

Plenary Lecture

September 12 (Tue) 16:50-17:50 Room A (501)

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

***PL-1* Challenges in Nucleic Acid Therapeutics for Malignant Pleural Mesothelioma**

○ Hidetoshi Tahara

(Dep. Cell. Mol. Biol, Grad. Sch. Biomedical & Health Sci., Hiroshima Univ)

Educational Lecture

September 13 (Wed) 11:00-11:40 Room A (501)

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

***EL-1* Education of Pharmaceutical Sciences : Present and Future**

○ Shigeru Ohta

(Fac. Pharm. Sci., Wakayama Medical Univ.)

Award Lectures

Scientific Award

September 13 (Wed) 13:00-13:30 Room A (501)

Chair: Hisamitsu Nagase (Gifu Univ. of Med. Sci.)

***AL-1* Application of *in vivo* bio-imaging to research on pharmaceutical health sciences and environmental toxicology**

○ Tsuyoshi Nakanishi

(Gifu Pharmaceutical Univ.)

Kanehara Award

September 13 (Wed) 13:30-13:50 Room A (501)

Chair: Yoshito Kumagai (Grad. Sch. Pharm. Sci., Kyushu Univ.)

***AL2-1* A modelling of metal exposomes based on electrophilic metals**

○ Masahiro Akiyama

(Fac. Pharm., Keio Univ)

September 13 (Wed) 13:50-14:10 Room A (501)
Chair: Kouichi Yoshinari (Sch. Pharm. Sci., Univ. Shizuoka)

AL2-2 Unraveling the molecular mechanisms of chemical toxicity focusing on the functions of xenobiotic-sensing nuclear receptors

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

Invited Lecture

September 12 (Tue) 10:30-11:00 Room A (501)
Chair: Yaichiro Kotake (Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)

IL-1 Emerging role of Sestrin2 as key regulator in the maintenance of homeostasis in liver pathophysiology

○ Sung Hwan Ki
(Laboratory of Molecular Toxicology, College of Pharmacy, Chosun University)

Forum I : Expectations for pharmaco-health sciences in forensic toxicology -So far and from now on-

September 12 (Tue) 14:40-16:40 Room A (501)
Organizer / Chair: Akira Namera (Grad. Sch. Biomed. Health Sci., Hiroshima Univ.)
Yasumitsu Ogra (Grad. Sch. Pharm. Sci., Chiba Univ.)

FI-1 Cooperation and Harmony between Pharmaceutical Science and Forensic Medicine in Cause of Death Investigation

○ Toshikazu Kondo
(Dept. Forensic Med., Wakayama Med. Univ.)

FI-2 The role of pharmacy schools in the Basic Act on Promotion of Death Investigation and its social expectations in Japan

○ Satoshi Numazawa
(Showa Univ. Sch. Pharm.)

FI-3 Current status and required pharmacological knowledge of forensic toxicology in the investigation of cause of death

○ Akira Namera
(Grad. Sch. Biomed. Health Sci., Hiroshima Univ.)

- F1-4 The role of pharmaceutical professionals in forensic medicine**
○ Katsuhiro Okuda, Masaru Asari, Yuta Takahashi, Keiko Shimizu
(Dep. Leg. Med., Asahikawa Med. Univ.)

Forum II : New perspectives on organelle biology & toxicology pioneered by young scientists

September 13 (Wed) 9:00-11:00 Room A (501)

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

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

- F2-1 Low concentrations of MPP⁺ promote glucose metabolism and impair autophagy**
○ Masatsugu Miyara, Yaichiro Kotake
(Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)
- F2-2 Sequestration of toxic metals by SeP/lysosome pathway**
○ Takashi Toyama, Yoshiro Saito
(Grad. Sch. Pharm. Sci., Tohoku Univ.)
- F2-3 Novel inhibitory mechanisms of cancer cell metastasis through liquid-liquid phase separation of p62 and NBR1**
○ Takuya Noguchi, Atsushi Matsuzawa
(Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- F2-4 Regulation of cell cycle and tumorigenesis via functional communication between endoplasmic reticulum and nucleus**
○ Atsushi Saito, Yasunao Kamikawa, Taichi Ito, Kazunori Imaizumi
(Inst. Biochem, Dept. Biomed. Health Sci., Hiroshima Univ.)

Forum III : Nutritional significance of fat-soluble vitamins in the maintenance and promotion of health and prevention and treatment of disease

September 13 (Wed) 14:20-16:20 Room A (501)

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

Kimie Nakagawa (Fac. Pharm. Sci., Kobe Gakuin Univ.)

- F3-1 Chronic kidney disease and vitamin A**
○ Yutaka Taketani¹, Yuichiro Adachi^{1,2}, Natsumi Yamamoto¹, Hirokazu Ohminami¹,
Masashi Masuda¹
(¹Medical Nutrition., Tokushima Univ, ²Harvard Medical School.)

***F3-2* The relationship of vitamin D deficiency to disease risks and its improvement**

○ Akiko Kuwabara

(Fac. Human Life and Ecology., Osaka Metropolitan Univ.)

***F3-3* Research of vitamin E function using tissue specific GPx4 deficient mice**

○ Hiroataka Imai

(Sch. Pharm. Sci., Kitasato Univ.)

***F3-4* Importance of Vitamin K Nutrition and Risk of Disease Due to Vitamin K Deficiency**

○ Kimie Nakagawa

(Fac. Pharm. Sci., Kobe Gakuin Univ.)

2023 Japan/Korea Joint Symposium on Pharmaceutical Health Science and Environmental Toxicology

September 12 (Tue) 11:00-12:00 Room A (501)

Chair: Joohee Jung (Duksung Women's University)

Takuya Noguchi (Tohoku University)

S-1 Targeting phospholipase D1 attenuates intestinal tumorigenesis by controlling multiple cancer relevant pathways and immunogenic cell death

Hyesung Lee, Seong Hun Lim, ○ Do Sik Min

(College of Pharmacy, Yonsei University)

S-2 α 1-Antitrypsin/Proteinase 3 imbalance promotes nonalcoholic steatohepatitis through proteolytic regulation of IL-32 γ

Jeong-Su Park¹, Jin Lee², Feng Wang¹, Hwan Ma¹, Yong-Sun Lee³, Sang-Gyu Lee⁴, Bumseok Kim⁵, Jin Tae Hong¹, ○ Yoon-Seok Roh^{1,*}

(¹College of Pharmacy and Medical Research Center, Chungbuk National University, Cheongju 28160, South Korea; ²Department of Pathology, School of Medicine, University of California, San Diego, La Jolla, CA 92093, USA; ³Toxicological Evaluation and Research Department, National Institute of Food and Drug Safety Evaluation, Ministry of Food and Drug Safety, Cheongju 28159, Republic of Korea; ⁴College of Pharmacy, Sungkyunkwan University, Suwon 16419, South Korea; ⁵College of Veterinary Medicine and Biosafety Research Institute, Jeonbuk National University, Iksan 54596, South Korea)

S-3 Establishment and characterization of genetic mouse model of polycystic ovary syndrome

○ Daisuke Matsumaru¹, Riko Yoshida¹, Yuta Mori¹, Keishi Ishida¹, Kyoko Mekada¹, Hozumi Motohashi², Tsuyoshi Nakanishi¹

(¹Laboratory of Hygienic Chemistry and Molecular Toxicology, Gifu Pharmaceutical University, ¹ Department of Gene Expression Regulation, Institute of Development, Aging and Cancer, Tohoku University)

S-4 A new aspect of selenoprotein P/ApoER2 pathway as a therapeutic target against glioblastoma

○ Takashi Toyama, Yoshiro Saito

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

2023 Japan/Korea Joint Symposium on Pharmaceutical Health Science and Environmental Toxicology : Poster Session

September 12 (Tue) 13:10-14:30 Room C (101)

- PS-01 Elucidation of the protective mechanism of a food-derived compound against ferroptosis**
○ Ryota Kojima¹, Yusuke Hirata¹, Takuya Noguchi¹, Yoichi Kurokawa²,
Atsushi Matsuzawa¹
(¹Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., ²Dept. of Biosci.
and Biotech., Fukui Prefect. Univ.)
- PS-02 Environmentally relevant doses of bisphenol A stimulate estradiol production by regulating β -catenin-FOXO2-CYP19A1 pathway in human ovarian granulosa cells**
○ Haifeng Liu¹, Hanyong Jin², Guenhwi Kim¹, Jeeyeong Kim¹, Jeehyeon Bae¹
(¹School of Pharmacy, Chung-Ang University, Seoul, 06974, South Korea, ²Key
Laboratory of Natural Medicines of the Changbai Mountain, Ministry of Education,
College of Pharmacy, Yanbian University, Yanji, 133002, Jilin Province, China)
- PS-03 Green algae *Chlamydomonas reinhardtii* acquire adaptability to copper stress by defense and tolerance/recovery responses**
○ Ryotaro Tsutsumi¹, Risa Yoshimoto², Jiro Miura³, Takuya Yamashita¹,
Kazumasa Hirata^{1,2}, Kazuya Nagano^{1,2}
(¹Sch. Pharm. Sci., Wakayama Medical Univ., ²Grad. Sch. Pharm. Sci., Osaka Univ.,
³Grad. Sch. Dent. Sci., Osaka Univ.)
- PS-04 Downregulation of IL-10 reduces autophagy and invasion in breast cancer**
○ Young Keun Hwang^{1,2}, Hao Jin¹, Yeji Hong^{1,2}, Joohee Jung^{1,2}, Aree Moon^{1,2}
(¹Duksung IDC, Duksung Women's Univ., ²Coll. Pharm., Duksung Women's Univ.)
- PS-05 Exploring mRNA markers for assessing developmental neurotoxicity using primary rat neurons**
○ Ryoga Fujihara, Masatsugu Miyara, Yuki Takehara, Tomoki Takabayashi,
Yuki Yamamoto, Hidetoshi Tahara, Yaichiro Kotake
(Grad. Sch. Biomed. Health Sci., Hiroshima Univ.)
- PS-06 Impresic acid ameliorate diesel exhaust particles-induced NLRP1 inflammasome in human keratinocyte cells**
○ Seung Yeon Lee, Gi Ho Lee, Ju Yeon Chae, Jae Won Kim, Sang Won Seo,
Hye Gwang Jeong
(Department of Toxicology, College of Pharmacy, Chungnam National University,
Daejeon, Republic of Korea.)

