lipid oxidation mechanism by Lipo1 using Lipo1 KO mice**
(P-113) ○ Bo Chen, Shotaro Hatanaka, Masaki Matsuoka, Hirotaka Imai
 (Fac. Pharm., Kitasato Univ.)
- A-9 Effects of nanoparticle exposure on neuronal cells caused by differentially**
(P-019) expressed miRNAs in extracellular vesicles
 ○ Momoka Tanaka, Atsuto Onoda, Ken Takeda, Ken Tachibana
 (Fac. Pharm.Sci, Sanyo-onoda city Univ.)
- A-10 Absolute quantification of abasic sites in RNA using LC-MS/MS and its increase**
(P-073) by inhibition of DNA repair enzyme APE1
 ○ Manami Muramatsu, Yoshinori Okamoto, Akira Aoki, Hideto Jinno
 (Fac. Pharm., Meijo Univ.)

Award Candidates Presentation Candidates for Young Investigator Award

September 9 (Tue) 10:10-11:30 Room B (702 · 703 · 704)

Chair: Hirotaka Imai (Fac. Pharm., Kitasato Univ.)

B-1 (P-013) Transgenerational Growth Retardation in an Offspring Induced by Prenatal Exposure to TCDD: Mechanisms of Restoring Disorders in the F1 Generation via Aripiprazole Intervention in F0 Dams

○ Xing Zou¹, Ming Yuan¹, Takeshi Matsushita², Tomoki Takeda^{1,3}, Yoshitaka Tanaka¹, Yuji Ishii¹

(¹Grad Sch Pharmaceuti Sci., Kyushu Univ., ²Pharmaceuti Sci., Kyushu Univ., ³F-SEEDS)

B-2 (P-059) Methylglyoxal confers resistance to ferroptosis in cancer cells

○ Takuya Nijijima¹, Yusuke Hirata¹, Takuya Noguchi^{1,2}, Atsushi Matsuzawa¹

(¹Lab. Of Health Chem., Grad. Sch. Of Pharmaceut. Sci., Tohoku Univ., ²Dep. of Med. Biochem., Sch. of Pharm., Iwate Med. Univ.)

B-3 (P-010) AhR-Ligand induced expression of SELENBP1 in human cells: involvement of hESR1

○ Shuangli Zhao^{1,2}, Yingxia Song¹, Ren-shi Li³, Takayuki Koga⁴, Yoshitaka Tanaka¹, Yuji Ishii¹

(¹Grad Sch Pharmaceuti Sci, Kyushu Univ, ²JSPS Fellow DC2, ³China Pharmaceutical University, ⁴Daiichi Univ. Pharmacy)

B-4 (P-108) Physiological role of a reducing intestinal environment mediated by gut microbial supersulfides

○ Jun Uchiyama^{1,2}, Masahiro Akiyama²

(¹Grad. Sch. Pharm., Keio Univ., ²Inst. Clin. Pharmacol., Showa Med Univ.)

B-5 (P-055) A novel toxicological mechanism of tributyltin via CASM

○ Shunichi Hatamiya, Masatsugu Miyara, Yaichiro Kotake

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

B-6 (P-111) Lipoxytosis chemical inducers can initiate lipid peroxidation induced cell death in an iron-independent manner via the lipid oxidase Lipo1

○ Yuzu Kono¹, Ayaka Enomoto¹, Masaki Matsuoka¹, Tomoyasu Hirose², Masato Iwatsuki², Hirotaka Imai¹

(¹Kitasato Univ., ²Omora Satoshi Memorial Institute)

- B-7 (P-112) The lipoxytosis executor Lipo2 translocates from the nucleus to membrane and induces cell death**
 ○ Yu Fujiwara, Masaki Matsuoka, Hirotaka Imai
 (Sch. Pharm. Sci., Kitasato Univ.)
- B-8 (P-045) Exploring the role and physiological significance of COQ5 in MK-4 conversion mechanism**
 ○ Kurumi Nakagawa¹, Shunta Sudo¹, Mei Koyanagi², Yoshitomo Suhara^{1,2},
 Liqing Zang³, Yasuhito Shimada⁴, Yoshihisa Hirota^{1,2}
 (¹Grad. Sch., Shibaura Inst. of Tech., ²Shibaura Inst. of Tech., ^{3,4}Mie Univ.)
- B-9 (P-027) Elucidation of methylmercury-induced inhibition of Selenium metabolism and identification of sensitivity determinants using stepwise knockout strains of the Selenium metabolic pathway**
 ○ Hayato Takashima¹, Hiroki Taguchi¹, Takashi Toyama¹, Junya Ito², Eikan Mishima²,
 Yoshiro Saito¹
 (¹Grad. Sch. Pharm. Sci., Tohoku Univ., ²Helmholtz Munich)
- B-10 (P-123) Maintenance of Acyl Chain Asymmetry in Membrane Phospholipids via Phospholipase A**
 ○ Tsumugi Iwata¹, Hiroki Kawana², Yutaro Yagi¹, Nozomu Kono¹, Junken Aoki¹
 (¹Grad. Sch. Pharm. Sci., Tokyo Univ.,
²Grad. Sch. Science and Technology, Nara Institute of Science and Technology)

Oral Session 1

September 9 (Tue) 16:00-17:00 Room B (702 • 703 • 704)

Chairs: Saotomo Itoh (Sch. Pharm., Aichi Gakuin Univ.)

Hiroki Yoshioka (Sch. Med., Kitasato Univ.)

01-1 Development of a human iPS cell-derived intestinal evaluation model and validation of drug toxicity and prophylactic effects

○ Isamu Ogawa¹, Yudai Matsuura¹, Miki Akimoto¹, Chihiro Kobayashi¹, Takaaki Nakai¹, Takuya Kanno², Takahito Katano², Hiromi Kataoka², Tamihide Matsunaga¹, Takahiro Iwao¹, Shigeaki Hida¹

(¹Grad. Sch. Pharm. Sci., Nagoya City Univ.,

²Grad. Sch. Med. Sci., Nagoya City Univ.)

01-2 *trans*-Fatty acids promote cellular senescence and inflammation upon DNA damage

○ Yusuke Hirata¹, Ryota Kojima¹, Takuya Noguchi^{1,2}, Atsushi Matsuzawa¹

(¹Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.,

²Dep. of Med. Biochem., Sch. of Pharm., Iwate Med. Univ.)

01-3 Nutritional availability and selenoprotein response to selenium methylation products in human liver cells

○ Kotaro Ishibashi¹, Seito Hirashima¹, Hiroaki Takemoto², Noriyuki Suzuki¹

(¹Fac. Pharm. Sci., Toho Univ, ²Sch. Pharm., Int. Univ. Health and Welfare, Narita)

01-4 Effect of vitamin K-converting enzyme UBIAD1 deficiency on osteoblast proliferation and differentiation

○ Shunsuke Hirashima, Chikako Kita, Ayari Kitamura, Takashi Kimoto, Kimie Nakagawa

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

01-5 Disorganization of the corticomedullary boundary in the maternal thymus by childbirth

○ Kei Nakayama, Hiroshi Hasegawa

(Lab. Hygienic Sci., Kobe Pharm. Univ.)

Oral Session 2

September 10 (Wed) 9:00-10:00 Room B (702 · 703 · 704)

Chairs: Yasuhiro Shinkai (Sch. Life Sci., Tokyo Univ. Pharm. Life Sci.)

Ken Tachibana (Fac. Pharm. Sci., Yamaguchi Univ. Pharm. Sci.)

O2-1 Development of a non-invasive method for detection of male reproductive toxicity using a novel compact magnetic resonance imaging system

○ Satoshi Yokota¹, Kousuke Suga¹, Hidenobu Miyaso², Hiroki Yoshioka³,
Satoshi Kitajima¹

(¹National Institute of Health Sciences, ²Tokyo Medical University.,
³Kitasato Univ. Sch. Med.)

O2-2 Establishment of a method for simultaneous determination of methylmercury and inorganic mercury in breast milk

○ Miyuki Iwai-Shimada¹, Kenta Iwai¹, Kaname Asato², Yayoi Kobayashi¹,
Kunihiko Nakai³, Shoji F. Nakayama¹, Nozomi Tatsuta¹

(¹NIES., ²Tohto Univ., ³Tokaigakuen Univ.)

O2-3 Development of a Simultaneous LC-MS/MS Analysis Method for Deoxynivalenol and Its Analogues, and Application to Grain Samples

○ Erina Imai¹, Emi Shirotani², Masahiko Tachi¹, Hirokazu Tsuzuki¹

(¹Aichi Prefectural Institute of Public Health, ²Kinuura Health Center)

O2-4 Adsorptive removal of bipyridinium herbicide using wheat bran for prevention of pesticide poisoning

○ Yugo Uematsu, Hikaru Yamashita, Fumihiko Ogata, Naohito Kawasaki
(Fac. Pharm., Kindai Univ.)

