Plenary Lecture

August 31 (Sat) 15:00 - 15:50 Room A (3F)
Chair: Tetsushi Watanabe (Kyoto Pharmaceutical Univ.)

PL-1 **Causes of colon cancer development and strategies for its chemoprevention**
◯ Keiji Wakabayashi
(University of Shizuoka)

Educational Lecture

September 1 (Sun) 11:10 - 11:50 Room A (3F)
Chair: Hitoshi Ueno (Fac. Pharm. Sci., Setsunan Univ.)

EL-1 **Pharmaceutical food sciences: Search for functional substances from food resources for prevention and improvement of lifestyle diseases**
◯ Toshio Morikawa[1,2]
([1]Pharm. Res. Technol. Inst. and , [2]Antiaging Center, Kindai Univ.)

Award Lectures

Scientific Award

September 1 (Sun) 14:00 - 14:30 Room A (3F)
Chair: Hiroyasu Yamazaki (Fac. Pharm. Sci., Kobegakuin Univ.)

AL-1 **Construction of environmental purification system for prevention of health problems**
◯ Naohito Kawasaki
(Fac. Pharm., Kindai Univ.)

Kanehara Award

September 1 (Sun) 14:30 - 14:50 Room A (3F)
Chair: Atsushi Matsuzawa (Grad. Sch. Pharm. Sci., Tohoku Univ.)

AL2-1 **Elucidation of the molecular mechanisms underlying the toxic actions of *trans*-fatty acids**
◯ Yusuke Hirata
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

September 1 (Sun) 14:50 - 15:10 Room A (3F)
Chair: Hitoshi Harada (Fac. Pharm. Sci., Suzuka Univ. of Medical Science)

AL2-2 **Investigation of the mechanism for the toxicity of environmental chemicals by focusing on nuclear receptors**
◯ Youhei Hiromori
(Dept. Pharmaceut. Sci., Suzuka University of Medical Science)

Invited Lecture

August 31 (Sat) 11:10 - 11:40 Room A (3F)
Chair: Akira Naganuma (Tohoku Univ.)

IL-1 **Recent advances in health functional foods as a disease preventor in Korea**
◯ Se-Young Choung
(College of Pharmacy, Kyung Hee University)

2019 Japan/Korea Joint Symposium on Pharmaceutical Health Science and Environmental Toxicology

August 31 (Sat) 11:40 - 12:40 Room A (3F)
Chair: Kyung-Soo Chun (Keimyung University)
Keiko Taguchi (Tohoku University)

S-1 **Prediction of hepatotoxicity using hepatocyte spheroids and chimeric mice with humanized liver**
◯ Seigo Sanoh
(Graduate School of Biomedical and Health Sciences, Hiroshima University)

S-2 **The role of YAP in CAR dependent hepatocyte proliferation**
◯ Ryota Shizu, Kouichi Yoshinari
(Laboratory of Molecular Toxicology, School of Pharmaceutical Sciences. University of Shizuoka.)

S-3 **Exposure of liver cells to 3-methylcholanthrene potentiates oxidative stress via downregulation of glutathione synthesis**
◯ Young-Suk Jung
(College of Pharmacy, Pusan National Univ.)

S-4 **Xanthohumol prevents colitis-associated colorectal carcinogenesis in mice by the coordinated regulation of IKKβ/NF-κB and KEAP1/Nrf2 signaling pathways**
◯ Sun-Mi Yun, Da-Young Lee, Moon-Young Song, Eun-Hee Kim
(College of Pharmacy, CHA Univ.)

2019 Japan/Korea Joint Symposium on Pharmaceutical Health Science and Environmental Toxicology : Poster Session

August 31 (Sat) 14:00 - 14:50 Room C (The 130th Anniversary Hall)

PS-1 **A 3D structure modeling of metallothionein-3 and its related function as a sulfane sulfur binding protein**
◯ Yunjie Ding[1], Yasuhiro Shinkai[1,2], Masahiro Akiyama[2], Yoshito Kumagai[1,2] ([1]Grad. Sch. Comprehensive Human Sci., Univ. of Tsukuba, [2]Fac. of Med., Univ. of Tsukuba)

PS-2 **Identification of alpha-amanitin-induced hepatotoxic mechanism in human hepatocytes using comparative proteomics**
◯ Do Eun Kim[1], Sun Joo Kim[2], Hye Suk Lee[2], Sangkyu Lee[1] ([1]College of Pharmacy, Kyungpook National Univ., [2]College of Pharmacy, The Catholic University of Korea)

PS-3 **The mechanisms of biglycan suppression by FGF-2 in vascular endothelial cells**

◯ Takato Hara[1], Mai Yoshida[1], Miho Ishii[1], Chika Yamamoto[1], Toshiyuki Kaji[2] ([1]Fac. Pharm. Sci., Toho Univ., [2]Fac. Pharm. Sci., Tokyo Univ. Sci.)

PS-4 **Protective Effect of carnosine against ischemic edema**

◯ Eun-Hye Kim[1], Donggeun Shin[1], Eunsun Kim[1], Arshad Majid[2], Ok-Nam Bae[1] ([1] Coll. Pharm., Hanyang Univ., South Korea, [2]Sheffield Instit. Transl. Neurosci., Univ. Sheffield., UK)

PS-5 **Assessment of neuronal cell death via microglial activation by heavy metals using optimized organotypic brain slice cultures**

◯ Takayuki Hoshi, Takashi Toyama, Akira Naganuma, Gi-Wook Hwang (Graduate School of Pharmaceutical Sciences, Tohoku University)

PS-6 **1-Bromopropane-induced phosphorylation of histone 2AX in a human hepatic cell line through CYP2E1-mediated oxidative stress.**

◯ Gi Ho Lee[1], Sun Woo Jin[1], Jae Ho Choi[1], Hyung Gyun Kim[2], Hye Gwang Jeong[1] ([1]Department of Toxicology, College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea, [2]Department Research Planning Team, Mokpo Marine Food-industry Research Center, Mokpo, Republic of Korea)

PS-7 **Molecular mechanism underlying the pro-apoptotic effect of *trans*-fatty acids during DNA damage**

◯ Aya Inoue, Yusuke Hirata, Miki Takahashi, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharm. Sci., Tohoku Univ.)

PS-8 **Methylglyoxal-induced Cellular Dysfunctions in Brain Endothelial Cells**

◯ Kyeong-A Kim, Donghyun Kim, Eujin Oh, Ok-Nam Bae (Coll. Pharm., Hanyang Univ., South Korea)

PS-9 **Endogenous parkinsonian neurotoxin 1BnTIQ impairs autophagic degradation**

◯ Masatsugu Miyara[1,2,3], Ayaka Yabuki[1], Natsumi Okada[1], Kanae Umeda[1,4], Takafumi Nishio[1], Shigeru Yamada[5], Yasunari Kanda[5], Tsuyoshi Nakanishi[2], Shigeru Ohta[1,6], Yaichiro Kotake[1] ([1]Hiroshima Univ., [2]Gifu Pharm. Univ., [3]JSPS Research Fellow PD, [4]JSPS Research Fellow DC, [5]Div. of Pharmacol., National Institute of Health Sci., [6]Wakayama Med. Univ.)

PS-10 **The fibrogenic effects downregulation of exosomal miR-451a from bronchial epithelial cells injured by PHMG-phosphate via modulating OSR1**

◯ Mi Ho Jeong[1], Kyu Hyuck Chung[1], Ha Ryong Kim[2] ([1]School of Pharmacy, Sungkyunkwan University, [2]College of Pharmacy, Daegu Catholic University)

PS-11 **Modulation of cytochrome P450 3A4 activity by protein-protein interaction with UDP-glucuronosyltransferase (UGT): luminal domain of UGT is essential for the interaction**

◯ Yuu Miyauchi[1,2], Yoshitaka Tanaka[1], Kiyoshi Nagata[3], Yasushi Yamazoe[4], Peter I. Mackenzie[5], the late Hideyuki Yamada[2], Yuji Ishii[2] ([1]Div Pharmaceut Cell Biol, Grad Sch Pharmaceut Sci, Kyushu Univ, [2]Lab Mol Life Sci, Grad Sch Pharmaceut Sci, Kyushu Univ, [3] Dept Environ Health Sci, Tohoku Medical & Pharmaceut Univ, [4] Grad Sch Pharmaceut Sci, Tohoku Univ, [5]Dept Clin Pharmacol, Coll Med & Pub Health, Flinders Univ)

PS-12 **Assessment of drug interaction of loxoprofen with CYP3A4 activity regulating drugs**

◯ Sanjita Paudel[1], Aarajana Shrestha[2], Tae Cheon Jeong[2], Eung Seok Lee[2], Sangkyu Lee[1] ([1] College of Pharmacy, Kyungpook National Univ., [2]College of Pharmacy, Yeungnam Univ.)

PS-13 **Hydrogen peroxide-mediated excitation of glutamatergic neurons triggers dopaminergic neurodegeneration via extracellular Zn^{2+} influx in the substantia nigra pars compacta**

◯ Ryusuke Nishio, Hiroki Morioka, Azusa Takeuchi, Nana Saeki, Haruna Tamano, Atsushi Takeda (Grad. Sch. Pharm. Sci., Univ. Shizuoka)

PS-14 **Polyhexamethylene guanidine phosphate impairs airway epithelial barrier function through tight junction protein degradation in human bronchial epithelial BEAS-2B cells**

◯ Sun Woo Jin, Gi Ho Lee, Tuyet Ngan Thai, Jae Ho Choi, Hye Gwang Jeong (Department of Toxicology, College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea)

PS-15 **Mechanism of developmental neurotoxicity induced by prenatal exposure to nanoparticle**

◯ Atsuto Onoda[1, 2], Takayasu Kawasaki[3], Koichi Tsukiyama[3, 4], Ken Takeda[5], Masakazu Umezawa[6] ([1]Dep. Pediatrics, Nagoya University, [2]JSPS-Res. Fel., [3]Ins. Sci. Tech., Org. Res. Adv., Tokyo Univ. Sci. 4Dep. Chem., Fac. Sci., Tokyo Univ. Sci., [5]Fac. Pharm. Sci., Sanyo-Onoda City Univ., [6]Dep. Matertial. Sci. Tech., Fac. Ind. Sci. Tech., Tokyo Univ. Sci.,)

PS-16 **Polyhexamethylene guanidine phosphate-induced dysfunctions in cytoplasmic organelle leading to cell death**

◯ In Jae Bang[1], Mi Ho Jung[1], Ha Ryong Kim[2] ([1]Sch. Pharm., Sungkyunkwan Univ., [2]Coll. Pharm., Daegu Catholic Univ.)

