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プログラム  
Program

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## 特別講演

9月1日（第1日目）14：30～15：20 A会場（70周年記念講堂）  
座長：永沼 章（東北大院薬）

*PL-1* 食の安全性を確保するために  
○佐藤 洋  
（食品安全委員会委員長）

## 教育講演

9月2日（第2日目）9：00～9：40 A会場（70周年記念講堂）  
座長：吉成 浩一（静岡県大薬）

*EL-1* 薬物代謝酵素と毒性発現  
○山添 康  
（内閣府食品安全委員会）

## 学術賞受賞講演

9月2日（第2日目）14：00～14：30 A会場（70周年記念講堂）  
座長：原 俊太郎（昭和大薬）

*ALI* GPx4 とビタミン E により制御される新規細胞死と疾患に関する研究  
○今井 浩孝  
（北里大・薬）

## 部会賞・金原賞受賞講演

9月2日（第2日目）14：30～14：50 A会場（70周年記念講堂）  
座長：成松 鎮雄（南九州大学）

*AL2-1* メタボロミクスを基盤とする解析を通じた化学物質の毒性発現機構の解明  
○武田 知起  
（九州大院・薬）

9月2日（第2日目）14：50～15：10 A会場（70周年記念講堂）  
座長：那須 正夫（大阪大谷大薬）

*AL2-2* 環境細菌の統合的理解に関する衛生微生物学的研究  
○一條 知昭  
（大阪大・院薬）

## 招待講演

9月1日（第1日目）11：00～11：30 A会場（70周年記念講堂）

座長：久下 周佐（東北医薬大薬）

### *IL-1* SIRT1 and diabetic-induced nephrotoxicity

○ Hyung Sik Kim

（School of Pharmacy, Sungkyunkwan University, Serobu-ro, 2066, Suwon, Republic of Korea）

9月1日（第1日目）15：20～16：10 A会場（70周年記念講堂）

座長：永田 清（東北医薬大薬）

### *IL-2* 私のフェノバルビタール物語：核内受容体の情報伝達機構

○根岸 正彦

（米国国立環境衛生研究所）

## 日韓次世代シンポジウム

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9月1日（第1日目）11：30～12：30 A会場（70周年記念講堂）

座長：Jee-Hyeon BAE（Sch. Pharm., Chung-Ang Univ.）

Jin-Yong LEE（Sch. Pharm., Aichi Gakuin Univ.）

**S-1 Peroxiredoxin 2 negatively regulates redox signaling in collagen-stimulated platelets**

Su Bin Wang, Yun Jeong Kong, ○ Tong-Shin Chang

（College of Pharmacy, Ewha Womans University, Seoul, Republic of Korea）

**S-2 Hydrogen peroxide-induced redox regulation of Pyruvate Kinase M2 (PKM2) in cancer cells**

○ Hayato Irokawa, Shin Kato, Satoshi Numasaki, Shota Takahashi, Shusuke Kuge

（Dept. Microbiol., Fac. Pharmaceut. Sci., Tohoku Med. Pham. Univ.）

**S-3 Inhibitory effect of chrysin loaded nanoparticles on the tumor growth and metastasis *in vivo***

○ Joohee Jung

（College of Pharmacy, Duksung Women's University / Innovative Drug Center, Duksung Women's University, Republic of Korea）

**S-4 The tumor suppressor STK11/LKB1 in death receptor-mediated apoptosis**

○ Takuya Noguchi, Atsushi Matsuzawa

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

## 日韓次世代シンポジウム・ポスターセッション

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発表時間：9月1日（第1日目）13：30～14：30 PA会場（ウェリタス2Fロビー）

**PS-1 Occurrence of fibrates and their metabolites in source and drinking water in Shanghai and Zhejiang, China**

○ Akiko Ido<sup>1</sup>, Youhei Hiromori<sup>1,2</sup>, Liping Meng<sup>3</sup>, Haruki Usuda<sup>1</sup>, Min Yang<sup>4</sup>, Jianying Hu<sup>3</sup>, Tsuyoshi Nakanishi<sup>1</sup>, Hisamitsu Nagase<sup>1</sup> (<sup>1</sup>Gifu Pharm. Univ., <sup>2</sup>Fac. Pharm. Sci., Suzuka Univ. of Medical Sci., <sup>3</sup>Peking Univ., <sup>4</sup>Chinese Acad. of Sci.)

**PS-2 Evaluation of nine bioselenocompounds on nutritional availability**

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

## 日韓次世代シンポジウム・ポスターセッション

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- PS-3 Identification of a novel enzyme regulating autophagic flux**  
○ Moon Jung Back, Dae Kyong Kim (Department of Environmental and Health Chemistry, College of Pharmacy, Chung-Ang University; 84 Heukseok-ro, Dongjak-Ku, Seoul 06974, Republic of Korea)
- PS-4 Utility of murine dendritic cell line DC2.4 for *in vitro* assay of skin-sensitization potential**  
○ Erina Shiraishi<sup>1</sup>, Akiko Ido<sup>1</sup>, Youhei Hiromori<sup>1,2</sup>, Kento Tanaka<sup>1</sup>, Tomoki Kimura<sup>3</sup>, Hisamitsu Nagase<sup>1</sup>, Tsuyoshi Nakanishi<sup>1</sup> (<sup>1</sup>Gifu Pharm. Univ., <sup>2</sup>Fac. Pharm. Sci., Suzuka Univ. of Medical Sci., <sup>3</sup>Fac. Sci. Eng., Setsunan Univ.)
- PS-5 Peroxiredoxin 2 negatively regulates redox signaling in collagen-stimulated platelets**  
○ Su Bin Wang, Yun Jeong Kong, Tong-Shin Chang (College of Pharmacy, Ewha Womans University, Seoul, Republic of Korea)
- PS-6 Environmental electrophiles activate redox signaling transduction pathways through covalent modification of sensor proteins**  
○ Yumi Abiko, Yoshito Kumagai (Fac. Med., Univ. Tsukuba)
- PS-7 A dioxin-induced attenuation in the fetal expression of growth hormone: a search for novel factors which imprint the low growth of offspring produced by maternal exposure to dioxin**  
○ Yukiko Hattori<sup>1,2</sup>, Tomoki Takeda<sup>1</sup>, Yuji Ishii<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Kyushu Univ., <sup>2</sup>JSPS Res. Fellow.)
- PS-8 Diclofenac inhibits autophagic flux and sensitizes hepatocarcinoma cells to sorafenib-induced cell death**  
○ Seung-Hwan Jung, Seung-Hyeon Park, Kang-Yo Lee, Byung-Hoon Lee (College of Pharmacy and Research Institute of Pharmaceutical Sciences, Seoul National University, Seoul, Republic of Korea)
- PS-9 Vitamin D3-induced hypercalcemia increases carbon tetrachloride-induced hepatotoxicity through elevated oxidative stress in mice**  
○ Hiroki Yoshioka (Dept. Pharm., Kinjo Gakuin Univ.)

## 日韓次世代シンポジウム・ポスターセッション

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- PS-10** Optimization and determination of the predictability of a newly developed alternative test for the photo-sensitization potential of chemicals using keratinocytic VEGF and IL-8  
○ Beomseon Suh, Chanhee Yu, Young-Jun Shin, Ok-Nam Bae\* (College of Pharmacy Institute of Pharmaceutical Science and Technology, Hanyang University, Ansan, Republic of Korea)
- PS-11** A possible role of NF- $\kappa$ B in the anti-inflammatory effects of activated PXR  
○ Maya Okamura<sup>1</sup>, Taiki Abe<sup>2</sup>, Satoshi Tsuruta<sup>1</sup>, Ryota Shizu<sup>1</sup>, Takuomi Hosaka<sup>1</sup>, Takamitsu Sasaki<sup>1</sup>, Susumu Kodama<sup>2</sup>, Kouichi Yoshinari<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Univ. of Shizuoka, <sup>2</sup>Grad. Sch. Pharmaceut. Sci., Tohoku Univ.)
- PS-12** Molecular mechanisms underlying trans-fatty acid-mediated enhancement of DNA damage-induced cell death  
○ Saki Suzuki, Yusuke Hirata, Ryosuke Matsui, Miki Takahashi, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- PS-13** A synthesized chrysin-derivative attenuates skin inflammation through dual modulation of inflammatory signaling pathways of JAK2/STAT1 and Nrf2/HO-1  
○ Chan-Hee Yu, Beomseon Suh, Young-Jun Shin, Ok-Nam Bae\* (College of Pharmacy Institute of Pharmaceutical Science and Technology, Hanyang University, Ansan, Republic of Korea)
- PS-14** Protective role of TCF3, a transcription factor activated by methylmercury, against methylmercury toxicity  
○ Takashi Toyama, Yanjiao Wang, Akira Naganuma, Gi-Wook Hwang (Grad. Sch. Pharmaceut. Sci., Tohoku Univ.)
- PS-15** Leptin induces aromatase activation via COX-2 up-regulation in breast cancer cells  
○ Sun Woo Jin, Yong An Kim, Gi Ho Lee, Hye Gwang Jeong (College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea)

## 日韓次世代シンポジウム・ポスターセッション

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- PS-16** Puerarin attenuates high glucose-induced lipid accumulation in HepG2 cells via CaMKK/AMPK and SIRT1 signaling pathway  
○ Sun Woo Jin, Thi Hoa Pham, Tuyet Ngan Thai, Hye Gwang Jeong (College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea)
- PS-17** A RING-type E3 ubiquitin ligase TRIM48 positively regulates oxidative stress-induced ASK1 activation and cell death  
○ Keita Nagaoka, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- PS-18** A new therapeutic application of Auranofin, an anti-rheumatic gold compound, by suppressing the NLRP3 inflammasome  
○ Seon Joo Lee, Gabsik Yang, Hye Eun Lee, Joo Young Lee (BK21plus Team, College of Pharmacy, The Catholic University of Korea, Jibongro 43, Bucheon, Republic of Korea)
- PS-19** The role of XRCC6, a tmRT1 binding protein, in activation of tmRT1 by methylmercury  
○ Yi-An Chen<sup>1</sup>, Katsuhiko Osaki<sup>1,2</sup>, Takashi Toyama<sup>1</sup>, Akira Naganuma<sup>1</sup>, Gi-Wook Hwang<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Tohoku Univ., <sup>2</sup>Kohjin Life Science Co., Ltd.)
- PS-20** Altered mRNA and miRNA expression profiles associated with PHMG-phosphate-induced pulmonary toxicity in human alveolar adenocarcinoma (A549) cells  
○ Da Young Shin<sup>1</sup>, Mi Ho Jeong<sup>1</sup>, In Jae Bang<sup>1</sup>, Ji Soo Park<sup>1</sup>, Young Ju Jung<sup>1</sup>, Eun Hye Jang<sup>1</sup>, So Hee Yoo<sup>1</sup>, Ha Ryoung Kim<sup>2</sup>, Kyu Hyuck Chung<sup>1</sup> (<sup>1</sup>School of Pharmacy, Sungkyunkwan University, Suwon, Gyeonggi-do, 16419, Republic of Korea, <sup>2</sup>Department of pharmaceutical engineering, Dongshin University, Naju-si, Jeollanam-do, 58245, Republic of Korea)
- PS-21** Per/polysulfide-mediated protection of protein tyrosine phosphatase 1B by reactive oxygen species derived from 9,10-phenanthrenequinone *in vitro*  
○ Nho Cong Luong<sup>1</sup>, Yumi Abiko<sup>1,2</sup>, Yoshito Kumagai<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Comp. Human Sci., Univ. Tsukuba, <sup>2</sup>Fac. Med., Univ. Tsukuba)
- PS-22** Effect of low-level environmental toxin on neuronal differentiation  
○ Suzuna Go, Manami Hatano, Hisaka Kurita, Masatoshi Inden, Isao Hozumi (Laboratory of Medical Therapeutics and Molecular Therapeutics, Gifu Pharmaceutical University, Japan.)