O2-5 Development of an atlas of large animal lung diseases at single-cell resolution

○ Shotaro Yamano, Yumi Umeda

(National Institute of Occupational Safety and Health)

Oral Session 3

September 10 (Wed) 10:00-11:00 Room B (702 • 703 • 704)

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

Miyuki Iwai-Shimada (NIES)

O3-1 Maintaining activity of UDP-glucuronosyltransferase 1A9 by its cytoplasmic tail and prediction of the molecular mechanism

○ Yuu Miyauchi¹, Yume Sadato², Madoka Sawai³, Shinji Takechi¹,
Masahiro Hiratsuka⁴, Yuji Ishii²

(¹Fac. Pharmaceut. Sci., Sojo Univ., ²Grad. Sch. Pharm. Sci., Kyushu Univ.,

³Sch. Pharm. at Fukuoka, Int. Univ. Health & Welfare,

⁴Grad. Sch. Pharm. Sci., Tohoku Univ.)

O3-2 Phase I and phase II drug metabolism of volatile chemicals in the mouse olfactory epithelium

○ Naoki Takaoka, Sayomi Ishihara, Ayana Nishide, Hiroki Kanda, Shigeru Ohta,
Seigo Sanoh

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

O3-3 Elucidation of the mechanism of cisplatin-induced renal injury via complex formation by selenoprotein P

○ Nanae Matsubara, Hiroki Taguchi, Takashi Toyama, Yoshiro Saito

(Laboratory of Molecular Biology and Metabolism, Tohoku Univ.)

O3-4 Effect of selenoprotein P on bone remodeling

○ Fuka Kaise, Takashi Toyama, Yoshiro Saito

(Fac. Pharm., Tohoku Univ.)

O3-5 Development of a new diabetes treatment based on the suppression of selenoprotein P expression

○ Marina Ueki¹, Mei Hanaki¹, Mayu Yamashita², Ozora Sasamoto², Masanori Shigeno²,
Takashi Toyama², Yoshiro Saito²

(¹Fac. Pharm., Tohoku Univ., ²Grad. Sch. Pharm., Tohoku Univ.)

Oral Session 4

September 10 (Wed) 14:20-15:20 Room B (702 · 703 · 704)

Chairs: Yuji Ishii (Grad. Sch. Pharm. Sci., Kyushu Univ.)

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

04-1 Investigation of adverse outcome pathway for lead-induced developmental neurotoxicity

○ Keishi Ishida, Kisaki Naito, Kyoko Mekada, Daisuke Matsumaru, Tsuyoshi Nakanishi
(Gifu Pharm. Univ.)

04-2 Possible Involvement of Oxidative Stress in Anti-Androgen-Induced Urethral Malformation

○ Miu Morikawa¹, Daisuke Matsumaru¹, Yuta Mori¹, Aki Murashima², Keishi Ishida¹, Tsuyoshi Nakanishi¹
(¹Gifu Pharm. Univ., ²Grad. Sch. Med. Sci., Nagoya City Univ.)

04-3 Sex-Differences in Developmental Effects of Prenatal and Lactational Exposure of Rats to Benzo[a]pyrene

○ Shashi Nandar Kumar¹, Noha E. Sheble¹, Yousra Reda¹, Cai Zong¹, Mahfuza Rahman¹, Ummara Altaf¹, Saleh Ahmed¹, Sai Charan¹, Takuto Ikeda¹, Mizuki Sawada¹, Sahoko Ichihara², Natsuko Kubota³, Shinya Yanagita³, Gaku Ichihara^{1*}
(¹Department of Occupational and Environmental Health, Faculty of Pharmaceutical Sciences, Tokyo University of Science, Katsushika-ku, Tokyo 125-8585, Japan, ²Department of Environmental and Preventive Medicine, Jichi Medical University, Shimotsuke 329-0498, Japan, ³Faculty of Science and Technology, Tokyo University of Science, Noda 278-8510, Japan)

04-4 MBP, a metabolite of bisphenol A, induces expression and transcription of β -catenin, which is involved in the malignancy of breast cancer cells

○ Masayo Hirao-Suzuki¹, Koki Kanameda², Masufumi Takiguchi¹, Shuso Takeda²
(¹Fac. Pharm. Sci., Hiroshima Intl. Univ., ²Grad. Sch. Pharm. Pharmaceut. Sci., Fukuyama Univ.)

04-5 Mutation signature analysis induced by environmental mutagens using error-corrected NGS

○ Shinya Hasegawa¹, Rikako Ishigamori¹, Marina Ohno², Kenichi Yoshida², Nobuyuki Kakiuchi³, Koichi Watanabe³, Shun Kawaguchi³, Seishi Ogawa^{3,4}, Yukari Totsuka¹
(¹Hoshi Univ., ²Natl. Cancer Ctr Res., ³Kyoto Univ., ⁴Inst. for the Advanced Study of Human Biol., Kyoto Univ.)

Oral Session 5

September 10 (Wed) 15:20-16:10 Room B (702 · 703 · 704)

Chairs: Daisuke Matsumaru (Gifu Pharm. Univ.)

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

O5-1 Analysis of vitamin K conversion dynamics during inflammation in immune system tissues

○ Takashi Kimoto, Yoshinori Harada, Yukie Matsui, Shunsuke Hirashima, Kimie Nakagawa
(Fac. Pharm., Kobe Gakuin Univ.)

O5-2 Hematopoietic prostaglandin D synthase-derived PGD₂ suppresses caerulein-induced pancreatitis

○ Kenta Hosomi¹, Masatoshi Nakatsuji¹, Yusuke Onishi², Shigeru Kawabata^{2,3}, Yoshinobu Hirose², Ko Fujimori¹
(¹Grad. Sch. Pharm. Sci., Osaka Med. Pharm. Univ.,
²Fac. Med. Sci., Osaka Med. Pharm. Univ., ³Fac. Med. Sci., Shimane Univ.)

O5-3 Mechanism of lipid-oxidation dependent cell death by interacting molecules with GPx4

○ Shu Yasuda¹, Ryusei Abe^{1,2}, Hirotaka Imai¹
(¹Grad. Sch. Pharm. Sci., Kitasato Univ., ²Grad. Sch. Pharm. Sci., The Univ. of Tokyo)

O5-4 Transcription factor SOX10 regulates melanoma ferroptosis by modulating expression of RXR γ

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

Poster Session: Day 1

September 9 (Tue) 14:10-14:50 Room C (6F Exhibition Room)

- P-001 Forensic science research into the developmental stages of cannabis cultivation**
○ Noriyuki Usami¹, Rina Kato¹, Kai Aruga¹, Ayako Kitano¹, Asuka Moribayashi¹, Sohta Kikuchi¹, Shion Suzuki¹, Mai Takata¹, Ayaka Yamada¹, Takuya Shuo²
(¹Fac.Pharm. Sci., Hokuriku Univ., ²Fac. Heal. Med. Sci., Hokuriku Uni.)
- P-002 Component analysis of kombu extracts using ¹H-NMR metabolome analysis**
○ Kazumi Sugihara¹, Masumi Motonaga¹, Yoshitaka Tayama¹, Yaichiro Kotake²
(¹Fac. Pharm. Sci., Hiroshima Int'l Univ.,
²Grad. Sch. Biomed. Health & Sci., Hiroshima Univ.)
- P-003 *In silico* search for TRPA1 antagonists targeting scent compounds in the living environment**
○ Kano Hirota¹, Yuka Suzuki¹, Shino Ogawa¹, Susumu Ohkawara¹, Takashi Isobe¹, Nobumitsu Hanioka¹, Hideto Jinno², Toshiko Tanaka-Kagawa¹
(¹Yokohama Univ. Pharm., ²Facul. Pharm., Meijo Univ.)
- P-004 *In silico* evaluation of human TRPA1 activation by fragrance components in fabric softeners**
○ Yuka Suzuki¹, Kano Hirota¹, Shino Ogawa¹, Susumu Ohkawara¹, Takashi Isobe¹, Nobumitsu Hanioka¹, Hideto Jinno², Toshiko Tanaka-Kagawa¹
(¹Yokohama Univ. Pharm., ²Facul. Pharm., Meijo Univ.)
- P-005 *In silico* search for hTRPA1 antagonists targeting lactones among the "Class 18 Flavoring Substances" designated by the Ministry of Health, Labour and Welfare of Japan**
○ Anju Kondo¹, Susumu Ohkawara¹, Takashi Isobe¹, Nobumitsu Hanioka¹, Hideto Jinno², Toshiko Tanaka-Kagawa¹
(¹Yokohama Univ. Pharm., ²Facul. Pharm., Meijo Univ.)
- P-006 Effects of acetamiprid and its metabolites on neural stem cells**
○ Ryoko Tamura, Tomomi Mikajiri, Atsuto Onoda, Ken Takeda, Ken Tachibana
(Fac. Pharm. Sci., Sanyo-Onoda City Univ.)
- P-007 Analysis of Maternal Transfer of Dinotefuran and Its Metabolites to Offspring**
○ Satsuki Takano, Atsuto Onoda, Ken Takeda, Ken Tachibana
(Fac. Pharm. Sanyo-Onoda City Univ.)