PS-17 **Involvement of TNF receptor 3 in the neuronal damage caused by methylmercury in mouse brain and its expected mechanisms**

◯ Yohei Tsunoda, Takashi Toyama, Akira Naganuma, Gi-Wook Hwang (Graduate School of Pharmaceutical Sciences, Tohoku University)

PS-18 **Chrysin overcome 5-fluorouracil-resistance in gastric cancer AGS cells**

◯ Sun Yi Lee[1,2], Suk Kyeong Lee[3], Joohee Jung[1,2] ([1]Duksung IDC, Duksung Women's Univ., [2]College Pharm., Duksung Women's Univ., [3]Dep. Biomed. Sci., College of Med., Catholic Univ. Korea)

PS-19 **The antibiotic cefotaxime works as both an activator of Nrf2 and an inducer of HSP70 in mammalian cells**

◯ Mayuka Yamada, Midori Suzuki, Takumi Yokosawa, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

PS-20 **Immunomodulatory effects of prostanoids in regulating the balance between Th1- and Th2-producing inflammatory cytokines in diet-restriction-induced thymic involution**

◯ Nurhanani Razali, Hirofumi Hohjoh, Bishnu Devi Maharjan, Kimie Nakagawa, Hiroshi Hasegawa (Lab. of Hygienic Sci., Kobe Pharmaceut. Univ.)

PS-21 **Caspase-3 and Nrf2 protect cells from polymyxin B-induced cytotoxicity by preventing ROS accumulation**

◯ Takumi Yokosawa, Mayuka Yamada, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

Forum I: The Current Intake and Problem of Vitamins and Biofactors in Aging Society

August 31 (Sat) 9:10 - 11:10 Room A (3F)
Organizer / Chair: Tadashi Okamoto (Fac. Pharm. Sci., Kobegakuin Univ.)
Kentaro Kogure (Grad. Sch. Biomed. Sci., Tokushima Univ)

F1-1 **Vitamin K intake and its physiological effects**
◯ Kimie Nakagawa
(Lab. Hygienic Sci., Kobe Pharmaceut. Univ.)

F1-2 **Effects of vitamin D deficiency and insufficiency on health, and measures for its improvement**
◯ Naoko Tsugawa
(Department of Health and Nutrition, Osaka Shoin Women's University)

F1-3 **Antioxidative effects of Vitamin E and Astaxanthin, and expected lifestyle disease prevention**
◯ Kentaro Kogure
(Graduate School of Biomedical Sciences, Tokushima Univ.)

F1-4 **Role of vitamins in the health promotion of the elderly**
◯ Kiyoshi Tanaka[1], Misora Ao[2], Akiko Kuwabara[3]
([1]Fac Nutrition, Kobe Gakuin Univ., [2]Grad Sch, Food and Nutrition, Kyoto Women's Univ., [3] Dept. Clinical Nutrition, Osaka Prefecture Univ)

Forum II: Advanced Research of Biological Metal for Disease Prevention

August 31 (Sat) 16:00 - 18:00 Room A (3F)
Organizer / Chair: Naohito Kawasaki (Fac. Pharm., Kindai Univ.)
Hiroyuki Yasui (Div. Anal. and Physic. Chem., Kyoto Pharm. Univ.)

F2-1 **Metallomics study for assessing the association of human health/disease and hair metal levels**
◯ Hiroshi Yasuda
(La Bell Vie Research Lab.; Inst. Nature Environ. Technol., Kanazawa Univ.)

F2-2 **Organic-inorganic hybrid molecules as a tool to analyze cellular defense mechanisms in vascular cells**
◯ Tomoya Fujie[1], Toshiyuki Kaji[2], Chika Yamamoto[1]
([1]Fac. Pharm. Sci., Toho Univ., [2]Fac. Pharm. Sci., Tokyo Univ. Sci.)

F2-3 **Prevention of zinc deficiency -Zinc is involved in skin wound healing-**

◯ Keigo Nishida, Ryota Uchida
(Grad. Sch. Pharmaceut. Sci., Suzuka Univ. Med. Sci.)

F2-4 **Biometals repositioning concept based on metalome analysis of multi-organ distribution of biological and essential trace metals in experimental animals.**

◯ Hiroyuki Yasui
(Dept. Anal. Bioinorg. Chem., Div. Anal. and Physic. Chem., Kyoto Pharm. Univ.)

Forum III: Current Researches on Prevention Strategies and Biomarkers for Various Diseases

September 1 (Sun) 9:10 - 11:10 Room A (3F)
Organizer / Chair: Hirotaka Imai (Sch. Pharm. Sci., Kitasato Univ. / AMED-CREST)
Atsushi Matsuzawa (Grad. Sch. of Pharm. Sci., Tohoku Univ.)

F3-1 **Pathogenesis and prevention strategies involving lipid oxidation dependent novel cell death**

◯ Hirotaka Imai[1,2]
([1]Sch. Pharmaceutical. Sci., Kitasato University, [2]AMED-CREST)

F3-2 **Development of disease prevention and therapeutics targeting selenoprotein P: Biomarker and liaison between medicine and pharmacy**

◯ Yoshiro Saito[1,2]
([1]Grad. Sch. Pharm. Sci., Tohoku Univ., [2]Fac. Life Med. Sci., Doshisha Univ.)

F3-3 **Increased lipid peroxides through stress-induced lipid oxidase activation and its physiological role**

◯ Mototada Shichiri
(Biomedical Research Institute, National Institute of Advanced Industrial Science and Technology (AIST))

F3-4 **Understanding of complexity of gut environment for the prospective precision medicine and health**

◯ Jun Kunisawa
(National Institutes of Biomedical Innovation, Health and Nutrition)

Forum IV: Regulatory Science of Indoor and Ambient Air Environment supported by the Standard Methods of Analysis for Hygienic Chemists

September 1 (Sun) 15:10 - 17:10 Room A (3F)

Organizer / Chair: Toshiko Tanaka-Kagawa (Fac. Pharm. Sci., Yokohama Univ. of Pharmacy)
Hideto Jinno (Fac. Pharm., Meijo Univ.)

F4-1 **Asbestos risk and future issues**

◯ Naoki Toyama

(Tokyo Occupational Safety and Health Center)

F4-2 **Exposure of phthalates in residential environment**

◯ Toshiko Tanaka-Kagawa[1], Ikue Saito[2], Hideto Jinno[3]

([1]Yokohama Univ. Pharm., [2]Tokyo Metro. Inst. Public Health, [3]Facul. Pharm., Meijo Univ.)

F4-3 **Health risks due to indoor environmental pollution: a public health perspective**

◯ Kenichi Azuma

(Fac. Med., Kindai Univ.)

F4-4 **Revision of Indoor Air Quality Guidelines in Japan**

◯ Shinobu Sakai

(National Institute of Health Sciences)

Award Candidates Presentation

Candidates for Young Investigator Award

August 31 (Sat) 9:10–10:17 Room B (2F)
Chair: Tetsushi Watanabe (Kyoto Pharmaceutical Univ.)

P-019 **Mechanism of reduced fetal gonadotropin elicited by maternal exposure to dioxin: Elevated folate metabolism in the hypothalamus and the recovery by α-lipoic acid supplementation**

◯ Hiroe Sano[1], Ren-Shi Li[1,2], Hong-Bin Chen[1], Takayuki Koga[3], Takeshi Matsushita[1], Yuki Matsuo[1], Tomoki Takeda[1,4], Yoshitaka Tanaka[1], Yuji Ishii[1] ([1]Grad Sch Pharmaceuti Sci., Kyushu Univ., [2]China Pharmaceutical University, [3]Daiichi University of Pharmacy, [4]Japan Bioassay Research Center)

P-021 **Possible role of death associated protein-like 1 (Dapl1) in pituitary-gonadal axis: study using Dapl1-knockout mice**

◯ Hong-Bin Chen[1], Hiroe Sano[1], Ren-shi Li[1,2], Yukiko Hattori[1], Tomoki Takeda[1,3], Yoshitaka Tanaka[1], Yuji Ishii[1] ([1]Grad. Sch. Pharmaceut. Sci., Kyushu Univ., [2]China Pharmaceutical Univ., [3]Japan Bioassay Research Center)

P-025 **Selenium metabolism in a gastrointestinal tract including Se enterohepatic circulation**

◯ Kazuaki Takahashi, Noriyuki Suzuki, Yasumitsu Ogra (Grad. Sch. Pharm. Sci., Chiba Univ.)

P-035 **Induction of a metal transporter ZIP8 expression by cadmium is mediated by the JNK-NF-κB pathway in vascular endothelial cells**

◯Keisuke Ito[1], Eiko Yoshida[1], Tomoya Fujie[2], Chika Yamamoto[2], Toshiyuki Kaji[1] ([1]Fac. of Pharm. Sci., Tokyo Univ. of Sci., [2]Fac. of Pharm. Sci., Toho Univ.)

P-044 **Hydrogen peroxide-mediated excitation of glutamatergic neurons triggers dopaminergic neurodegeneration via extracellular Zn^{2+} influx in the substantia nigra pars compacta**

◯ Ryusuke Nishio, Hiroki Morioka, Azusa Takeuchi, Nana Saeki, Haruna Tamano, Atsushi Takeda (Grad. Sch. Pharm. Sci., Univ. Shizuoka)

P-046 **Analysis of function of ncRNA induced by oxidized phospholipid on lipoxytosis**

◯ Rina Hirota[1,2], Risa Ohara[1], Takeshi Kumagai[1,2], Hirotaka Imai[1,2] ([1]Sch. of Pharm. Sci., Kitasato Univ., [2]AMED-CREST)

P-047 **Analysis of preventive effects of antibiotic cefoperazone on the cardio sudden death by decrease of vitamin E.**

◯ Naoya Kumagai[1,2], Tomoko Koumura[1,2], Shiori Ichinose[1], Hirotaka Imai[1,2] ([1]Sch. of Pharm. Sci., Kitasato Univ., [2]AMED-CREST)

P-081 **Role of prostaglandin terminal synthases in chemicals-induced inflammation**

◯ Tsubasa Ochiai[1], Nanako Yoshida[1], Mei Maeda[1], Yuka Sasaki[1], Chieko Yokoyama[2], Shuntaro Hara[1] ([1]Sch. of Pharm., Showa Univ., [2]Kanagawa Inst. of Tech.)

P-093 **Antigen labeling with Tetragalloyl-D-Lysine Dendrimer promotes antigen uptake from microfold cells**

◯ Toshimasa Takasaki[1], Naoki Kihsimoto[1], Takafumi Inoue[1], Nobutoki Takamune[2], Ryotarou Mitsumata[1], Shogo Misumi[1] ([1]Grad. Sch. Pharm. Sci., Kumamoto Univ., [2]KIDO)

Award Candidates Presentation

Candidates for Rookie of the Year Award

August 31 (Sat) 10:17–11:10 Room B (2F)
Chair: Tomoki Kimura (Fac. Sci. and Eng., Setsunan Univ.)