- PS-07 AdipoR2 counteracts saturated fatty acid-induced lipotoxicity by its saturated fatty acid-selective phospholipase A₂ activity**
 ○ Yutaro Yagi¹, Hiroki Kawana¹, Kuniyuki Kano¹, Nozomu Kono¹, Hiroaki Tanabe², Miki Okada-Iwabu³, Masato Iwabu³, Toshimasa Yamauchi³, Takashi Kadowaki⁴, Shigeyuki Yokoyama², Junken Aoki¹
 (¹Dept. of Health Chem., Grad. Sch. of Pharm. Sci., The University of Tokyo, ²RIKEN Clust. for Sci., Technol. & Innov. Hub, ³Dept. of Diabetes & Metab. Dis., Grad. Sch. of Med., The University of Tokyo, ⁴Toranomon hosp.)
- PS-08 Anti-angiogenesis and anti-cancer effects of fisetin in colorectal cancer patient-derived organoid xenograft model**
 ○ Nayun Kim^{1,2}, Junhye Kwon^{3,4}, Ui Sup Shin^{3,4}, Joohee Jung^{1,2*}
 (¹Duksung IDC, Duksung Women's Univ., ²Coll. Pharm., Duksung Women's Univ., ³Dep. Radiol. Clinic. Res., Korea Cancer Center Hospital, ⁴KIRAMS)
- PS-09 A mechanism underlying metabolic remodeling of selenium in inflammation**
 ○ Hayato Takashima, Mayumi Sugawara, Kotoko Arisawa, Takayuki Kaneko, Takashi Toyama, Yoshiro Saito
 (Grad. Sch. Pharm. Sci., Tohoku Univ.)
- PS-10 Weight of Evidence for Chemical Hazard Assessment in the Reproductive and Developmental Toxicity**
 ○ Sunyi Lee¹, Jae-Ho Shin², Sanghee Park³, Sanghyeon Yeon³, Myongsil Hwang⁴, Myung-Ha Song⁵, Sanghee Lee⁵, Jungkwan Seo⁵, Hyomin Lee⁶, Joohee Jung¹
 (¹College. Pharm., Duksung Women's Univ., ² Dept. Biomed. Lab. Sci., Eulji Univ., ³Chemtopia Co., ⁴College. Bio-nano Technol., Gachon Univ., ⁵Risk Assessment Div., NIER, ⁶Risk Mgmt. Inst. Co.)
- PS-11 Search for the endogenous ligand of MrgB5 and MRGX4, oxidized phospholipid GPCRs involved in itch-sensing**
 ○ Yugo Takagi, Jumpei Omi, Junken Aoki
 (Fac. Pharm. Sci., The University of Tokyo)
- PS-12 Phenotypic characterization and role of TGF-β⁺ regulatory natural killer cells in atopic dermatitis mice**
 ○ Min Yeung Choi^{1,2}, Keun Young Min¹, Min Geun Jo¹, Wahn Soo Choi¹, and Young Mi Kim²
 (¹Dep. Immunol., Sch. Med., Konkuk Univ., ²College Pharm. Duksung Women's Univ.)
- PS-13 Selenoprotein P/ApoER2 axis plays a crucial role in intracellular selenium storage**
 ○ Atsuya Ichikawa, Kotoko Arisawa, Takashi Toyama, Yoshiro Saito
 (Grad. Sch. Pharm. Sci., Tohoku Univ.)

- PS-14 Potential toxicity of polystyrene nanoplastics with different surface charge in human lung epithelial BEAS-2B cells and HaCaT keratinocytes**
 ○ So Young Kyung, Joo Hee Han, Joo Kyung Shin, Eunah Lee, Hwa Young Cha, Jae Hyeon Park, Hyung Sik Kim
 (Sch. Pharm., Sungkyunkwan Univ.,)
- PS-15 Effect of human serum albumin on post-mortem metabolism of organophosphorus insecticides**
 ○ Yoshikazu Yamagishi¹, Hirotaro Iwase¹, Yasumitsu Ogra^{1,2}
 (¹Graduate School of Medicine, Chiba University, ²Graduate School of Pharmaceutical Sciences, Chiba University)
- PS-16 Safety assessment of *Cnidium Officinale* rhizome extract in cosmetics using the Threshold of Toxicological Concern (TTC) approach**
 ○ Soha Jeon¹, Eun-Young Lee², Prima F. Hillman², Sang-Jip Nam², and Kyung-Min Lim¹
 (¹College of Pharmacy, Ewha Womans University, Seoul 03760, Republic of Korea. ²Department of Chemistry and Nanoscience, Ewha Womans University, Seoul 03760, Republic of Korea)
- PS-17 Functional analysis of long-chain acyl-CoA synthetase (ACSL)4 in chemical-induced lung injury**
 ○ Yuki Tomitsuka, Hiroshi Kuwata, Shuntaro Hara
 (Sch. of Pharmacy, Showa Univ.)
- PS-18 The effect of estrogen receptor alpha 36 on multi-drug resistance 1/P-glycoprotein expression in human triple negative breast cancer cells**
 ○ Gi Ho Lee, Poyonov Muslimbek, Seung Yeon Lee, Ju Yeon Chae, Jae Won Kim, Hye Gwang Jeong
 (Department of Toxicology, College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea.)
- PS-19 Exploration of candidate drugs to induce metallothionein3**
 ○ Mizuki Tsuru¹, Kazuki Komai¹, Kazuki Ohuchi¹, Yasuhiro Shinkai², Tomoki Kimura³, Nobuhiko Miura⁴, Yoshito Kumagai⁵, Isao Hozumi¹, Masatoshi Inden¹, Hisaka Kurita¹
 (¹Fac. Pharm. Sci., Gifu Pharmaceutical Univ, ²Sch. Life Sci., Tokyo Univ. Pharm. and Life Sci., ³Fac. Pharm. Sci., Setsunan Univ, ⁴Fac. Pharm. Sci., Yokohama Univ. Pharma, ⁵Fac. Pharm. Sci., Kyushu Univ.)
- PS-20 The inhibitory effects of supersulfides on oxidative stress-induced parthanatos**
 ○ Yutaro Yamada, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa
 (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

- PS-21 Acyl-CoA synthetase long-chain family member 4 (ACSL4) links inflammation and carcinogenesis in a mouse model of colitis-associated cancer**
○ Tsubasa Ochiai, Hiroshi Kuwata, Shuntaro Hara
(Sch. of Pharm., Showa Univ.)
- PS-22 Prostacyclin synthase negatively regulates the inflammatory reactions caused by lipopolysaccharide-induced sepsis *in vivo***
○ Toshiya Honsawa¹, Tsubasa Ochiai¹, Chieko Yokoyama², Hiroshi Kuwata¹, Shuntaro Hara¹
(¹Sch. of Pharm., Showa Univ., ²Kanagawa Inst. of Tech.)
- PS-23 Lead induces novel necrosis-like cell death in differentiating neurons**
○ Satoru Shiina, Takayuki Kaneko, Takashi Toyama, Yoshiro Saito
(Grad. Sch. Pharm. Sci., Tohoku Univ.)

Award Candidates Presentation Candidates for Young Investigator Award

September 12 (Tue) 9:00-10:30 Room A (501)

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

A-1 Maternal exposure to TCDD elicits disruption of nicotinic acid metabolism in fetal (P-102) hypothalamus: possible mechanism involved in the reduced steroidogenesis

○ Mana Fujimoto¹, Hiroe Sano¹, Ren-Shi Li^{1,2}, Hong-Bin Chen¹, Takayuki Koga³, Yoshitaka Tanaka¹, Yuji Ishii¹

(¹Grad Sch Pharm Sci, Kyushu Univ., ²China Pharm Univ., ³Daiichi Univ. Pharmacy)

A-2 Activation of fibrinolytic system of human vascular endothelial cells by (P-032) γ -irradiation and its mechanisms

○ Miyabi Kobayashi¹, Lihito Ikeuchi¹, Tsuyoshi Nakano², Kazuki Kitabatake¹, Chika Yamamoto², Mitsutoshi Tsukimoto¹, Tomoya Fujie¹, Toshiyuki Kaji¹

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

A-3 Lipoxytosis regulator Lipo-2 involved in Sudden Cardiac Death

(P-029) ○ Ryuya Kobayashi, Masaki Matsuoka, Hirotaka Imai

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

A-4 Analysis of the effects of long-chain acyl-CoA synthetase (ACSL) 4 deficiency on (P-044) drug-induced lung injury

○ Yuki Tomitsuka, Hiroshi Kuwata, Shuntaro Hara

(Sch. of Pharmacy, Showa Univ.)

A-5 Functional analysis of vitamin K converting enzyme UBIAD1 in bone formation

(P-164) ○ Shunsuke Hirashima¹, Yukino Kiyooka², Shinichiro Kaetsu², Kimie Nakagawa^{1,2}

(¹ Grad. Sch. Pharm. Sci., Kobegakuin Univ., ² Fac. Pharm. Sci., Kobegakuin Univ.)

A-6 Selenoprotein P/ApoER2 axis plays a crucial role in intracellular selenium storage

(P-016) ○ Atsuya Ichikawa, Kotoko Arisawa, Takashi Toyama, Yoshiro Saito

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

A-7 Lead induces novel necrosis-like cell death in differentiating neurons

(P-018) ○ Satoru Shiina, Takayuki Kaneko, Takashi Toyama, Yoshiro Saito

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

A-8 Thyroid hormone (TH) promotes urinary excretion of 2,3,7,8-tetrachlorodibenzo- (P-112) *p*-dioxin (TCDD) via the function of TH receptor (TR) β in mice

○ Shunsuke Tomita¹, Pinyapach Dungkokkruad², Youhei Hiromori³, Keishi Ishida¹, Daisuke Matsumaru¹, Hisamitsu Nagase⁴, and Tsuyoshi Nakanishi¹

(¹ Gifu Pharm. Univ., ² Mahasarakham Univ., ³ Suzuka Univ. of Med. Sci., ⁴ Gifu Univ. of Med. Sci.)

A-9 The inhibitory effects of supersulfides on oxidative stress-induced parthanatos
(P-028) ○ Yutaro Yamada, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

Award Candidates Presentation Candidates for Rookie of the Year Award

September 12 (Tue) 9:00-10:30 Room B (404)

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

B-1 **Functional analysis of vitamin K-converting enzyme (UBIAD1) in adipose tissue**
(P-166) **using Tamoxifen-inducible gene-deficient mice**

○ Rika Horigome¹, Momoka Nagura¹, Haruka Saeki¹, Shunsuke Hirashima²,
Kimie Nakagawa^{1,2}

(¹Fac. Pharm. Sci., Kobe Gakuin Univ, ²Grad. Sch. Pharm. Sci., Kobe Gakuin Univ.)

B-2 **A mechanism underlying metabolic remodeling of selenium in inflammation**

(P-012) ○ Hayato Takashima, Mayumi Sugawara, Kotoko Arisawa, Takayuki Kaneko,
Takashi Toyama, Yoshiro Saito

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

B-3 **The relationship between maternal thyroid-related parameters and brain**
(P-147) **development in offspring under chemical-induced hypothyroidism**

○ Manami Koizumi¹, Keishi Ishida¹, Saori Kasuya¹, Kanoko Tatsumi¹,
Kyoko Mekada¹, Daisuke Matsumaru¹, Aki Murashima¹, Hisamitsu Nagase²,
Yasunari Kanda³, Kazuhiro Takuma⁴, Tsuyoshi Nakanishi¹

(¹Gifu Pharm. Univ., ²Gifu Uni. of Med Sci., ³NIHS, ⁴Osaka Univ.)

B-4 **Metabolism and nutritional availability of methylated-selenium metabolites**
(P-013) **produced by gut microflora in rats**

○ Sayano Iijima¹, Kazuaki Takahashi², Yasumitsu Ogra³

(¹Fac. Pharm. Sci., Chiba Univ., ²Grad. Sch. Hort., Chiba Univ., ³Grad. Sch. Pharm.
Sci., Chiba Univ.)

B-5 **Elucidation of the protective mechanism of a food-derived compound against**
(P-030) **ferroptosis**

○ Ryota Kojima¹, Yusuke Hirata¹, Takuya Noguchi¹, Yoichi Kurokawa²,
Atsushi Matsuzawa¹

(¹Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., ²Dept. of Biosci.
and Biotech., Fukui Prefect. Univ.)

B-6 **Effect of furosemide to the expression of ion transporters on brain in neonatal**
(P-140) **chronic lung disease**

○ Hiroki Kurokawa¹, Atsuto Onoda^{1,2}, Yoshiaki Sato², Xu Yue^{2,3}, Ken Tachibana¹,
Ken Takeda¹

(¹Dep. Pharm., Sanyo-Onoda City Univ, ²Cent. Mat-Neo., Nagoya Univ. Hosp. ³Grad.
Med., Nagoya)

B-7 **Effects of Fetal Exposure to Ultrafine Particles on Brain Development in a Model
(P-106) of *Setd5* Deficiency**

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

B-8 **Effect of fetal growth restriction on brain development: Expression levels of OX2
(P-173) glycoprotein in oligodendrocytes**

○ Ayumi Yamato, Atsuto Onoda, Ken Tachibana, Ken Takeda
(Fac. Pharm. Sci., Sanyo-Onoda City Univ.)