- P-008 Comprehensive toxicological evaluation of *trans*-fatty acids based on *in vivo* metabolic profiling**
 ○ Shinnosuke Kimura¹, Yusuke Hirata¹, Ryota Kojima¹, Takuya Noguchi^{1,2}, Atsushi Matsuzawa¹
 (¹Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.,
²Dep. of Med. Biochem., Sch. of Pharm., Iwate Med. Univ.)
- P-009 Exposure to Heated Tobacco Aerosol Enhances Hepatic Triglyceride Metabolism in Mice Fed a High-Fat Diet**
 ○ Sawako Shindo¹, Madoka Nihei¹, Kodai Tsukada¹, Yohei Inaba², Akira Ushiyama², Kenji Hattori¹
 (¹Fac. Pharm. Sci., Meiji Pharm. Univ., ²Dep. Env. Health, NIPH)
- P-010 AhR-Ligand induced expression of SELENBP1 in human cells: involvement of hESR1**
 ○ Shuangli Zhao^{1,2}, Yingxia Song¹, Ren-shi Li³, Takayuki Koga⁴, Yoshitaka Tanaka¹, Yuji Ishii¹
 (¹Grad Sch Pharmaceuti Sci, Kyushu Univ, ²JSPS Fellow DC2,
³China Pharmaceutical University, ⁴Daiichi Univ. Pharmacy)
- P-011 Maternal exposure to TCDD elicits megaloblastic anemia in the fetus due to insufficient active cobalamin, which disrupts the one-carbon metabolism**
 ○ Yuki Ishiiyama¹, Mana Fujimoto¹, Xing Zou¹, Hiroe Sano¹, Takayuki Koga², Yoshitaka Tanaka¹, Yuji Ishii¹
 (¹Grad. Sch. Pharmaceut. Sci., Kyushu Univ., ²Daiichi Univ. Pharm.)
- P-012 The developmental disorders in rat fetuses caused by maternal exposure to low-dose TCDD and restoration by nobiletin: Study on the reduction of fetal GH and maternal thyroid hormone**
 ○ Nao Yoshikawa¹, Ryoto Hiyama², Ryoya Inatsugi¹, Chiho Ohta³, Nobuyuki Koga³, Yoshitaka Tanaka², Yuji Ishii²
 (¹Fac. Pharmaceut. Sci., ²Grad. Sch. Pharmaceut. Sci., Kyushu Univ.,
³Nakamura Gakuen Univ.)
- P-013 Transgenerational Growth Retardation in an Offspring Induced by Prenatal Exposure to TCDD: Mechanisms of Restoring Disorders in the F1 Generation via Aripiprazole Intervention in F0 Dams**
 ○ Xing Zou¹, Ming Yuan¹, Takeshi Matsushita², Tomoki Takeda^{1,3}, Yoshitaka Tanaka¹, Yuji Ishii¹
 (¹Grad Sch Pharmaceuti Sci., Kyushu Univ., ²Pharmaceuti Sci., Kyushu Univ.,
³F-SEEDS)

- P-014 Chain Length–Dependent Effects of PFASs on Hepatic Protein Expression in Mice**
 ○ Reina Hirao¹, Mizuki Akai², Ayaka Takagi¹, Kanae Miyara², Seigo Sanoh³,
 Yasuo Uchida^{1,2}, Yaichiro Kotake^{1,2}
 (¹Fac. Pharmaceut. Sci., Hiroshima Univ.,
²Grad. Sch. Biomed. Health Sci., Hiroshima Univ.,
³Sch. of Pharm. Sci., Wakayama Med. Univ.)
- P-015 Analysis of the Properties and Health Effects of Ambient Particulate Matter**
 ○ Saori Taneo, Satoshi Fukushima, Nariaki Ougiya, Atsuto Onoda, Ken Takeda,
 Ken Tachibana
 (Fac. Pharm., Sanyo-Onoda City Univ.)
- P-016 Nanoparticle-induced Abnormal Protein Structuring and Its Dynamics in the Brains**
 ○ Atsuto Onoda¹, Yutaro Yagi¹, Naoya Sakaguchi², Yuta Takahashi²,
 Kaumbekova Samal², Ken Tachibana¹, Ken Takeda¹, Masakazu Umezawa²
 (¹Dep. Pharm., Sanyo-Onoda City Univ,
²Dep. Materials and Technology, Tokyo Univ of Science)
- P-017 Quantification of hydroquinones in mainstream smoke from e-cigarette products and comparison of concentrations with benzoquinones**
 ○ Haruki Tara¹, Yumi Abiko¹, Kanae Bekki², Yohei Inaba², Akira Toriba¹
 (¹Grad. Sch. Biomed. Sci., Nagasaki Univ., ²National Institute of Public Health)
- P-018 Cd displays the unsynchronized phenomena: impaired cell growth and stimulated E2 signaling**
 ○ Koki Kanameda¹, Masayo Hirao-Suzuki², Narumi Sugihara³, Masufumi Takiguchi²,
 Shuso Takeda^{1,3}
 (¹Grad. Sch. Pharm. Pharmaceut. Sci., Fukuyama Univ.,
²Fac. Pharm. Sci., Hiroshima Intl. Univ.,
³Fac. Pharm. Pharmaceut. Sci., Fukuyama Univ.)
- P-019 Effects of nanoparticle exposure on neuronal cells caused by differentially expressed miRNAs in extracellular vesicles**
 ○ Momoka Tanaka, Atsuto Onoda, Ken Takeda, Ken Tachibana
 (Fac. Pharm.Sci, Sanyo-onoda city Univ.)
- P-020 Effect of environmental light/dark condition on chronopharmacological characteristics of antidepressant activity of fluoxetine**
 Sayuri Honda¹, Reiko Iwadate², ○ Hiroshi Kawai¹
 (¹Fac. Pharm. Pharmaceut. Sci., Josai Univ. , ²Nippon Med. Sch.)

- P-021 Accumulation and metabolism of a fragrance compound, alpha-pinene, in the brain and their effects on brain function**
 ○ Saki Nagai, Ami Oguro, Yaichiro Kotake
 (Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)
- P-022 Effects of limonene metabolites on neurons and glial cells in the brain**
 ○ Nozomi Mizutani, Ami Oguro, Yaichiro Kotake
 (Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)
- P-023 Prenatal nanoparticle exposure induces perivascular brain lesions: Role of long noncoding RNA**
 ○ Takeshi Uemae¹, Masakazu Umezawa², Ryodai Itano², Hiyori Edo², Yuto Matsunaga², Ken Tachibana¹, Ken Takeda¹, Atsuto Onoda¹
 (¹Fac. Pharm., Sanyo-Onoda Univ., ²Fac. Adv Eng., Tokyo Univ Sci.)
- P-024 Involvement of microglia in the spinal dorsal horn in methylmercury-induced hyperalgesia**
 ○ Ryota Yamagata, Toko Sasaki, Naoya Yamashita, Gi-Wook Hwang
 (Fac. of Pharmaceut. Sci., Tohoku Med. Pharmaceut. Univ.)
- P-025 Development and application of quantitative analysis with a chemical derivatization for selenide *in vivo***
 ○ Mizuki Kamata¹, Noriyuki Suzuki², Misaki Matsunaga³, Yoshikazu Yamagishi⁴, Yasumitsu Ogra⁵
 (¹Fac. Pharm. Sci., Chiba Univ., ²Fac. Pharm. Sci., Toho Univ., ³Grad. Sch. Med. Pharm. Sci., Chiba Univ., ⁴Grad. Sch. Med., Chiba Univ., ⁵Grad. Sch. Pharm. Sci., Chiba Univ.)
- P-026 Role of RACK1 in methylmercury toxicity in mouse neuronal stem cells**
 ○ Naoya Yamashita, Ayaka Shoji, Miki Sawada, Ryota Yamagata, Gi-Wook Hwang
 (Fac. Pharmaceut. Sci., Tohoku Med. Pharmaceut. Univ.)
- P-027 Elucidation of methylmercury-induced inhibition of Selenium metabolism and identification of sensitivity determinants using stepwise knockout strains of the Selenium metabolic pathway**
 ○ Hayato Takashima¹, Hiroki Taguchi¹, Takashi Toyama¹, Junya Ito², Eikan Mishima², Yoshiro Saito¹
 (¹Grad. Sch. Pharm. Sci., Tohoku Univ., ²Helmholtz Munich)
- P-028 Investigation of the mechanism of impaired phosphorus resorption caused by cadmium exposure using proximal tubule cells**
 ○ Hitomi Fujishiro, Miku Takahashi, Daigo Sumi
 (Fac. Pharm., Tokushima Bunri Univ.)