P-014 **Age-related vulnerability to nigral dopaminergic degeneration is due to Zn^{2+} toxicity induced by reactive oxygen species-sensitive cation channel activation**
◯ Ryo Furuhata, Hiroki Morioka, Ryusuke Nishio, Yuma Komata, Haruna Tamano, Atsushi Takeda (Sch. Pharm. Sci., Univ. Shizuoka)

P-016 **Amygdalar β-adrenergic receptor activation rescues impairment of fear memory induced by amyloid $\beta_{1\text{-}42}$-mediated Zn^{2+} toxicity in the amygdala**
◯ Ryusei Ito, Haruna Tamano, Atsushi Takeda (Sch. Pharm. Sci., Univ. Shizuoka)

P-022 **Assessment of low-dose estrogenic/anti-estrogenic action induced by bisphenol A using estrogen responsive reporter mice**
◯ Masataka Kunitani[1], Motoshi Furukawa[1], Hisamitsu Nagase[1,2], Tsuyoshi Nakanishi[1] ([1]Gifu Pharm. Univ., [2] Gifu University of Medical Science.)

P-027 **Formation of "biogenic nanoparticles" for the detoxification of sodium tellurite in HepG2 cells**
◯ Ayako Shiokawa[1], Noriyuki Suzuki[1], Yu-ki Tanaka[1], Satoshi Matsuyama[2], Mari Shimura[3,4], Yasumitsu Ogra[1] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]Osaka Univ., [3]NCGM, [4]RIKEN SPring-8)

P-041 **Role of arginine residue in the enzyme activity of arsenic (+3 oxidation state) methyltransferase (AS3MT)**
◯ Yuri Nakamura, Daigo Sumi, Seiichiro Himeno (Fac. Pharmaceut. Sci., Tokushima Bunri Univ.)

P-056 **Molecular mechanisms underlying pro-senescence effect of *trans*-fatty acids**
◯ Aya Inoue, Miki Takahashi, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

P-107 **Changes of chromosome number of V79 cells after exposing of thio-dimethylarsinic acid**
◯ Ikumi Fukushima, Kayoko Kita, Jumpei Tachikawa, Taro Honma, Toshihide Suzuki (Fac. Pharma-Sci., Teikyo Univ.)

Oral Session 1

Biochemistry, Drug Metabolism

August 31 (Sat) 16:00 - 17:00 Room B (2F)
Chair: Tsuyoshi Nakanishi (Gifu Pharm. Univ.)
Kouichi Yoshinari (Sch. Pharm. Sci., Univ. of Shizuoka)

O1-1 **Role of aryl hydrocarbon receptor to modulate inosine monophosphate dehydrogenase 2 involved in the synthesis of uric acid in the liver of rats**

◯ Koya Miyao[1], Yuko Shioji[2], Yuu Miyauchi[2], Hiroe Sano[2], Yukiko Hattori[2], Tomoki Takeda[2,3], Yoshitaka Tanaka[2], Yuji Ishii[2] ([1]Faculty of Pharmaceut. Sci., Kyushu Univ., [2]Grad. Sch. Pharmaceut. Sci., Kyushu Univ., [3]Japan Bioassay Research Center)

O1-2 **Partial neonatal lethality in pups born to cystathionine γ-lyase-deficient mice due to milk ejection failure**

◯ Noriyuki Akahoshi, Hiroki Handa, Isao Ishii (Health Chemistry, Showa Pharmaceutical Univ.)

O1-3 **A 3D structure modeling of metallothionein-3 (MT3) and its related function as a sulfane sulfur binding protein**

◯ Yasuhiro Shinkai[1,2], Yunjie Ding[1], Masahiro Akiyama[2], Yoshito Kumagai[1,2] ([1]Grad. Sch. Comprehensive Human Sci., Univ. of Tsukuba, [2]Fac. of Med., Univ. of Tsukuba)

O1-4 **Cannabidiol metabolism revisited: a novel metabolic reaction, phenol decarbonylation catalyzed by human liver microsomes and cytochrome P450 3A subfamily**

◯ Kazuhito Watanabe[1], Noriyuki Usami[2], Shizuo Narimatsu[3], Yuji Ishii[4], Shigehiro Osada[1], Hironori Aramaki[1], Ikuo Yamamoto[2], Hidetoshi Yoshimura[4] ([1]Daiichi Univ. Pharm., [2] Fac. Pharm. Sci., Hokuriku Univ., [3]Fac. Health Nutr., Minami Kyushu Univ., [4]Grad. Sch. Pharm. Sci., Kyushu Univ.)

O1-5 **Revisiting the C-terminal di-lysine motif of UDP-glucuronosyltransferase 1A9 as a novel crucial motif for glucuronidation activity**

◯ Yuu Miyauchi[1,2], Ken Kurohara[1], Akane Kimura[1], Keiko Fujimoto[1], Yuko Hirota[1], Peter Mackenzie[3], Yoshitaka Tanaka[1], Yuji Ishii[2] ([1]Div Pharmaceut Cell Biol, Grad Sch Pharmaceut Sci, Kyushu Univ, [2]Lab Mol Life Sci, Grad Sch Pharmaceut Sci, Kyushu Univ, [3] Dept Clin Pharmacol, Coll Med & Pub Health, Flinders Univ)

Oral Session 2

Immunotoxicity · Infectious Diseases, Endocrine Disruptors, Preventive Pharmacology, Foods and Pesticides

August 31 (Sat) 17:00 - 18:00 Room B (2F)
Chair: Kenji Suzuki (Dept. Pharm Sci., Ritsumeikan Univ.)
Hiroshi Hasegawa (Lab. Hygienic Sci., Kobe Pharmaceut. Univ.)

O2-1 **Nanaomycin A inhibits activation of NLRP3 inflammasome**
◯ Naoki Takemura[1], Yudai Matsui[2], Tatsuya Saitoh[1] ([1]Grad. Sch. Pharmaceut. Sci., Osaka Univ., [2]Sch. Pharmaceut. Sci., Osaka Univ.)

O2-2 **Immunomodulatory effects of prostanoids in regulating the balance between Th1- and Th2-producing inflammatory cytokines in diet-restriction-induced thymic involution**
◯ Nurhanani Razali, Hirofumi Hohjoh, Bishnu Devi Maharjan, Kimie Nakagawa, Hiroshi Hasegawa (Lab. of Hygienic Sci., Kobe Pharmaceut. Univ.)

O2-3 **Role of DEHP exposure during early pregnancy in vaginal immunity**
◯ Hirofumi Hohjoh, Risa Nagata, Hiroshi Hasegawa (Kobe Pharmaceut. Univ.)

O2-4 **Proteomics of cerebrospinal fluid in fetal growth restriction model**
◯ Atsuto Onoda[1,2], Yuma Kitase[1], Masahiro Tsuji[3,4], Masahiro Hayakawa[1], Yoshiaki Sato[1] ([1]Cent. Maternal-Neonat. Care, Nagoya Univ. Hosp., [2]JSPS Research Fellow PD, [3]Fac. Home Econ., Kyoto Women's Univ., [4]Dep. Regene. Med. Tis. Eng., Natio. Cere. Cardio. Cent. Res. In.)

O2-5 **Long-term dietary intake of excessive vitamin A impairs spermatogenesis in mice**
◯ Satoshi Yokota[1,2], Takuya Shirahata[2], Junko Yusa[3], Yuko Sakurai[3], Hiroshi Ito[3], Shigeru Oshio[2] ([1]Division of Cellular and Molecular Toxicology, National Institute of Health Sciences, [2]Fac. Pharmaceut. Sci., Ohu. Univ., [3] Fac. Dent., Ohu. Univ.)

Oral Session 3

Environmental Pollutants

September 1 (Sun) 9:10 - 10:10 Room B (2F)
Chair: Akira Toriba (Pharm. Health Sci., Kanazawa Univ.)
Youko Fujimoto (Dept. Physiol. Chem., Osaka Univ. Pharmaceut. Sci.)

O3-1 **Atmospheric concentration of $PM_{2.5}$ and polycyclic aromatic hydrocarbons in Saitama**

◯ Tsuyoshi Murahashi[1], Ching-Tang Kuo[2], Toshiyuki Higuchi[1], Naoto Uramaru[1], Akiko Koyama[1], Shoko Sasaki[1], Yui Hosokawa[1], Natsuka Nagai[1] ([1]Nihon Pharmaceutical University, [2] China Medical University)

O3-2 **Effects of Fetal Exposure to PM 2.5-derived Organic Chemicals on the Male Reproductive Function in Offspring**

◯ Seiichi Yoshida[1], Naomi Muraki[2], Tsuyoshi Ito[2], Takamichi Ichinose[1] ([1]Oita Univ. NHS, [2]JARI)

O3-3 **Analysis of potential rare earth pollution in Tama-river and its biological effects against aquatic animals**

◯ Masashi Sekimoto[1], Kazuhiko Nakano[1], Kumi Matsui[2], Akihide Itoh[2] ([1]Sch. Life Environ. Sci., Azabu Univ., [2]Sch. Vet. Med., Azabu Univ.)

O3-4 **Effect of tetrabromobisphenol A (TBBP-A) on the gene expression of ketone body-utilizing enzymes in 3T3-L1 and ST-13 adipocytes.**

◯ Masahiro Yamasaki, Shinya Hasegawa, Masahiko Imai, Noriko Takahashi (Dept. of Health chemistry, Sch. of pharm., Hoshi Univ.)

O3-5 **Deletion of Nrf2 enhances susceptibility to neurotoxic effects of acrylamide in mice**

◯ Frederick Ekuban[1], Zong Cai[1], Kouta Morikawa[1], Madoka Takikawa[1], Toshihiro Sakurai[1], Sahoko Ichihara[2], Seiichiroh Ohsako[3], Gaku Ichihara[1] ([1]Department of Occupational and Environmental Health, Faculty of Pharmaceutical Sciences, Tokyo University of Science, Japan, [2]Department of Environmental and Preventive Medicine, Jichi Medical University School of Medicine, [3]Laboratory of Environmental Health Sciences, Faculty of Medicine, The University of Tokyo)

Oral Session 4

Neural Toxicity, Oxidative Stress, Biochemistry

September 1 (Sun) 10:10 - 11:00 Room B (2F)
Chair: Tomofumi Okuno (Fac. Pharm. Sci., Setsunan Univ.)
Yasuhiro Shinkai (Fac. Med., Univ. of Tsukuba)

O4-1 **The time course of impairment of multi sensory modalities and neurons in dorsal root ganglion induced by methylmercury exposure**
◯ Yo Shinoda[1], Yuta Yamada[1], Mari Kikuta[1,2,3], Momoko Sakamoto[1], Yayoi Tsuneoka[1], Tsutomu Takahashi[1], Eiko Yoshida[4], Toshiyuki Kaji[4], Yasuyuki Fujiwara[1] ([1]Sch. Pharm. Tokyo Univ. of Pharm. and Life Sci., [2]Tokyo Gakugei Univ. Int. Sec. Sch., [3]JST/GSC, Keio Univ., [4]Fac. of Pharm. Sci., Tokyo Univ. of Sci.)