## 日韓次世代シンポジウム・ポスターセッション

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- PS-23** EP4 agonist CAY10598 induces degradation of HSP90 client proteins via ROS-dependent HSP90 cleavage in colon cancer HCT116 cells  
○ In Gyeong Chae, Seung Mi Choi, Kyung-Soo Chun (College of Pharmacy, Keimyung University, 1095, Dalgubeol-daero, Dalseo-gu, Daegu, Republic of Korea)
- PS-24** CAR utilizes EGF signaling for activation  
○ Ryota Shizu<sup>1,2</sup>, Masahiko Negishi<sup>2</sup>, Kouichi Yoshinari<sup>1</sup> (<sup>1</sup>Sch. Pharmaceut. Sci., Univ. of Shizuoka, <sup>2</sup>RDBL, NIEHS, NIH)
- PS-25** Thymoquinone suppresses migration of renal cancer cells via inhibition of EP2-mediated MMP-9 activity  
○ Geumi Park, Kyung-Soo Chun (College of Pharmacy, Keimyung University, Daegu, South Korea)
- PS-26** Role of YAP in CAR-mediated proliferation of mouse hepatocytes  
○ Yuto Amaike<sup>1</sup>, Taiki Abe<sup>1,2</sup>, Ryota Shizu<sup>1</sup>, Takuomi Hosaka<sup>1</sup>, Takamitsu Sasaki<sup>1</sup>, Atsushi Matsuzawa<sup>2</sup>, Kouichi Yoshinari<sup>1,2</sup> (<sup>1</sup>School of Pharmaceutical Sciences, University of Shizuoka, <sup>2</sup>Graduate School of Pharmaceutical Sciences, Tohoku University)

※ 1日の懇親会にて優秀発表者賞を表彰予定

## フォーラム I：重金属毒性の標的因子とその分子機構

### ～若手女性研究者によるフォーラム～

9月1日（第1日目）9：00～11：00 A会場（70周年記念講堂）

オーガナイザー：佐藤 雅彦（愛知学院大・薬）

座長：藤代 瞳（徳島文理大薬）

阿南 弥寿美（昭和薬大）

**F1-1**      メチル水銀による小脳障害の病理仮説「炎症仮説」における標的分子とシグナル経路

○吉田 映子, 佐々木 優, 金 純子, 鍛冶 利幸

（東京理科大・薬）

**F1-2**      海馬細胞外  $Zn^{2+}$  流入は加齢に伴う認知機能低下に関与する

○玉野 春南

（静岡県大・薬）

**F1-3**      ヒ素毒性と紡錘体チェックポイント

○北 加代子

（帝京大・薬）

**F1-4**      カドミウムによる腎毒性発現の新規分子機構

○徳本 真紀, 李 辰竜, 佐藤 雅彦

（愛知学院大・薬）

## フォーラム II：薬毒物試験法と注解 2017 刊行記念フォーラム：

### 薬学における裁判化学・法中毒学の復古に向けて

9月2日（第2日目）9：40～11：40 C会場（603講義室）

オーガナイザー・座長：小椋 康光（千葉大院薬）

成松 鎮雄（南九州大）

**F2-1**      法医学における薬物分析の現状と課題

○岩瀬 博太郎<sup>1,2</sup>

（<sup>1</sup>千葉大学大学院医学研究院法医学教室, <sup>2</sup>東京大学大学院医学系研究科法医学教室）

**F2-2**      東京都における危険ドラッグの分析－流行の推移や分析上の問題点－

○鈴木 仁

（東京都健康安全研究センター）

**F2-3** 科学捜査で活躍する裁判化学・法中毒学  
○瀬戸 康雄  
(科警研)

**F2-4** 臨床中毒学と薬学  
○藤田 友嗣  
(岩手医大・医)

### フォーラム III：衛生薬学における核内受容体研究の最前線

9月1日（第1日目）16：10～18：10 A会場（70周年記念講堂）

オーガナイザー・座長：吉成 浩一（静岡県大薬）  
中西 剛（岐阜薬科大学）

**F3-1** 転写制御を介した食品成分の抗メタボリックシンドローム作用  
○井上 順  
(東大・農)

**F3-2** 異物受容体 CAR の活性調節機構  
○菅野 裕一郎  
(東邦大・薬)

**F3-3** 飲料水中に存在する核内受容体作動性ハザードとそのリスク  
○中西 剛  
(岐阜薬科大学)

**F3-4** 異物応答性核内受容体による肝細胞増殖制御  
○吉成 浩一  
(静岡県大・薬)

### フォーラム IV：加熱食品中に含まれるアクリルアミドのリスク評価

9月1日（第1日目）16：10～18：10 B会場（602講義室）

オーガナイザー・座長：青木 康展（国立環境研究所）  
広瀬 明彦（国立医薬品食品衛生研究所）

**F4-1** アクリルアミドの有害性評価と曝露量評価  
○青木 康展  
(国立環境研究所、環境リスク・健康研究センター)

**F4-2** 陰膳法によるアクリルアミド曝露量評価  
○河原 純子<sup>1</sup>, 安達 修一<sup>2</sup>, 中島 大介<sup>1</sup>, 柴田 康行<sup>1</sup>  
(<sup>1</sup>国立環境研究所, <sup>2</sup>相模女子大学・栄養科学部)

**F4-3** 加熱による食品中でのアクリルアミド生成  
○吉田 充  
(日本獣医生命科学大学・応用生命科学部)

**F4-4** 健康リスク評価におけるベンチマークドース法  
○広瀬 明彦  
(国立医薬品食品衛生研究所・安全性予測評価部)

## フォーラム V：薬物代謝 0 相から 3 相まで

9月2日 (第2日目) 9:40 ~ 12:00 A 会場 (70周年記念講堂)

オーガナイザー・座長：熊谷 嘉人 (筑波大医)

石井 祐次 (九州大院薬)

**F5-1** アセトアミノフェンおよび類縁体の CYP3A タンパク質分解制御によるその酵素活性への影響  
○佐能 正剛<sup>1,2</sup>, 山頭 征岳<sup>1</sup>, 大月 佑也<sup>2</sup>, 江尻 洋子<sup>3</sup>, 古武 弥一郎<sup>1,2</sup>, 太田 茂<sup>1,2</sup>  
(<sup>1</sup>広島大院・医歯薬保, <sup>2</sup>広島大・薬, <sup>3</sup>株式会社クラレ)

**F5-2** 異物代謝第二相酵素：UDP-グルクロン酸転移酵素・多様性と基質特異性  
○石井 祐次  
(九州大院薬)

**F5-3** 異物解毒における薬物代謝酵素-トランスポーター連携  
○玉井 郁巳  
(金沢大・薬)

**F5-4** フェーズゼロ反応：パースルフィドによる親電子物質の捕獲・不活性化  
○熊谷 嘉人  
(筑波大・医学医療系)

**F5-5** イオウ呼吸とイオウ毒性 (生命進化のイオウパラドックス)：ヒトの新しいエネルギー代謝と解毒代謝経路の発見  
○赤池 孝章<sup>1</sup>, 西村 明<sup>1</sup>, 井田 智章<sup>1</sup>, 松永 哲郎<sup>1</sup>, 守田 匡伸<sup>1</sup>, 本橋 ほづみ<sup>2</sup>  
(<sup>1</sup>東北大院・医・環境保健医学, <sup>2</sup>東北大・加齢医学・遺伝子発現制御)

## フォーラム VI：健康食品の功罪

9月2日（第2日目）15：20～17：20 A会場（70周年記念講堂）

オーガナイザー・座長：永田 清（東北医薬大薬）

渡邊 泰雄（横浜薬大）

### **F6-1 健康食品の消費者購買実態と動向**

○武田 猛

（株式会社グローバルニュートリショングループ）

### **F6-2 健康食品の基礎ならびに臨床医学的検証**

○渡邊 泰雄，都築 繁利，中野 真，速水 耕介，出雲 信夫

（横浜薬科大学・総合健康メディカルセンター）

### **F6-3 健康食品の安全性評価**

○姫田 尚

（（公）中央畜産会、食品安全委員会フェロー）

### **F6-4 薬と健康食品との相互作用**

○永田 清

（東北医科薬科大・薬・環境衛生学）

## 優秀若手研究者賞候補者プレゼンテーション

9月1日（第1日目）9：00～10：00 B会場（602講義室）

座長：永田 清（東北医薬大薬）

- P-149** 細胞質 DNA センサー STING の変異に起因する炎症応答恒常活性化機構の分子メカニズムの解析  
○小川 笑満里<sup>1</sup>, 秋葉 達也<sup>1</sup>, 向井 康治朗<sup>1</sup>, 田口 友彦<sup>2</sup>, 新井 洋由<sup>1,2,3</sup>（<sup>1</sup>東大院・薬・衛生化学, <sup>2</sup>東大院・薬・疾患細胞, <sup>3</sup>AMED-CREST）
- P-004** カーボンブラックナノ粒子の妊娠期吸入曝露により児に誘導されるアストログリアオーシスと新奇環境下における行動変化  
○小野田 淳人<sup>1,2,3</sup>, Karin S Hougaard<sup>4,5</sup>, Ulla B Vogel<sup>4</sup>, 武田 健<sup>2</sup>, 梅澤 雅和<sup>2,6</sup>（<sup>1</sup>東京理大院・薬, <sup>2</sup>東京理大・総研院, <sup>3</sup>学振特別研究員 DC, <sup>4</sup>Nat. Res. Cen. Work. Environ., Denmark, <sup>5</sup>Inst. Pub. Health, Univ. Copen., <sup>6</sup>東京理大・基礎工）
- P-014** メチル水銀の次世代毒性の性差：胎児コルチコステロンとその下流遺伝子の誘導の意義  
○人見 将也<sup>1</sup>, 武田 知起<sup>1</sup>, 服部 友紀子<sup>1,3</sup>, 藤村 成剛<sup>4</sup>, 田中 嘉孝<sup>2</sup>, 石井 祐次<sup>1</sup>（<sup>1</sup>九州大院・薬 1 分子衛生, <sup>2</sup>細胞生物, <sup>3</sup>学振 DC, <sup>4</sup>国立水俣病研）
- P-028** メチル水銀による TNF- $\alpha$  の発現誘導機構  
○金子 千華<sup>1</sup>, 外山 喬士<sup>1</sup>, 深川 隼<sup>1</sup>, 野口 拓也<sup>2</sup>, 松沢 厚<sup>2</sup>, 永沼 章<sup>1</sup>, 黄 基旭<sup>1</sup>（<sup>1</sup>東北大院・薬・生体防御薬学, <sup>2</sup>東北大院・薬・衛生化学）
- P-046** 低分子シード化合物スクリーニングによる NASH 治療薬候補分子の探索  
○長岡 恵多, 平田 祐介, 野口 拓也, 松沢 厚（東北大学・大学院薬学研究科・衛生化学分野）
- P-052** DNA 損傷時におけるトランス脂肪酸特異的な細胞死亢進機構  
○鈴木 沙季, 平田 祐介, 松井 稜祐, 高橋 未来, 野口 拓也, 松沢 厚（東北大学・大学院薬学研究科・衛生化学分野）
- P-067** TGF- $\beta$  シグナルを介した血管内皮細胞メタロチオネインの誘導  
○土田 翼<sup>1</sup>, 藤江 智也<sup>1,3</sup>, 吉田 映子<sup>1</sup>, 藤原 泰之<sup>2</sup>, 山本 千夏<sup>3</sup>, 鍛冶 利幸<sup>1</sup>（<sup>1</sup>東京理科大・薬, <sup>2</sup>東京薬科大・薬, <sup>3</sup>東邦大・薬）
- P-104** 核内受容体 CAR 依存的な肝細胞増殖への YAP の関与  
○天池 優斗<sup>1</sup>, 阿部 太紀<sup>1,2</sup>, 志津 怜太<sup>1</sup>, 保坂 卓臣<sup>1</sup>, 佐々木 崇光<sup>1</sup>, 松沢 厚<sup>2</sup>, 吉成 浩一<sup>1</sup>（<sup>1</sup>静岡県立大学・薬, <sup>2</sup>東北大学大学院・薬）