- P-029 Physical form change and the mechanism analysis in the absorption and distribution of silver nanoparticles after oral exposure**
 ○ Kazuya Nagano¹, Ikkei Tasaki¹, Yasuo Tsutsumi²
 (¹Sch. Pharm. Sci., Wakayama Med. Univ., ²Grad. Sch. Pharm. Sci., Osaka Univ.)
- P-030 Multiorgan verification of the anti-inflammatory effects of dihydropyrazine**
 ○ Madoka Sawai¹, Yutaka Tatano¹, Hidetoshi Tozaki-Saitoh¹, Katsuya Miyake², Jian-Rong Zhou³, Hisao Kansui³, Yuu Miyauchi³, Shinji Takechi³
 (¹Sch. Pharm., at Fukuoka. Int. Univ. Health & Welfare., ²Cbmr., at Narita. Int. Univ. Health & Welfare., ³Fac. Pharmaceut. Sci., Sojo Univ.)
- P-031 Dihydropyrazine activates the CAMKK2-AMPK-ULK1 signaling pathway in human hepatoma HepG2 cells**
 ○ Shinji Takechi¹, Madoka Sawai², Hisao Kansui¹, Yuu Miyauchi¹
 (¹Fac. Pharmaceut. Sci., Sojo Univ., ²Sch. Pharm., at Fukuoka. Int. Univ. Health & Welfare)
- P-032 Role of thiopurine S-methyl transferase (TPMT) in detoxification of reactive sulfur species in TPMT-overexpressed and TPMT-knockdown cells**
 ○ Natsu Saito¹, Yasunori Fukumoto², Yoshikazu Yamagishi³, Momoka Uchida¹, Ayune Watanabe¹, Yu-ki Tanaka², Noriyuki Suzuki⁴, Yasumitsu Ogra²
 (¹Fac. Pharm. Sci., ²Grad. Sch. Pharm. Sci., ³Grad. Sch. Med., Chiba Univ, ⁴Fac. Pharm. Sci., Toho Univ.)
- P-033 Effects of Heated Tobacco Exposure in an Asthma Mouse Model**
 ○ Akira Ushiyama¹, Yohei Inaba¹, Miina Sakaguchi², Yui Goto², Sawako Shindo², Kenji Hattori²
 (¹National Institute of Public Health, ²Meiji Pharm. University)
- P-034 The role of the immunoproteasome in glucose metabolism**
 ○ Hiroaki Kimura, Sakura Kurogi, Ayane Yasuda, Tomona Hamaue
 (Sch. Pharm., Kyushu Univ. of Med. Sci.)
- P-035 The effect of olive leaf consumption on hepatic lipid metabolism of mouse model for diabetes**
 ○ Tohru Yamazaki, Yoshiki Ishii, Rikuto Sugaya, Atsushi Mitsumoto
 (Fac. Pharm., Josai International Univ.)
- P-036 Analysis of the regulatory mechanism of ferroptosis by liver-type pyruvate kinase (PKL) in human hepatocellular carcinoma cells HepG2**
 ○ Hayato Irokawa, Kouki Takeda, Shusuke Kuge
 (Fac. Pharm. Sci., Tohoku Med. Pharm. Univ.)

- P-037 High molecular weight species formation of the tetrahydrofolate-metabolizing enzyme protein**
Rira Akutagawa, Sara Yanagisawa, Fumie Itoh, Yutaka Tanaka, Sachiko Komatsu, Kazuhiro Watanabe, Tsutomu Fujimura, ○ Masato Sasaki
(Fac. Pharm. Sci., Tohoku Med. Pharm. Univ.)
- P-038 AhR promotes fibrosis associated with MASH**
○ Shigeki Shimba, Akinori Sakai, Toshiyuki Miyauchi, Mai Ohtani, Yukiko Takasugi, Taira Wada
(Dep. Health Sci. Sch. Pharmacy, Nihon Univ.)
- P-039 Functional characterization of miRNA4 as a negative regulator of lipid accumulation in adipocytes**
○ Kohei Matsuo, Miyu Kitazaki, Ai Sakaguchi, Daisuke Aibara, Kimihiko Matsusue
(Fac. Pharm., Fukuoka. Univ.)
- P-040 Analysis of the intracellular transport of lysosomal membrane protein LAMP-2C**
○ Hiroshi Sakane, Ikuto Okuda, Yuna Takeda, Kanae Michihara, Kenji Akasaki
(Fac. Pharm., Fukuyama Univ.)
- P-041 Comparison of serum protein profiles between chimeric mice with low and high replacement indexes of human hepatocytes**
○ Seigo Sanoh¹, Naoki Takaoka¹, Yuji Ishida², Shigeru Ohta¹, Chise Tateno^{1,2}
(¹Sch. Pharm., Wakayama Med. Univ., ²PhoenixBio Co. Ltd.)
- P-042 Relationship between selenium status and selenoprotein expression during myotube differentiation of C2C12 cells**
○ Hirofumi Ogino, Kota Shiigai, Saori Yoshioka
(Fac. Pharm. Sci., Nihon Pharm. Univ.)
- P-043 Effects of GTP Regulation on Intracellular Responses and Metabolic Functions**
○ Taiki Ashizawa¹, Masashi Oshima², Kazuma Tada³, Yoshihisa Hirota^{1,2,3}
(¹Grad. Sch. Pharm. Sci., Shibaura Inst. of Tech.,
²University of Cincinnati College of Medicine, ³Dep. Life. Sci., Shibaura Inst. of Tech.)
- P-044 Effects of vitamin K analogues and their derivatives with ferroptosis inhibitory effects on novel object recognition in mice**
○ Ayaka Kato¹, Rina Watanabe¹, Haruka Kawamura¹, Chikara Kato², Susumu Takekoshi³, Kazuki Takeda⁴, Motoki Takagi¹, Yoshihisa Hirota¹
(¹Grad. Sch. Shibaura Inst. of Tech., ²Shizuoka Univ., ³Tokai Univ., ⁴Kitasato Univ.)

- P-045 Exploring the role and physiological significance of COQ5 in MK-4 conversion mechanism**
 ○ Kurumi Nakagawa¹, Shunta Sudo¹, Mei Koyanagi², Yoshitomo Suhara^{1,2},
 Liqing Zang³, Yasuhito Shimada⁴, Yoshihisa Hirota^{1,2}
 (¹Grad. Sch., Shibaura Inst. of Tech., ²Shibaura Inst. of Tech., ^{3,4}Mie Univ.)
- P-046 Conversion mechanism of vitamin K and its derivatives containing food additives**
 ○ Shunta Sudo¹, Kurumi Nakagawa¹, Mei Koyanagi², Yoshitomo Suhara^{1,2},
 Yoshihisa Hirota^{1,2}
 (¹Grad. Sch. Pharm. Sci., Shibaura Inst. of Tech.,
²Dep. Life. Sci., Shibaura Inst. of Tech.)
- P-047 Inhibition of TGF- β -induced renal fibrosis by Emodine and involvement of adapter protein Nedd9**
 ○ Yuka Fukuda, Hina Ito, Misaki Kamata, Akinori Sugiyama
 (Sch. Pharm., Iwate Medical Univ.)
- P-048 Hesperetin suppresses TGF- β -induced increases in α -SMA, p-MKK4, and Nedd9 expression**
 ○ Misaki Kamata, Hina Ito, Yuka Fukuda, Akinori Sugiyama
 (Sch. Pharm., Iwate Medical Univ.)
- P-049 Silibinin inhibits JNK pathway activation by Nedd9 in renal fibroblasts**
 ○ Hina Ito, Yuka Fukuda, Misaki Kamata, Akinori Sugiyama
 (Sch. Pharm., Iwate Medical Univ.)
- P-050 Carbon black particles induce lysosomal membrane permeabilization and cytotoxic effect**
 ○ Tomohiro Ishihara, Atsushi Furukawa, Yuka Nagata, Ryo Suzuki
 (Fac Pharm Sci, Kanazawa Univ)
- P-051 Seeking EV-associated proteins involved in fever response derived from influenza-infected embryonated egg**
 ○ Ayaka Urahama¹, Naoki Kishimoto¹, Towa Abe¹, Nobutoki Takamune²,
 Shogo Misumi¹
 (¹Grad. Sch. Pharm. Sci., Kumamoto Univ., ²HRDS, Kumamoto Univ.)
- P-052 Mitochondrial uncouplers induce protein insolubilization under low pH conditions**
 ○ Yuuki Tsuchida, Masatsugu Miyara, Saya Takao, Yaichiro Kotake
 (Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)