O4-2 **Synaptic activity-independent co-uptakes of amyloid $\beta_{1\text{-}42}$ and Zn^{2+} into dentate granule cells in the normal brain and intracellular Zn^{2+} toxicity**
◯ Haruna Tamano, Aoi Shioya, Naoya Oneta, Munekazu Tempaku, Mako Egawa, Atsushi Takeda (Grad. Sch. Pharm. Sci., Univ. Shizuoka)

O4-3 **No Oxidative Stress was Observed in Mice Exposed to Intermediate Frequency Electromagnetic Field Utilized for Wireless Power Transfer Systems**
◯ Kenji Hattori[1], Haruna Ono[1], Haruka Fujita[1], Kaho Hosoi[1], Mai Morita[1], Shin Ohtani[1], Yukihisa Suzuki[2], Keiji Wada[2], Akira Ushiyama[3], Naoki Kunugita[4], Kazuyuki Ishii[1] ([1]Fac. Pharmaceut. Sci., Meiji Pharm. Univ., [2]Grad. Sch. of Sci. and Eng., Tokyo Metropolitan Univ., [3]Fac. National Inst. of Public Health, [4]Grad. Sch. of Health Sci., Univ. of Occupational and Environmental Health)

O4-4 **Regulation of triglyceride metabolism by knockout of ketone body-utilizing enzyme**
◯ Shinya Hasegawa, Masahiko Imai, Masahiro Yamasaki, Noriko Takahashi (Lab. Health Chem., Hoshi Univ.)

Oral Session 5

Cellular Responses

September 1 (Sun) 15:20 - 16:20 Room B (2F)
Chair: Ryo Suzuki (Fac. Pharm. Sci., Kanazawa Univ.)
Shigeaki Hida (Dept. Mol. Cell. Health Sci., Nagoya City Univ.)

O5-1 **Identification of omega-3 fatty acid epoxides-producing enzymes in mast cells**
◯ Nozomu Kono[1], Yuki Tanaka[1], Yuta Shimanaka[1], Hiroyuki Arai[2] ([1]Grad. Sch. Pharmaceut. Sci., Univ. of Tokyo, [2] Grad. Sch. Med., Univ. of Tokyo)

O5-2 **Anti-melanoma effects by a whitening agent, rhododenol**

◯ Satoru Yokoyama[1], Yoshihiro Hayakawa[2], Hiroaki Sakurai[1] ([1]Dep. of Cancer Cell Biology, Grad. Sch. of Med. and Pharm. Sci., [2]Div. of Pathogenic Biochem., Inst. of Natural Medicine, University of Toyama)

O5-3 **Dihydropyrazine suppresses inflammatory cytokine expression**

◯ Madoka Esaki[1], Shunji Itoh[2], Masaki Yoshida[3], Takuro Beppu[1], Takumi Ishida[1], Shinji Takechi[1] ([1]Fac. Pharmaceut. Sci., Sojo Univ., [2]Dept. Health Sci., Grad. Sch. Health Sci., Kansai Univ. Health Sci., [3]Fac. Bio-Sci., Nagahama Inst. Bio-Sci. Thechnol.)

O5-4 **Molecular mechanism underlying trehalose-induced Akt inhibition.**

Kanae Umeda[1,2], ◯ Masatsugu Miyara[1,3,4], Shunichi Hatamiya[1], Tsuyoshi Nakanishi[3], Shigeru Ohta[1,5], Yaichiro Kotake[1] ([1]Hiroshima Univ., [2]JSPS Research Fellow DC, [3]Gifu Pharm. Univ., [4]JSPS Research Fellow PD, [5]Wakayama Med. Univ.)

O5-5 **Up-regulation mechanisms of fatty acid 2-hydroxylase (FA2H) by Δ^9-tetrahydrocannabinol in MDA-MB-231 cells**

◯ Masayo Hirao-Suzuki[1], Shuso Takeda[1], Kazuhito Watanabe[2], Masufumi Takiguchi[1], Hironori Aramaki[2] ([1]Fac. Pharm. Sci., Hiroshima Intl. Univ., [2] Daiichi Univ. Pharm.)

Oral Session 6

Metals

September 1 (Sun) 16:20 - 17:10 Room B (2F)

Chair: Tsutomu Takahashi (Sch. Pharm. Tokyo Univ. of Pharm. and Life Sci.)
Chika Yamamoto (Fac. Pharm. Sci., Toho Univ.)

O6-1 **Silver nanoparticles impaired lysosomal and autophagic function and decreased expression of TFEB and related genes in A549 human lung adenocarcinoma cells.**

◯ Takamitsu Miyayama, Kota Fujiki, Masato Matsuoka (Department of Hygiene and Public Health, School of Medicine, Tokyo Women's Medical Univ.)

O6-2 **Methylmercury induces caspase-dependent apoptosis in rat dorsal root ganglion neurons**

◯ Eiko Yoshida[1], Kazuhiro Aoki[1], Yo Shinoda[2], Yasuyuki Fujiwara[2], Toshiyuki Kaji[1] ([1]Fac. of Pharm. Sci., Tokyo Univ. of Sci., [2]Sch. Pharm., Tokyo Univ. Pharm. & Life Sci.)

O6-3 **The involvement of intra cellular glucose level in cadmium renal toxicity**

◯ Jin-Yong Lee, Masaki Kondo, Takaaki Nakamura, Hideki Hashimoto, Maki Tokumoto, Masahiko Satoh (Sch. Pharm., Aichi Gakuin Univ.)

O6-4 **Decrease in erythropoietin gene expression through the inhibition of HIF-1 transcription activity by cadmium**

◯ Maki Tokumoto, Jin-Yong Lee, Masahiko Satoh (Sch. of Pharm., Aichi Gakuin Univ.)

Poster Session

Odd: August 31 (Sat) 14:00 - 14:50 Room C (The 130th Anniversary Hall)
Even: September 1 (Sun) 13:00 - 13:50 Room C (The 130th Anniversary Hall)

Environmental Pollutants

P-001 **Removal of dyes in textile wastewater by 21 kinds of waste tea leaves.**
◯ Takehiro Nakamura, Sayuri Mishima, Fumihiko Ogata, Naohito Kawasaki (Fac. Pharm. Kindai. Univ.)

P-002 **Inactivation of antimicrobial-resistant bacteria in the wastewater samples by ozonation**
◯ Erika Yamakawa, Takashi Azuma, Satoru Sakuma, Yohko Fujimoto (Dept. Physiol. Chem., Osaka Univ. Pharmaceut. Sci.)

P-003 **Inactivation of antimicrobial-resistant bacteria in the wastewater samples by chlorine disinfection**
◯ Kazuma Yoshikawa, Takashi Azuma, Satoru Sakuma, Yohko Fujimoto (Dept. Physiol. Chem., Osaka Univ. Pharmaceut. Sci.)

P-004 **Evaluation of the interaction between borate ions and nickel–aluminum complex hydroxide for purification of wastewater**
◯ Fumihiko Ogata[1], Megumu Toda[2], Masashi Otani[2], Takehiro Nakamura[1], Naohito Kawasaki[1] ([1]Fac. Pharm., Kindai Univ., [2]Kansai Catalyst Co., Ltd.)

P-005 **A modeling of environmental electrophiles exposome: Effect of 1,2-NQ on 1,4-NQ-dependent activation of PTP1B/EGFR signaling**
◯ Yumi Abiko[1,2], Khoki Kurosawa[2], Hiroto Yamakawa[2], Yoshito Kumagai[1,2] ([1]Fac. Med., Univ. Tsukuba, [2]Grad. Sch. Comp. Human Sci., Univ. Tsukuba)

P-006 **Characteristics of exposure to $PM_{2.5}$ and particle polycyclic aromatic hydrocarbons and their derivatives inside taxi cars in Thailand**
◯ Akira Toriba[1], Yuuki Nagaoka[1], Masamu Fukagawa[1], Thaneeya Chetiyanukornkul[2], Ning Tang[1,3], Kazuichi Hayakawa[3] ([1]Institute of Medical, Pharmaceutical and Health Sciences, Kanazawa University, [2]Department of Biology, Faculty of Science, Chiang Mai University, [3]Institute of Nature and Environmental Technology, Kanazawa University)

P-007 **Emission source study of particulate matters in urban air of East Asia using 1-nitropyre and pyrene**
◯Kazuichi Hayakawa[1], Akira Toriba[2], Ning Tang[1] ([1]Inst. Nature and Environ. Technol., [2]Fac. Pharmaceut. Sci., Kanazawa Univ.)

P-008 **Association between Atmospheric Air Pollutants and Emergency Department Child Patient Visits for Asthma in Sasebo, Japan**

◯ Mohammad Shahriar Khan[1], Yumi Kawase[1], Yuya Deguchi[2], Seiko Ogino[3], Kana Oyama[3], Momomi Kawamoto[3], Takahiro Matsumoto[1], Hiroaki Nagaoka[2], Nobuyuki Yamagishi[4], Tetsushi Watanabe[1] ([1]Kyoto Pharm. Univ., [2]Fac. of Pharm. Sci., Nagasaki International Univ., [3]Sasebo City General Hosp., [4]Fac. of Pharm. Sci., Setsunan Univ.)

P-009 **Hydrolysis of 2,2,4- trimethyl-1,3-pentanediol diisobutyrate in human liver, intestines, and lung: an *in vitro* analysis using microsomal fractions**

◯ Takashi Isobe[1], Susumu Ohkawara[1], Toshiko Tanaka-Kagawa[1], Hideto Jinno[2], Nobumitsu Hanioka[1] ([1]Fac. Phar. Yokohama Univ. Phar.; , [2]Fac. Phar., Meijo Univ.)

P-010 **Intracellular demethylation of methylmercury to inorganic mercury by organomercurial lyase (MerB) strengthens cytotoxicity**

◯ Yasukazu Takanezawa[1], Ryosuke Nakamura[1], Yuka Ohshiro[1], Shimpei Uraguch[1], Tatsumi Adachi[2], Masako Kiyono[1] ([1]Dept. of Public Health, School of Pharmacy, Kitasato Univ., [2]Faculty of Pharmacy, Chiba Institute of Science)

P-011 **Arsenite inhibits HeLa cell proliferation *via* repression of transketolase**

◯ Tsutomu Takahashi, Masato Hosono, Tsuyoshi Nakano, Yasuyuki Fujiwara (Sch. of Pharm., Tokyo Univ. of Pharm.)

P-012 **Effects of fipronil exposure on microglia in the central nervous system**

◯ Yuri Ando[1], Cai Zong[1], Makoto Urushitani[2], Gaku Ichihara[1] ([1]Department of Pharmaceutical Sciences, Tokyo University of Science, [2]Department of Neurology, Shiga University of Medical Science)

Neural Toxicity

P-013 **Behavioral and immunohistological analysis of peripheral neuronal degeneration in methylmercury-exposed rats**

◯ Mari Kikuta[1,2,3], Yo Shinoda[2], Yuta Yamada[2], Momoko Sakamoto[2], Yayoi Tsuneoka[2], Tsutomu Takahashi[2], Eiko Yoshida[4], Toshiyuki Kaji[4], Yasuyuki Fujiwara[2] ([1]Tokyo Gakugei Univ. Int. Sec. Sch., [2]Sch. Pharm. Tokyo Univ. of Pharm. and Life Sci., [3]JST/GSC, Keio Univ., [4]Fac. of Pharm. Sci., Tokyo Univ. of Sci.)