※1日の懇親会にて優秀若手研究者賞及び新人賞を表彰予定

## 新人賞候補者プレゼンテーション

9月1日（第1日目）10：00～11：00 B会場（602講義室）

座長：木村 朋紀（摂南大・理工）

- P-150** 高血糖状態における新規メイラード反応生成物の化学構造  
○今堀 大輔, 松本 崇宏, 小島 直人, 住居 潤美, 住田 大志, 長谷井 友尋, 山下 正行, 渡辺 徹志（京都薬大）
- P-002** バジルシードによるストロンチウム及びセシウムイオンの吸着能  
○植松 勇伍, 緒方 文彦, 中村 武浩, 川崎 直人（近畿大・薬）
- P-029** メチル水銀投与マウスの脳内での TNF- $\alpha$  発現誘導に関わる責任細胞の同定とその機構解析  
○星 尚志, 外山 喬士, 村上 聡一, 永沼 章, 黄 基旭（東北大・薬）
- P-044** セファロsporin系抗菌薬による細胞内凝集体 ALIS を介した新たな細胞障害・細胞死誘導機構  
○武藤 夏美, 鈴木 碧, 宮川 紗央子, 平田 祐介, 野口 拓也, 松沢 厚（東北大学・大学院薬学研究科・衛生化学分野）
- P-089** Cre-loxP システムを用いた造精機能障害モデルマウスの構築  
○長尾 優汰, 目加田 京子, 中西 剛, 永瀬 久光（岐阜薬大・薬）
- P-092** メチル水銀によるラット末梢神経障害の発症メカニズム  
○荏原 俊介<sup>1</sup>, 巽 啓<sup>1</sup>, 雨宮 達郎<sup>1</sup>, 篠田 陽<sup>1</sup>, 佐々木 優<sup>2</sup>, 吉田 映子<sup>2</sup>, 高橋 勉<sup>1</sup>, 鍛冶 利幸<sup>2</sup>, 藤原 泰之<sup>1</sup>（<sup>1</sup>東京薬大・薬, <sup>2</sup>東京理大・薬）
- P-093** 海馬メタロチオネイン誘導による A $\beta$  誘発性記憶障害の回避  
○橋本 若奈, 鈴木 大貴, 小池 勇太, 玉野 春南, 武田 厚司（静岡県立大・薬）
- P-095** パーキンソン病関連神経毒による p62 核内蓄積の発見とそのメカニズム検討  
○桑原 由佳<sup>1</sup>, 宮良 政嗣<sup>2</sup>, 坂本 修一郎<sup>2</sup>, 石田 慶士<sup>2</sup>, 徳永 航<sup>2</sup>, 古武 弥一郎<sup>1,2</sup>, 太田 茂<sup>1,2</sup>（<sup>1</sup>広島大・薬, <sup>2</sup>広島大院・医歯薬保）

※1日の懇親会にて優秀若手研究者賞及び新人賞を表彰予定

## 一般講演（口頭）セッション 1

### 金属、脳・神経毒性物質

9月1日（第1日目）16：10～16：58 C会場（603講義室）

座長：角 大悟（徳島文理大薬）

藤原泰之（東京薬大薬）

**O1-1** 超微小粒子胎仔期曝露は社会的隔離により誘発される攻撃性を上昇させる  
○横田 理<sup>1</sup>，押尾 茂<sup>1</sup>，武田 健<sup>2</sup>（<sup>1</sup>奥羽大・薬，<sup>2</sup>公立山口東理大）

**O1-2** 新規 Fe-Mg 型ハイドロタルサイトによるタンゲステンの吸着能  
○緒方 文彦，川上 真理奈，中村 武浩，川崎 直人（近畿大・薬）

**O1-3** マンガンの飲水曝露による聴覚系への影響  
○大神 信孝，李 香，押野 玲奈，加藤 昌志（名大・医）

**O1-4** カドミウム腎毒性におけるアポトーシス抑制因子 BIRC3 の役割  
○李 辰竜，徳本 真紀，佐藤 雅彦（愛知学院大・薬）

## 一般講演（口頭）セッション 2

### その他

9月1日（第1日目）16：58～17：46 C会場（603講義室）

座長：杉原 数美（広島国際大薬）

戸田 晶久（第一薬大薬）

**O2-1** メタボリックシンドロームによる DNA メチル化を介した Foxa2 発現抑制と脂肪肝との関連  
○川崎 靖，佐々木 彩香，今村 仁美，高橋 伶歌，村井 誠文，小河 史佳，齋藤 有莉，小泉 友輝，三浦 陽香里，千葉 侑希，米澤 正，杉山 晶規，名取 泰博（岩手医大・薬）

**O2-2** P-150 へ移動

**O2-3** 「いわゆる健康食品」の品質評価と安全性について—崩壊度試験の結果から—  
○櫻井 映子<sup>1</sup>，上田 ゆかり<sup>2</sup>，櫻井 栄一<sup>2</sup>（<sup>1</sup>いわき明星大・薬，<sup>2</sup>徳島文理大・薬）

**O2-4** 錠剤粉碎器 SafeCrush<sup>TM</sup>を使用した時の室内医薬品汚染の低減効果について  
○村橋 毅，鈴木 彩夏，荒井 美帆，木下 成美，樋口 敏幸（日本薬科大学・薬）



## 一般講演（口頭）セッション3

### 細胞応答1

9月2日（第2日目）9：40～10：40 B会場（602講義室）

座長：野口 拓也（東北大院薬）

佐々木 雅人（東北医薬大薬）

#### 03-1 好中球におけるダイナミンを介した粒子状物質の貪食

○吉田 安宏, Wang Duo, 三宅 伸完, 森田 健太郎（産業医大・免疫学・寄生虫学）

#### 03-2 P-149 へ移動

#### 03-3 飽和脂肪酸含有リン脂質による炎症応答の誘導

○大木 悠佑<sup>1</sup>, 神田 麻優香<sup>1</sup>, 嶋中 雄太<sup>1</sup>, 河野 望<sup>1,2</sup>, 新井 洋由<sup>1,3</sup>（<sup>1</sup>東大・院薬・衛生化学, <sup>2</sup>PRIME, AMED, <sup>3</sup>AMED-CREST, AMED）

#### 03-4 FGF19 による非アルコール性脂肪肝炎 (NASH) 改善作用の分子機構

○山田 真佑花<sup>1</sup>, 土田 芽衣<sup>1</sup>, 高橋 未来<sup>1</sup>, 平田 祐介<sup>1</sup>, 宮田 昌明<sup>2</sup>, 吉成 浩一<sup>1,3</sup>, 野口 拓也<sup>1</sup>, 松沢 厚<sup>1</sup>（<sup>1</sup>東北大・院薬, <sup>2</sup>水大校・食品科学, <sup>3</sup>静岡県立大・院薬）

#### 03-5 高度不飽和脂肪酸（PUFA）欠損細胞の表現形解析

○石野 雄己<sup>1</sup>, 斎藤 友理<sup>1</sup>, 向井 康治朗<sup>1</sup>, 田口 友彦<sup>2</sup>, 新井 洋由<sup>1,2,3</sup>（<sup>1</sup>東大院薬・衛生化学, <sup>2</sup>東大院薬・疾患細胞生物学, <sup>3</sup>AMED-CREST）

## 一般講演（口頭）セッション4

### 細胞応答2

9月2日（第2日目）10：40～11：40 B会場（602講義室）

座長：竹田 修三（広島国際大薬）

猪瀬 敦史（東北医薬大薬）

#### 04-1 マクロファージ活性化に及ぼすピタバスタチンの影響

○辻中 海斗, 小池 敦資, 天野 富美夫（大阪薬大・薬・生体防御学）

#### 04-2 分子標的薬ゲフィチニブが誘導する新たな細胞障害亢進機構

○関口 雄斗, 土田 芽衣, 平田 祐介, 野口 拓也, 松沢 厚（東北大学・大学院薬学研究科・衛生化学分野）

- 043 シスプラチンによる急性中毒死について  
○小野坂 敏見, 岡野 伊浩 (神戸学院大学栄養学部)
- 044 Heregulin による AhR を介した HER2 過剰発現乳がん細胞の増殖・遊走機構  
○山下 直哉<sup>1</sup>, 齋藤 菜緒<sup>1</sup>, 趙 帥<sup>1</sup>, 寺井 謙介<sup>2</sup>, 金澤 真作<sup>2</sup>, 蛭田 啓之<sup>2</sup>,  
武城 英明<sup>2</sup>, 根本 清光<sup>1</sup>, 菅野 裕一郎<sup>1</sup> (<sup>1</sup>東邦大・薬, <sup>2</sup>東邦大・佐倉病院)
- 045 繊維型大麻草主成分 cannabidiolic acid (CBDA) による PPAR  $\beta$  を介した  
COX-2 の発現抑制機構  
○鈴木 雅代<sup>1</sup>, 竹田 修三<sup>1</sup>, 岡崎 裕之<sup>2</sup>, 渡辺 和人<sup>2</sup>, 荒牧 弘範<sup>2</sup>, 瀧口 益史<sup>1</sup>  
(<sup>1</sup>広島国際大・薬, <sup>2</sup>第一薬大)

## 一般講演 (口頭) セッション 5

### 生化学・酸化ストレス

9月2日 (第2日目) 15:20 ~ 16:20 B会場 (602講義室)

座長: 中西 剛 (岐阜薬大)

北 加代子 (帝京大薬)

- 05-1 ケトン体利用酵素のノックアウトマウスの解析  
○長谷川 晋也<sup>1</sup>, 山崎 正博<sup>1</sup>, 今井 正彦<sup>1</sup>, 福井 哲也<sup>2</sup>, 高橋 典子<sup>1</sup> (<sup>1</sup>星薬大・薬, <sup>2</sup>立命館大・薬)
- 05-2 脂肪肝形成に関与する *Fsp27* 遺伝子のインスリンによる発現制御  
○藍原 大甫<sup>1</sup>, 松末 公彦<sup>1</sup>, 松尾 康平<sup>1</sup>, 瀧口 総一<sup>2</sup>, 山野 茂<sup>1</sup> (<sup>1</sup>福岡大・薬,  
<sup>2</sup>九州がんセンター臨床研究部)
- 05-3 脂質酸化依存的細胞死における Lipo-3 遺伝子の機能解析  
○岡 佳保里, 水澤 佳月, 福田 理恵, 長久 萌, 松岡 正城, 今井 浩孝 (北里大・薬)
- 05-4 SMS2 過剰発現細胞における脂質過酸化依存的新規細胞死抑制機構の解析  
○熊谷 剛<sup>1</sup>, 大矢 梨里香<sup>1</sup>, 平澤 星蘭<sup>1</sup>, 部坂 由衣<sup>1</sup>, 坂本 太郎<sup>1</sup>, 馬場 直道<sup>2</sup>,  
今井 浩孝<sup>1</sup> (<sup>1</sup>北里大・薬・衛生化学, <sup>2</sup>備前化成株式会社)
- 05-5 抗がん剤感受性における過酸化水素センサー因子 BAG-1 システイン残基の機能解析  
○猪瀬 敦史, 土屋 沙恵, 武田 洸樹, 色川 隼人, 久下 周佐 (東北医薬大・薬・微生物)

## 一般講演（口頭）セッション6

### 免疫毒性・感染症、その他

9月2日（第2日目）16：20～17：20 B会場（602講義室）

座長：奥野 智史（摂南大薬）

神野 透人（名城大薬）

- 06-1** ビオチニル化ペプチドのアナフィラキシー反応に対する抑制効果とそのメカニズム  
○佐藤 陽<sup>1</sup>, 蝦名 敬一<sup>1,2</sup> (<sup>1</sup>いわき明星大・薬, <sup>2</sup>いわき明星大院・理工)
- 06-2** 胎仔期 LPS 曝露による出生仔免疫系への影響  
○吉田 成一<sup>1</sup>, 村木 直美<sup>2</sup>, 伊藤 剛<sup>2</sup>, 嵐谷 奎一<sup>3</sup>, 市瀬 孝道<sup>1</sup> (<sup>1</sup>大分県看科大, <sup>2</sup>日本自動車研究所, <sup>3</sup>産業医大)
- 06-3** マウス接触性過敏反応における脾臓中 T 細胞ポピュレーションおよびサイトカイン発現に及ぼす酸化オリブ油の影響  
○荻野 泰史, 山田 真吾, 岡田 雅史, 荒川 友博, 奥野 智史, 上野 仁 (摂南大・薬)
- 06-4** 病原糸状菌 *Aspergillus fumigatus* が持つ細胞壁ガラクトフラノース糖鎖の構造制御と免疫回避におよぼす役割の解明  
○田中 大<sup>1</sup>, 岡 拓二<sup>2</sup>, 伊藤 文恵<sup>1</sup>, 佐々木 雅人<sup>1</sup>, 柴田 信之<sup>1</sup> (<sup>1</sup>東北医薬・薬, <sup>2</sup>崇城大・応用微生物)
- 06-5** ヒトにおける 4-*tert*-オクチルフェノールのグルクロン酸抱合反応に関与する UGT 分子種とその役割  
○磯部 隆史<sup>1</sup>, 大河原 晋<sup>1</sup>, 香川(田中) 聡子<sup>1</sup>, 神野 透人<sup>2</sup>, 埴岡 伸光<sup>1</sup> (<sup>1</sup>横浜薬大・薬, <sup>2</sup>名城大・薬)