- P-053 Functional analysis of sEH in the brain as a new synthetic enzyme for endogenous cannabinoid 2-AG**
 ○ Ami Oguro, Yurino Kaga, Hideaki Sato, Yaichiro Kotake
 (Grad. Sch. of Biomed. and Health Sci, Hiroshima Univ.)
- P-054 Establishment of a new method for identifying lysosomal membrane damage response proteins**
 ○ Masatsugu Miyara, Futa Suzuki, Kanae Miyara, Yaichiro Kotake
 (Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)
- P-055 A novel toxicological mechanism of tributyltin via CASM**
 ○ Shunichi Hatamiya, Masatsugu Miyara, Yaichiro Kotake
 (Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)
- P-056 Maternal DHA Intake in mice Increased DHA Metabolites in the Fetal Brain and Regulated Brain Functions**
 ○ Shinji Fujimoto¹, Ami Oguro², Megumi Yamamoto³, Yaichiro Kotake²
 (¹Sch. Pharm. Sci., Hiroshima Univ.,
²Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.,
³National Institute for Minamata Disease)
- P-057 Mechanism of p62 nuclear accumulation induced by a Parkinson's disease-related neurotoxins**
 ○ Chihiro Suto¹, Masatsugu Miyara^{1,2}, Honoka Hashimoto², Yaichiro Kotake^{1,2}
 (¹Sch. Pharm. Sci., Hiroshima Univ.,
²Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)
- P-058 Elucidation of the anti-inflammatory mechanisms by the cephem antibiotics**
 ○ Sara Suzuki¹, Yusuke Hirata¹, Takuya Noguchi^{1,2}, Atsushi Matsuzawa¹
 (¹Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., ²Fac. of Pharm., Iwate Med. Univ.)
- P-059 Methylglyoxal confers resistance to ferroptosis in cancer cells**
 ○ Takuya Nijima¹, Yusuke Hirata¹, Takuya Noguchi^{1,2}, Atsushi Matsuzawa¹
 (¹Lab. Of Health Chem., Grad. Sch. Of Pharmaceut. Sci., Tohoku Univ.,
²Dep. of Med. Biochem., Sch. of Pharm., Iwate Med. Univ.)
- P-060 Proteinase 3 involved in leukemia cell differentiation induced by arsenite medicine**
 ○ Rina Nakayama, Hitomi Fujishiro, Daigo Sumi
 (Fac. Pharm. Sci. Tokushima Bunri Univ.)

- P-061 3-methyladenine induce mitotic catastrophe in U-2OS cells through DNA damage response**
 ○ Kenji Hattori, Toshimi Kawata, Yuna Yonezawa
 (Fac. Pharm. Sci., Meiji Pharm. Univ.)
- P-062 The Influence of *Neopyropia yezoensis* on the Cholesterol Absorption Mechanism Mediated by NPC1L1**
 ○ Narumi Sugihara¹, Yukiko Kurihara¹, Yukimasa Yamagishi², Yasuhiko Miwa², Yuhzo Hieda¹, Tetsuya Nakamura¹, Koki Kanameda¹, Shuso Takeda¹, Akiho Shima¹, Jun Kamishikiryo¹
 (¹Fac. Pharm. Pharmaceut. Sci., Fukuyama Univ., ²Fac. Life Sci., Fukuyama Univ.)
- P-063 Examination of the suppressive effect of Jerusalem artichoke powder on AGEs formation caused by glycation of albumin and keratin**
 ○ Masaki Takaishi¹, Myu Hiraiwa¹, Miharuru Fukasawa¹, Yuko Suzuki¹, Sayoko Nishioka², Akio Kobayashi¹, Satoshi Asano³
 (¹Pharm. Sci., IUHW., ²Pharmakion Plan., ³FSC.)
- P-064 Follow-up study results on the disintegration of tablet-type foods and forthcoming challenges**
 ○ Risa Oya, Beom Yeeun, Yuya Deguchi, Hiroaki Nagaoka
 (Fac. Pharm. Sci., Nagasaki Intl. Univ.)
- P-065 Diversity of values regarding preventive dentistry across cultures**
 ○ Chiemi Still Yoshida¹, Reiko Aizawa^{2,3}
 (¹Dept. LA., JCGA, ²Reina Dental Office, ³Grad. Sch. Yokohama Univ. Pharm.)
- P-066 Preventive effect of cloperastine on urinary dysfunction in drug-induced menopause model mice**
 ○ Fumio Soeda, Yuki Yoshinaga, Risa Ushinohama, Takayuki Koga, Yuko Kobuke, Yukiko Fujii
 (Daiichi Univ. Pharm.)
- P-067 Regulation of hepatic *Tmcc3* expression by PPAR γ in fatty liver disease**
 ○ Daisuke Aibara, Ai Sakaguchi, Kohei Matsuo, Kimihiko Matsusue
 (Faculty of Pharmaceutical Science, Fukuoka University)
- P-068 Involvement of PRDX6, a chalcogen receptor, in metabolic remodeling of selenium**
 ○ Ryui Miyazaki¹, Takashi Toyama², Yoshiro Saito²
 (¹Lab of MB & M, Fac, Pharm, Tohoku Univ., ²Lab of MB & M, Grad. Sch. Pharm. Sci., Tohoku Univ.)

P-069 Characterization of CX3CR1 knock-in reporter mice and their application in colitis model

○ Saya Tanaka, Keishi Ishida, Kenjiro Tajimi, Daisuke Matsumaru,
Tsuyoshi Nakanishi
(Gifu Pharm. Univ.)

Poster Session: Day 2

September 10 (Wed) 16:30-17:10 Room C (6F Exhibition Room)

P-070 Development of a postmortem screening method for nitrite poisoning

○ Saki Imai¹, Sayaka Nagasawa^{2,3}, Masatoshi Kojima³, Issei Nakanishi³,
Yohsuke Makino³, Hirotaro Iwase³, Yasumitsu Ogra²
(¹Faculty of Pharmaceutical Sciences, ²Graduate School of Pharmaceutical Sciences,
³Graduate School of Medicine, Chiba University)

P-071 Investigation of cause of death at School of Pharmaceutical Sciences, the University of Osaka

○ Kazuo Harada^{1,2}, Yukari Sakamoto¹, Haruhi Yoshida¹, Yuri Tokugawa¹,
Haruki Kuze¹, Taichi Nishihori¹, Fumika Yamamoto¹, Hikaru Tamagawa¹,
Tsuyoshi Inoue¹, Kazuma Higashisaka¹, Hiroshi Matsumoto², Yasuo Tsutsumi¹
(¹Sch. Pharm., Univ. Osaka, ²Sch. Med., Univ. Osaka)

P-072 Comparison of carrier gases in thermal desorption-gas chromatography-mass spectrometry for chemicals with guideline values for indoor air concentrations

○ Naohiro Oshima, Nahoko Uchiyama, Shinobu Sakai
(NIHS)

P-073 Absolute quantification of abasic sites in RNA using LC-MS/MS and its increase by inhibition of DNA repair enzyme APE1

○ Manami Muramatsu, Yoshinori Okamoto, Akira Aoki, Hideto Jinno
(Fac. Pharm., Meijo Univ.)

P-074 Development of a no-observed-effect level (NOEL) prediction model for repeated-dose toxicity studies of cosmetic ingredients using machine learning

○ Kohsuke Hayamizu, Yuika Sone, Ayaka Horiike
(Yokohama Univ. Pharm.)

P-075 Survey on formaldehyde in textiles and adhesive products on the online marketplaces

○ Maiko Tahara, Sachie Kawano, Yoko Mori, Tsuyoshi Kawakami, Nahoko Uchiyama
(National Institute of Health Sciences)

- P-076 Effect of silica nanoparticle on pregnancy outcomes and inflammatory response in placental cells**
 ○ Kazuma Higashisaka^{1,2,3}, Rena Yamamoto³, Risa Sakai³, Momoe Serizawa^{2,3}, Yuya Haga^{2,3}, Yasuo Tsutsumi^{2,3,4,5,6,7}
 (¹IACS., Osaka Univ., ²Grad. Sch. Pharm. Sci., Osaka Univ., ³Sch. Pharm. Sci., Osaka Univ., ⁴Grad. Sch. Med., Osaka Univ., ⁵MEI Ctr., Osaka Univ., ⁶OTRI., Osaka Univ., ⁷INSD., Osaka Univ.)
- P-077 Development of a novel adsorbent with phosphorus selectivity derived from fossil coral**
 ○ Kota Sogabe¹, Yugo Uematsu², Fumihiko Ogata^{1,2}, Naohito Kawasaki^{1,2}
 (¹Grad. Sch. Pharm., Kindai Univ., ²Fac. Pharm., Kindai Univ.)
- P-078 Modulation of Gut Microbial Function by Environmental Electrophiles**
 ○ Rika Imai^{1,2}, Kousoku Sugiyama³, Kensuke Sato⁴, Hanako Aoki^{1,4}, Jun Uchiyama^{2,4}, Ryota Nakano¹, Maiko Kusano³, Masahiro Akiyama⁴
 (¹Showa Univ. Pharm., ²Keio Univ. Pharm., ³Showa Univ. Med., ⁴Showa Univ. Inst. Clin. Pharmacol.)
- P-079 Chemical analysis of particulate respirator mask straps to identify the cause of allergic contact dermatitis and select alternative products**
 ○ Yoko Mori¹, Shigeruko Iijima^{2,3}, Maiko Tahara¹, Tsuyoshi Kawakami¹
 (¹National Institute of Health Sciences, ²Hanamizuki Clinic, ³Ryugasaki Saiseikai Hospital)
- P-080 Analysis of carcinogenic, allergenic dyes and their related dyes in textile products**
 ○ Yu Uchida¹, Iwaki Nishi¹, Tsuyoshi Kawakami²
 (¹Kanagawa Prefectural Institute of Public Health, ²NIHS)
- P-081 Effect of per- and polyfluoroalkyl substances on human trophoblast stem cell line differentiation**
 ○ Tomoki Kimura¹, Shoko Ogushi², Takehiro Nakamura¹, Tsuyoshi Nakanishi³
 (¹Fac. Farm. Sci., Setsunan Univ., ²Sch. Life Sci., Tokyo Univ. Pharm. Life Sci., ³Gifu Pharm. Univ.)
- P-082 Fundamental Study on Mercury Ion Removal from Aqueous Environments Using Sulfuric Acid-Treated Bagasse**
 ○ Kaito Yamashiro^{1,2}, Kanako Asano², Fumihiko Ogata², Yasuyuki Fujiwara¹, Naohito Kawasaki²
 (¹School of Pharmacy, Tokyo University of Pharmacy and Life Sciences, ²Faculty of Pharmacy, Kindai University)