B-9 **PXR-dependent inhibition of the proliferation of ER α -positive breast cancer cells
(P-165)**

○ Kazuki Ota, Takuomi Hosaka, Aoi Yoshihara, Ryota Shizu, Yuichiro Kanno,
Kouichi Yoshinari
(Sch. Pharm. Sci., Univ. Shizuoka)

B-10 **The selective androgen receptor modulator YK11 regulates binding of
(P-178) transcriptional coactivators through NTD and AF2 interactions in androgen
receptor**

○ Tomohiro Kosuge, Ryota Shizu, Takuomi Hosaka, Yuichiro Kanno,
Kouichi Yoshinari
(Sch. Pharm. Sci., Univ. Shizuoka)

Oral Session 1

September 12 (Tue) 14:40-15:40 Room B (404)

Chair: Tomoki Kimura (Fac. Pharm. Sci., Setsunan Univ.)

Yumi Abiko (Grad. Sch. Bio. Sci., Nagasaki Univ.)

01-1 Low-dose radiation affects developing human iPSC-derived retinal ganglion organoid

○ Hideko Sone^{1,2}, Mari Katsura^{3,4}, Tomohiro Ito², Hiroko Nansai¹, Youichiro Wada¹
(¹Grad. Sch. Pharm. Sci., Univ. Pharm. Yokohama, ²HERD, NIES, ³ISC, Univ. Tokyo, ⁴Reiwa Eye Clinic, ⁵Grad. Sch. Med. Sci., Univ. Tokyo, ISC / RCAST, Univ. Tokyo)

01-2 Effect of Benzo[a]pyrene on IL-17 mediated signaling

○ Kota Nariya, Ryuta Muromoto, Tadashi Matsuda
(Grad. Sch. Pharm. Sci., Hokkaido Univ)

01-3 The affection of the changes of polycyclic aromatic hydrocarbons and 1-nitropyrene in Shenyang, China from 2014 to 2020

○ Hao Zhang¹, Xuan Zhang¹, Yan Wang¹, Pengchu Bai¹, Lulu Zhang^{2,3}, Chong Han⁴,
Qimin Wang⁵, Yunping Cai⁵, Seiya Nagao³, Akira Toriba⁶, Ning Tang^{3,5,7}
(¹Grad. Sch. Medical Sci., Kanazawa Univ, ² Inst. Civil Eng., Archit. Environ., Hubei Univ. Technol. ³Inst. Nature and Environ. Technol., Kanazawa Univ. ⁴Sch. Metall., Northeastern Univ., China, ⁵Coll. Energy and Power, Shenyang Inst. Eng., China, ⁶Inst. Biomed. Sci. Nagasaki Univ. ⁷Inst. Medical, Pharm. and Health Sci., Kanazawa Univ.)

01-4 Personal exposure and health effect of polycyclic aromatic hydrocarbons for healthy residents: a pilot study in heavy-polluted cities of China

○ Xuan Zhang¹, Hao Zhang¹, Yan Wang¹, Pengchu Bai¹, Lulu Zhang^{2,3}, Akira Toriba⁴,
Yongjie Wei⁵, Ning Tang^{3,6,7}
(¹Grad. Sch. Medical Sci., Kanazawa Univ., ²Inst. Civil Eng., Archit. Environ., Hubei Univ. Technol., ³Inst. Nature and Environ. Technol., Kanazawa Univ. ⁴Inst. Nature and Environ. Technol., Kanazawa Univ. ⁵Inst. Biomed. Sci. Nagasaki Univ. ⁶Inst. Medical, Pharm. and Health Sci., Kanazawa Univ. ⁷Coll. Energy and Power, Shenyang Inst. Eng., China)

01-5 Concentration variation of air pollutants at a Japanese background site, Wajima from 2016 to 2021

○ Pengchu Bai¹, Hao Zhang¹, Xuan Zhang¹, Yan Wang¹, Lulu Zhang^{2,3}, Seiya Nagao³,
Akira Toriba⁴, Ning Tang^{3,5}
(¹Grad. Sch. Medical Sci., Kanazawa Univ., ²Inst. Civil Eng., Archit. Environ., Hubei Univ. Technol., ³ Inst. Nature and Environ. Technol., Kanazawa Univ., ⁴ Inst. Biomed. Sci. Nagasaki Univ., ⁵ Inst. Medical, Pharm. and Health Sci., Kanazawa Univ.)

Oral Session 2

September 12 (Tue) 15:40-16:40 Room B (404)

Chair: Kayoko Kita (Fac. Pharm. Sci., Teikyo Univ.)

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

02-1 Detection of bisphenol A diglycidyl ether (BADGE) and their derivatives in infants admitted to neonatal intensive care unit (NICU)

○ Atsuto Onoda^{1,2}, Mami Kuwamura³, Kentaro Tanaka³, Kentaro Taki²,
Chihaya Koriyama⁴, Rie Tanaka³, Ken Tachibana¹, Ken Takeda¹,
Toshihiro Kawamoto³, Mayumi Tsuji³
(¹ Fac. Pharm. Sci., Sanyo-Onoda U., ² Fac. Med. Sci., Nagoya U., ³ U. Occup. Env.
Health., ⁴ Kagoshima U. Grad. Sch. Med. Sci.)

02-2 Effects of Bisphenol A replacement chemicals, BPAF, BPB, and BPS, on the proliferation of ER-positive MCF-7 breast cancer cells: A comparative study between single and repeated exposure system

○ Michitaka Tanaka¹, Masayo Hirao-Suzuki¹, Jun-ichi Shimoda¹, Shuso Takeda²,
Masufumi Takiguchi¹
(¹Fac. Pharm. Sci., Hiroshima Intl. Univ., ²Fac. Pharm. Pharmaceut. Sci., Fukuyama
Univ.)

02-3 Human biomonitoring survey: an attempt to collect biological samples via the postal method

○ Miyuki Iwai-Shimada¹, Kenta Iwai¹, Mai Takagi¹, Nozomi Tatsuta²,
Yayoi Kobayashi¹ Shoji F. Nakayama¹
(¹Health. Environ. Risk, National Institute for Environmental Studies, ²Grad. Sch. Med.,
Tohoku Univ.)

02-4 Tributyltin induces LC3-II accumulation independent of autophagy initiation complex

○ Shunichi Hatamiya, Masatsugu Miyara, Yaichiro Kotake
(¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)

02-5 Silver nanoparticle-induced autophagic disruption and Rubicon expression in human alveolar epithelial adenocarcinoma cells

○ Takamitsu Miyayama, Masato Matsuoka
(School of Medicine, Tokyo Women's Medical University)

Oral Session 3

September 13 (Wed) 9:00-10:00 Room B (404)

Chair: Yasuhiro Shinkai (Sch. Life. Sci., Tokyo Univ of Pharm and Life Sci.)

Yuu Miyauchi (Fac. Pharm. Sci., Sojo Univ.)

O3-1 Analysis of the association between PEPT2 expression and AhR in human lung-derived H441 cells

○ Maya Nakanishi¹, Masashi Kawami², Ryoko Yumoto², Mikihiisa Takano³,
Yasuo Uchida²

(¹Fac. Pharm. Sci., Hiroshima Univ, ²Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ³Fac. Pharm. Sci., Yasuda Women Univ.)

O3-2 Mechanism underlying abemaciclib-induced epithelial-mesenchymal transition in alveolar epithelial cell line, A549

○ Tomoyo Yoshimori¹, Masashi Kawami¹, Yuta Kumagai², Ryoko Yumoto¹,
Mikihiisa Takano³, Yasuo Uchida¹

(¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ²Sch. Pharm. Sci., Hiroshima Univ., ³Fac. Pharm. Sci., Yasuda Women Univ.)

O3-3 Role of p53 in miR-34a-induced epithelial-mesenchymal transition in non-small lung cancer cells

○ Mizuki Akai¹, Masashi Kawami¹, Hiroto Namiuchi², Ryoko Yumoto¹,
Mikihiisa Takano³, Yasuo Uchida¹

(¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ²Sch. Pharm. Sci., Hiroshima Univ., ³Fac. Pharm. Sci., Yasuda Women Univ.)

O3-4 Relationship between purine nucleotide analogue sensitivity and 10-formyltetrahydrofolate metabolizing enzyme expression in hepatocellular carcinoma cells

○ Masato Sasaki¹, Kazuo Yamamoto², Takeshi Ueda³, Hayato Irokawa¹, Ryoya Sekine¹,
Kouki Takeda¹, Yutaka Tanaka¹, Fumie Ito¹, Shusuke Kuge¹, Nobuyuki Shibata¹

(¹Fac. Pharm. Sci., Tohoku Med. Pharm. Univ., ²Biomed. Res. Supp. Center, Nagasaki Univ. Sch. Med., ³Fac. Med., Kindai Univ.)

O3-5 Effects of estrogenic condition on expression of fatty acid 2-hydroxylase (FA2H) in estrogen receptor α -positive breast cancer cells

○ Masayo Hirao-Suzuki¹, Koki Kanameda², Takayuki Koga³, Masufumi Takiguchi¹,
Narumi Sugihara², Masahiro Ohara⁴, Shuso Takeda²

(¹Fac. Pharm. Sci., Hiroshima Intl. Univ., ²Fac. Pharm. Pharmaceut. Sci., Fukuyama Univ., ³Daiichi Univ. Pharm., ⁴Saitama Med. Univ. Intl. Med. Cent.)

Oral Session 4

September 13 (Wed) 10:00-11:00 Room B (404)

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

Yuka Sasaki (Sch. of Pharm., Showa Univ.)

04-1 Study on the factors associated with the ribavirin resistance in breast cancer cells MCF-7 cells

○ Airi Fukushima¹, Masashi Kawami¹, Yuki Sugimoto², Ryoko Yumoto¹,
Mikihisa Takano³, Yasuo Uchida¹

(¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ²Sch. Pharm. Sci., Hiroshima Univ., ³Fac. Pharm. Sci., Yasuda Women Univ.)

04-2 De novo phospholipid synthesis driven by autophagy-related genes is required for saturated fatty acid-induced IRE1a activation

○ Nozomu Kono¹, Shenwei Ni¹, Shunsuke Kasai¹, Sosuke Akagi¹, Hiroyuki Arai²,
and Junken Aoki¹

(¹Grad. Sch. of Pharmeut. Sci., Univ. of Tokyo.; ²Grad. Sch. of Med., Univ. of Tokyo)

04-3 Histological change accompanied by the stress-induced thymic involution

○ Kei Nakayama, Kaito Fukuda, Hiroshi Hasegawa

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

04-4 Linalool alters the expression levels of drug-metabolizing enzymes in the brain

○ Taichi Fujiyama, Ami Oguro, Yaichiro Kotake

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

04-5 Prediction of oligomer-forming site of UDP-glucuronosyltransferases

○ Yuu Miyauchi¹, Madoka Sawai², Shinji Takechi¹, Peter Mackenzie³, Yuji Ishii⁴

(¹ Fac. Pharmaceut. Sci., Sojo Univ., ² Sch. Pharm. at Fukuoka, Int. Univ. Health & Welfare, ³Dept. Clin. Pharmacol., Coll. Med. & Pub. Health, Flinders Univ., ⁴Grad. Sch. Pharm. Sci., Kyushu Univ.)