## 一般講演（ポスター）

奇数番号：9月1日（第1日目）13：30～14：30 PB会場（ウェリタス1Fアトリウム）

偶数番号：9月2日（第2日目）13：00～14：00 PB会場（ウェリタス1Fアトリウム）

## 環境汚染物質

- P-001** Seasonal Fluctuation of the Concentrations of Endotoxin, Protein and Ionic Substances in Outdoor Air and their Effect on Asthmatic Patients  
○ Mohammad Shahriar Khan<sup>1</sup>, Nami Furukawa<sup>1</sup>, Yuuki Kubo<sup>1</sup>, Yusuke Nakaoji<sup>1</sup>, Yumi Kawase<sup>1</sup>, Tomohiro Hasei<sup>1</sup>, Takahiro Matsumoto<sup>1</sup>, Yoshitaka Yano<sup>1</sup>, Yuya Deguchi<sup>2</sup>, Hiroaki Nagaoka<sup>2</sup>, Makoto Miura<sup>3</sup>, Yukio Nagasaka<sup>3</sup>, Nobuyuki Yamagishi<sup>4</sup>, Tetsushi Watanabe<sup>1</sup> (<sup>1</sup>Kyoto Pharm. Univ., <sup>2</sup>Fac. Pharm. Sci., Nagasaki Int. Univ., <sup>3</sup>Rakuwakai Otowa Hospital, <sup>4</sup>Fac. Pharm. Sci., Setsunan. Univ.)
- P-002** バジルシードによるストロンチウム及びセシウムイオンの吸着能  
○植松 勇伍, 緒方 文彦, 中村 武浩, 川崎 直人 (近畿大・薬)
- P-003** PM2.5の炎症反応と肺のアレルギー炎症増悪における銅の関与  
○市瀬 孝道, 吉田 成一 (大分看科大・看)
- P-004** カーボンブラックナノ粒子の妊娠期吸入曝露により児に誘導されるアストログリアオーシスと新奇環境下における行動変化  
○小野田 淳人<sup>1,2,3</sup>, Karin S Hougaard<sup>4,5</sup>, Ulla B Vogel<sup>4</sup>, 武田 健<sup>2</sup>, 梅澤 雅和<sup>2,6</sup> (<sup>1</sup>東京理大院・薬, <sup>2</sup>東京理大・総研院, <sup>3</sup>学振特別研究員 DC, <sup>4</sup>Nat. Res. Cen. Work. Environ., Denmark, <sup>5</sup>Inst. Pub. Health, Univ. Copen., <sup>6</sup>東京理大・基礎工)
- P-005** 臭化難燃剤 TBBP-A が培養脂肪細胞のケトン体利用経路に対して与える影響の検討  
○山崎 正博, 松本 莉奈, 宮脇 祐太, 守屋 俊治, 八柄 雅子, 松林 実歩子, 長谷川 晋也, 高橋 典子 (星薬大・薬)
- P-006** BEAS-2B 細胞におけるイソチアゾリノン系抗菌剤による炎症性メディエーター産生  
○大河原 晋<sup>1</sup>, 中村 恵理子<sup>1</sup>, 磯部 隆史<sup>1</sup>, 埴岡 伸光<sup>1</sup>, 神野 透人<sup>2</sup>, 香川(田中) 聡子<sup>1</sup> (<sup>1</sup>横浜薬大・薬, <sup>2</sup>名城大・薬)
- P-007** 多環芳香族炭化水素キノン類による大気粉塵の活性酸素種産生への寄与評価  
○鳥羽 陽<sup>1</sup>, 森井 彩香<sup>1</sup>, 寺村 優希<sup>1</sup>, 本間 千春<sup>1</sup>, 唐 寧<sup>1,2</sup>, 早川 和一<sup>2</sup>, 鈴木 亮<sup>1</sup> (<sup>1</sup>金沢大・医薬保, <sup>2</sup>金沢大・環日本海域環境研究セ)

**P-008** タバコ煙のセカンドハンドスモークとサードハンドスモークのにおいに関する研究

○佐藤 博<sup>1</sup>, 栗山 桃花<sup>1</sup>, 前田 佐紀<sup>1</sup>, 大内田 直子<sup>1</sup>, 馬場 華奈子<sup>1</sup>, 相田 美和<sup>1</sup>, 野口 美由貴<sup>2</sup>, 関根 嘉香<sup>3</sup>, 松原 英隆<sup>4</sup>, 嵐谷 奎一<sup>5</sup> (<sup>1</sup>長崎国際大学・薬, <sup>2</sup>成蹊大学, <sup>3</sup>東海大学, <sup>4</sup>チューケン生活環境研究所, <sup>5</sup>産業医科大学)

**P-009** 魚の大きさと魚中メチル水銀及び多価不飽和脂肪酸との関係

○岩井 美幸<sup>1</sup>, 仲井 邦彦<sup>2</sup>, 中山 祥嗣<sup>1</sup>, 佐藤 洋<sup>2</sup> (<sup>1</sup>国立環境研究所, <sup>2</sup>東北大・医)

**P-010** 亜ヒ酸毒性発現における転写因子 WT1 の関与

○田中 裕士, 中野 毅, 高橋 勉, 篠田 陽, 藤原 泰之 (東京薬大・薬)

**P-011** 塩素消毒処理による医薬品および生活関連化学物質の毒性変動調査

國澤 和憲<sup>1</sup>, 岡田 達司<sup>1</sup>, 堂脇 美緒<sup>1</sup>, 井上 沙也香<sup>1</sup>, 清水 良<sup>1</sup>, 北村 繁幸<sup>2</sup>, 太田 茂<sup>3</sup>, ○杉原 数美<sup>1</sup> (<sup>1</sup>広島国際大・薬, <sup>2</sup>日本薬大, <sup>3</sup>広島大院・医歯薬保)

## 金 属

**P-012** アルカリ水熱処理により創製したフライアッシュ由来ゼオライトへの鉛イオン吸着能

○小林 悠平, 緒方 文彦, 中村 武浩, 永橋 瑛梨, 川崎 直人 (近畿大・薬)

**P-013** フェノール性の天然高分子化合物による亜鉛の吸着能

○永橋 瑛梨, 緒方 文彦, 中村 武浩, 小林 悠平, 川崎 直人 (近畿大・薬)

**P-014** メチル水銀の次世代毒性の性差：胎児コルチコステロンとその下流遺伝子の誘導の意義

○人見 将也<sup>1</sup>, 武田 知起<sup>1</sup>, 服部 友紀子<sup>1,3</sup>, 藤村 成剛<sup>4</sup>, 田中 嘉孝<sup>2</sup>, 石井 祐次<sup>1</sup> (<sup>1</sup>九州大院・薬 1 分子衛生, <sup>2</sup>細胞生物, <sup>3</sup>学振 DC, <sup>4</sup>国立水俣病研)

**P-015** 血管内皮細胞の増殖を強力に促進する亜鉛錯体

○中村 武浩<sup>1,2</sup>, 吉田 映子<sup>2</sup>, 滝田 良<sup>3</sup>, 緒方 文彦<sup>1</sup>, 川崎 直人<sup>1</sup>, 内山 真伸<sup>3</sup>, 鍛冶 利幸<sup>2</sup> (<sup>1</sup>近畿大・薬, <sup>2</sup>理科大・薬, <sup>3</sup>東大院・薬)

**P-016** 鉛による血管内皮細胞増殖の阻害に関与するヘパラン硫酸プロテオグリカンの大型分子種パルカンの発現抑制機構

○熊谷 玲衣奈<sup>1</sup>, 原 崇人<sup>1,3</sup>, 吉田 映子<sup>1</sup>, 藤原 泰之<sup>2</sup>, 山本 千夏<sup>3</sup>, 鍛冶 利幸<sup>1</sup> (<sup>1</sup>東京理大・薬, <sup>2</sup>東京薬大・薬, <sup>3</sup>東邦大・薬)

**P-017** ジチオカルバメート銅錯体 Cu10 による血管内皮細胞のシンデカン-4 発現誘導

○立石 紘子<sup>1</sup>, 原 崇人<sup>1,2</sup>, 藤江 智也<sup>1,2</sup>, 吉田 映子<sup>1</sup>, 山本 千夏<sup>2</sup>, 中 寛史<sup>3</sup>, 鍛冶 利幸<sup>1</sup> (<sup>1</sup>東京理大・薬, <sup>2</sup>東邦大・薬, <sup>3</sup>名大・物国セ)

- P-018** 投与経路によるバイオセレン化合物の動態の差異とセレン源としての栄養学的評価  
○高橋 一聡, 鈴木 紀行, 小椋 康光 (千葉大院・薬)
- P-019** トリプトチルスズによるエピジェネティックな核呼吸因子-1 発現減少メカニズムの解明  
○花岡 早紀<sup>1</sup>, 石田 慶士<sup>2</sup>, 田中 早紀<sup>2</sup>, 古武 弥一郎<sup>1,2</sup>, 太田 茂<sup>1,2</sup> (<sup>1</sup>広島大・薬, <sup>2</sup>広島大院・医歯薬保)
- P-020** カドミウムによる近位尿細管再吸収障害機構の *in vitro* 解析  
○大寺 信輝, 山本 葉月, 藤代 瞳, 姫野 誠一郎 (徳島文理大・薬)
- P-021** CSE 欠損による親電子ストレスに対する感受性増強と CSE 高発現による還元ストレスに対する生体応答  
○秋山 雅博<sup>1</sup>, 蕨 栄治<sup>1</sup>, 鶴木 隆光<sup>1</sup>, 新開 泰弘<sup>1</sup>, 赤池 孝章<sup>2</sup>, 熊谷 嘉人<sup>1</sup> (<sup>1</sup>筑波大・医学医療系, <sup>2</sup>東北大院・医学系)
- P-022** 培養細胞を用いたカツオだしのセレン供給源としての評価  
○丸山 洋子<sup>1</sup>, 吉田 さくら<sup>1</sup>, 原武 衛<sup>2</sup>, 淵上 剛志<sup>1</sup>, 中山 守雄<sup>1</sup> (<sup>1</sup>長崎大院・医歯薬, <sup>2</sup>崇城大・薬)
- P-023** ガザミ (ワタリガニ) 由来セレンの分析  
○泊 優花<sup>1</sup>, 吉田 さくら<sup>2</sup>, 岩高 美帆<sup>2</sup>, 古賀 香織<sup>1</sup>, 原武 衛<sup>3</sup>, 淵上 剛志<sup>2</sup>, 中山 守雄<sup>2</sup> (<sup>1</sup>長崎大・薬, <sup>2</sup>長崎大院・医歯薬, <sup>3</sup>崇城大・薬)
- P-024** 亜ヒ酸は c-Cbl 依存的な EGFR 分解システムを抑制する  
○角 大悟, 佐藤 由実, 姫野 誠一郎 (徳島文理大・薬)
- P-025** 質量分析法に基づくヒ素脂質の代謝および毒性機構の解明 第2報  
～ヒ素脂質経口投与後のマウスにおけるヒ素の分布と排泄～  
○小林 弥生<sup>1</sup>, 鈴木 紀行<sup>2</sup>, 小椋 康光<sup>2</sup>, 平野 靖史郎<sup>1</sup> (<sup>1</sup>国環研・環境リスク・健康, <sup>2</sup>千葉大院・薬)
- P-026** 経口金製剤オーラノフィンの抗炎症作用機序  
○山下 正道 (日本大・生物資源)
- P-027** 国産及び外国産たばこ銘柄のたばこ葉の金属分析  
○稲葉 洋平, 内山 茂久, 櫻田 尚樹 (国立保健医療科学院・生活環境研究部)
- P-028** メチル水銀による TNF- $\alpha$  の発現誘導機構  
○金子 千華<sup>1</sup>, 外山 喬士<sup>1</sup>, 深川 隼<sup>1</sup>, 野口 拓也<sup>2</sup>, 松沢 厚<sup>2</sup>, 永沼 章<sup>1</sup>, 黄 基旭<sup>1</sup> (<sup>1</sup>東北大院・薬・生体防御薬学, <sup>2</sup>東北大院・薬・衛生化学)