P-014 **Age-related vulnerability to nigral dopaminergic degeneration is due to Zn^{2+} toxicity induced by reactive oxygen species-sensitive cation channel activation**

◯ Ryo Furuhata, Hiroki Morioka, Ryusuke Nishio, Yuma Komata, Haruna Tamano, Atsushi Takeda (Sch. Pharm. Sci., Univ. Shizuoka)

P-015 **Ninjin-yoei-to, a Kampo medicine, prevents hippocampal neuronal death after amyloid β_{1-42} injection into the lateral ventricle**

◯ Haruna Tokoro, Ryo Furuhata, Aoi Shioya, Haruna Tamano, Atsushi Takeda (Sch. Pharm. Sci., Univ. Shizuoka)

P-016 **Amygdalar β-adrenergic receptor activation rescues impairment of fear memory induced by amyloid β_{1-42}-mediated Zn^{2+} toxicity in the amygdala**

◯ Ryusei Ito, Haruna Tamano, Atsushi Takeda (Sch. Pharm. Sci., Univ. Shizuoka)

P-017 **Comparison of stimulant effects between cathinone and phenethylamine derivatives in mice**

◯ Erika Morita[1], Seigo Sanoh[1], Shota Suyama[1], Akiko Watanabe[1], Katsuhiro Okuda[2], Shigeru Ohta[1,3], Yaichiro Kotake[1] ([1]Grad. Sch. Biomed. Health Sci., Hiroshima Univ., [2]Asahikawa Med. Univ., [3]Wakayama Med. Univ.)

Endocrine Disruptors

P-018 **Detection of morphological effect on the sperm of 1,2-Dichloropropane-given rat by utilizing dark field images in the Computer-Assisted Sperm Analysis (CASA)**

◯ Katsumi Ohtani[1], Kenichi Kobayashi[1], Vigeh Mohsen[2] ([1] National Institute of Occupational Safety and Health, Japan, [2] Tehran University of Medical Sciences)

P-019 **Mechanism of reduced fetal gonadotropin elicited by maternal exposure to dioxin: Elevated folate metabolism in the hypothalamus and the recovery by α-lipoic acid supplementation**

◯ Hiroe Sano[1], Ren-Shi Li[1,2], Hong-Bin Chen[1], Takayuki Koga[3], Takeshi Matsushita[1], Yuki Matsuo[1], Tomoki Takeda[1,4], Yoshitaka Tanaka[1], Yuji Ishii[1] ([1]Grad Sch Pharmaceuti Sci., Kyushu Univ., [2]China Pharmaceutical University, [3]Daiichi University of Pharmacy, [4]Japan Bioassay Research Center)

P-020 **Alternative test system for assessing estrogenic potentials of endocrine-disrupting chemicals using embryos-larvae of medaka (*Oryzias latipes*)**

◯ Nobuaki Tominaga[1], Hiroshi Ishibashi[2], Masaya Uchida[2], Masashi Hirano[3], Koji Arizono[4] ([1]Depart. Creat. Engineer., Nat. Instit. Technol., Ariake Coll., [2]Grad. Sch. Agric., Ehime Univ., [3]Depart. Biol. Chem. Syst. Engineer., Nat. Instit. Technol., Kumamoto Coll., [4]Fac. Environ. Symbio. Sci., Pref. Univ. Kumamoto)

P-021 **Possible role of death associated protein-like 1 (Dapl1) in pituitary-gonadal axis: study using Dapl1-knockout mice**

◯ Hong-Bin Chen[1], Hiroe Sano[1], Ren-shi Li[1,2], Yukiko Hattori[1], Tomoki Takeda[1,3], Yoshitaka Tanaka[1], Yuji Ishii[1] ([1]Grad. Sch. Pharmaceut. Sci., Kyushu Univ., [2]China Pharmaceutical Univ., [3]Japan Bioassay Research Center)

P-022 **Assessment of low-dose estrogenic/anti-estrogenic action induced by bisphenol A using estrogen responsive reporter mice**

◯ Masataka Kunitani[1], Motoshi Furukawa[1], Hisamitsu Nagase[1,2], Tsuyoshi Nakanishi[1] ([1]Gifu Pharm. Univ., [2] Gifu University of Medical Science.)

P-023 **Novel screening approach for anti-androgenic action of chemicals using a transgenic mouse model of androgen overproduction.**

◯ Takahiro Hirano[1], Keisuke Ito[1], Kyoko Mekada[1], Yasushi Nishioka[1], Hisamitsu Nagase[1,2], Tsuyoshi Nakanishi[1] ([1]Gifu Pharm. Univ., [2]Gifu Univ. of Med. Sci.)

P-024 **Possible *in vivo* toxicity of triphenyl phosphate with the association of estrogenic/ anti-estrogenic action**

◯ Kyosuke Takahashi[1], Masataka Kunitani[1], Keishi Ishida[1,2], Youhei Hiromori[1,3], Hisamitsu Nagase[1,4], Jianying Hu[5], Tsuyoshi Nakanishi[1] ([1]Gifu Pharm. Univ., [2]JSPS Research Fellow, [3]College of Pharm., Suzuka Med. Sci. Univ., [4]Gifu Univ. of Med. Sci., [5]College of Urban and Environ. Sci., Peking Univ.)

Metals

P-025 **Selenium metabolism in a gastrointestinal tract including Se enterohepatic circulation**

◯ Kazuaki Takahashi, Noriyuki Suzuki, Yasumitsu Ogra (Grad. Sch. Pharm. Sci., Chiba Univ.)

P-026 **Mechanisms underlying the induction of oncostatin M expression by methylmercury in microglia**

◯ Takayuki Hoshi, Takashi Toyama, Akira Naganuma, Gi-Wook Hwang (Graduate School of Pharmaceutical Sciences, Tohoku University)

P-027 **Formation of “biogenic nanoparticles” for the detoxification of sodium tellurite in HepG2 cells**

◯ Ayako Shiokawa[1], Noriyuki Suzuki[1], Yu-ki Tanaka[1], Satoshi Matsuyama[2], Mari Shimura[3,4], Yasumitsu Ogra[1] ([1]Grad. Sch. Pharm. Sci., Chiba Univ., [2]Osaka Univ., [3]NCGM, [4]RIKEN SPring-8)

P-028 **Suppression of IL-6 induced JAK-STAT pathway by Zinc (II) Complex**

◯ Yu Sato, Takayuki Koga, Fumio Soeda, Keiko Tazuya-Murayama, Akihisa Toda, Makoto Hiromura (Daiichi Univ. Pharm.)

P-029 **Adsorption ability of mercury and lead ions onto novelty K-zeolite produced from fly ash**

◯ Yuhei Kobayashi, Fumihiko Ogata, Takehiro Nakamura, Naohito Kawasaki (Fac. Pharm., Kindai Univ.)

P-030 **Mechanisms involved in the mitochondrial dysfunction via TNF receptor 3 caused by methylmercury**

◯ Yohei Tsunoda, Takashi Toyama, Akira Naganuma, Gi-Wook Hwang (Graduate School of Pharmaceutical Sciences, Tohoku University)

P-031 **Transcriptional induction of CSE, a reactive sulfur species-producing enzyme, through the ERK/p38 MAPK pathways activated by copper(II) bis(diethyldithiocarbamate) in vascular endothelial cells**

◯ Akane Takahashi[1], Musubu Takahashi[1], Tomoya Fujie[2], Takato Hara[2], Chika Yamamoto[2], Hiroshi Naka[3], Toshiyuki Kaji[1] ([1]Fac. of Pharm. Sci., Tokyo Univ. of Sci, [2]Fac. of Pharm. Sci., Toho Univ., [3]Res. Center for Mater. Sci., Nagoya Univ.)

P-032 **Study on relationship between characteristics of novel magnesium-iron-aluminum hydroxides and its adsorption capability of phosphate ion.**

◯ Riku Nagafuji, Takehiro Nakamura, Yuhei Kobayashi, Fumihiko Ogata, Naohito Kawasaki (Fac. Pharm., Kindai Univ.)

P-033 **Identification of cytostatic factors that are released from neuronal stem cells by methylmercury, and a mechanism underlying its production**

◯ Takashi Toyama, Akira Naganuma, Gi-Wook Hwang (Graduate School of Pharmaceutical Sciences, Tohoku University)

P-034 **Species differences in sensitivity to cadmium among cultured proximal tubule cells**

◯ Yukimi Iwasa, Hitomi Fujishiro, Seiichiro Himeno (Fac. Pharm. Sci., Tokushima Bunri. Univ.)

P-035 **Induction of a metal transporter ZIP8 expression by cadmium is mediated by the JNK-NF-κB pathway in vascular endothelial cells**

◯Keisuke Ito[1], Eiko Yoshida[1], Tomoya Fujie[2], Chika Yamamoto[2], Toshiyuki Kaji[1] ([1]Fac. of Pharm. Sci., Tokyo Univ. of Sci., [2]Fac. of Pharm. Sci., Toho Univ.)

P-036 **Studies on organ accumulation and biological effects of gadolinium contrast agents**

◯ Ryosuke Nakamura, Yasukazu Takanezawa, Yuka Ohshiro, Shimpei Uraguchi, Masako Kiyono (Sch. Pharm., kitasato Univ.)

P-037 **Selectivity for element of bacterial mercury transporter MerC**

◯ Yuka Ohshiro, Koki Kawaguchi, Shimpei Uraguchi, Ryosuke Nakamura, Yasukazu Takanezawa, Masako Kiyono (Sch. Pharm. Sci., Kitasato Univ.)

P-038 **Estimation of selenium intake in Osaka Prefecture by total diet study**

◯ Koichi Murano, Aiko Yutani, Eri Kishi, Taro Murakami, Ayuko Kudo, Yukihiko Yamaguchi, Naoya Kakutani, Tetsuo Yamano (Division of Hygienic Chemistry, Osaka Institute of Public Health)

P-039 **Decreased GluA2 expression in methylmercury-treated rats**

◯ Yuki Takehara[1], Keishi Ishida[1,2,3], Kazuki Takeda[1], Shigeru Ohta[1,4], Yaichiro Kotake[1] ([1]Grad. Sch. Biomed. Health Sci., Hiroshima Univ., [2]Gifu Pharm. Univ., [3]JSPS Research Fellow PD, [4]Wakayama Med. Univ.)

P-040 **Glutathione-protected gold cluster that suppresses the proteoglycan synthesis in vascular endothelial cells at low cell density**

◯ Misato Saeki[1], Takato Hara[2], Yuichi Negishi[3], Chika Yamamoto[2], Toshiyuki Kaji[1] ([1]Fac. Pharm. Sci., Tokyo Univ. Sci., [2]Fac. Pharm. Sci., Toho Univ., [3]Fac. of Sci., Tokyo Univ. Sci.)