Oral Session 5

September 13 (Wed) 14:20-15:20 Room B (404)

Chair: Shigeaki Hida (Fac. Pharm. Sci., Nagoya City Univ.)

Yusuke Hirata (Grad. Sch. of Pharm. Sci., Tohoku Univ.)

05-1 Detection of SARS-CoV-2 and Influenza viruses in the atmosphere

○ Akira Aoki¹, Hirokazu Adachi², Miyu Hibino¹, Miyabi Itou², Yoshihiro Yasui²,
Yoshinori Okamoto¹, Hideto Jinno¹

(¹Fac. Pharm., Meijo Univ., ²Aichi Pref. Inst. Public Health)

- 05-2 Innate immune reactions by PEPT2-mediated transport of bacterial dipeptides in alveolar macrophages**
 ○ Yutaka Takeuchi¹, Kosuke Fujii², Masashi Kawami¹, Ryoko Yumoto¹, Mikihisa Takano³, Yasuo Uchida¹
 (¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ²Sch. Pharm. Sci., Hiroshima Univ., ³Fac. Pharm. Sci., Yasuda Women Univ.)
- 05-3 Metabolic Shift to Aerobic Glycolysis in HIV-1 Infection: Triosephosphate Isomerase 1 Contributes to Efficient Viral Replication**
 ○ Towa Abe¹, Naoki Kihimoto¹, Satoshi Miura¹, Tae Yasutake¹, Nobutoki Takamune¹, Shogo Misumi¹
 (¹Grad. Sch. Pharm. Sci., Kumamoto Univ. ²KIDO, Kumamoto Univ.)
- 05-4 Diversity of HIV transmission controlled by metabolic dynamics**
 ○ Naoki Kishimoto¹, Satoshi Miura¹, Tae Yasutake¹, Towa Abe¹, Nobutoki Takamune², Shogo Misumi¹
 (¹ Grad. Sch. Pharm. Sci., Kumamoto Univ., ² KIDO)
- 05-5 H₂O₂-Zn²⁺ signaling induces age-related nigral dopaminergic neurodegeneration after exposure to paraquat**
 ○ Atsushi Takeda¹, Haruna Tamura¹, Miki Sasaki¹, Hiroki Morioka¹, Ryusuke Nishio¹, Haruna Tamano^{1,2}
 (¹ Sch. Pharm. Sci., Univ. Shizuoka, ² Shizuoka Tohto Med. Col.)

Oral Session 6

September 13 (Wed) 15:20-16:20 Room B (404)

Chair: Shuso Takeda (Fac. Pharm. Sci., Fukuyama Univ.)

Tomoya Fujie (Fac. of Pharm. Sci., Tokyo Univ. of Sci.)

- 06-1 Effect of high fat diet-feeding on the ketone body-utilizing pathway in brown adipose tissue**
 ○ Masahiro Yamasaki, Shinya Hasegawa, Masahiko Imai, Shotaro Ozaki, Noriko Takahashi
 (Dep. of Health Chem., Hoshi Univ)
- 06-2 Dephosphorylation of lysophosphatidic acid by soluble epoxide hydrolase (sEH) and its function in the brain**
 ○ Yurino Kaga, Ami Oguro, Yaichiro Kotake
 (Grad. Sch. of Biomed. and Health Sci, Hiroshima Univ)

- 06-3 Mechanism of lipid oxidation dependent cell death by persulfide**
○ Shu Yasuda¹, Takara Hashimoto¹, Maho Morita¹, Tomohiro Sawa²,
Tomoko Koumura¹, Hirotaaka Imai¹
(¹Grad. Sch. Pharm. Sci., Kitasato Univ, ²Grad. Sch. Med. Sci., Kumamoto Univ.)
- 06-4 Functional analysis of Lipo-1 in Lipoxytosis**
○ Masaki Matsuoka, Shotaro Hatanaka, Hirotaaka Imai
(Sch. of Pharm., Kitasato Univ.)
- 06-5 Effects of an immune modulator FTY720 (fingolimod) on signaling pathways that control cell proliferation in fission yeast**
○ Kanako Hagihara^{1,2}, Ryosuke Satoh², Takuya Maeda¹, and Reiko Sugiura²
(¹Dept. Pharm., Sch. Pharm., Hyogo Med. Univ., ²Lab. of Mol. Pharmacogenom., Fac. of Pharm., Kindai Univ.)

Poster Session

September 12 (Tue) 13:10-14:30 Room C (101)

- P-001 Trial Exposure of Mice to Heated Tobacco Aerosols**
○ Sawako Shindo¹, Chisato Takahashi¹, Shiori Nishikawa¹, Madoka Nihei¹, Kodai Tsukada¹, Kazuhiko Nakadate¹, Yohei Inaba², Akira Ushiyama², Kenji Hattori¹
(¹Fac. Pharm. Sci., Meiji Pharm. Univ., ²Dep. Env. Health, NIPH)
- P-002 Inhibition of p38 mitogen-activated protein kinases attenuates methylmercury toxicity in SH-SY5Y neuroblastoma cells**
○ Yasukazu Takanezawa, Kazuma Sakai, Ryosuke Nakamura, Yuka Ohshiro, Shimpei Uraguchi, Masako Kiyono
(Dep. Public Health. Sch of Pharm., Kitasato Univ.)
- P-003 Involvement of polycyclic aromatic hydrocarbons and endotoxin in macrophage expression of interleukin-33 induced by exposure to particulate matter**
○ Nami Ishihara¹, Tomoaki Okuda², Christoph FA Vogel³, Yasuhiro Ishihara^{1,3}
(¹Hiroshima Univ, ²Keio Univ, ³ University of California)
- P-004 Elbow jet separation of Beijing urban particles and their responses to macrophages**
○ Yasuhiro Ishihara¹, Yu Nabetani², Yuto Tani³, Chiharu Tokoro³, Hiroshi Okochi³
(¹Hiroshima Univ, ²Miyazaki Univ, ³Waseda Univ.)
- P-005 Autophagy response to toxic metal exposure in SH-SY5Y neuroblastoma cells**
○ Yuki Ohashi, Yasukazu Takanezawa, Kazuma Sakai, Ryosuke Nakamura, Yuka Ohshiro, Shimpei Uraguchi, Masako Kiyono
(Dep. Public Health. Sch of Pharm., Kitasato Univ.)
- P-006 Determination of atmospheric microplastics in Kanazawa, Japan**
○ Yan Wang¹, Hao Zhang¹, Xuan Zhang¹, Pengchu Bai¹, Lulu Zhang^{2,3}, Kohei Ono⁴, Seiya Nagao³, Akira Toriba⁵, Atsushi Matsuki³, Ning Tang^{3,6,7}
(¹Grad. Sch. Medical Sci., Kanazawa Univ., ²Inst. Civil Eng., Archit. Environ., Hubei Univ. Technol., ³Inst. of Nature and Environ. Technol., Kanazawa Univ., ⁴Grad. Sch. Natural Sci. and Technol., Kanazawa Univ., ⁵Inst. of Biomed. Sci. Nagasaki Univ., ⁶Inst. of Medical, Pharm. and Health Sci., Kanazawa Univ., ⁷Coll. Energy and Power, Shenyang Inst. Eng., China)
- P-007 In vitro and in silico analysis of human TRP channels activation by isothiazolinone antibiotics**
○ Momoka Urashima¹, Rina Nakamukai¹, Yumira Miyazaki¹, Susumu Ohkawara¹, Yoko Mori^{2,3}, Ikuo Kawamura¹, Nobuhiko Miura¹, Takashi Isobe¹, Nobumitsu Hanioka¹, Hideto Jinno³, Toshiko Tanaka-Kagawa¹
(¹Yokohama Univ. Pharm., ²Natl. Inst. Environ. Studies, ³Facul. Pharm., Meijo Univ.)

- P-008 Effects of alkyl chain length, cationic core atoms, and anionic species of ionic liquids on cytotoxicity toward mouse macrophage J774.1 cells**
 ○ Toshio Hirokawa, Takahito Nishiyama, Ryouyusuke Suda, Kyoko Fujita, Kimiyoshi Ichida, Satoshi Yamaori
 (Tokyo University of Pharmacy and Life sciences)
- P-009 Effects of di-(2-ethyl hexyl) phthalate metabolites on transcriptional activity via human nuclear receptors and gene expression in HepaRG cells**
 ○ Ayaka Yasuda¹, Wataru Murase¹, Atsuhito Kubota¹, Naoto Uramaru², Katsuhiko Okuda³, Ryo Hakota¹, Atsuko Ikeda-Araki^{4,5}, Hiroyuki Kojima^{1,5}
 (¹Sch. Pharm. Sci., Health Sci. Univ. Hokkaido, ²Nihon Pharm. Univ., ³Asahikawa Med. Univ., ⁴Grad. Sch. Health. Sci., Hokkaido Univ., ⁵Cent. Env. Health Sci., Hokkaido Univ.)
- P-010 Evaluation of xenopus AhR responsiveness to various chemicals using A8-XRE-Luc cells**
 ○ Tarou Kawaguchi¹, Taito Matueda¹, Takaaki Inomata², Koudai Takano², Kumi Matui³, Masashi Sekimoto^{1,2}
 (¹Grad. Sch. Environ. Health Sci., Azabu Univ, ²Sch. Life Environ. Sci., Azabu Univ., ³Fac. Veterinary Sci., Azabu Univ.)
- P-011 Sensory nerve predominant peripheral neurotoxicity of methylmercury is caused by infiltrated macrophage-derived TNF- α storm**
 ○ Toshiyuki Kaji¹, Tsuyoshi Nakano², Eiko Yoshida³, Shigekatsu Kazama¹, Chika Yamamoto², Yasuyuki Fujiwara⁴, Komyo Eto⁵, Yo Shinoda⁴
 (¹Fac. Pharm., Tokyo Univ. Sci., ² Fac. Pharm., Toho Univ., ³ CRIEPI, ⁴Sch. Pharm., Tokyo Univ. Pharm. Life Sci., ⁵Health Nurs. Fac. for the Aged, Jushindai)
- P-012 A mechanism underlying metabolic remodeling of selenium in inflammation**
 ○ Hayato Takashima, Mayumi Sugawara, Kotoko Arisawa, Takayuki Kaneko, Takashi Toyama, Yoshiro Saito
 (Grad. Sch. Pharm. Sci., Tohoku Univ.)
- P-013 Metabolism and nutritional availability of methylated-selenium metabolites produced by gut microflora in rats**
 ○ Sayano Iijima¹, Kazuaki Takahashi², Yasumitsu Ogra³
 (¹Fac. Pharm. Sci., Chiba Univ., ²Grad. Sch. Hort., Chiba Univ., ³Grad. Sch. Pharm. Sci., Chiba Univ.)
- P-014 Alteration of intracellular free zinc concentration by the heavy metal-dependent transcription factor MTF-1**
 ○ Masaki Tanaka, Haruka Inazuka, Tae Shimoyama
 (Fac. Pharm. Sci., Teikyo Univ.)