- P-029** メチル水銀投与マウスの脳内での TNF- $\alpha$  発現誘導に関わる責任細胞の同定とその機構解析  
○星 尚志, 外山 喬士, 村上 聡一, 永沼 章, 黄 基旭 (東北大・薬)
- P-030** メチル水銀毒性増強に関わる転写因子 tmRT1 と結合する蛋白質の同定  
○富樫 佑太<sup>1</sup>, 大崎 勝弘<sup>1,2</sup>, 陳 奕安<sup>1</sup>, 外山 喬士<sup>1</sup>, 永沼 章<sup>1</sup>, 黄 基旭<sup>1</sup> (<sup>1</sup>東北大院・薬, <sup>2</sup>興人ライフサイエンス)
- P-031** 活性イオウ分子はカドミウムの不活性化を介して生体応答および肝毒性の惹起を負に制御する  
○新開 泰弘<sup>1</sup>, 秋山 雅博<sup>1</sup>, 鶴木 隆光<sup>1</sup>, 石井 功<sup>2</sup>, 熊谷 嘉人<sup>1</sup> (<sup>1</sup>筑波大・医, <sup>2</sup>昭和薬科大・薬)
- P-032** 植物テルル代謝物を投与したラットにおけるテルルの体内動態  
○阿南 弥寿美<sup>1</sup>, 井上 成紀<sup>1</sup>, 飛弾野 将人<sup>1</sup>, 石井 功<sup>1</sup>, 小椋 康光<sup>2</sup> (<sup>1</sup>昭和薬大・薬, <sup>2</sup>千葉大院・薬)
- P-033** ジチオカルバメート錯体による血管内皮細胞選択的なメタロチオネイン発現の誘導  
○藤江 智也<sup>1</sup>, 土田 あずさ<sup>1</sup>, 中 寛史<sup>2</sup>, 鍛冶 利幸<sup>3</sup>, 山本 千夏<sup>1</sup> (<sup>1</sup>東邦大・薬, <sup>2</sup>名大・物国セ, <sup>3</sup>東京理大・薬)
- P-034** 血管平滑筋細胞においてパーシカンのコンドロイチン硫酸糖鎖を選択的に短縮する亜鉛錯体  
○池田 敦也<sup>1</sup>, 藤江 智也<sup>1</sup>, 原 崇人<sup>1</sup>, 中村 武浩<sup>2</sup>, 鍛冶 利幸<sup>3</sup>, 山本 千夏<sup>1</sup> (<sup>1</sup>東邦大・薬, <sup>2</sup>近畿大・薬, <sup>3</sup>東京理大・薬)
- P-035** 培養細胞を用いた金属の細胞毒性に関する基礎的検討  
○小林 淳<sup>1</sup>, 池田 啓一<sup>2</sup>, 杉山 英男<sup>3</sup>, 望月 真理子<sup>1</sup> (<sup>1</sup>日獣大・獣医, <sup>2</sup>北陸大・薬, <sup>3</sup>松本大院・健康科学)

## 健康食品

- P-036** レモン (*Citrus limon*) 果皮からの抗変異原性成分の探索研究  
○松本 崇宏, 高橋 一輝, 中野 結華, 金山 堇玲, 吉備 万純, 井上 枝里子, 長谷井 友尋, 渡辺 徹志 (京都薬大)
- P-037** 市販飲料水中の溶存水素濃度の比較 (その2)  
○木村 敏行, 西村 香奈, 小川 紗知, 佐藤 安訓 (北陸大・薬)
- P-038** 肝臓の n-3/n-6 高価不飽和脂肪酸のシフトは FXR シグナル欠損に起因する肝肥大と肝機能障害を軽減させる  
○宮田 昌明, 新野 耕平, 木下 智貴, 杉浦 義正 (水大校・食品科学)

**P-039** CYP 遺伝子発現作用に及ぼす健康食品の影響  
○渡邊 夢実<sup>1</sup>, 熊谷 健<sup>1</sup>, 佐々木 崇光<sup>2</sup>, 永田 清<sup>1</sup> (<sup>1</sup>東北医薬大・薬, <sup>2</sup>静岡県大・薬)

**P-040** Breast cancer resistance protein(BCRP) 輸送系に及ぼす Quercetin 及び類縁フラボノイドの影響  
○花田 真梨子, 藤本 紘浩, 田中 浩貴, 上敷領 淳, 瀬尾 誠, 杉原 成美 (福山大学・薬)

## 食品と農薬

**P-041** アスパルテーム及びその分解物の安定性に与える pH の影響について  
○出口 雄也, 山口 直夏, 山崎 綾香, 岸 智裕, 長岡 (浜野) 恵, 長岡 寛明 (長崎国際大・薬)

## 分析法

**P-042** カテキン類蛍光誘導体化反応を用いた各種茶浸出液のカテキン類濃度の分析  
○迎 菜穂子, 大坪 駿介, 岸 智裕, 出口 雄也, 長岡 恵, 長岡 寛明 (長崎国際大・薬)

## 細胞応答

**P-043** グアニンヌクレオチド交換因子 FGD1 による N-カドヘリン糖鎖修飾変換と細胞間接着制御  
○若狭 大樹, 藤原 俊亮, 大嶋 利之, 早川 磨紀男 (東京薬大・薬)

**P-044** セファロスポリン系抗菌薬による細胞内凝集体 ALIS を介した新たな細胞障害・細胞死誘導機構  
○武藤 夏美, 鈴木 碧, 宮川 紗央子, 平田 祐介, 野口 拓也, 松沢 厚 (東北大学・大学院薬学研究科・衛生化学分野)

**P-045** ストレス応答キナーゼ ASK1 を介した免疫応答に対するトランス脂肪酸特異的作用機構の解明  
○平田 祐介, 高橋 未来, 工藤 勇気, 野口 拓也, 松沢 厚 (東北大学・大学院薬学研究科・衛生化学分野)

**P-046** 低分子シード化合物スクリーニングによる NASH 治療薬候補分子の探索  
○長岡 恵多, 平田 祐介, 野口 拓也, 松沢 厚 (東北大学・大学院薬学研究科・衛生化学分野)

**P-047** Biochanin A による核内受容体 ROR  $\gamma$  活性化機構の解析  
○室本 竜太<sup>1</sup>, 高橋 美妃<sup>1</sup>, 小島 弘幸<sup>2</sup>, 武内 伸治<sup>2</sup>, 松田 正<sup>1</sup> (<sup>1</sup>北海道大・薬, <sup>2</sup>北海道立衛生研究所)



- P-048** マクロファージ活性化に及ぼす重炭酸ナトリウム濃度の影響  
○川上 智也, 小池 敦資, 天野 富美夫 (大阪薬大・薬・生体防御学)
- P-049** 培養ヒト冠動脈血管内皮細胞の線溶活性に対するグルタチオン保護金クラスターの作用  
○許 有希<sup>1</sup>, 吉田 映子<sup>1</sup>, 根岸 雄一<sup>2</sup>, 鍛冶 利幸<sup>1</sup> (<sup>1</sup>東京理大・薬, <sup>2</sup>東京理大・理)
- P-050** 培地中のカルシウム濃度に依存して、表皮角化細胞の p53 経路を介したストレス応答が抑制される  
○森 雄太郎, 千田 裕子, 服部 研之, 石井 一行 (明治薬科大・薬)
- P-051** 二酸化チタンのナノ粒子の細胞への取り込みは結晶形により異なり、結晶形による中皮腫細胞への毒性の違いの要因となる  
○吉村 悦子, 千田 祐子, 服部 研之, 中舘 和彦, 小笠原 裕樹, 石井 一行 (明治薬科大・薬)
- P-052** DNA 損傷時におけるトランス脂肪酸特異的な細胞死亢進機構  
○鈴木 沙季, 平田 祐介, 松井 稜祐, 高橋 未来, 野口 拓也, 松沢 厚 (東北大学・大学院薬学研究科・衛生化学分野)
- P-053** 作用機序の異なる 2 種類のアゴニストによるヒト侵害受容器 TRPA1 の相乗的活性化  
○前川 梨沙<sup>1</sup>, 青木 明<sup>1</sup>, 岡本 誉士典<sup>1</sup>, 植田 康次<sup>1</sup>, 大河原 晋<sup>2</sup>, 埴岡 伸光<sup>2</sup>, 香川 (田中) 聡子<sup>2</sup>, 神野 透人<sup>1</sup> (<sup>1</sup>名城大・薬, <sup>2</sup>横浜薬大)
- P-054** 発達期の性ホルモン合成系および性成熟における芳香族炭化水素受容体の意義  
○武田 知起<sup>1</sup>, 中村 有沙<sup>1</sup>, 服部 友紀子<sup>1,2</sup>, 福満 春希<sup>1</sup>, 石井 祐次<sup>1</sup> (<sup>1</sup>九州大院・薬, <sup>2</sup>学振 DC)
- P-055** 核内受容体 CAR の細胞内局在調節機構  
○宇田川 有咲, 丸茂 昂平, 野山 裕可, 木川 奈海, 根本 清光, 菅野 裕一朗 (東邦大・薬)
- P-056** 核内受容体 PXR の抗炎症作用における NF- $\kappa$ B の寄与の解析  
○岡村 麻絢<sup>1</sup>, 阿部 太紀<sup>2</sup>, 鶴田 聡志<sup>1</sup>, 志津 怜太<sup>1</sup>, 保坂 卓臣<sup>1</sup>, 佐々木 崇光<sup>1</sup>, 児玉 進<sup>2</sup>, 吉成 浩一<sup>1</sup> (<sup>1</sup>静岡県立大・薬, <sup>2</sup>東北大院・薬)
- P-057** ポリスルフィド Na<sub>2</sub>S<sub>4</sub> はイオウ付加体形成を通じて 1,4-NQ による PTEN/Akt/CREB シグナルの活性化と細胞毒性を抑制する  
○鶴木 隆光<sup>1</sup>, 安孫子 ユミ<sup>1</sup>, 新開 泰弘<sup>1</sup>, 広瀬 玲子<sup>1</sup>, 上原 孝<sup>2</sup>, 熊谷 嘉人<sup>1</sup> (<sup>1</sup>筑波大・医学医療系, <sup>2</sup>岡山大・院医歯薬)

- P-058** スプライシングレポーターを用いた PKM スプライシングスイッチの生理的意義の解明  
○大出 寧香, 倉 はるか, 鈴木 健二, 正木 聡 (立命館大・薬)
- P-059** BDNF 受容体下流の情報伝達系に対する Necdin の制御  
○宮下 恵里花, 中村 鴻介, 正木 聡, 鈴木 健二 (立命館大・薬)
- P-060** 膜タンパク質である CRIM1 の減少は、E-cadherin の低下や MMP の増加を引き起こし、腎がん細胞の遊走や浸潤能を亢進する  
○杉山 晶規<sup>1</sup>, 小笠原 信敬<sup>1</sup>, 工藤 碧美<sup>1</sup>, 佐藤 真咲<sup>1</sup>, 川崎 靖<sup>1</sup>, 米澤 正<sup>1</sup>, 宮城 洋平<sup>2</sup>, 高橋 悟<sup>3</sup>, 名取 泰博<sup>1</sup> (<sup>1</sup>岩手医大・薬, <sup>2</sup>神奈川がんセ・臨床研, <sup>3</sup>武庫川女大・薬)
- P-061** TGF- $\beta$  1 誘導性 EMT における低分子量 G タンパク質 RhoE の役割と機能解析  
○駒田 莉奈<sup>1</sup>, 長田 茂宏<sup>1</sup>, 白根 道子<sup>1</sup>, 今川 正良<sup>1</sup>, 西塚 誠<sup>1</sup> (名市大・薬)
- P-062** アミロイド $\beta$  曝露によるヒトアストロサイトーマ U-251MG 細胞の酸化ストレスとその防御  
○奥野 智史, 戎 真実, 早瀬 大輝, 奥平 直毅, 赤井 洋介, 村野 晃一, 荻野 泰史, 荒川 友博, 上野 仁 (摂南大薬)
- P-063** 選択的アンドロゲン受容体調節薬 (17 $\alpha$ ,20E)-17,20-[(1-Methoxyethylidene) bis(oxy)]-3-oxo-19-norpregna- 4,20-diene-21-carboxylic Acid Methyl Ester (YK11) の Follistatin 発現誘導機構の解明  
○谷津 智史, 日下部 太一, 加藤 恵介, 根本 清光, 菅野 裕一郎 (東邦大・薬)
- P-064** セレノメチオニンによる肥満細胞のアレルギー応答抑制作用  
○荒川 友博, 大久保 春輝, 荻野 泰史, 奥野 智史, 上野 仁 (摂南大・薬)
- P-065** リガンドによる AhR の転写活性化能の調節機構  
○齋藤 菜緒, 山下 直哉, 根本 清光, 菅野 裕一郎 (東邦大薬)
- P-066** FGF-2 による内皮細胞シンデカン-4 の細胞密度依存的な発現誘導  
○原 崇人<sup>1,2</sup>, 薮下 栞<sup>1</sup>, 吉田 映子<sup>1</sup>, 山本 千夏<sup>2</sup>, 鍛冶 利幸<sup>1</sup> (<sup>1</sup>東京理大・薬, <sup>2</sup>東邦大・薬)
- P-067** TGF- $\beta$  シグナルを介した血管内皮細胞メタロチオネインの誘導  
○土田 翼<sup>1</sup>, 藤江 智也<sup>1,3</sup>, 吉田 映子<sup>1</sup>, 藤原 泰之<sup>2</sup>, 山本 千夏<sup>3</sup>, 鍛冶 利幸<sup>1</sup> (<sup>1</sup>東京理科大・薬, <sup>2</sup>東京薬科大・薬, <sup>3</sup>東邦大・薬)