P-041 **Role of arginine residue in the enzyme activity of arsenic (+3 oxidation state) methyltransferase (AS3MT)**

◯ Yuri Nakamura, Daigo Sumi, Seiichiro Himeno (Fac. Pharmaceut. Sci., Tokushima Bunri Univ.)

P-042 **Synthesis of vanadium-hydroxamic acid complexes containing liposomes with anti-diabetic effect**

◯ Sakura Yoshida[1], Kyohei Shiojiri[1], Takeshi Fuchigami[1], Mamoru Haratake[2], Morio Nakayama[1] ([1]Graduate School of Biomedical Sciences, Nagasaki University, [2]Faculty of Pharmaceutical Sciences, Sojo University)

Oxidative Stress

P-043 **Suppression of melanogenesis due to pteryxin as Nrf2 activator in B16F1 melanoma cells**

◯ Junsei Taira[1], Takayuki Ogi[2], Arina Matsumoto[2] ([1]Dept. Bioresour., Natl. Inst. Tech., [2]Okinawa Ind. Tech. Cent.)

P-044 **Hydrogen peroxide-mediated excitation of glutamatergic neurons triggers dopaminergic neurodegeneration via extracellular Zn^{2+} influx in the substantia nigra pars compacta**

◯ Ryusuke Nishio, Hiroki Morioka, Azusa Takeuchi, Nana Saeki, Haruna Tamano, Atsushi Takeda (Grad. Sch. Pharm. Sci., Univ. Shizuoka)

P-045 **Functional analysis of recombinant mice Lipoxytosis inducer Lipo-1**

◯ Masaki Matsuoka, Hirotaka Imai (Kitasato Univ. Sch. of Pharmacy)

P-046 **Analysis of function of ncRNA induced by oxidized phospholipid on lipoxytosis**

◯ Rina Hirota[1,2], Risa Ohara[1], Takeshi Kumagai[1,2], Hirotaka Imai[1,2] ([1]Sch. of Pharm. Sci., Kitasato Univ., [2]AMED-CREST)

P-047 **Analysis of preventive effects of antibiotic cefoperazone on the cardio sudden death by decrease of vitamin E.**

◯ Naoya Kumagai[1,2], Tomoko Koumura[1,2], Shiori Ichinose[1], Hirotaka Imai[1,2] ([1]Sch. of Pharm. Sci., Kitasato Univ., [2]AMED-CREST)

P-048 **Time-dependent change of cell composition in bronchoalveolar lavage fluid by continuous inhalation of high concentration oxygen**

◯ Marie Sawa[1], Akira Ushiyama[2], Kenji Hattori[1], Kazuhiko Nakadate[1], Kazuyuki Ishii[1] ([1] Meiji Pharmaceutical Univ., [2]National Institute of Public Health)

P-049 **Role of selenoprotein P in the oxidative stress defense system of mouse astrocyte**

◯ Tomofumi Okuno, Naho Katsuda, Kaho Nomura, Yuta Nozaki, Mami Nishimoto, Hirofumi Ogino, Tomohiro Arakawa, Hitoshi Ueno (Fac. Pharmaceut. Sci., Setsunan Univ.)

P-050 **Modification of proteins by reaction with dihydropyrazine**

◯ Takurou Beppu, Madoka Esaki, Takumi Ishida, Shinji Takechi (Fac. Pharmaceut. Sci., Sojo Univ.)

P-051 **Analyses of variation and significance of post-translational modification on cysteine residues of pyruvate kinase M2 (PKM2).**

◯ Hayato Irokawa, Shin Kato, Satoshi Numasaki, Shusuke Kuge (Dept. Microbiol., Fac. Pharmaceut. Sci., Tohoku Med. Pham. Univ..)

Immunotoxicity · Infectious Diseases

P-052 **Comparison of adjuvant effects between dibutyl succinate and ethylene glycol dibutyrate in an FITC-induced contact hypersensitivity.**

◯ Mutsumi Nose, Kohta Kurohane, Erina Ogawa, Yasuyuki Imai (Laboratory of Microbiology and Immunology, School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, Japan)

P-053 **Effect of oxidized olive oil on antigen-presenting cells**

◯ Hirofumi Ogino, Miho Kawashima, Tomofumi Okuno, Tomohiro Arakapa, Hitoshi Ueno (Fac. Pharmaceut. Sci., Setsunan. Univ.)

Cellular Responses

P-054 **Regulatory role of the expression of ELAVL2 and Oct3/4 for sustaining undifferentiated state in renal adenocarcinoma cells**

◯ Tomofumi Fujino, Kouta Sugisaki, Rei Kato, Makio Hayakawa (Tokyo univ. pharm. Life sci.)

P-055 **A modeling of environmental electrophiles exposome: Additive or synergistic activation of Keap1/Nrf2 pathway due to combined exposure to environmental electrophiles**

◯ Hanako Aoki[1], Yusuke Onose[1], Yumi Abiko[1,2], Yoshito Kumagai[1,2] ([1]Grad. Sch. Comp. Human Sci., Univ. Tsukuba, [2]Fac. Med., Univ. Tsukuba)

P-056 **Molecular mechanisms underlying pro-senescence effect of *trans*-fatty acids**

◯ Aya Inoue, Miki Takahashi, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

P-057 **Signal transduction in enteroendocrine cells evoked by bitter compounds.**

◯ Yoko Mori[1], Akira Aoki[1], Yoshinori Okamoto[1], Koji Ueda[1], Takashi Isobe[2], Susumu Ohkawara[2], Nobumitsu Hanioka[2], Toshiko Tanaka-Kagawa[2], Hideto Jinno[1] ([1]Faculty of Pharmacy, Meijo University, [2]Yokohama University of Pharmacy)

P-058 **Novel molecular mechanisms by which FGF19 improves non-alcoholic steatohepatitis (NASH)**

◯ Mayuka Yamada[1], Mei Tsuchida[1], Yusuke Hirata[1], Masaaki Miyata[2], Kouichi Yoshinari[3], Takuya Noguchi[1], Atsushi Matsuzawa[1] ([1]Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., [2]Dept. of Food Sci. and Tech., National Fisheries Univ., [3]Sch. of Pharm. Sci., Univ. of Shizuoka)

P-059 **Unfolded Protein Response and Paraptosis-like Cell Death was Induced by Chloroform Extract of MPUC-398 (*Galactomyces pseudocandidus*) in U-2OS cells.**

◯ Yukina Noguchi, Ayano Ando, Takayuki Iino, Eisei Matsuyama, Youki Masuda, Kaoru Kinoshita, Kiyotaka Koyama, Kazuhiko Nakadate, Kenji Hattori, Kazuyuki Ishii (Fac. of Pharm. Sci. Meiji Pharm. Univ.)

P-060 **Chemical biology unveils the mechanism of STAT3 splicing switch**

◯ Miki Kise, Sakika Shimotsu, Kenji Suzuki, So Masaki (Dep. Pharmaceut. Sci., Ritsmeikan Univ.)

P-061 **Involvement of EMT-related molecules and integrin family molecules in the malignant transformation of renal cancer cells by deferoxamine**

◯ Akinori Sugiyama[1], Yui Saito[1], Nobutaka Ogasawara[1], Mori Yaegashi[1], Yasushi Kawasaki[1], Sei Yonezawa[2], Yasuhiro natori[1] ([1]Sch. Pharm., Iwate Medical Univ., [2]Grad. Sch. Pharmaceut. Sci., Univ. Shizuoka)

P-062 **Suppression of biglycan synthesis by FGF-2 in vascular endothelial cells**

◯ Takato Hara[1], Mai Yoshida[1], Miho Ishii[1], Chika Yamamoto[1], Toshiyuki Kaji[2] ([1]Fac. Pharm. Sci., Toho Univ., [2]Fac. Pharm. Sci., Tokyo Univ. Sci.)

P-063 **Inhibitory mechanism of melanogenesis by fenretinide derivative**

◯ Noriko Takahashi, Yu Komori, Daisuke Saito, Shinya Hasegawa, Masahiro Yamasaki, Masahiko Imai (Lab. of Physiolog. Chem., Inst. of Med. Chem., Hoshi Univ.)

P-064 **Growth inhibitory effects of cinnamate derivatives in refractory cancer**

◯ Masahiko Imai[1], Daisuke Saito[1], Hiromasa Yokoe[2], Masayoshi Tsubuki[2], Shinya Hasegawa[1], Masahiro Yamasaki[1], Noriko Takahashi[1] ([1]Lab. of Physiolog. Chem., Inst. of Med. Chem., Hoshi Univ., [2]Lab. of Bioorg. Chem., Inst. of Med. Chem., Hoshi Univ.)

P-065 **The chemical pollutants regulate inflammasome-dependent inflammatory responses.**

◯ Risa Kohno, Ryo Suzuki (Faculty of Pharmaceutical Sciences, Institute of Medical, Pharmaceutical, and Health Sciences, Kanazawa University)

P-066 **The study of molecular heterogeneity in mast cell granules.**

◯ Marin Sakamoto[1], Tomoyuki Kusada[2], Shohei Inamoto[2], Tomomi Senda[2], Naohide Hirashima[2], Ryo Suzuki[1] ([1]Faculty of Pharmaceutical Sciences, Institute of Medical, Pharmaceutical, and Health Sciences, Kanazawa University, [2]Graduate School of Pharmaceutical Sciences, Nagoya City University)

P-067 **Exploring for saturated fatty acid-containing phospholipids that induce unfolded protein response.**

◯ Kota Yamagishi[1], Mayuka Kanda[1], Nozomu Kono[1], Hiroyuki Arai[2] ([1]Grad. Sch. Pharmaceut. Sci., Univ. of Tokyo, [2] Grad. Sch. Med., Univ. of Tokyo)

P-068 **The lysophospholipase PNPLA7 is regulated by methionine availability and is linked to epigenetic regulation**

◯ Sayaka Harada[1], Yoshitaka Taketomi[1], Mai Kawaguchi[1,2], Tetsuya Hirabayashi[2], Seiichiro Ohsako[1], Makoto Murakami[1] ([1]Univ. Tokyo, [2]Tokyo Metro. Inst. Med. Sci.)

P-069 **Aryl-hydrocarbon receptor (AhR)-independent function of AhR repressor (AhRR)**

◯ Nao Saito, Misa Fujiki, Naoya Yamashita, Yuichiro Kanno, Kiyomitsu Nemoto (Fac. Pharmaceut. Sci., Toho Univ.)

P-070 **Effect of seleno-L-methionine on immunoglobulin E-mediated allergic response in RBL-2H3 cells**

◯ Tomohiro Arakawa, Atsushi Inaoka, Shunsuke Namura, Tomofumi Okuno, Hirofumi Ogino, Hitoshi Ueno (Fac. Pharmaceut. Sci., Setsunan Univ.)