- P-015** **Effect of cystine transporter inhibitor on arsenic accumulation and spindle assembly checkpoint activation in HeLa cells treated with thio-dimethylarsinic acid**
○ Kayoko Kita, Tatsuya Sunada, Taro Honma, Toshihide Suzuki
(Fac. Pharma-Sci., Teikyo Univ.)
- P-016** **Selenoprotein P/ApoER2 axis plays a crucial role in intracellular selenium storage**
○ Atsuya Ichikawa, Kotoko Arisawa, Takashi Toyama, Yoshiro Saito
(Grad. Sch. Pharm. Sci., Tohoku Univ.)
- P-017** **Molecular mechanism underlying the methylation of inorganic tellurium salt**
○ Ayuka Takata¹, Yu-ki Tanaka², Yoshikazu Yamagishi³, Yasunori Fukumoto²,
Noriyuki Suzuki², Yasumitsu Ogra²
(¹Fac. Pharm. Sci., Chiba Univ, ²Grad. Sch. Pharm. Sci., Chiba Univ, ³Grad. Sch. Med.,
Chiba Univ.)
- P-018** **Lead induces novel necrosis-like cell death in differentiating neurons**
○ Satoru Shiina, Takayuki Kaneko, Takashi Toyama, Yoshiro Saito
(Grad. Sch. Pharm. Sci., Tohoku Univ.)
- P-019** **Involvement of integrins in cadmium-induced injury of vascular endothelial cell layer**
○ Natsumi Ichida¹, Kentaro Sayama², Takato Hara², Toshiyuki Kaji¹,
Chika Yamamoto², Tomoya Fujie¹
(¹ Fac. Pharm. Sci., Tokyo Univ. of Sci., ² Fac. Pharm. Sci., Toho Univ.)
- P-020** **Role of OSGIN1 in the induction of neuronal cell death by methylmercury**
○ Naoya Yamashita, Marino Uchiyama, Ryota Yamagata, Gi-Wook Hwang
(Fac. Pharmaceut. Sci., Tohoku Med. Pharmaceut. Univ.)
- P-021** **Involvement of TNFR3 in neurobehavioral changes of mice exposed to methylmercury during embryonic and developmental stages**
○ Ryota Yamagata, Yurina Uesugi, Naoya Yamashita, Gi-Wook Hwang
(Fac. of Pharmaceut. Sci., Tohoku Med. Pharmaceut. Univ.)
- P-022** **Toxicity mechanism of organic iron compounds using the chemical properties and cytotoxicity**
○ Masaki Takaishi, Mahiro Saito, Leona Tsuyukubo, Akio Kobayashi
(Dept. Pharm. Sci., Intl. Univ. Health Welfare)

- P-023 Effects of cadmium on the renin-angiotensin system of mouse kidney and blood vessels**
○ Kanaho Odashima¹, Miho Takase¹, Ayumu Iseki², Yayoi Tsuneoka^{2,3}, Takato Hara¹, Yasuyuki Fujiwara², Chika Yamamoto¹
(¹Fac. Pharm. Sci., Toho Univ., ²Sch. Pharm., Tokyo Univ. Pharm and Life Sci., ³Fac. Pharma-Sci., Teikyo Univ.)
- P-024 Contribution of claudin-5 and ZO-1 to cadmium-induced detachment injury in vascular endothelial cells**
○ Chiaki Nakata¹, Haruka Katayama¹, Mayuka Asatsu¹, Takato Hara¹, Tomoya Fujie², Chika Yamamoto¹
(Fac. Pharm. Sci., Toho Univ.)
- P-025 Trace elements control and manganese accumulation in TPN patients**
○ Masumi Motonaga^{1,2}, Akiko Ohkawa², Tomoko Tamada², Yuta Eguchi², Kousuke Noma², Ayaka Suzawa², Tetsushi Sutoh², Nanami Fujii², Toshiko Shimotaka², Kazumi Sugihara¹, Hideo Mawatari³
(¹Faculty of Pharmaceutical Sciences, Hiroshima International University, ²Hiroshima Prefectural Rehabilitation Center, ³Hiroshima Prefectural Rehabilitation Support Center)
- P-026 Rhododendrol suppresses the differentiation of 3T3-L1 cells into adipocytes**
○ Naoto Uramaru, Kawashima (Katagiri) Azusa, Makoto Osabe, Toshiyuki Higuchi
(Div. Pharm. Health Biosci., Nihon Pharm. Univ.)
- P-027 Effect of nobiletin administration on the expression of thioredoxin-interacting protein (TXNIP) in the brain of Alzheimer's disease model mice**
○ Kotaro Ishibashi¹, Wei Dai¹, Hiroaki Takemoto¹, Hikaru Kasuya¹, Takashi Saito^{2,3}, Takaomi C. Saïdo³, Yasushi Ohizumi⁴, Kiyomitsu Nemoto¹
(¹Fac. Pharm. Sci., Toho Univ., ²Grad. Sch. Med. Sci., Nagoya City Univ., ³RIKEN Center for Brain Sci., ⁴Tohoku Univ.)
- P-028 The inhibitory effects of supersulfides on oxidative stress-induced parthanatos**
○ Yutaro Yamada, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-029 Lipoytosis regulator Lipo-2 involved in Sudden Cardiac Death**
○ Ryuya Kobayashi, Masaki Matsuoka, Hirotaka Imai
(Grad. Sch. Pharm. Sci., Kitasato Univ.)

- P-030 Elucidation of the protective mechanism of a food-derived compound against ferroptosis**
○ Ryota Kojima¹, Yusuke Hirata¹, Takuya Noguchi¹, Yoichi Kurokawa², Atsushi Matsuzawa¹
(¹Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., ²Dept. of Biosci. and Biotech., Fukui Prefect. Univ.)
- P-031 The caspase-mediated tissue-specific degradation of the nuclear receptor PPAR γ**
○ Makoto Osabe, Toshiyuki Higuchi
(Div. Pharm. Health Biosci., Nihon Pharm. Univ.)
- P-032 Activation of fibrinolytic system of human vascular endothelial cells by γ -irradiation and its mechanisms**
○ Miyabi Kobayashi¹, Lihito Ikeuchi¹, Tsuyoshi Nakano², Kazuki Kitabatake¹, Chika Yamamoto², Mitsutoshi Tsukimoto¹, Tomoya Fujie¹, Toshiyuki Kaji¹
(¹Fac. of Pharm. Sci., Tokyo Univ. of Sci., ²Fac. of Pharm. Sci., Toho Univ.)
- P-033 Mitochondrial DNA maintaining mechanism was depending on autophagy**
○ Kenji Hattori, Ayana Ohisi, Reika Kohinata
(Fac. Pharm. Meiji Pharmaceutical Univ.)
- P-034 Regulatory mechanism of glycosaminoglycan elongation enzymes expression in proliferating vascular endothelial cells at grown culture by TGF- β_1**
○ Takuya Uzawa, Tatsutoshi Matsumura, Natsumi Endo, Fuwano Horikawa, Takato Hara, Chika Yamamoto
(Fac. Pharm. Sci., Toho Univ.)
- P-035 ATP potentiates hydrogen peroxide-induced vascular endothelial cell damage**
○ Tomoki Inami, Tsuyoshi Nakano, Chika Yamamoto
(Fac. of Pharm. Sci., Toho Univ.)
- P-036 Neurodegeneration and neurogenesis in methylmercury-exposed rat dorsal root ganglion**
○ Yo Shinoda¹, Yuka Sekiguchi¹, Ayaka Matsuki¹, Eiko Yoshida², Tsutomu Takahashi¹, Toshiyuki Kaji³, Yasuyuki Fujiwara¹
(¹Sch. Pharm., Tokyo Univ. Pharm. Life Sci., ²CRIEPI, ³Fac. Pharm., Tokyo Univ. Sci.)
- P-037 Toxicity mechanism induced by the combination of flunitrazepam and chlorpromazine using mouse brain microdialysis**
○ Kota Nakajima¹, Asuka Kaizaki-Mitsumoto², Satoshi Numazawa²
(¹ Grad. Sch. Pharm. Sci., Showa Univ., ²Sch. Pharm., Showa Univ.)

- P-038 Establishment of pain assessments for intermediate frequency magnetic field**
 ○ Shin Ohtani¹, Akira Ushiyama², Keiji Wada³, Yukihiro Suzuki³, Kenji Hattori¹
 (¹Meiji Pharm. Univ, ²National Institute of Public Health, ³Tokyo Metropolitan Univ.)
- P-039 Investigation of rosin-related substances contained in medical patches as causative substances for allergic contact dermatitis**
 ○ Tsuyoshi Kawakami¹, Maiko Tahara¹, Akiko Yagami², Yoshiaki Ikarashi¹
 (¹NIHS, ² Fujita Health Univ. School Med. Bantane Hospital)
- P-040 Prostacyclin synthase negatively regulates the inflammatory reactions caused by lipopolysaccharide-induced sepsis *in vivo***
 ○ Toshiya Honsawa¹, Tsubasa Ochiai¹, Chieko Yokoyama², Hiroshi Kuwata¹, Shuntaro Hara¹
 (¹Sch. of Pharm., Showa Univ., ²Kanagawa Inst. of Tech.)
- P-041 Development of a cellular assay for small-molecule antivirals targeting the main protease of SARS-CoV-2 at biosafety level 1**
 ○ Yasunori Fukumoto, Reina Hara, Noriyuki Suzuki, Yu-ki Tanaka, Yasumitsu Ogra
 (Grad. Sch. Pharm. Sci., Chiba Univ.)
- P-042 Search for the endogenous ligand of MrgB5 and MRGX4, oxidized phospholipid GPCRs involved in itch-sensing**
 ○ Yugo Takagi, Jumpei Omi, Junken Aoki
 (Fac. Pharm. Sci., The University of Tokyo)
- P-043 Carbon black nanoparticles induce cytotoxic effects in alveolar macrophages**
 ○ Tomohiro Ishihara, Atsushi Furukawa, Yuka Nagata, Ryo Suzuki
 (Fac Pharm Sci, Kanazawa Univ)
- P-044 Analysis of the effects of long-chain acyl-CoA synthetase (ACSL) 4 deficiency on drug-induced lung injury**
 ○ Yuki Tomitsuka, Hiroshi Kuwata, Shuntaro Hara
 (Sch. of Pharmacy, Showa Univ.)
- P-045 Extracellular cysteine regulates oxidative and electrophilic stresses in HepG2 cells**
 ○ Hanako Aoki¹, Yasuhiro Shinkai^{1,2,5}, Masahiro Akiyama^{2,4}, Satoshi Yamazaki^{1,2}, Motohiro Nishida⁵, Yoshito Kumagai^{1,2,3}
 (¹Grad. Sch. Med Sci., Tsukuba Univ., ²Fac. Medicine., Tsukuba Univ., ³Sch. Life. Sci., Tokyo Univ of Pharm and Life Sci., ⁴Fac. Pharm., Keio Univ., ⁵Grad. Sch. Pharm. Sci., Kyushu Univ.)