**P-068** 繊維型大麻草主成分 cannabidiolic acid (CBDA) によるがん細胞 migration の抑制：アクチンストレスファイバーの形成に関連したメカニズム  
○岡崎 裕之<sup>1</sup>, 竹田 修三<sup>2</sup>, 鈴木 雅代<sup>2</sup>, 渡辺 和人<sup>1</sup>, 瀧口 益史<sup>2</sup>, 荒牧 弘範<sup>1</sup>  
(<sup>1</sup>第一薬大, <sup>2</sup>広島国際大・薬)

**P-149** 細胞質 DNA センサー STING の変異に起因する炎症応答恒常活性化機構の分子メカニズムの解析  
○小川 笑満里<sup>1</sup>, 秋葉 達也<sup>1</sup>, 向井 康治朗<sup>1</sup>, 田口 友彦<sup>2</sup>, 新井 洋由<sup>1,2,3</sup> (<sup>1</sup>東大院・薬・衛生化学, <sup>2</sup>東大院・薬・疾患細胞, <sup>3</sup>AMED-CREST)

## 酸化ストレス

**P-069** 糖化反応中間体 dihydropyrazine による炎症反応への影響  
○江崎 円香<sup>1</sup>, 石田 卓巳<sup>1</sup>, 武知 進士<sup>1</sup>, 伊藤 俊治<sup>2</sup>, 吉田 雅紀<sup>3</sup> (<sup>1</sup>崇城大院・薬, <sup>2</sup>関西医療大院・保健医療, <sup>3</sup>長浜ハイテ大・ハイサイエンス)

**P-070** 9,10-フェナントラキノンにより生じた活性酸素種によるプロテインチロシンフォスファターゼ活性阻害に対するパースルフィドおよびポリスルフィドの保護効果  
○ルオン コンニョー<sup>1</sup>, 安孫子 ユミ<sup>1,2</sup>, 熊谷 嘉人<sup>1,2</sup> (<sup>1</sup>筑波大院・人間総合科学研究科, <sup>2</sup>筑波大・医学医療系)

**P-071** アセトアミノフェンと四塩化炭素の併用による複合毒性の影響  
○深谷 栞<sup>1</sup>, 吉岡 弘毅<sup>1</sup>, 市丸 嘉<sup>1</sup>, 三浦 伸彦<sup>2</sup>, 永津 明人<sup>1</sup>, 野々垣 常正<sup>1</sup>  
(<sup>1</sup>金城学院大・薬, <sup>2</sup>労働安全衛生総合研究所)

**P-072** トリペプチドである Gly-His-Lys の酸化ストレス抑制作用について  
○伊藤 悠貴, 佐久間 覚, 藤本 陽子 (大阪薬大・薬)

**P-073** 近位尿細管 S1, S2, S3 領域の活性酸素種感受性の差異  
○藤代 瞳, 山上 りえ, 姫野 誠一郎 (徳島文理大・薬)

**P-074** アミロイドβ産生細胞における抗酸化因子としてのセレンの機能評価  
○門富 竜之介<sup>1</sup>, 吉田 さくら<sup>1</sup>, 岩田 修永<sup>1</sup>, 浅井 将<sup>1</sup>, 淵上 剛志<sup>1</sup>, 原武 衛<sup>2</sup>, 丸山 敬<sup>3</sup>, 中山 守雄<sup>1</sup> (<sup>1</sup>長崎大院・医歯薬, <sup>2</sup>崇城大・薬, <sup>3</sup>埼玉医大・医)

**P-075** 核小体型グルタチオンペルオキシダーゼ 4 高発現による細胞増殖抑制機構の解析  
○池田 隼人, 中山 俊介, 坂本 太郎, 今井 浩孝 (北里大・薬)

**P-076** 環境中電子受容体とパースルフィドとの反応で生じるパーチルラジカル  
○安孫子 ユミ<sup>1,2</sup>, 中井 由実<sup>3</sup>, Luong Cong Nho<sup>2</sup>, 熊谷 嘉人<sup>1,2</sup> (<sup>1</sup>筑波大・医学医療系, <sup>2</sup>筑波大院・人間総合科学研究科, <sup>3</sup>JEOL RESONANCE)

**P-077** 解糖系律速酵素ピルビン酸キナーゼのレドックス感受性システイン残基の同定  
○沼崎 賢史, 色川 隼人, 猪瀬 敦史, 久下 周佐 (東北医薬・薬・微生物学)

**P-078** ラット悪性髄膜腫細胞におけるレザフィリンを用いた光線力学療法による酸化ストレス防御因子の発現誘導  
○高橋 勉<sup>1</sup>, 鈴木 早紀<sup>1</sup>, 三澤 鈴香<sup>1</sup>, 篠田 陽<sup>1</sup>, 秋元 治朗<sup>2</sup>, 藤原 泰之<sup>1</sup>  
(<sup>1</sup>東京薬科大・薬, <sup>2</sup>東京医大)

## 生化学

**P-079** 長鎖アシル CoA 合成酵素 4 遺伝子欠損マウス由来マクロファージの機能解析  
○桑田 浩, 中谷 絵理子, 水沼 孝裕, 原 俊太郎 (昭和大・薬)

**P-080** 接触性皮膚炎におけるプロスタグランジン最終合成酵素の役割  
○佐々木 由香<sup>1</sup>, 落合 翔<sup>1</sup>, 横山 知永子<sup>2</sup>, 原 俊太郎<sup>1</sup> (<sup>1</sup>昭和大・薬, <sup>2</sup>神奈川工科大)

**P-081** プロスタグランジン E 合成酵素相互作用タンパク質の検索  
○中谷 良人<sup>1</sup>, 笠原 楓<sup>1</sup>, 渡部 彩夏<sup>1</sup>, 河西 莉奈<sup>1</sup>, 清野 了椰<sup>1</sup>, 増本 理佳子<sup>1</sup>, 相内 敏弘<sup>2</sup>, 原 俊太郎<sup>1</sup> (<sup>1</sup>昭和大・薬・衛生薬学, <sup>2</sup>昭和大・薬・生物化学)

**P-082** TRPA1 活性化によるマウス脂肪前駆細胞の褐色化誘導  
○酒谷 健斗, 青木 明, 茨木 康太, 城山 晴佳, 岡本 誉士典, 植田 康次, 神野 透人 (名城大・薬)

**P-083** がん細胞における ErbB ファミリーの膜近傍領域スレオニンリン酸化による活性調節機構  
○河崎 優希, 櫻井 宏明 (富山大院・薬)

**P-084** 加齢に伴う胸腺の組織学的・分子生物学的変化  
○佐名木 遥佳, Laurensius K. Lie, 廣野 順介, 中川 公恵, 長谷川 潤 (神戸薬科大学)

**P-085** Ca<sup>2+</sup>活性型カリウムチャネル K<sub>Ca</sub>3.1 は脂肪細胞分化を抑制する  
○中野 友香, 成田 沙智世, 長田 茂宏, 白根 道子, 今川 正良, 西塚 誠 (名市大院・薬)

**P-086** Cystathionine gamma-lyase 欠損マウスにおける妊娠高血圧症候群と育児放棄  
○赤星 軌征, 半田 博紀, 石井 功 (昭和薬科大・衛生化学)

**P-087** Cystathionine  $\gamma$ -lyase 欠損マウスにおける乳清アミノ酸成分の異常  
○半田 博紀, 横山 輝, 赤星 軌征, 石井 功 (昭和薬科大・衛生化学)

## 内分泌攪乱化学物質

- P-088** ムラサキイガイ (*Mytilus galloprovincialis*) RXR(retinoid X receptor) の同定及び性状解析  
○宮城 隆之<sup>1</sup>, 廣森 洋平<sup>1,2</sup>, 秋元 凌<sup>1</sup>, 中西 剛<sup>1</sup>, 永瀬 久光<sup>1</sup> (<sup>1</sup>岐阜薬大・薬, <sup>2</sup>鈴鹿医療科学大学・薬)
- P-089** Cre-loxP システムを用いた造精機能障害モデルマウスの構築  
○長尾 優汰, 目加田 京子, 中西 剛, 永瀬 久光 (岐阜薬大・薬)
- P-090** エストロゲン応答性レポーターマウスを用いた骨粗しょう症治療薬の新規薬効スクリーニング試験法の構築  
○古川 誠之, 金枝 夏紀, 中西 剛, 永瀬 久光 (岐阜薬大・薬)
- P-091** 外性器形成毒性評価における溶媒効果に関する包括的検討  
○玉井 一輝, 竹内 理貴, 恩田 将成, 中西 剛, 永瀬 久光 (岐阜薬大・薬)

## 脳・神経毒性物質

- P-092** メチル水銀によるラット末梢神経障害の発症メカニズム  
○荏原 俊介<sup>1</sup>, 巽 啓<sup>1</sup>, 雨宮 達郎<sup>1</sup>, 篠田 陽<sup>1</sup>, 佐々木 優<sup>2</sup>, 吉田 映子<sup>2</sup>, 高橋 勉<sup>1</sup>, 鍛冶 利幸<sup>2</sup>, 藤原 泰之<sup>1</sup> (<sup>1</sup>東京薬大・薬, <sup>2</sup>東京理大・薬)
- P-093** 海馬メタロチオネイン誘導による A  $\beta$  誘発性記憶障害の回避  
○橋本 若奈, 鈴木 大貴, 小池 勇太, 玉野 春南, 武田 厚司 (静岡県立大・薬)
- P-094** ピコモル濃度の A  $\beta$  誘発性記憶障害には細胞外 Zn<sup>2+</sup>が必要である  
○河渕 修平, 佐々木 美紅, 天白 宗和, 玉野 春南, 武田 厚司 (静岡県大・薬)
- P-095** パーキンソン病関連神経毒による p62 核内蓄積の発見とそのメカニズム検討  
○桑原 由佳<sup>1</sup>, 宮良 政嗣<sup>2</sup>, 坂本 修一朗<sup>2</sup>, 石田 慶士<sup>2</sup>, 徳永 航<sup>2</sup>, 古武 弥一郎<sup>1,2</sup>, 太田 茂<sup>1,2</sup> (<sup>1</sup>広島大・薬, <sup>2</sup>広島大院・医歯薬保)
- P-096** 低濃度環境化学物質曝露がドパミン神経発達に及ぼす影響  
○郷 すすな, 畑野 愛, 栗田 尚佳, 位田 雅俊, 保住 功 (岐薬大・薬)
- P-097** ドパミン神経毒曝露における *SLC30A10* の発現経路及びその保護効果の検討  
○畑野 愛<sup>1</sup>, 郷 すすな<sup>1</sup>, 横尾 一樹<sup>1</sup>, 栗田 尚佳<sup>1</sup>, 位田 雅俊<sup>1</sup>, 神戸 大朋<sup>2</sup>, 保住 功<sup>1</sup> (<sup>1</sup>岐薬大・薬, <sup>2</sup>京大院・生命科学)
- P-098** アクリルアミド単回曝露による小脳ニューロンのオートファジー誘導  
○山村 征寛<sup>1</sup>, 森田 喬<sup>1</sup>, 松添 朋之<sup>1</sup>, 張 靈逸<sup>2</sup>, 宗 才<sup>1</sup>, 長嶋 大地<sup>1</sup>, 櫻井 敏博<sup>1</sup>, 市原 佐保子<sup>3</sup>, 市原 学<sup>1</sup> (<sup>1</sup>東京理科大・薬, <sup>2</sup>理化学研究所, <sup>3</sup>自治医大・医)

- P-099** 人工甘味料ネオテームによる酸化ストレス誘導を介した神経毒性  
○佐々木 ちひろ, 岡本 誉士典, 青木 明, 植田 康次, 神野 透人 (名城大・薬)
- P-100** 6-ヒドロキシドパミンによるパーキンソン病様運動障害における細胞内 Zn<sup>2+</sup>シグナルの関与とその回避  
○西尾 隆佑, 森岡 洋貴, 玉野 春南, 武田 厚司 (静岡県大院・薬)
- P-101** キノホルムによるメタロチオネイン mRNA 発現誘導作用  
藁谷 博之<sup>1</sup>, 松本 謙吾<sup>1,2</sup>, 河本 美咲<sup>1</sup>, 松浦 健二<sup>1</sup>, 山田 佳太<sup>1</sup>, 勝山 真人<sup>3</sup>,  
○坂崎 文俊<sup>1</sup> (<sup>1</sup>大阪大谷大・薬, <sup>2</sup>名古屋大院・医, <sup>3</sup>京府医大・医)