P-071 **Role of histone-modifying enzymes on transactivation mediated by nuclear receptor, CAR**

◯ Yuichiro Kanno, Haruka Yamaguchi, Miyu Ito, Kaho Koizumi, Nao Saito, Kiyomitsu Nemoto (Fac. Pharmaceut. Sci., Toho-Univ.)

P-072 **Crosstalk of CAR and PPARδ on ANGPTL4 expression**

◯ Wei Dai, Shuai Zhao, Yuichiro Kanno, Kiyomitsu Nemoto (Fac. Pharmaceut. Sci., Toho Univ.)

P-073 **Individual variations in mRNA levels of TRPA1, TRPV1 and TRPM8 in human trachea and lung tissues**

◯ Yuki Ozaki[1], Nozomi Kanazawa[1], Kazuyuki Ohashi[1], Nobuhiko Miura[1], Ikuo Kawamura[1], Yoko Mori[2], Moeko Nagai[2], Susumu Ohkawara[1], Takashi Isobe[1], Nobumitsu Hanioka[1], Hideto Jinno[2], Toshiko Tanaka-Kagawa[1] ([1] Yokohama University of Pharmacy., [2] Faculty of Pharmacy, Meijo University)

P-074 **Effects of statins on murine innate immune cells**

◯ Yukiko Maehara[1], Ryojin Takeuti[1], Takuma Kitano[1], Shinsuke Taki[2], Saotomo Itoh[1], Shigeaki Hida[1] ([1]Grad.Sch. Pharmaceut. Sci. Nagoya-City Univ., [2] Sch. Med, Shinshu Univ.)

P-075 **Mechanisms of lipid accumulation and cytotoxicity by fatty acid uptake in renal tubular epithelial cells**

◯ Yasushi Kawasaki[1], Miho Karimazawa[1], Yuki Katsumata[1], Yumi Sato[1], Fumika Ogawa[1], Sei Yonezawa[2], Yasuhiro Natori[1], Akinori Sugiyama[1] ([1]Sch. Pharmacy, Iwate Medical Univ., [2]Sch. Pharmacy, Univ. Shizuoka)

P-076 **Analysis of oxidative stress response by the HSP70 cochaperone BAG-1 in vitro**

◯ Koki Takeda, Hayato Irokawa, Shusuke Kuge (Department of Microbiology, Faculty of Pharmaceutical Science, Tohoku Medical and Pharmaceutical University)

P-077 **Mechanisms of activation of transient receptor potential ankyrin 1 (TRPA1) by ferulic acid and its analogues.**

◯ Moeko Nagai[1], Yoko Mori[1], Susumu Ohkawara[2], Takashi Isobe[2], Akira Aoki[1], Koji Ueda[1], Yoshinori Okamoto[1], Nobumitsu Hanioka[2], Toshiko Tanaka-Kagawa[2], Hideto Jinno[1] ([1]Faculty of Pharmacy, Meijo University, [2]Yokohama University of Pharmacy)

Biochemistry

P-078 **Roles of the novel RING finger E3 ubiquitin ligase LINCR in innate immune responses**

◯ Takumi Yokosawa, Yuki Nada, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

P-079 **Role of TRP channel and TMEM protein on energy metabolism by Capsaicin.**

◯ Yoshihisa Hirota[1], Yuma Unno[1], Maya Kamao[2], Yoshitomo Suhara[1], Naomi Osakabe[1] ([1]Systems Engineering and Science, Graduate School of Engineering and Science, Shibaura Institute of Technology, [2]Extension center, Kobe Pharmaceutical University)

P-080 **Elucidation of mechanism by which β-hydroxybutyrate suppresses cancer cell growth**

◯ Hiroki Hasui[1,2], Kouji Ueshima[1], Atsuko Tomida[1], Sou Masaki[1], Kenji Suzuki[1] ([1]Coll. Pharmaceut. Sci., Ritsumeikan Univ., [2]Grad. Sch. Life Sci., Ritsumeikan Univ.)

P-081 **Role of prostaglandin terminal synthases in chemicals-induced inflammation**

◯ Tsubasa Ochiai[1], Nanako Yoshida[1], Mei Maeda[1], Yuka Sasaki[1], Chieko Yokoyama[2], Shuntaro Hara[1] ([1]Sch. of Pharm., Showa Univ., [2]Kanagawa Inst. of Tech.)

P-082 **Impact of cystathionine γ-lyase (CTH) deficiency on adaptive immune responses in mice**

◯ Masashi Miyashita, Rintaro Takemoto, Toshiki Yoshizawa, Noriyuki Akahoshi, Isao Ishii (Health Chemistry, Showa Pharmaceutical Univ.)

P-083 **TPCL is a spermatid specific phospholipid species essential for spermatogenesis**

◯ Dai Mochizuki[1], Sosuke Akagi[1], Yuta Shimanaka[1], Hiroyuki Arai[2], Nozomu Kono[1] ([1]Grad. Pharm. Sci., The Univ. of Tokyo, [2]Grad. Med. Sci., Center of Disease Biology and integrative Medicine, the Univ. of Tokyo)

Preventive Pharmacology

P-084 **Effects of existing medicine on micturition function in drug-induced menopausal mice**

◯ Akihiro Tashiro, Fumio Soeda, Sumire Kudo, Ichiro Kimura, Aki Sato, Yuri Eto, Takayuki Koga, Akihisa Toda (Daiichi Univ. Pharm.)

P-085 **Study on monitoring of mineral concentrations in female hair for prevention osteoporosis**

◯ Kaito Yamashiro[1], Atsushi Urao[1], Fumihiko Ogata[1], Takehiro Nakamura[1], Naohito Kawasaki[1,2] ([1] Faculty of Pharmacy, Kindai University, [2]Anti-aging Center, Kindai University)

P-086 **Study on relationship between hay fever and mineral concentrations in female nails**

◯ Atsushi Urao[1], Kaito Yamashiro[1], Hiroyuki Shigemori[2], Katsuhiro Horikoshi[2], Fumihiko Ogata[1], Takehiro Nakamura[1], Naohito Kawasaki[1,3] ([1] Faculty of Pharmacy, Kindai University, [2] Frontier Pharmacy, [3]Anti-aging Center, Kindai University)

P-087 **Effect of a nitric oxide donor NOR5 on the differentiation of 3T3-L1 preadipocytes into mature adipocytes**

◯ Yasuki Momikura, Satoru Sakuma, Takashi Azuma, Yohko Fujimoto (Dept. Physiol. Chem., Osaka Univ. Pharmaceut. Sci.)

P-088 **Prevention of passive smoking in the campus：the present state of passive smoking by PM2.5 measurement**

◯ Takako Yamaguchi, Yasuko Morimoto, Wakana Nakajima, Kazuki Yoshida, Hiroyasu Yamazaki (Fac. Pharm. Sci., Kobe Gakuin Univ.)

P-089 **Social defeat stress-induced depression model mice had altered expression of sweet taste receptors in circumvallate papillae and glucose transporters in small intestine**

◯ Yuka Takahata, Yukie Yamada, Yusuke Kamimura, Erina Kuwagaki, Sakika Hamano, Waka Yoshimoto, Kazuki Nagasawa (Dep. Environ. Biochem., Kyoto Pharm.)

P-090 **Development of atypical depression model mice by loading subchronic and mild social defeat stress, and their expression of hippocampal inflammatory cytokines and intestinal glucose transporters.**

◯ Hikari Ueda, Kayo Kobayashi, Hutaba Naka, Mayu Yamagata, Kazuki Nagasawa (Dept. of Environ. Biochem., Kyoto Pharm. Univ.)

P-091 **Oral administration of refined deep-seawater containing high concentrations of magnesium prevents the development of dextran sulfate sodium-induced inflammatory bowel disease in mice**

◯ Kayo Miyanga[1], Anzu Suzuki[1], Ayumi Asada[1], Miki Komoto[1], Yasuyuki Oshima[1], Takeshi Yasukawa[2], Hirotoshi Morimoto[2], Yoshinobu Uozumi[2], Kazuki Nagasawa[1] ([1]Dep. Environ. Biochem., Kyoto Pharm. Univ., [2]Ako Kasei Co., Ltd.)

P-092 **Influence of Metallothionein gene knockout by CRISPR-Cas9 gene editing on lipid accumulation in a murine hepatocyte cell line AML12.**

◯ Yoshito Kadota, Masaki Tomotake, Takashige Kawakami, Shinya Suzuki (Fac. Pharmaceut. Sci., Tokushima Bunri Univ.)

P-093 **Antigen labeling with Tetragalloyl-D-Lysine Dendrimer promotes antigen uptake from microfold cells**

◯ Toshimasa Takasaki[1], Naoki Kihsimoto[1], Takafumi Inoue[1], Nobutoki Takamune[2], Ryotarou Mitsumata[1], Shogo Misumi[1] ([1]Grad. Sch. Pharm. Sci., Kumamoto Univ., [2]KIDO)

P-094 **Alteration of sweet and bitter taste sensitivity in streptozotocin-induced diabetic rats**

◯Chie Koizumi, Moemi Iwamura, Risa Honda, Utano Tanaka, Kazuki Nagasawa (Dep. Environ. Biochem., Kyoto Pharm. Univ.)

Analytical Chemistry

P-095 **Evaluation of an analytical method of Polonium-210 in foods**

◯ Keisuke Soga, Kazunari Kondo, Akiko Hachisuka (National Institute of Health Sciences)

P-096 **Component analysis of tea using ^{1}H-NMR metabolome analysis**

Madoka Sueda[1], Masumi Motonaga[1], Ryo Shimizu[1], Shigeyuki Kitamura[2], Seigo Sanoh[3], Yaichiro Kotake[3], Shigeru Ohta[3,4], ◯ Kazumi Sugihara[1] ([1]Fac. Pharm. Sci., Hiroshima Int'l Univ., [2]Nihon Pharm. Univ., [3]Grad. Sch. Biomed. Health & Sci., Hiroshima Univ., [4]Wakayama Med. Univ.)

Drug Metabolism

P-097 **Changes of cytochrome P450 isozymes in cecal ligation and puncture-induced sepsis in various cytokine deficient mouse livers**

◯ Yuki Nakamura[1], Takashi Ashino[1], Hirokazu Ohtaki[2], Jun Watanabe[3], Yoichiro Iwakura[4], Satoshi Numazawa[1] ([1]Div. Toxicol., Showa Univ. Sch. Pharm., [2]Dept. Anatomy, Showa Univ. Sch. Med., [3]Ctr. Biotech., Showa Univ., [4]Res. Inst. Biomed. Sci., Tokyo Univ. Sci.)