- P-083 Analysis of structure-activity relationships, cell-type dependency and mechanisms of PFAS-induced cytotoxicity in cultured vascular endothelial cells**
 ○ Sayori Ichijo, Toshiyuki Kaji, Tomoya Fujie
 (Fac. Pharm. Sci., Tokyo Univ. of Sci.)
- P-084 Transcriptomic analysis of vascular endothelial cells exposed to PFOS, PFOA, and PFHxS**
 ○ Tomomi Takiuchi, Sayori Ichijo, Toshiyuki Kaji, Tomoya Fujie
 (Fac. Pharm. Sci., Tokyo Univ. of Sci.)
- P-085 Protective effect of oleanolic acid and its saponin derivatives on methylmercury toxicity in mice**
 ○ Ryosuke Nakamura, Yoko Kuroda, Ikumi Ohashi, Tatsuya Shirahata, Naruki Konishi, Yasukazu Takanezawa, Yuka Ohshiro, Shimpei Uraguchi, Yoshinori Kobayashi, Masako Kiyono
 (Sch. Pharm., Kitasato Univ.)
- P-086 Autophagy and the handling of methylmercury-bound proteins**
 ○ Yasukazu Takanezawa¹, Rei Tsunoda¹, Ryosuke Nakamura¹, Yuka Ohshiro¹, Shimpei Uraguchi^{1,2}, Masako Kiyono¹
 (¹Dep. Public Health. Sch of Pharm., Kitasato Univ.,
²Grad. Sch of Hortic., Chiba Univ.)
- P-087 Adaptability of the mercury transporter MerC for environmental remediation**
 ○ Yuka Ohshiro, Shimpei Uraguchi, Ryosuke Nakamura, Yasukazu Takanezawa, Masako Kiyono
 (Dept. of public Health, School of pharmacy, Kitasato Univ.)
- P-088 Genotoxicity assessment of suspended particulate matter from different sources using mouse Bhas42 cells**
 Kouki Munemura, Toshinori Miura, Mari Ochiai, ○ Masashi Sekimoto
 (Lab. Environ. Hygiene, Sch. Life and Environ. Sci., Azabu Univ.)
- P-089 Changes in the olfactory epithelium, olfactory bulb, hippocampus, amygdala, lungs, liver, and skin of mice following chronic inhalation exposure to the indoor pollutant 2-ethylhexanol**
 ○ Takanari Wakayama^{1,2}, Mio Miyake¹, Yuki Ito¹, Motoh Mutsuga², Michihiro Kamijima¹
 (¹Grad. Sch. Med, Nagoya City Univ., ²Nagoya City Public Health Research Institute)

- P-090 Effects of gut microbiota on metal concentrations in mice after methylmercury administration**
 ○ Manaka Kono¹, Kazuaki Takahashi², Yasumitsu Ogra³
 (¹Fac. Pharm. Sci., Chiba Univ., ²Grad. Sch. Horticul., Chiba Univ.,
³Grad. Sch. Pharm. Sci., Chiba Univ.)
- P-091 Involvement of thyroid hormone receptor α in developmental neurotoxicity**
 ○ Shigeru Yamada, Yukuto Yasuhiko, Yasunari Kanda
 (Div Pharmacology, NIHS)
- P-092 Effects of xenobiotic-induced activation of the nuclear receptor CAR on fetal and infant development in mice**
 Manami Yoshikawa, ○ Ryota Shizu, Sari Tashiro, Akira Ooka, Kouichi Yoshinari
 (Sch. Pharm. Sci., Univ. Shizuoka)
- P-093 Development and Evaluation of a Next-Generation Toxicity Assessment Platform Using Human iPSCs**
 ○ Tsunehiko Hongen¹, Ryusei Kusakabe¹, Naoya Hirata², Masashi Asai¹,
 Yasunari Kanda², Hideko Sone¹
 (¹Grad. Sch. Pharm. Sci., Yokohama Univ. Pharm., ²Div. Pharmacol., NIHS.)
- P-094 Characterization of human neuroblastoma cell line IMR-32 as a neuronal differentiation model for *in vitro* DNT analysis**
 ○ Shunsuke Tomita¹, Keishi Ishida¹, Daisuke Matsumaru¹, Masatsugu Miyara²,
 Yaichiro Kotake², Tsuyoshi Nakanishi¹
 (¹Gifu Pharm. Univ., ²Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)
- P-095 The histological analysis of neurons and satellite glial cells in the dorsal root ganglion of a methylmercury-exposed rat**
 ○ Masaki Ozawa^{1,2}, Ayaka Matsuki², Yuka Sekiguchi², Kaito Yamashiro²,
 Tsutomu Takahashi², Yasuyuki Fujiwara², Eiko Yoshida³, Kaji Toshiyuki⁴, Yo Shinoda²
 (¹HIROO GAKUEN Senior High Sch., ²Sch. Pharm., Tokyo Univ. Pharm. Life Sci.,
³CRIEPI, ⁴Fac. Pharm., Tokyo Univ. Sci.)
- P-096 Aberrant activation of cellular signaling pathway by organic- and inorganic arsenicals in rat cultured cerebellar astrocytes**
 ○ Takayuki Negishi¹, Daiki Yoshioka¹, Shoto Sasaki², Takamasa Tsuzuki¹,
 Kazunori Yukawa¹
 (¹Fac. Pharm., Meijo University,
²Fac. Pharm., International University of Health and Welfare)

- P-097 Novel Evaluation Method for Developmental Neurotoxicity in Medaka Embryos -The Case of Imidacloprid and Warfarin**
 ○ Hotaka Kai¹, Kotoha Ueno¹, Masaya Uchida², Nobuaki Tominaga²
 (¹National Institute of Technology, Suzuka Collge,
²National Institute of Technology, Ariake Collge.)
- P-098 Elucidation of the mechanism of hepatocyte proliferation mediated by the xenobiotic response nuclear receptor CAR through the upregulation of GADD45B**
 ○ Aki Tkaeshita, Ryota Shizu, Takuomi Hosaka, Akira Ooka, Kouichi Yoshinari
 (Grad. Sch. Integrated Pharmaceutical and Nutritional Sciences. Univ. Shizuoka.)
- P-099 Read-across prediction of thyroid tumors in rats using mechanism-relevant *in vitro* assay data**
 Kosuke Mizuno¹, Jun-ichi Takeshita^{1,2}, Yu Harakawa¹, Takuomi Hosaka¹, Ryota Shizu¹,
 Akira Ooka¹, ○ Kouichi Yoshinari¹
 (¹Sch Pharmaceut Sci, Univ Shizuoka, ²AIST)
- P-100 Regional Variation in Inorganic Element Composition of Tap Water in Tokyo Wards and Its Association with Water Source Systems**
 ○ Takehisa Matsukawa^{1,2}, Naoki Kaneko², Yuta Kuwahara², Ryunosuke Taira²,
 Takuto Moriai², Miki Suzuki¹
 (¹Fac. Pharm., Juntendo Univ., ²Fac. Med., Juntendo Univ.)
- P-101 Involvement of intracellular GSH in Darinaparsin-induced spindle assembly checkpoint activation**
 ○ Kayoko Kita¹, Kasumi Kobayashi¹, Taro Honma¹, Kozo Yao², Toshihide Suzuki¹
 (¹Fac. Pharm. Sci., Teikyo Univ., ²Solasia Pharma K. K.)
- P-102 Regulation of histone deacetylases-mediated selective induction of metallothionein-1 expression in vascular endothelial cells**
 ○ Nao Yamada¹, Haruka Kondo¹, Takehiro Nakamura², Tomoki Kimura²,
 Hiroshi Naka³, Toshiyuki Kaji¹, Tomoya Fujie¹
 (¹Fac. Pharm., Tokyo Univ of Sci., ²Fac. Pharm., Setsunan Univ.,
³Grad. Sch. Pharm., Kyoto Univ.)
- P-103 Cyclic mechanical stretching potentiates cadmium-induced toxicity in vascular endothelial cells**
 ○ Sara Ogawa¹, Yukino Kasama¹, Hikaru Fujimori², Takato Hara², Chika Yamamoto²,
 Toshiyuki Kaji¹, Tomoya Fujie¹
 (¹Fac. Pharm. Sci., Tokyo Univ. Sci., ²Fac. Pharm. Sci., Toho Univ.)