- P-046 Exploration of selenoproteins involved in the induction of insulin resistance in type 2 diabetes**
○ Hirofumi Ogino¹, Koichi Murano², Tomofumi Okuno³, Hitoshi Ueno³
(¹Fac. Pharm. Sci., Nihon Pharmaceutical Univ, ² Osaka Institute of Public Health, ³Fac. Pharm. Sci., Setsunan Univ.)
- P-047 Photodynamic therapy induces HO-1 and CSE via Nrf2 activation in human glioblastoma cells**
○ Tsutomu Takahashi¹, Keiko Miura¹, Kanon Masamoto¹, Natsumi Nishi¹, Yo Shinoda¹, Jiro Akimoto², Yasuyuki Fujiwara¹
(¹Sch. of Pharm., Tokyo Univ. of Pharm. and Life Sci., ²Tokyo Med. Univ.)
- P-048 The effect of the bacterial lectin (PFL) from *Pseudomonas fluorescens* Pf0-1 on the lipid profile of human breast cancer cell T47D**
○ Kohei Kawabata, Yuichiro Sato, Akira Tokumura, Hiroyuki Nishi, Kinjiro Morimoto
(Fac. Pharm., Yasuda Women's University)
- P-049 Role of microsomal prostaglandin E synthase (mPGES)-1 in chemical-induced bladder carcinogenesis**
○ Yuka Sasaki¹, Tsubasa Ochiai¹, Yuki Endo², Yasutomo Suzuki², Yukihiro Kondo², Shuntaro Hara¹
(¹Sch. of Pharmacy, Showa Univ, ²Nippon Medical School)
- P-050 Proteoglycan synthesis prevents the generation of advanced glycation endproducts**
○ Takato Hara, Chika Yamamoto
(Fac. Pharm. Sci., Toho Univ.)
- P-051 Androgen-dependent gene expression of CUX2 leads to that of the drug metabolizing enzymes and drug transporters in the pig liver**
○ Masaki Kojima^{1,2}, Masakuni Degawa³, Kiyomitsu Nemoto²
(¹Natl. Agric. Food Res. Org., ²Dep. Mol. Toxicol., Fac. Pharm. Sci., Toho Univ., ³Lab. Mol. Toxicol., Sch. Pharm. Sci., Univ. Shizuoka.)
- P-052 Effect of human serum albumin on post-mortem metabolism of organophosphorus insecticides**
○ Yoshikazu Yamagishi¹, Hirotaro Iwase¹, Yasumitsu Ogra^{1,2}
(¹ Graduate School of Medicine, Chiba University, ² Graduate School of Pharmaceutical Sciences, Chiba University)

- P-053 Role of interleukin-6 in the downregulation of hepatic drug transporters by cecal ligation and puncture-induced sepsis**
○ Takashi Ashino¹, Yuki Nakamura², Hirokazu Ohtaki³, Yoichiro Iwakura⁴, Satoshi Numazawa¹
(¹Showa Univ. Sch. Pharm., ²Yokohama Univ. Pharm., ³Tokyo Univ. Pharm. Life Sci., ⁴Tokyo Univ. Sci.)
- P-054 Aberrant photoperiod affects hyperglycemia induced by corticosterone in mice**
○ Hiroshi Kawai, Koki Takeda, Reiko Iwadate
(Fac. Pharm. Pharmaceut. Sci., Josai Univ)
- P-055 Cell culture on vegetable-originated paper**
○ Fumiya Sueyoshi, Kousei Nagayoshi, Kansei Moriyasu, Toshiyuki Oshima, Tomofumi Fujino
(Tokyo Univ. Pharm. Life Sci.)
- P-056 Geometrical isomerization of arachidonic acid upon lipid peroxidation serves as a negative feedback mechanism in ferroptosis**
○ Carla Ferreri¹, Yusuke Hirata², Yuto Yamada², Wakana Suzuki², Saya Takano², Takuya Noguchi², Chryssostomos Chatgililoglu¹, Atsushi Matsuzawa²
(¹The Institute of Organic Synthesis and Photoreactivity-National Research Council, Bologna, Italy, ²Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., Sendai, Japan)
- P-057 Evaluation of adsorption mechanism of mercury using mangosteen via elemental distribution and binding energy analyses**
○ Chalermpong Saenjum¹, Fumihiko Ogata², Yugo Uematsu², Titikan Mongkolsiri¹, Naohito Kawasaki²
(¹Fac. Pharm., Chiang Mai Univ., Thailand, ²Fac. Pharm., Kindai Univ., Japan)

September 13 (Wed) 16:30-17:50 Room C (101)

- P-101 Preparation of the carbonaceous material produced from waste cotton and its adsorption capability of crystal violet from aqueous phase**
○ Fumihiko Ogata, Kazuki Sugimura, Naohito Kawasaki
(Fac. Pharm., Kindai Univ.)
- P-102 Maternal exposure to TCDD elicits disruption of nicotinic acid metabolism in fetal hypothalamus: possible mechanism involved in the reduced steroidogenesis**
○ Mana Fujimoto¹, Hiroe Sano¹, Ren-Shi Li^{1,2}, Hong-Bin Chen¹, Takayuki Koga³, Yoshitaka Tanaka¹, Yuji Ishii¹
(¹Grad Sch Pharm Sci, Kyushu Univ., ²China Pharm Univ., ³Daiichi Univ. Pharmacy)
- P-103 The effect of microplastics degraded by sunlight on macrophage**
○ Yurika Wada¹, Yoko Iwamoto^{1,2}, Yu Nabetani³, Yasuhiro Ishihara^{1,2}
(¹Sch Integr Arts Sci, Hiroshima Univ, ²Grad Sch Integr Sci Life, Hiroshima Univ, ³Facul Engineer, Miyazaki Univ.)
- P-104 Polymethoxyflavonoid nobiletin restores developmental retardation elicited by maternal exposure to low-dose dioxin**
○ Ryoto Hiyama¹, Hongbin Chen¹, Chiho Ohta², Nobuyuki Koga², Yoshitaka Tanaka¹, Yuji Ishii¹
(¹Kyushu Univ., ²Nakamura Gakuen Univ.)
- P-105 Analysis of the properties of airborne particles collected in Sanyo-Onoda City, Yamaguchi Prefecture**
○ Nariaki Ougiya, Satoshi Fukushima, Atsuto Onoda, Ken Takeda, Ken Tachibana
(Fac Pharma. Sanyo-Onoda City Univ.)
- P-106 Effects of Fetal Exposure to Ultrafine Particles on Brain Development in a Model of *Setd5* Deficiency**
○ Risa Fuku, Atsuto Onoda, Tadashi Nakagawa, Ken Tachibana, Ken Takeda
(Fac. Pharm. Sanyo- Onoda city Univ.)
- P-107 Analysis of polycyclic aromatic hydrocarbon quinones in atmospheric fine particulate matter (PM_{2.5}) collected in Wajima, Ishikawa**
○ Ayaka Furukawa¹, Sakura Yoshida¹, Yumi Abiko¹, Ning Tang², Akira Toriba¹
(¹Grad. Sch. Bio. Sci., Nagasaki Univ, ²Institute of Nature and Environmental Technology, Kanazawa Univ.)

- P-108 Analysis of quinoid polycyclic aromatic hydrocarbons in the mainstream smoke of electronic cigarettes**
 ○ Hibiki Yoshioka¹, Sakura Yoshida¹, Yumi Abiko¹, Kanae Bekki², Yohei Inaba², Akira Toriba¹
 (¹Grad. Sch. Biomed. Sci., Nagasaki Univ., ²National Institute of Public Health)
- P-109 Role of human selenium-binding protein 1 in lipid metabolism with HepG2**
 ○ Shuangli Zhao¹, Yuko Nakashima¹, Yingxia Song¹, Ren-shi Li², Takayuki Koga³, Yoshitaka Tanaka¹, Yuji Ishii¹
 (¹Kyushu Univ., ²China Pharmaceutical University, ³Daiichi Univ. Pharmacy)
- P-110 Residual profile and human exposure of brominated and chlorinated chemicals in crustacean products from Asian market**
 ○ Katsumi Kodo¹, Yukiko Fujii¹, Yoshihisa Kato², Junpei Ando¹, Keiko Murayama¹, Koichi Haraguchi¹
 (¹Fac. Pharm. Sci., Daiichi Univ. Pharm., ²Kagawa Pharm. Sci., Tokushima Bunri Univ.)
- P-111 Detection of estrogenic activity at low doses of bisphenol A using highly sensitive in vivo screening method**
 ○ Keishi Ishida¹, Motoshi Furukawa¹, Masataka Kunitani¹, Rai Yamagiwa¹, Youhei Hiromori^{1,2}, Daisuke Matsumaru¹, Jianying Hu³, Hisamitsu Nagase⁴, and Tsuyoshi Nakanishi¹
 (¹Gifu Pharm. Univ., ²Suzuka Med. Sci. Univ., ³Peking Univ., ⁴Gifu Univ. of Med. Sci.)
- P-112 Thyroid hormone (TH) promotes urinary excretion of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD) via the function of TH receptor (TR) β in mice**
 ○ Shunsuke Tomita¹, Pinyapach Dungkokkruad², Youhei Hiromori³, Keishi Ishida¹, Daisuke Matsumaru¹, Hisamitsu Nagase⁴, and Tsuyoshi Nakanishi¹
 (¹Gifu Pharm. Univ., ²Maharakham Univ., ³Suzuka Univ. of Med. Sci., ⁴Gifu Univ. of Med. Sci.)
- P-113 Investigation of the effects of PPCPs on plant seed germination and growth**
 Ryo Ujihara, Reiji Sadamatsu, Taro Imura, Youki Miyano, Ryosuke Tarumoto, Ryo Shimizu, ○ Kazumi Sugihara
 (Faculty of Pharmaceutical Sciences, Hiroshima International University)
- P-114 Physical property analysis of silver nanoparticles after oral exposure**
 ○ Kazuya Nagano^{1,2}, Ikkei Tasaki¹, Yasuo Tsutsumi²
 (¹Sch. Pharm. Sci., Wakayama Med. Univ., ²Grad. Sch. Pharm. Sci., Osaka Univ.)

- P-115 Green algae *Chlamydomonas reinhardtii* acquire adaptability to copper stress by defense and tolerance/recovery responses**
 ○ Ryotaro Tsutsumi¹, Risa Yoshimoto², Jiro Miura³, Takuya Yamashita¹, Kazumasa Hirata^{1,2}, Kazuya Nagano^{1,2}
 (¹Sch. Pharm. Sci., Wakayama Medical Univ., ²Grad. Sch. Pharm. Sci., Osaka Univ., ³Grad. Sch. Dent. Sci., Osaka Univ.)
- P-116 Investigation of mechanism of impaired proximal tubular reabsorption by injection of cadmium-metallothionein Complex**
 ○ Hitomi Fujishiro¹, Kanako Matsumoto¹, Yuka Ishizaki¹, Kumiko Takeuchi¹, Miku Takahashi¹, Seiichiro Himeno², Daigo Sumi¹
 (¹Fac. Pharm. Sci., Tokushima Bunri Univ., ²Fac. Pharm., Showa Univ.)
- P-117 Fundamental investigation of heavy metal adsorption using mangosteen shell for the improvement of water environment**
 ○ Yugo Uematsu, Ibuki Kobata, Fumihiko Ogata, Naohito Kawasaki
 (Fac. Pharm., Kindai Univ.)
- P-118 Alterations in protein polysulfidation induced by methylmercury exposure**
 ○ Takamitsu Unoki¹, Masahiro Akiyama², Yoshito Kumagai³, Masatake Fujimura¹
 (¹Dept. Basic Med. Sci., Nat. Inst. Minamata Dis., ²Fac. Pharm., Keio Univ., ³Grad. Sch. Pharm. Sci., Kyushu Univ.)
- P-119 Cadmium accumulation in invasive function-impaired extravillous trophoblast-like HTR-8/SVneo cells**
 ○ Shoko Ogushi¹, Hitomi Fujishiro², Tsuyoshi Nakanishi³, Tomoki Kimura¹
 (¹Fac. Pharm. Sci., Setsunan Univ., ²Fac. Pharm. Sci., Tokushima Bunri Univ., ³Gifu Pharm. Univ.)
- P-120 Green tea catechin promotes recovery of endothelial barrier**
 ○ Rio Wakasugi¹, Saki Ishii¹, Koichi Uemura², Kenji Suzuki^{1,2}, Takako Kaneko-Kawano^{1,2}
 (¹Col. Pharm. Sci., Ritsumeikan Univ., ²Grad. Sch. Pharm., Ritsumeikan Univ.)
- P-121 The suppressing effects of luteolin on the cholesterol absorption mechanism via NPC1L1**
 Tomoya Hanayama¹, Kaito Agari¹, Masayo Hirao-Suzuki², Shuso Takeda¹, Jun Kamishikiryo, ○ Narumi Sugihara¹
 (¹Fac. Pharm. Pharmaceut. Sci., Fukuyama Univ., ²Fac. Pharm. Sci., Hiroshima Intl. Univ.)