P-098 **Rhododendrol, a metabolite of raspberry ketone, suppresses adipogenesis in 3T3-L1 cells.**

◯ Naoto Uramaru, Tomoki Suzuki, Yuka Kinebuchi, Ryo Kawamura, Yoko Watanabe, Makoto Osabe, Toshiyuki Higuchi (Division of Pharmaceutical Health Biosciences, Department of Pharmaceutical Sciences, Nihon Pharmaceutical University)

P-099 **Identification of sulfotransferase isoforms involved in the sulfation of the reduced form of vitamin K_3 (menadione); Menadione, a toxic intermediate formed in the process of vitamin K_1 to vitamin K_2 conversion**

◯ Takahito Nishiyama, Inoue Yuu, Ohuma Tomokazu, Ogura Kenichiro, Hiratuka Akira (Dept. Drug Metab. Mol. Toxicol., Sch. Pharm., Tokyo Uni. of Pharm. Life Sci.)

P-100 **Morphinone, an electrophilic metabolite of morphine, activates the electrophilic signaling of the Keap1/Nrf2 pathway in human hepatoma HepG2 cells**

◯ Kohei Matsuo, Daisuke Aibara, Kimihiko Matsusue, Shigeru Yamano (Fac. Pharmaceut. Sci., Fukuoka. Univ.)

Foods and Pesticides

P-101 **Lethal effect of neonicotinoid reagents and pesticides on nematode *C. elegans***

◯ Sadahiro Kawazoe[1], Ayaka Nishizawa[1], Shinya Matsumoto[1], Hiroshi Ishibashi[2], Nobuhiro Ichikawa[3], Koji Arizono[4] ([1]Dept. Food and Nutr., Kyoto Women's Univ., [2]Grad. Sch. Agric., Ehime Univ., [3]Col. Pharmaceut. Sci., Ritsumeikan Univ., [4]Fac. Environ. Symbio. Sci., Pref. Univ. Kumamoto)

P-102 **Application of basil seed (*Ocimum basilicum*) as adsorbent in treatment of acute poisoning with paraquat and diquat**

◯ Yugo Uematsu, Fumihiko Ogata, Takehiro Nakamura, Naohito Kawasaki (Fac. Pharm., Kindai Univ.)

Health Foods

P-103 **Effects of Maternal Exposure to High Dose Folic acid on the Immune System in Male Offspring**

◯ Nana Otsuka[1], Maki Abe[2], Seiichi Yoshida[3] ([1]Midwifery Course, Graduate School, Oita University of Nursing and Health Sciences, [2]Midwifery Laboratory, [3]Pathobiology Laboratory)

P-104 **Examination of anti-obesity effect of Ginkgo vinegar**

◯ Shugo Hosoda[1], Satoshi Numazawa[2], Atufumi Manabe[1] ([1]Department of Conservative Dentistry, Division of Aesthetic Dentistry and Clinical Cariology, Showa University, [2]Pharmacology, Toxicology and Therapeutics of Toxicology, Showa University)

P-105 **Effects of proteins isolated from royal jelly on macrophage foam cell formation and proliferation**

Hiroto Unuma[1], ◯ Akira Sato[1,2], Keiichi Ebina[1,2] ([1]Fac. Pharm., Iryo Sosei Univ., [2]Grad. Sch. Sci. Eng., Iryo Sosei Univ.)

P-106 **Analysis of strain difference on disturbance of amino acid metabolism caused by chemical-induced dermatitis**

◯ Takayuki Koga[1], Fuka Hirayama[1], Yuji Ishii[2], Makoto Hiromura[1], Fumio Soeda[1], Akihisa Toda[1] ([1]Daiichi Univ. Pharm., [2]Grad. Sch. Pharmaceut. Sci., Kyushu Univ)

Carcinogen

P-107 **Changes of chromosome number of V79 cells after exposing of thio-dimethylarsinic acid**

◯ Ikumi Fukushima, Kayoko Kita, Jumpei Tachikawa, Taro Honma, Toshihide Suzuki (Fac. Pharma-Sci., Teikyo Univ.)

P-108 **The influence of PXR activation on phenobarbital-induced liver tumor promotion**

◯ Mai Ishimura, Ryota Shizu, Keiichiro Sobe, Kanako Ezaki, Takuomi Hosaka, Takamitsu Sasaki, Kouichi Yoshinari (Sch. of Pharmaceut. Sci., Univ. of Shizuoka)

P-109 **Chemical structures and antimutagenic effects of new triterpenoids isolated from the leaves of *Lansium domesticum***

◯ Takahiro Kitagawa[1], Takahiro Matsumoto[1], Tomoe Ohta[2], Tatsusada Yoshida[2], Teo Stephen[3], Tetsushi Watanabe[1] ([1]Department of Public Health, Kyoto Pharmceutical Univ., [2]Nagasaki international Univ., [3]Forest Department Sarawak)

P-110 **Chemical structure and antimutagenicity of constituents obtained from the fruit peels of *Citrus junos***

◯ Daisuke Imahori, Takahiro Matsumoto, Kazuki Achiwa, Hayato Murai, Tetsushi Watanabe (Department of Public Health, Kyoto Pharm. Univ.)

P-111 **Isolation and structure elucidation of constituents from the stems and twigs of *Hibiscus tiliaceus***

◯ Kazuki Achiwa, Takahiro Matsumoto, Ayumi Aoki, Yuuka Isuzumi, Tetsushi Watanabe (Department of Public Health, Kyoto Pharm. Univ.)

Others

P-112 **Decreasing of electrical conductivity using bentonite treated with acid solution**

◯ Eri Nagahashi, Fumihiko Ogata, Takehiro Nakamura, Naohito Kawasaki (Fac. Pharm., Kindai Univ)

P-113 **The influence of mutations associated with the androgen insensitivity syndrome on the ligand-dependent activation of androgen receptor.**

◯ Ryota Shizu[1], Kosuke Yokobori[1], Masahiko Negishi[2], Kouichi Yoshinari[1] ([1]Sch Pharmaceut. Sci., Univ. Shizuoka, [2]NIEHS, NIH)

P-114 **Determination of harmful chemical compounds generated from heated tobacco products**

◯ Yohei Inaba, Shigehisa Uchiyama, Kanae Bekki, Akira Ushiyama. (National Institute of Public Health)

P-115 **Male reproductive dysfunction induced by circadian disruption**

◯ Nobuhiko Miura[1], Hiroki Yoshioka[2], Katsumi Ohtani[3] ([1]Yokohama Univ Pharm, [2]Kinjo Gakuin Univ, [3]Natl Inst Occu Safety Health)

From Korea and Other Countries

P-116 **Suppressive effects of Platyconic acid A, Platycodi radix-derived saponin, on TGF-β1-induced hepatic stellate cell activation through inhibiting SMAD pathway**

◯ Jae Ho Choi[1], Gi Ho Lee[1], Sun Woo Jin[1], Young Chul Chung[2], Hye Gwang Jeong[1] ([1]Department of Toxicology, College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea, [2]Department of Food and Medicine, College of Public Health and Natural Science, International University of Korea, Jinju, Korea)

P-117 **CAY10598, EP4 receptor agonist, inactivates HSP90 via ROS-dependent HSP90 cleavage in human colon cancer HCT116 cells**

◯ In Gyeong Chae, Kyung-Soo Chun (College of Pharmacy, Keimyung University, Daegu, Republic of Korea)

P-118 **Global research of histidine phosphoproteome in *Danio rerio***

◯ Yan Gao[1], Hyojin Lee[2], Do Eun Kim[1], Sanjita Paudel[1], Oh Kwang Kwon[1], Ki-Tae Kim[2], Sangkyu Lee[1] ([1]College of Pharmacy, Kyungpook National Univ., [2]Department of Energy and Environmental Engineering and Department of Environmental Engineering, Seoul National Univ. of Sci. and Tech.)

P-119 **The toxicological mechanism study for high-dose Korean red ginseng extract in liver through a comparative global proteomic analysis**

◯ Ann-Yae Na[1], YounAh Kim[1], Jung Jae Jo[1], Oh Kwang Kwon[1], Piljoung Cho[1], Gao Yan[1], Kyu Min Kim[2], Sung Hwan Ki[2], Sangkyu Lee[1] ([1]College of Pharmacy, Kyungpook National Univ., [2] College of Pharmacy, Chosun Univ.)

P-120 **The effect of polyhexamethylene guanidine phosphate (PHMG-P) on hepatic stellate cell activation**

◯ Ji Hye Yang[1,2], Young Chang Cho[3], Sung Hwan Ki[2] ([1]College of Korean Medicine, Dongshin Univ., Naju, Jeollanam-do, Republic of Korea, [2]College of Pharmacy, Chosun Univ., Gwangju, Republic of Korea, [3]College of Pharmacy, Chonnam Nat. Univ., Gwangju, Republic of Korea)

P-121 **The role of miR-6126 in polyhexamethylene guanidine-phosphate induced epithelial-mesenchymal transition**

◯ Yong Joo Park, Kyu Hyuck Chung (Fac. School of Pharmacy, Sungkyunkwan University)

P-122 **Regulation of AMPK and NRF2 during metabolic stress in cancer**

◯ Eun-Ji Choi[1], So-Hyun Park[1], Sang-Min Jeon[1,2 †] ([1]College of Pharmacy, [2]Research Institute of Pharmaceutical Science and Technology, Ajou University)

P-123 **Hyper-pigmentating effects of nicotine on the skin melanocytes**

◯ Jin-Sil Lee, Kyuri Kim, Kyung-Min Lim (College of Pharmacy, Ewha Womans University, Republic of Korea)

P-124 **Chronotoxiology of cisplatin-induced renal injury in mice**

◯ Hiroki Yoshioka[1], Sarah Tominaga[2], Tohru Maeda[2], Gi-Wook Hwang[3], Nobuhiko Miura[4] ([1]Center for Craniofacial Research, The University of Texas Health Science Center at Houston,[2]College of Pharmacy, Kinjo Gakuin University, [3]Laboratory of Molecular and Biochemical Toxicology, Tohoku University, [4]Department of Health Science, Yokohama University of Pharmacy)

P-125 **Long-term cadmium exposure changes metabolite profiles on the urine of mice**

◯ Hing Man Chan, Sailendra Nath Sarma, Ammar Saleem (Department of Biology, University of Ottawa, Ottawa, Canada)

P-126 **Role of prostaglandin terminal synthases in chemical-induced carcinogenesis**

◯ Yuka Sasaki[1], Tsubasa Ochiai[2], Shuntaro Hara[2] ([1]Cedars-Sinai Med. Ctr., Los Angeles, CA, USA, [2]Sch. Pharm., Showa Univ., Tokyo, Japan)

Banquet

August 31 (Sat) 18:30 ～ 20:30
Site：Kyoto Yamashina Hotel Sanraku

Scientific Award Ceremony
Kanehara Award Ceremony
Presentation of Young Investigator Award Winners and Conferment Ceremony
Presentation of Rookie of the Year Award Winners and Conferment Ceremony
Presentation of Chief Organizer Award Winners and Conferment Ceremony
Presentation of Best Poster Award Winners for 2019 Japan/Korea Joint Symposium on Pharmaceutical Health Science and Environmental Toxicology and Conferment Ceremony