## 発がん性物質

- P-102** 4-(Methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) の解毒機構  
○西山 貴仁, 柳田 裕美, 林 奈帆子, 加倉井 直輝, 小池 涼, 大沼 友和,  
小倉 健一郎, 平塚 明 (東京薬大・薬)
- P-103** ラットにおける肝化学発がん核内受容体活性化の関連性  
田部 美紗子, 志津 怜太, 保坂 卓臣, 佐々木 崇光, ○吉成 浩一 (静岡県大・薬)
- P-104** 核内受容体 CAR 依存的な肝細胞増殖への YAP の関与  
○天池 優斗<sup>1</sup>, 阿部 太紀<sup>1,2</sup>, 志津 怜太<sup>1</sup>, 保坂 卓臣<sup>1</sup>, 佐々木 崇光<sup>1</sup>, 松沢 厚<sup>2</sup>,  
吉成 浩一<sup>1</sup> (<sup>1</sup>静岡県立大学・薬, <sup>2</sup>東北大学大学院・薬)
- P-150** 高血糖状態における新規メイラード反応生成物の化学構造  
○今堀 大輔, 松本 崇宏, 小島 直人, 住居 潤美, 住田 大志, 長谷井 友尋,  
山下 正行, 渡辺 徹志 (京都薬大)

## 免疫毒性・感染症

- P-105** C型肝炎ウイルス Core タンパク質 C 末端長の違いによる小胞体ストレス応答変化の解析  
○永瀬 史士, 高橋 庄太, 猪瀬 敦史, 久下 周佐 (東北医薬大・薬・微生物)
- P-106** サルモネラ感染マクロファージにおける細胞死誘導機構の解析  
○小池 敦資<sup>1</sup>, 小濱 清子<sup>1</sup>, 天野 富美夫<sup>1</sup> (大阪薬大・薬・生体防御学)
- P-107** FITC 誘導接触性皮膚炎におけるパラベンの皮膚感作促進作用  
○遠藤 由貴奈, 松岡 毅, 関口 皓太, 鈴木 若菜, 小川 衿菜, 黒羽子 孝太,  
今井 康之 (静岡県大・薬)
- P-108** アレルギー性接触皮膚炎における MUP1 の機能解明に向けた検討  
○白石 絵里奈, 井戸 章子, 田中 健人, 中西 剛, 永瀬 久光 (岐阜薬大・薬)

**P-109 環境因子による好塩基球やマスト細胞の活性化制御機構**

○北野 拓真<sup>1</sup>, 柴田 将成<sup>1</sup>, 蓮池 浩太<sup>1</sup>, 瀧 伸介<sup>2</sup>, 伊藤 佐生智<sup>1</sup>, 肥田 重明<sup>1</sup>  
(<sup>1</sup>名市大・薬, <sup>2</sup>信州大・医)

**薬物代謝**

**P-110 CYP3A4 遺伝子の新規転写活性化について**

○渡辺 孝樹<sup>1</sup>, 小田桐 玲生<sup>1</sup>, 荒津 祐輔<sup>1</sup>, 佐々木 崇光<sup>2</sup>, 進藤 佐和子<sup>1</sup>,  
熊谷 健<sup>1</sup>, 永田 清<sup>1</sup> (<sup>1</sup>東北医科薬科大学薬学部, <sup>2</sup>静岡県立大学薬学部)

**P-111 レチノイン酸の低濃度測定可能な CYP26A1 遺伝子レポーターアッセイ系の構築**

○森 謙太<sup>1</sup>, 鈴木 裕之<sup>1</sup>, 塩谷 安奈里<sup>1</sup>, 佐々木 崇光<sup>2</sup>, 進藤 佐和子<sup>1</sup>, 熊谷 健<sup>1</sup>,  
永田 清<sup>1</sup> (<sup>1</sup>東北医科薬科大学薬学部, <sup>2</sup>静岡県立大学薬学部)

**P-112 ラットにおける銀杏中毒原因物質による毒性発現の性差 (第7報)**

○石川 美香, 伊藤 みなみ, 鎌田 翔太, 吉村 昭毅, 小林 大祐, 和田 啓爾  
(北医療大・薬)

**P-113 UDP-グルクロン酸転移酵素 2B7 における新たな小胞体膜局在化配列の探索**

○宮内 優<sup>1,2</sup>, 木村 天<sup>2</sup>, 藤本 景子<sup>1</sup>, 廣田 有子<sup>1</sup>, Peter I. Mackenzie<sup>3</sup>,  
石井 祐次<sup>2</sup>, 田中 嘉孝<sup>1</sup> (<sup>1</sup>九大院・薬 細胞生物薬学, <sup>2</sup>分子衛生薬学, <sup>3</sup>フリンダー  
ス大・医)

**P-114 Nrf2 欠損による薬物代謝能低下とシトクロム P450 誘導能の低下**

○芦野 隆<sup>1</sup>, 山本 雅之<sup>2</sup>, 沼澤 聡<sup>1</sup> (<sup>1</sup>昭和大・薬, <sup>2</sup>東北大院・医)

**予防薬学**

**P-115 エンリッチ環境効果を指標とした老齢マウスの夜間頻尿様症状の改善に関与する脳内分子の探索**

○副田 二三夫<sup>1,2</sup>, 戸田 晶久<sup>1</sup>, 後藤 夏美<sup>2</sup>, 鮫島 慎乃介<sup>2</sup>, 古賀 貴之<sup>1</sup>,  
三隅 将吾<sup>2</sup>, 高濱 和夫<sup>2,3</sup> (<sup>1</sup>第一薬大, <sup>2</sup>熊本大・薬, <sup>3</sup>熊本保健科学大)

**P-116 クルクミンはクロザピンによる脂肪細胞分化誘導作用を抑制する**

○野田 知里, 佐久間 覚, 藤本 陽子 (大阪薬大・薬)

**P-117 マグネシウム欠乏食を摂取したマウス皮膚に及ぼすβ-カロテンの影響**

○高橋 典子, 掛 貴達, 長谷川 晋也, 山崎 正博, 今井 正彦 (星薬大・医薬研・  
病態機能制御学)

**P-118 寒冷ストレスの褐色脂肪組織への影響とメタロチオネインの関与**

○川上 隆茂, 中山 知美, 門田 佳人, 鈴木 真也 (徳島文理大・薬)

- P-119** ビザンチンの高脂肪食誘導性脂肪肝に対する影響解析  
川上 隆茂, ○佐藤 宏美, 門田 佳人, 中野 真代, 山本 博文, 鈴木 真也 (徳島文理大・薬)
- P-120** アレルギー性皮膚炎重症化過程におけるアミノ酸補給療法の有効性の検討  
○古賀 貴之<sup>1</sup>, 井上 貴恵<sup>1</sup>, 平山 芙香<sup>1</sup>, 武田 知起<sup>2</sup>, 石井 祐次<sup>2</sup>, 副田 二三夫<sup>1</sup>, 廣村 信<sup>1</sup>, 戸田 晶久<sup>1</sup> (<sup>1</sup>第一薬大, <sup>2</sup>九大院・薬)
- P-121** TM-I-3 株による非接触状態における抗菌活性物質の同定および芽胞状態での抗菌活性の探索  
○白井 千尋<sup>1</sup>, 大浦 皓紀<sup>1</sup>, 松本 未来<sup>1</sup>, 小川 由起子<sup>1</sup>, 相田 美和<sup>1</sup>, 中島 幸彦<sup>2</sup>, 杉田 和俊<sup>3</sup>, 野口 美由紀<sup>4</sup>, 浦川 真二<sup>5</sup>, 松原 英隆<sup>6</sup>, 永石 雅基<sup>7</sup>, 佐藤 博<sup>1</sup> (<sup>1</sup>長崎国際大・薬, <sup>2</sup>福岡大学・薬, <sup>3</sup>麻布大学・獣医, <sup>4</sup>成蹊大学・理工, <sup>5</sup>T.Mエンタープライズ(有), <sup>6</sup>チューケン生活環境研究所, <sup>7</sup>長崎県窯業技術センター)
- P-122** インスリン抵抗性発現に及ぼすセレンタンパク質の機能解析  
○村野 晃一, 仲江 美咲, 西田 侑樹, 岸田 悠人, 荻野 泰史, 荒川 友博, 奥野 智史, 上野 仁 (摂南大・薬)
- P-123** 都市河川中に存在するヒト用医薬品成分の健康リスク評価  
○西村 哲治<sup>1</sup>, 小杉 有希<sup>2</sup>, 渡邊 喜美代<sup>2</sup>, 鈴木 俊也<sup>2</sup> (<sup>1</sup>帝京平成大・薬, <sup>2</sup>東京都健康安全研究センター・環境保健部)
- その他**
- P-124** 見た目のアンチエイジングのための毛髪中ミネラル濃度の適用に関する研究  
○山城 海渡<sup>1</sup>, 緒方 文彦<sup>1</sup>, 中村 武浩<sup>1</sup>, 川崎 直人<sup>1,2</sup> (<sup>1</sup>近畿大薬, <sup>2</sup>近畿大アンチエイジングセ)
- P-125** 大腸癌細胞 Caco-2 の増殖に対する活性窒素種の影響  
○山口 葉奈, 佐久間 覚, 藤本 陽子 (大阪薬大・薬)
- P-126** アンドロゲンレセプターの遺伝子一塩基変異のホモ二量体形成への影響  
○志津 怜太<sup>1,2</sup>, Su-Jun Lee<sup>2</sup>, 根岸 正彦<sup>2</sup>, 吉成 浩一<sup>1</sup> (<sup>1</sup>静岡県大・薬, <sup>2</sup>米国国立環境衛生科学研究所)
- P-127** 大腸癌細胞 Caco-2 の増殖に対する硫化水素発生剤の影響  
○高瀬 真弥, 佐久間 覚, 藤本 陽子 (大阪薬大・薬)
- P-128** 酸化チタンナノ粒子による精巣機能障害 - 肝障害との比較 -  
○三浦 伸彦, 北條 理恵子, 大谷 勝己 (労働安全衛生総合研究所)



- P-129** 国産たばこ 11 銘柄の主流煙に含まれるフェノール類 7 成分の分析  
○小野 正寛<sup>1</sup>, 稲葉 洋平<sup>2</sup>, 杉田 和俊<sup>1</sup>, 内山 茂久<sup>2</sup>, 高木 敬彦<sup>1</sup>, 櫻田 尚樹<sup>2</sup>  
(<sup>1</sup>麻布大学・獣医, <sup>2</sup>国立保健医療科学院・生活環境研究部)
- P-130** 酸化チタンのマウス雄性生殖系への影響  
○大谷 勝己, 北條 理恵子, 三浦 伸彦 (労働安全衛生総合研究所)
- P-131** 医薬品製造施設における環境微生物叢解析  
○高橋 佑治<sup>1</sup>, 川井 真好<sup>2</sup>, 那須 正夫<sup>3</sup>, 一條 知昭<sup>1</sup> (<sup>1</sup>大阪大院・薬, <sup>2</sup>姫路獨協大・薬, <sup>3</sup>大阪大谷大・薬)

## 韓国からの演題

- P-132** Induction of inflammatory responses from THP-1 cells by Kathon CG™  
○BoYoon Chang<sup>1</sup>, Kyu Hyuck Chung<sup>2</sup>, SungYeon Kim<sup>1\*</sup> (<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, Iksan, Jeonbuk 54538, South Korea, <sup>2</sup>School of Pharmacy, Sungkyunkwan University, Suwon, 440-746, Korea)
- P-133** Protective host immune responses to *Salmonella* infection by *Morus alba* L.  
○BoYoon Chang<sup>1</sup>, DaEun Kim<sup>1</sup>, JiHye Park<sup>1</sup>, BongSung Koo<sup>2</sup>, Hyun cheul Lee<sup>2</sup>, SungYeon Kim<sup>1</sup> (<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, Iksan, Jeonbuk 54538, South Korea., <sup>2</sup>ForBioKorea Co., Ltd. 14, Gasan digital 2-ro, Geumcheon-gu, Seoul, Republic of Korea)
- P-134** Anti-oxidants and inhibitor of various matrix - metalloproteinases(MMPs) expression from seed of *Litchi chinensis* Sonn.  
○DaEun Kim<sup>1</sup>, BoYoon Chang<sup>1</sup>, Yeon Sil Hwang<sup>1</sup>, JiHye Park<sup>1</sup>, DaeSung Kim<sup>2</sup>, HyeSoo Kim<sup>2</sup>, HyoungKwon Cho<sup>2</sup>, SungYeon Kim<sup>1</sup> (<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, Iksan, Jeonbuk 54538, South Korea., <sup>2</sup>Hanpoong Pharm. CO., Ltd, 333-24 1st Palbok-dong, Deokjingu, Jeonju 561-841, Jeonbuk, Republic of Korea)
- P-135** Differential expression of metallothionein isoforms in various breast cancer cell lines  
○Se Jong Kim, Sun Woo Jin, Hye-Gwang Jeong (College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea)