- P-122 Effect of epithelial-mesenchymal transition-associated anticancer drugs on the epithelial and mesenchymal phenotypes in non-small lung cell cancer cells**
 ○ Ryo Takahashi¹, Masashi Kawami¹, Ryoko Yumoto¹, Mikihisa Takano², Yasuo Uchida¹
 (¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ²Fac. Pharm. Sci., Yasuda Women Univ.)
- P-123 Novel approach to identify miRNAs involved in drug-induced EMT by RNA-sequence analysis**
 ○ Yuki Maeda¹, Masashi Kawami¹, Ryoko Yumoto¹, Mikihisa Takano², Yasuo Uchida¹
 (¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ²Fac. Pharm. Sci., Yasuda Women Univ.)
- P-124 Alleviation effect of Contact Dermatitis by the Glycation Product Dihydropyrazine**
 ○ Madoka Sawai¹, Yutaka Tatano¹, Jian-Rong Zhou², Shunji Itoh³, Masaki Yoshida⁴, Yuu Miyauchi², Shinji Takechi²
 (¹Sch. Pharm., at Fukuoka. Int. Univ. Health & Welfare., ² Fac. Pharmaceut. Sci., Sojo Univ., ³Dept. Health Sci., Grad. Sch. Health Sci., Kansai Univ. Health Sci., ⁴Sch. Biosci. Biotech., TUT.)
- P-125 Thrombin-cleaved nephronectin is involved in experimental autoimmune encephalomyelitis (EAE) through a novel cell adhesion mechanism**
 ○ Machiko Honda, Shigeyuki Kon
 (Fac. of Pharm. Sci., Fukuyama Univ.)
- P-126 Characteristic analysis of extracellular vesicles derived from the serum of fish to elucidate the mechanism of human health by fish intake**
 ○ Takuya Yamashita¹, Ryotaro Tsutsumi¹, Kazuya Nagano^{1,2}
 (¹Sch. Pharm. Sci., Wakayama Med. Univ., ²Grad. Sch. Pharm. Sci., Osaka Univ.)
- P-127 Serotonin release from QGP-1 cells, an enterochromaffin cell model, by a hydrolysis product of di-2-ethylhexyl phthalate**
 ○ Ryuto Yuasa¹, Yoko Mori^{1,2}, Tamaki Azuma¹, Akira Aoki¹, Yoshinori Okamoto¹, Takashi Isobe³, Susumu Ohkawara³, Nobumitsu Hanioka³, Toshiko Tanaka-Kagawa³, and Hideto Jinno¹
 (¹ Faculty of Pharmacy, Meijo University, ² National Institute of Environmental Studies, ³ Yokohama University of Pharmacy)
- P-128 Investigation of the molecular mechanism of the transcriptional regulation of GADD45 β by the xenoresponsive nuclear receptor CAR**
 ○ Aki Takeshita, Ryota Shizu, Natsuki Makida, Takuomi Hosaka, Kouichi Yoshinari
 (Sch. Pharm. Sci., Univ. Shizuoka)

- P-129 Effects of HMG-CoA reductase inhibitors on T cell-immune responses**
 ○ Kanon Murase, Satoshi Ishikawa, Saotomo Itoh, Shigeaki Hida
 (Fac. Pharm. Sci., Nagoya City Univ.)
- P-130 Role of transcription factor IRF2 in innate immunity**
 ○ Tomoki Nagai¹, Iduru Ikuta¹, Syungo Sasaki¹, Yuma Ito¹, Saotomo Ito¹,
 Shinsuke Taki², Shigeaki Hida¹
 (¹Fac. Pharm. Sci., Nagoya City Univ, ² Shinshu Univ.)
- P-131 Effects of hypoxia and low glucose on the Neuroserpin expression levels of SH-SY5Y cells**
 ○ Yuriko Takahashi, Atsuto Onoda, Ken Tachibana, Ken Takeda
 (Fac. Pharm. Sci., Sanyo-Onoda City Univ.)
- P-132 Targeting cellular gaps using asymmetrical (Janus) nanoparticles in Caco-2 cells**
 ○ Takeo Kitazawa¹, Akihiro Matsumoto², Yuta Hatori¹, Mikihiisa Takano¹,
 Chie Watanabe³, Tomoya Takashima², Masahiro Murakami²
 (¹Fac. Pharm., Yasuda Women's Univ, ²Fac. Pharm., Osaka Ohtani Univ, ³Fac. Pharm.,
 Josai Univ.)
- P-133 Exploration of candidate drugs to induce metallothionein 3**
 ○ Mizuki Tsuru¹, Kazuki Komai¹, Kazuki Ohuchi¹, Yasuhiro Shinkai²,
 Tomoki Kimura³, Nobuhiko Miura⁴, Yoshito Kumagai⁵, Isao Hozumi¹,
 Masatoshi Inden¹, Hisaka Kurita¹
 (¹Fac. Pharm. Sci., Gifu Pharmaceutical Univ, ²Sch. Life Sci., Tokyo Univ. Pharm. and
 Life Sci., ³Fac. Pharm. Sci., Setsunan Univ, ⁴Fac. Pharm. Sci., Yokohama Univ. Pharma,
⁵Fac. Pharm. Sci., Kyushu Univ.)
- P-134 Investigation of the mechanism of insolubilization of intralysosomal hydrolases induced by the lysosomal membrane-damaging agent LLOMe**
 ○ Natsumi Fujiwara¹, Masatsugu Miyara¹, Ayaka Yabuki¹, Kanae Miyara²,
 Yaichiro Kotake¹
 (¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ²JSPS Research Fellow
 RPD.)
- P-135 Discovery of p62 nuclear accumulation induced by a Parkinson's disease-related neurotoxin and a novel nuclear role of p62**
 ○ Honoka Hashimoto¹, Masatsugu Miyara¹, Yuka Kuwabara¹, Hiroki Tsumoto²,
 Yuri Miura², Yaichiro Kotake¹
 (¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ²Tokyo Metropolitan
 Institute for Geriatrics and Gerontology)

- P-136 Molecular mechanisms of ferroptosis induced by conjugated fatty acids**
○ Yusuke Hirata, Yuto Yamada, Takuya Noguchi, and Atsushi Matsuzawa
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-137 Association of doxorubicin-induced epithelial-mesenchymal transition with the anticancer effect in A549 cells**
○ Sora Fujimoto¹, Masashi Kawami¹, Ryoko Yumoto¹, Mikihisa Takano²,
Yasuo Uchida¹
(¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ²Fac. Pharm. Sci., Yasuda Women Univ.)
- P-138 Functional analysis of soluble epoxide hydrolase in lipid metabolism in the brain**
○ Ami Oguro¹ Shinji Fujimoto², Yasuhiro Ishihara³ Takeshi Yamazaki³,
Yaichiro Kotake¹
(¹Grad. Sch. of Biomed. and Health Sci, Hiroshima Univ., ³Pharm. Sci., Hiroshima Univ. ³Grad. Sch of Integrated Sci. for Life, Hiroshima Univ.)
- P-139 Rotenone treatment enhances type I interferon production in BV2 microglial cell line**
○ Yoki Nakamura, Manaya Nakano, Momoka Iwamoto, Kazue Hisaoka-Nakashima,
Norimitsu Morioka
(Dept. Pharmacol., Grad. Sch. Biomed. Health Sci., Hiroshima Univ.)
- P-140 Effect of furosemide to the expression of ion transporters on brain in neonatal chronic lung disease**
○ Hiroki Kurokawa¹, Atsuto Onoda^{1,2}, Yoshiaki Sato², Xu Yue^{2,3}, Ken Tachibana¹,
Ken Takeda¹
(¹Dep. Pharm., Sanyo-Onoda City Univ, ²Cent. Mat-Neo., Nagoya Univ. Hosp. ³Grad. Med., Nagoya)
- P-141 Development of a read-across method for evaluating developmental neurotoxicity using molecular descriptors**
○ Manaya Takamura¹, Nao Omura¹, Takuomi Hosaka¹, Ryota Shizu¹,
Jun-ichi Takeshita², Kouichi Yoshinari¹
(¹Sch. Pharm. Sci., Univ. Shizuoka, ²National Institute of Advanced Industrial Science and Technology)
- P-142 The effect of endotoxin contained in PM2.5 on the prognosis of cerebral infarction**
○ Naoyuki Nezu¹, Miki Tanaka¹, Tomoaki Okuda², Yasuhiro Ishihara¹
(¹Integrated Sciences for life, Hiroshima Univ, ²Faculty of Science and Engineering, Keio Univ.)

- P-143 In utero exposure to the antiepileptic drug valproic acid induces a long-lasting hyperalgesia and allodynia associated with central sensitization**
○ Takeru Tahara¹, Eiji Imado¹, Daisuke Uta², Satoshi Asano¹, Kazuhiro Takuma³, Toshiaki Kume², Yaichiro Kotake¹, Yukio Ago¹
(¹Grad. Sch. Biomed. Health Sci., Hiroshima Univ., ²Grad. Sch. Med. Pharm. Sci., Univ. Toyama, ³Grad. Sch. Dent., Osaka Univ.)
- P-144 Differential response of hindbrain astrocytes upon excess ethanol administration in mice**
○ Hiroshi Hasegawa, Mari Kondo, Kei Nakayama
(Kobe Pharm. Univ.)
- P-145 Analysis of epigenetic alteration in *SYP* and *DLG4* genes induced by exposure to low concentrations of methylmercury during neuronal differentiation**
○ Hisaka Kurita, Haruka Masuda, Ayu Okuda, Kazuki Ohuchi, Isao Hozumi, Masatoshi Inden
(Fac. Pharm. Sci., Gifu Pharm Univ.)
- P-146 Search for genes involved in susceptibility to Parkinson's disease-associated neurotoxin MPP⁺**
○ Futa Suzuki, Masatsugu Miyara, Yaichiro Kotake
(Grad. Sch. of Biomed. Health Sci., Hiroshima Univ.)
- P-147 The relationship between maternal thyroid-related parameters and brain development in offspring under chemical-induced hypothyroidism**
○ Manami Koizumi¹, Keishi Ishida¹, Saori Kasuya¹, Kanoko Tatsumi¹, Kyoko Mekada¹, Daisuke Matsumaru¹, Aki Murashima¹, Hisamitsu Nagase², Yasunari Kanda³, Kazuhiro Takuma⁴, Tsuyoshi Nakanishi¹
(¹Gifu Pharm. Univ., ²Gifu Uni. of Med Sci., ³NIHS, ⁴Osaka Univ.)
- P-148 Prenatal VPA exposure impairs myelination and increases chemotaxis of Oligodendrocyte Precursor Cells**
○ Sakuno Nishimura¹, Kouichi Itoh², Yasuhiro Ishihara¹
(¹Grad. Sch. Integ. Sci for Life, Biomed, Hiroshima Univ, ²Fac. Kagawa-Phar. Therapeutic phar., Tokushima-bunri Univ.)