- P-104 Potentiation of lead-induced toxicity in vascular endothelial cells via P2Y receptor signaling by ATP**
 ○ Tomoki Okada, Lihito Ikeuchi, Kazuki Kitabatake, Mitsutoshi Tsukimoto, Toshiyuki Kaji, Tomoya Fujie
 (Fac. Pharm. Sci., Tokyo Univ. Sci.)
- P-105 Induction of a metal transporter ZIP8 expression via HIF pathway in vascular endothelial cells**
 ○ Junko Matsumoto, Miki Hanabusa, Tomoya Fujie, Toshiyuki Kaji
 (Fac. Pharm. Sci., Tokyo Univ. Sci.)
- P-106 Cadmium induced thrombomodulin suppression via NF-κB pathway activation in vascular endothelial cells**
 ○ Tsuyoshi Nakano, Haruka Tamura, Nanako Kurusu, Chika Yamamoto
 (Fac. of Pharm. Sci., Toho Univ.)
- P-107 Cadmium induces hyaluronan synthase 2 via MEK–ERK pathway in cultured vascular smooth muscle cells**
 ○ Takato Hara¹, Nonoka Kawamura¹, Misaki Shirai^{1,2}, Chika Yamamoto¹
 (¹Fac. Pharm. Sci., Toho Univ., ²JSPS Research Fellow)
- P-108 Physiological role of a reducing intestinal environment mediated by gut microbial supersulfides**
 ○ Jun Uchiyama^{1,2}, Masahiro Akiyama²
 (¹Grad. Sch. Pharm., Keio Univ., ²Inst. Clin. Pharmacol., Showa Med Univ.)
- P-109 Elucidating the production mechanism of supersulfides as an oxidative stress response in Gut bacteria**
 ○ Maho Kotori^{1,2}, Jun Uchiyama^{2,3}, Noriko Hida¹, Masahiro Akiyama²
 (¹Fac. Pharm., Showa Medical Univ.,
²Clinical Research Institute for Clinical Pharmacology and Therapeutics, SHOWA Medical Univ.,
³Fac. Pharm., Keio Univ.)
- P-110 Fatty acids changes the cellular sensitivity to NF-κB activation induced by oxidative stress**
 ○ Haruka Takahashi¹, Yui Sakamoto¹, Nao Hasunuma¹, Toshiyuki Oshima¹, Makoto Murakami², Tomofumi Fujino¹, Makio Hayakawa¹
 (¹Sch. Pharm., Tokyo Univ. Pharm. & Life Sci., ²Grad. Sch. Med., Univ. Tokyo)

- P-111 Lipoxytosis chemical inducers can initiate lipid peroxidation induced cell death in an iron-independent manner via the lipid oxidase Lipo1**
 ○ Yuzu Kono¹, Ayaka Enomoto¹, Masaki Matsuoka¹, Tomoyasu Hirose², Masato Iwatsuki², Hirotaka Imai¹
 (¹Kitasato Univ., ²Omora Satoshi Memorial Institute)
- P-112 The lipoxytosis executor Lipo2 translocates from the nucleus to membrane and induces cell death**
 ○ Yu Fujiwara, Masaki Matsuoka, Hirotaka Imai
 (Sch. Pharm. Sci., Kitasato Univ.)
- P-113 Analysis of lipid oxidation mechanism by Lipo1 using Lipo1 KO mice**
 ○ Bo Chen, Shotaro Hatanaka, Masaki Matsuoka, Hirotaka Imai
 (Fac. Pharm., Kitasato Univ.)
- P-114 Elution of metals from household products intended to come into direct and prolonged contact with the skin**
 ○ Tsuyoshi Kawakami, Maiko Tahara, Reiji Kubota, Yoshiaki Ikarashi
 (National Institute of Health Sciences)
- P-115 Analysis of the relationship between particle size and flammability of polystyrene**
 ○ Yui Akiyama¹, Kazuma Higashisaka^{1,2,3}, Mizuki Muranaka¹, Yamato Okumura¹, Yuya Haga^{1,2}, Yasuo Tsutsumi^{1,2,4,5,6,7}
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- P-116 Staphylococcal exoprotein Eap activates murine basophils**
 ○ Hina Kiriya¹, Rikuto Iwata¹, Chisaki Noda¹, Isamu Ogawa¹, Shigeaki Hida¹, Saotomo Itoh^{1,2}
 (¹Grad. Sch. Pharm. Sci., Nagoya city Univ., ²Sch. Pharm., Aichi Gakuin Univ.)
- P-117 Role of prostacyclin synthase in chemical carcinogen-induced breast cancer**
 ○ Yuka Sasaki, Suzu Kuratsuka, Shuntaro Hara
 (Showa Medical Univ.)
- P-118 Functional analysis of prostaglandin terminal synthases in female reproduction**
 ○ Toshiya Honsawa, Yuka Sasaki, Shuntaro Hara
 (Sch. of Pharm., Showa Medical Univ.)

- P-119 Analysis of the role of long-chain acyl CoA synthetase 4-mediated lipid metabolism in lung adenocarcinoma cell activity**
 ○ Yuki Tomitsuka¹, Fumihiro Ishikawa², Hiroshi Kuwata¹, Shuntaro Hara¹
 (¹Sch. of Pharmacy, Showa Medical Univ., ²Center for Biotech., Showa Medical Univ.)
- P-120 Sexual maturation causes sex differences in vitamin K conversion and bioavailability**
 ○ Ayuma Imasato, Shunsuke Hirashima, Takako Abe, Takashi Kimoto, Kimie Nakagawa
 (Fac. Pharm., Kobegakuin Univ.)
- P-121 Activation of G protein-coupled estrogen receptor induces apoptosis in triple-negative breast cancer cells**
 ○ Akina Noyama, Masatoshi Nakatsuji, Ko Fujimori
 (Fac. Pharm., Osaka Med. & Pharm. Univ.)
- P-122 Pranlukast, a cysteinyl leukotriene receptor 1 antagonist, suppressed body weight gain in high-fat diet-fed mice**
 ○ Masatoshi Nakatsuji¹, Toko Maehara², Atsushi Koike¹, Kenta Hosomi¹, Ko Fujimori¹
 (¹Fac. Pharm., Osaka Med. & Pharm. Univ., ²Fac. Agri., Iwate Univ.)
- P-123 Maintenance of Acyl Chain Asymmetry in Membrane Phospholipids via Phospholipase A**
 ○ Tsumugi Iwata¹, Hiroki Kawana², Yutaro Yagi¹, Nozomu Kono¹, Junken Aoki¹
 (¹Grad. Sch. Pharm. Sci., Tokyo Univ.,
²Grad. Sch. Science and Technology, Nara Institute of Science and Technology)
- P-124 Identification of Sulfane Sulfur-Binding Proteins Involved in Zinc Binding in the Mouse Brain**
 ○ Naoki Matsumoto¹, Ryuji Tsuda², Yoshito Kumagai³, Yasuhiro Shinkai¹
 (¹Sch. Life Sci., Tokyo Univ. Pharm. Life Sci.,
²Grad. Sch. Comprehensive Human Sci., Univ. Tsukuba,
³Grad. Sch. Pharm., Univ. Kyushu)
- P-125 Gut microbiome changes associated with olanzapine-induced weight gain in mice**
 ○ Akira Aoki^{1,2}, Hiroka Nakano¹, Kana Yoshihara¹, Namie Ryokin¹, Yoshinori Okamoto¹, Hideto Jinno¹
 (¹Fac. Pharm., Meijo Univ., ²Div. Digest. Dis., Dept. Med., UCLA)

- P-126 Inhibitory Effects of Drugs on Gut Enzyme and Docking Analysis**
 ○ Kohsuke Sugiyama¹, Kensuke Sato^{2,3}, Maho Kotori^{2,4}, Ryota Nakano⁴,
 Maiko Kusano¹, Masahiro Akiyama²
 (¹Grad. Sch. Med, Showa Med Univ, ²Clin. Res. Inst, Showa Med Univ, ³Tohoku Univ,
⁴Grad. Sch. Pharm, Showa Med Univ)
- P-127 Elucidation of the Nrf2-mediated mechanism suppressing cell migration and lymph node swelling in anaplastic large cell lymphoma**
 ○ Mai Sasajima¹, Akira Korai¹, Sota Saito¹, Yosuke Nakazawa¹, Kenji Tago²,
 Megumi Tago¹
 (¹Faculty of Pharmacy, Keio University, ²Faculty of Medicine, Gunma University.)
- P-128 Elucidation of the molecular mechanism underlying high sensitivity to Hydroxyurea in JAK2V617F-positive myeloproliferative neoplasms**
 ○ Masaya Saito¹, Masaya Matsumoto¹, Kenji Tago², Megumi Tago²
 (¹Faculty of Pharmacy, Keio University,
²Graduate School of Health Sciences, Gunma University)
- P-129 In immune-activated splenocytes, the expression and activity of the vitamin K converting enzyme UBIAD1 is preferentially upregulated in B cells**
 ○ Yoshinori Harada, Yukie Matsui, Takashi Kimoto, Shunsuke Hirashima,
 Kimie Nakagawa
 (Fac. Pharm., Kobe Gakuin Univ.)
- P-130 Lactation-associated changes in macrophages in the dermal layer of the mammary papilla**
 ○ Yukiko Marunaka, Kei Nakayama, Hiroshi Hasegawa
 (Lab. Hygienic.Sci., Kobe Pharm. Univ.)
- P-131 Transcriptomic analysis of peripheral blood following cerebral infarction**
 ○ Mitsuki Daito, Mari Kondo, Kei Nakayama, Hiroshi Hasegawa
 (Lab. Hyg. Sci., Kobe Pharm. Univ.)
- P-132 Machine learning-based screening and mechanism estimation of hepatic stellate cell deactivating compounds**
 ○ Akira Ooka, Yusuke Totsuka, Yuna Danbara, Takuomi Hosaka, Ryota Shizu,
 Kouichi Yoshinari
 (Sch Pharmaceut Sci, Univ Shizuoka)

- P-133 Formation and degradation mechanisms of γ -glutamyl- β -cyanoalanylglycine in human hepatocarcinoma cell line, HepG2**
 ○ Tomoya Taguchi¹, Yoshikazu Yamagishi², Yasumitsu Ogra³
 (¹Fac. Pharm., Chiba Univ., ²Grad. Sch. Med. Sci., Chiba Univ.,
³Grad. Sch. Pharm. Sci., Chiba Univ.)
- P-134 Evaluation of the effect of amorphous silica nanoparticles on remodeling in the placenta and clarification of its mechanism**
 ○ Risa Sakai¹, Kazuma Higashisaka^{1,2,3}, Rena Yamamoto¹, Yuya Haga^{1,2},
 Yasuo Tsutsumi^{1,2,4,5,6,7}
 (¹Sch. Pharm. Sci., Osaka Univ., ²Grad. Sch. Pharm. Sci., Osaka Univ.,
³IACS., Osaka Univ., ⁴Grad. Sch. Med., Osaka Univ., ⁵MEI Ctr., Osaka Univ.,
⁶OTRI., Osaka Univ., ⁷INSD., Osaka Univ.)
- P-135 Characterization of Extracellular Cysteine Efflux in A549 Cells**
 ○ Minoru Miura¹, Yoshito Kumagai², Yasuhiro Shinkai¹
 (¹Sch. Life Sci., Tokyo Univ. Pharm. Life Sci., ²Grad. Sch. Pharm., Univ. Kyushu.)
- P-136 Involvement of period 3 against acetaminophen-induced hepatotoxicity in mice**
 ○ Hiroki Yoshioka¹, Suo Shibata², Fumina Susaki², Satoshi Yokota³,
 Hirotaka Yamashita², Tohru Maeda⁴, Hyogo Horiguchi¹, Nobuhiko Miura⁵
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³Div. Cell Biol. Mol. Tox., Nat Inst Health Sci., ⁴Fac. Pharm., Kinjo Gakuin Univ.,
⁵Dep. Health Sci., Yokohama. Univ. Pharm.)
- P-137 Analysis of the action of novel compounds that activate the tumor suppressor gene p53**
 ○ Ryo Ito¹, Chiharu Miyajima¹, Yuya Suzuki¹, Naoki Umezawa², Hidetoshi Hayashi¹,
 Yasumichi Inoue¹
 (¹Cell Signal., Grad. Sch. Pharm. Sci, Nagoya City Univ.,
²Bioorg. Chem., Grad. Sch. Pharm. Sci, Nagoya City Univ.)
- P-138 Study on the Immune Response and Safety of Drug Delivery Systems Utilizing Commensal Bacteria**
 ○ Yuma Ito¹, Rio Murakami¹, Rin Oda¹, Saotomo Itoh², Isamu Ogawa¹,
 Shun'ichiro Taniguchi³, Shigeaki Hida¹
 (¹Grad. Sch. Pharm. Sci., Nagoya City Univ., ²Sch. Pharm., Aichi Gakuin Univ.,
³Grad. Sch. Med. Dent., Kagoshima Univ)
- P-139 USP2 contributes to tumor progression through the deubiquitination and stabilization of TAZ**
 ○ Takuto Fujiwara, Chiharu Miyajima, Hidetoshi Hayashi, Yasumichi Inoue
 (Grad. Sch. Pharm. Sci., Nagoya City Univ.)

- P-140 Immune modulation by antidepressants**
 ○ Haruka Mizuno, Satoshi Ishikawa, Isamu Ogawa, Shigeaki Hida
 (Fac. Pharm., Nagoya City Univ.)
- P-141 *In silico* analysis of protein structures contributing to species differences in TRPA1 activation**
 ○ Mirei Amano¹, Yoko Mori², Akira Aoki¹, Yoshinori Okamoto¹, Takashi Isobe³,
 Susumu Ohkawara³, Nobumitsu Hanioka³, Toshiko Tanaka-Kagawa³, Hideto Jinno¹
 (¹Fac.Pharm., Meijo Univ., ²Natl. Inst. Health Sci., ³Yokohama Univ. Pharm.)
- P-142 Physiological analysis of ion channel inhibition by odorants**
 ○ Fusao Kawai
 (School of Medicine, Fujita Health University)
- P-143 Analysis of the effect of pinene on the autonomic nervous system**
 ○ Fusao Kawai
 (School of Medicine, Fujita Health University)
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 ○ Fusao Kawai
 (School of Medicine, Fujita Health University)
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 ○ Yui Kuramochi, Kohsuke Hayamizu
 (Yokohama Univ. Pharm.)
- P-146 Evaluation of the interaction between antihypertensive drugs and health foods**
 ○ Yuri Mizuno¹, Yuuki Miyazaki², Yugo Uematsu², Fumihiko Ogata^{1,2},
 Naohito Kawasaki^{1,2}
 (¹Grad. Sch. Pharm., Kindai Univ., ²Fac. Pharm., Kindai Univ.)
- P-147 Anti-obesity effects of heat-killed plant-derived lactic acid bacteria in 3T3-L1 adipocytes and obese mice**
 ○ Atsushi Koike¹, Masatoshi Nakatsuji¹, Rikuta Shono², Yuko Kiyohara², Ko Fujimori¹
 (¹Fac. Pharm., Osaka Med. & Pharm. Univ., ²Miyama Co., Ltd.)
- P-148 Analysis of nobiletin in mandarin peel**
 Ouga Nakatsuka, Mayuka Yamamoto, ○ Fumitoshi Sakazaki
 (Fac. Pharm., Osaka Ohtani Univ.)

- P-149 Age-related vascular endothelial barrier dysfunction and protective effects of green tea catechin**
○ Rio Wakasugi¹, Rina Fukuda², Suguru Nishida², Kenji Suzuki^{1,2}, Takako Kaneko-Kawano^{1,2}
(¹Grad. Sch. Pharm., Ritsumeikan Univ., ²Col. Pharm. Sci., Ritsumeikan Univ.)
- P-150 Improving infertility from the perspective of medicine food**
○ Rin Endo, IJung Lee
(Yokohama University of Pharmacy)
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○ Kenyu Susuki, IJung Lee
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○ Kano Takenaka, IJung Lee
(Yokohama University of Pharmacy)
- P-153 Clinical case report of taste disorder after Coronavirus (COVID-19) Infections — Oriental medicine treatment, Herbal medicine and acupuncture**
○ Reiko Aizawa^{1,2}, Chiemi Still Yoshida³, IJung Lee¹
(¹Grad. Sch. Yokohama Univ. Pharm., ²Reina Dental Office, ³Dept. LA., JCGA)
- P-154 Survey on awareness of menopausal symptoms**
○ Runa Ooi, IJung Lee
(Yokohama University of Pharmacy)
- P-155 Differences in the action of RA and RA-derived compound *p*-DDAP in the skin**
○ Noriko Takahashi^{1,2,3}, Yuichi Sasaki³, Yasunori Fujiu³, Masahiko Imai³
(¹Fac. Pharm., Kobe Gakuin Univ., ²Res. Inst. Prod. Dev., ³Hoshi Univ.)