- P-149 Assessment of SARS-CoV-2-infected blood brain barrier dysfunction using human iPSC-derived brain microvascular endothelial-like cells**
○ Shota Yanagida^{1,2,3}, Shigeru Yamada¹, Tadahiro Hashita⁴, Hiroyuki Sato⁴, Yukuto Yasuhiko¹, Kaori Okabe⁵, Takamasa Noda⁵, Motohiro Nishida^{6,7}, Tamihide Matsunaga⁴, Yasunari Kanda¹
(¹Div. Pharmacol., NIHS, ² Grad. Sch. Pharma. Sci., Hiroshima Univ., ³PD, JSPS, ⁴Grad. Sch. Pharma. Sci., Nagoya City Univ., ⁵ NCNP Hospital, ⁶Grad. Sch. Pharma. Sci., Kyushu Univ., ⁷ NIPS)
- P-150 Effects of Metallothionein Knockout on Differentiation of C2C12 Myoblasts into Myotubes**
○ Yoshito Kadota, Takashige Kawakami, Shinya Suzuki
(Fac. Pharm. Sci., Tokushima Bunri Univ.)
- P-151 Dihydropyrazines induce endoplasmic reticulum stress and inhibit autophagy**
○ Shinji Takechi¹, Madoka Sawai², Yuu Miyauchi¹
(¹Fac. Pharmaceut. Sci., Sojo Univ., ²Sch. Pharm., at Fukuoka. Int. Univ. Health & Welfare.)
- P-152 The reversibility of electrophilic modification on PTP1B-bound polysulfides reactive sulfur species**
○ Yumi Abiko¹, Sakura Yoshida¹, Akira Toriba¹, Yoshito Kumagai²
(¹Grad. Sch. Bio. Sci., Nagasaki Univ, ² Fac. Med., Univ. Tsukuba.)
- P-153 Effect of neonicotinoid insecticides and their metabolites on the gene expression profile of mouse neural stem cells**
○ Tomomi Mikajiri, Atsuto Onoda, Ken Takeda, Ken Tachibana
(Fac. Pharm. Sci., Sanyo-Onoda City Univ.)
- P-154 Identification of toxicologically important findings in rat repeated-dose toxicity studies of pesticides**
○ Hiroaki Suzuki, Yu Harakawa, Manaya Takamura, Kosuke Mizuno, Takuomi Hosaka, Ryota Shizu, Kouichi Yoshinari
(Sch. Pharm. Sci., Univ Shizuoka)
- P-155 Chemical structures and cytotoxic activities of the constituents isolated from *Citrus hassaku***
○ Takuya Muraoka, Daisuke Imahori, Rina Miyagi, Hiroyuki Tanaka
(Fac. Pharm. Sci., Sanyo-Onoda City Univ.)

- P-156 Chemical structure and cytotoxic activities of constituents isolated from the peels of *Citrus sphaerocarpa***
 ○ Daisuke Imahori, Takuya Muraoka, Rina Miyagi, Hiroyuki Tanaka
 (Fac. Pharm. Sci., Sanyo-Onoda City Univ.)
- P-157 Regulation of hepatic *Adig* expression by PPAR γ**
 ○ Daisuke Aibara, Asuka Nakano, Funo Hashimoto, Ai Sakaguchi, Kohei Matsuo, Kimihiko Matsusue
 (Faculty of Pharmaceutical Science, Fukuoka University)
- P-158 Global analysis of extracellular/intracellular metabolites from exogenous lysophospholipids in HT-29, human colon cancer-derived epithelial cell line**
 ○ Yuya Ohtsuki, Kohei Kawabata, Erena Nakamura, Moe Asakami, Reina Morikawa, Hiroyuki Nishi, Akira Tokumura
 (Fac. Pharm., Yasuda Women's Univ)
- P-159 Cannabidiolic acid induces the expression of ANGPTL4, a PPAR β/δ target gene, in MDA-MB-231 cells**
 Masayo Hirao-Suzuki¹, Koki Kanameda², Takayuki Koga³, Masufumi Takiguchi¹, Narumi Sugihara², ○ Shuso Takeda²
 (¹Fac. Pharm. Sci., Hiroshima Intl. Univ., ²Fac. Pharm. Pharmaceut. Sci., Fukuyama Univ., ³Daiichi Univ. Pharm.)
- P-160 Function of STAT3 β , minor type splicing isoform, in adipogenic differentiation**
 ○ Yuika Morita¹, Kenji Suzuki^{1,2}, So Masaki²
 (¹Grad. Sch. Pharm., Ritsumeikan Univ, ²Col. Pharmaceut. Sci., Ritsumeikan Univ.)
- P-161 Effect of monocarboxylate transporters on the inhibitory action of ketone body on cancer cell proliferation**
 ○ Ami Tanaka¹, Marina Takahashi¹, Maika Nakagawa¹, Tomoka Kendai¹, Chihiro Nakamura¹, So Masaki¹, Noriko Takahashi², Kenji Suzuki¹
 (¹Dep. of Pharm. Sci., Ritsumeikan Univ., ²Inst. of Medic. Chem., Hoshi Univ.)
- P-162 The contribution of Selenium binding protein 1 (Selenbp1) to the regulation of hepatic methionine metabolizing enzyme Bhmt expression based on skin-liver interaction by allergic contact dermatitis**
 ○ Takayuki Koga¹, Makoto Hiromura¹, Masayo Hirao-Suzuki², Shuso Takeda³, Yuji Ishii⁴, Takumi Ishida⁵, Yukiko Fujii¹, Yuko Kobuke¹, Akihisa Toda¹, Fumio Soeda¹
 (¹Daiichi Univ. Pharm., ²Fac. Pharm. Sci., Hiroshima Intl. Univ., ³Fac. Pharm. Sci., Fukuyama Univ., ⁴Grad. Sch. Pharmaceut. Sci., Kyushu Univ., ⁵Sch. Pharm. Fukuoka, Int. Univ. Health & Welfare)

- P-163 Selenium binding protein 1 (Selenbp1) deficiency reduces fatty liver induced by high-fat diet**
 ○ Takayuki Koga¹, Makoto Hiromura¹, Syota Kagawa¹, Masayo Hirao-Suzuki², Shuso Takeda³, Yuji Ishii⁴, Takumi Ishida⁵, Fumihiro Nagashima¹, Yukiko Fujii¹, Yuko Kobuke¹, Akihisa Toda¹, Fumio Soeda¹
 (¹Daiichi Univ. Pharm., ²Fac. Pharm. Sci., Hiroshima Intl. Univ., ³Fac. Pharm. Sci., Fukuyama Univ., ⁴Grad. Sch. Pharmaceut. Sci., Kyushu Univ., ⁵Sch. Pharm. Fukuoka, Int. Univ. Health & Welfare)
- P-164 Functional analysis of vitamin K converting enzyme UBIAD1 in bone formation**
 ○ Shunsuke Hirashima¹, Yukino Kiyooka², Shinichiro Kaetsu², Kimie Nakagawa^{1,2}
 (¹ Grad. Sch. Pharm. Sci., Kobegakuin Univ, ² Fac. Pharm. Sci., Kobegakuin Univ.)
- P-165 PXR-dependent inhibition of the proliferation of ER α -positive breast cancer cells**
 ○ Kazuki Ota, Takuomi Hosaka, Aoi Yoshihara, Ryota Shizu, Yuichiro Kanno, Kouichi Yoshinari
 (Sch. Pharm. Sci., Univ. Shizuoka)
- P-166 Functional analysis of vitamin K-converting enzyme (UBIAD1) in adipose tissue using Tamoxifen-inducible gene-deficient mice**
 ○ Rika Horigome¹, Momoka Nagura¹, Haruka Saeki¹, Shunsuke Hirashima², Kimie Nakagawa^{1,2}
 (¹Fac. Pharm. Sci., Kobe Gakuin Univ, ²Grad. Sch. Pharm. Sci., Kobe Gakuin Univ.)
- P-167 Structural characterization of HMG-CoA reductase and menadione analogues that regulate the activity of vitamin K-converting enzyme UBIAD1**
 ○ Akihiro Endo¹, Ami Hamade¹, Yuina Nakagami¹, Yoshiaki Nishino¹, Shunsuke Hirashima², Kimie Nakagawa^{1,2}
 (¹Fac. Pharm. Sci., Kobe Gakuin Univ, ²Grad. Sch. Pharm. Sci., Kobe Gakuin Univ.)
- P-168 Morphinone, an electrophilic metabolite of morphine, activates the electrophilic signaling of the AKT/CREB pathway via phosphorylation in human hepatoma HepG2 cells**
 ○ Kohei Matsuo, Ai Sakaguchi, Daisuke Aibara, Kimihiko Matsusue
 (Fac. Pharmaceut. Sci., Fukuoka. Univ.)
- P-169 Expression profiles of aldehyde-metabolizing enzymes and metabolic activities of volatile aldehydes in mouse olfactory epithelium**
 ○ Naoki Takaoka^{1,2}, Seigo Sanoh^{1,2}, Yaichiro Kotake², Mami Kurosaki³, Mineko Terao³, Enrico Garattini³, Shigeru Ohta^{1,2}
 (¹Sch. Pharm. Sci., Wakayama Med. Univ., ²Grad. Sch. Biomed. Health Sci., Hiroshima Univ., ³Institute di Ricerche Farmacologie Mario Negri)

- P-170 Effects of acute hepatitis on phenobarbital-induced cytochrome P450 expression in mice**
○ Yukine Kubo, Chieri Fujino, Satoshi Ueshima, Toshiya Katsura
(College of Pharmaceutical Sciences, Ritsumeikan University)
- P-171 Decrease of endotoxin in rice by polishing and germinating**
○ Mai Hiramoto¹, Nana Miyazaki¹, Akihiro Kameda², Yuya Deguchi¹, Hiroaki Nagaoka¹
(¹Fac. Pharm. Sci., Nagasaki Intl. Univ., ²Hatsugagenmai Co., Ltd.)
- P-172 Effect of Food Thickeners on the Disintegration of Tablets**
○ Shion Matsuda, Kana Mitsuyasu, Seitaro Kamiya, Yuya Deguchi, Hiroaki Nagaoka
(Fac. Pharm. Sci., Nagasaki Intl. Univ.)
- P-173 Effect of fetal growth restriction on brain development: Expression levels of OX2 glycoprotein in oligodendrocytes**
○ Ayumi Yamato, Atsuto Onoda, Ken Tachibana, Ken Takeda
(Fac. Pharm. Sci., Sanyo-Onoda City Univ.)
- P-174 Inhibitory effect of sulfated vizantin on LPS-induced TNF- α production**
○ Takashige Kawakami, Managi Namikawa, Hirofumi Yamamoto, Tomomi Abe, Yoshito Kadota, Shinya Suzuki, Masahisa Inoue
(Faculty of Pharmaceutical Sciences, Tokushima Bunri University)
- P-175 Exploring the mechanism of enrichment effect on micturition function in drug-induced menopausal model mice**
○ Fumio Soeda, Mayo Kubota, Kiho Ichinomiya, Ryo Yokoo, Tatsuya Oda, Takayuki Koga, Yuko Kobuke
(Daiichi Univ. Pharm.)
- P-176 Inhibitory effect of dexamethasone on the function of peptide transporter 2 in alveolar epithelial cells**
○ Miku Matsuoka¹, Masashi Kawami¹, Ryoko Yumoto¹, Mikihisa Takano², Yasuo Uchida¹
(¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ²Fac. Pharm. Sci., Yasuda Women Univ.)
- P-177 Transport mechanism of nicotine focusing on intracellular pH in cultured cell lines**
○ Nozomi Hakotani¹, Masashi Kawami¹, Ryoko Yumoto¹, Mikihisa Takano², Yasuo Uchida¹
(¹Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ., ²Fac. Pharm. Sci., Yasuda Women Univ.)

P-178 **The selective androgen receptor modulator YK11 regulates binding of transcriptional coactivators through NTD and AF2 interactions in androgen receptor**

○ Tomohiro Kosuge, Ryota Shizu, Takuomi Hosaka, Yuichiro Kanno,
Kouichi Yoshinari
(Sch. Pharm. Sci, Univ. Shizuoka)