- P-136** 3-Caffeoyl, 4-dihydrocaffeoylquinic acid mediates endothelial nitric oxide synthase activation via multiple signaling pathways  
○ Sun Woo Jin, Chuanfeng Zheng, Min Hee Kang, Hye Gwang Jeong (College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea)
- P-137** Tetrabromobisphenol A promotes MMP-9 production in human breast cancer MCF-7 cells.  
○ Gi Ho Lee, Sun Woo Jin, Seul Mi Kim, Hye Gwang Jeong (College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea)
- P-138** Activation of GPR43 by organic acids leads to the inhibition of lipolysis and suppression of free fatty acids secretion in adipocytes.  
○ Dong-Gwang Kim, Byung-Hoon Lee (College of Pharmacy and Research Institute of Pharmaceutical Sciences, Seoul National University, Seoul, Republic of Korea)
- P-139** The role of endothelial progenitor cell dysfunction by methylglyoxal in delayed wound healing in diabetic condition  
○ Jeong Hyeon Kim, Haram Kim, Kyeong-A Kim, Eun-Sun Kim, Ok-Nam Bae\* (College of Pharmacy Institute of Pharmaceutical Science and Technology, Hanyang University, Ansan, Republic of Korea)
- P-140** The inhibitory effect of 3-(6-(3-aminophenyl)-7H-pyrrolo[2,3-d] pyrimidin-4-yl oxy) phenol on antigen-induced allergic response in mast cells.  
○ So Young JO, Young Mi KIM (College of Pharmacy, Duksung Women's University, Seoul, Republic of Korea)
- P-141** Interaction of polyhexamethylene guanidine phosphate with cytoplasmic organelles  
○ Ha Ryong Kim<sup>1</sup>, Sohee You<sup>2</sup>, Eun Hye Jang<sup>2</sup>, Kyu Hyuck Chung<sup>2</sup>  
(<sup>1</sup>Department of Pharmaceutical Engineering, Dongshin University, 185, Geonjae-ro, Naju-si, Jeollanam-do, Republic of Korea, <sup>2</sup>School of Pharmacy, Sungkyunkwan University, Suwon, Gyeonggi-do, 16419, Republic of Korea)
- P-142** *Dendropanax morbifera* ameliorates on thioacetamide-induced hepatic fibrosis  
○ Hoon Yong Yang, Kyeong Seok Kim, Hyung Sik Kim\* (School of Pharmacy, Sungkyunkwan University, Serobu-ro, 2066, Suwon, Republic of Korea)

- P-143** Protective Effect of *Dendropanax morbifera* on the Diabetes-Induced Renal Damage  
○ Ji Young Kim, Ji Yeon Son, Hyung Sik Kim\* (School of Pharmacy, Sungkyunkwan University, Serobu-ro, 2066, Suwon, Republic of Korea)
- P-144** Dermal penetration of butylated hydroxytoluene across excised rat skins  
○ Sungwook Park<sup>1</sup>, Junwoo Park<sup>1</sup>, Sun Dong Yoo<sup>1</sup>, Joo Young Lee<sup>2</sup>, Kyu-Bong Kim<sup>3\*</sup> (<sup>1</sup>School of Pharmacy, Sungkyunkwan University, Suwon, Gyeonggi-do, Korea, <sup>2</sup>The Catholic University of Korea, Bucheon, South Korea, <sup>3</sup>College of Pharmacy, Dankook University, Cheonan, Chungnam, Korea)
- P-145** In vitro percutaneous absorption of butylated hydroxyanisole, a free radical scavenger, across the rat skins  
○ Junwoo Park<sup>1</sup>, Sungwook Park<sup>1</sup>, Sun Dong Yoo<sup>1</sup>, Joo Young Lee<sup>2</sup>, Kyu-Bong Kim<sup>3\*</sup> (<sup>1</sup>School of Pharmacy, Sungkyunkwan University, Suwon, Gyeonggi-do, Korea, <sup>2</sup>The Catholic University of Korea, Bucheon, South Korea, <sup>3</sup>College of Pharmacy, Dankook University, Cheonan, Chungnam, Korea)
- P-146** Development of effective antibacterial therapeutics against *Vibrio vulnificus* using antimicrobial peptide-loaded gold nanoparticle-DNA aptamer conjugates  
○ Boeun Lee, Minkyung Ryou, Suchan Kim, Minjoo Joo, Ji-Hyun Yeom, Kangseok Lee, Jeehyeon Bae (Department of Life Science and School of Pharmacy, Chung-Ang University, Seoul 06974, Republic of Korea)
- P-147** Phenolics and neolignans isolated from the fruits of *Juglans mandshurica* Maxim. and their effects on lipolysis in adipocytes  
○ Yun-Hee Lee\*, Sang-Nam Kim, Seung Hyun Kim (College of Pharmacy, Yonsei University, Incheon, 21983, South Korea)
- P-148** Genetic Variations in Tobacco Smoking Exposure and Behavior  
○ Mihi Yang (College of Pharmacy, Research Center for Cell Fate Control Sookmyung Women's University, Yongsan-gu, Seoul, 140-742, Korea)

## 環境・衛生部会委員会拡大会議

9月1日（金）12：30～13：30

会場：C会場（603講義室）

## 懇親会

9月1日（金）19：00～21：00

会場：江陽グランドホテル

環境・衛生部会学術賞

環境・衛生部会・金原賞

環境・衛生部会新人賞

優秀若手研究者賞

実行委員長賞

日韓次世代シンポジウム・

ポスターセッション優秀発表者賞

授賞式

授賞式

受賞者発表・授賞式

受賞者発表・授賞式

受賞者発表・授賞式

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## Plenary Lecture

September 1 (Fri) 14:30-15:20 Room A

Chair: Akira Naganuma (Grad. Sch. Pharm. Sci., Tohoku Univ.)

***PL-1* Food Safety in Japan; with the emphasis on Food Safety Commission, the risk assessment body**

- Hiroshi Satoh  
(Chairperson, Food Safety Commission)

## Educational Lecture

September 2 (Sat) 9:00-9:40 Room A

Chair: Kouichi Yoshinari (Sch. Pharm. Sci., Univ. Shizuoka)

***EL-1* Drug metabolizing enzymes and the role in toxicity**

- Yasushi Yamazoe  
(Food Safety Commission of Japan)

## Award Lectures

### Scientific Award

September 2 (Sat) 14:00-14:30 Room A

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

***AL1* Lipid peroxidation dependent novel cell death and diseases regulated by GPx4 and vitamin E**

- Hirotaka Imai  
(Sch. Pharma. Sci., Kitasato Univ.)

### Kanehara Award

September 2 (Sat) 14:30-14:50 Room A

Chair: Shizuo Narimatsu (Minami Kyushu Univ.)

***AL2-1* Metabolomics-based studies to clarify the mechanism underlying toxic effects of chemicals**

- Tomoki Takeda  
(Grad. Sch. Pharma. Sci., Kyushu Univ.)

September 2 (Sat) 14:50-15:10 Room A  
Chair: Masao Nasu (Osaka Ohtani Univ.)

***AL2-2* Comprehensive analysis of environmental microbes for assurance of human health**

○ Tomoaki Ichijo  
(Grad. Sch. Pharm. Sci., Osaka Univ.)

## **Invited Lecture**

September 1 (Fri) 11:00-11:30 Room A  
Chair: Shusuke Kuge (Tohoku Med. Pharm. Univ.)

***IL-1* SIRT1 and diabetic-induced nephrotoxicity**

○ Hyung Sik Kim  
(School of Pharmacy, Sungkyunkwan University, Serobu-ro, 2066, Suwon, Republic of Korea)

September 1 (Fri) 15:20-16:10 Room A  
Chair: Kiyoshi Nagata (Tohoku Med. Pharm. Univ.)

***IL-2* A phenobarbital story: Nuclear receptors communicate via a conserved phosphorylation for better or worse**

○ Masahiko Negishi  
(National Institute of Environmental Health Sciences, NIH)

## **2017 Japan/Korea Joint Symposium on Pharmaceutical Health Science and Environmental Toxicology**

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September 1 (Fri) 11:30-12:30 Room A

Chair: Jee-Hyeon BAE (Sch. Pharm., Chung-Ang Univ.)

Jin-Yong LEE (Sch. Pharm., Aichi Gakuin Univ.)

- S-1 Peroxiredoxin 2 negatively regulates redox signaling in collagen-stimulated platelets**  
Su Bin Wang, Yun Jeong Kong, ○ Tong-Shin Chang  
(College of Pharmacy, Ewha Womans University, Seoul, Republic of Korea)
- S-2 Hydrogen peroxide-induced redox regulation of Pyruvate Kinase M2 (PKM2) in cancer cells**  
○ Hayato Irokawa, Shin Kato, Satoshi Numasaki, Shota Takahashi, Shusuke Kuge  
(Dept. Microbiol., Fac. Pharmaceut. Sci., Tohoku Med. Pham. Univ.)
- S-3 Inhibitory effect of chrysin loaded nanoparticles on the tumor growth and metastasis *in vivo***  
○ Joohee Jung  
(College of Pharmacy, Duksung Women's University / Innovative Drug Center, Duksung Women's University, Republic of Korea)
- S-4 The tumor suppressor STK11/LKB1 in death receptor-mediated apoptosis**  
○ Takuya Noguchi, Atsushi Matsuzawa  
(Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)

## **2017 Japan/Korea Joint Symposium on Pharmaceutical Health Science and Environmental Toxicology : Poster Session**

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Discussions: September 1 (Fri) 13:30-14:30 Room PA

- PS-1 Occurrence of fibrates and their metabolites in source and drinking water in Shanghai and Zhejiang, China**  
○ Akiko Ido<sup>1</sup>, Youhei Hiromori<sup>1,2</sup>, Liping Meng<sup>3</sup>, Haruki Usuda<sup>1</sup>, Min Yang<sup>4</sup>, Jianying Hu<sup>3</sup>, Tsuyoshi Nakanishi<sup>1</sup>, Hisamitsu Nagase<sup>1</sup> (<sup>1</sup>Gifu Pharm. Univ., <sup>2</sup>Fac. Pharm. Sci., Suzuka Univ. of Medical Sci., <sup>3</sup>Peking Univ., <sup>4</sup>Chinese Acad. of Sci.)
- PS-2 Evaluation of nine bioselenocompounds on nutritional availability**  
○ Kazuaki Takahashi, Noriyuki Suzuki, Yasumitsu Ogra (Grad. Sch. Pharm. Sci., Chiba Univ.)

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- PS-3 Identification of a novel enzyme regulating autophagic flux**  
○ Moon Jung Back, Dae Kyong Kim (Department of Environmental and Health Chemistry, College of Pharmacy, Chung-Ang University; 84 Heukseok-ro, Dongjak-Ku, Seoul 06974, Republic of Korea)
- PS-4 Utility of murine dendritic cell line DC2.4 for *in vitro* assay of skin-sensitization potential**  
○ Erina Shiraishi<sup>1</sup>, Akiko Ido<sup>1</sup>, Youhei Hiromori<sup>1,2</sup>, Kento Tanaka<sup>1</sup>, Tomoki Kimura<sup>3</sup>, Hisamitsu Nagase<sup>1</sup>, Tsuyoshi Nakanishi<sup>1</sup> (<sup>1</sup>Gifu Pharm. Univ., <sup>2</sup>Fac. Pharm. Sci., Suzuka Univ. of Medical Sci., <sup>3</sup>Fac. Sci. Eng., Setsunan Univ.)
- PS-5 Peroxiredoxin 2 negatively regulates redox signaling in collagen-stimulated platelets**  
○ Su Bin Wang, Yun Jeong Kong, Tong-Shin Chang (College of Pharmacy, Ewha Womans University, Seoul, Republic of Korea)
- PS-6 Environmental electrophiles activate redox signaling transduction pathways through covalent modification of sensor proteins**  
○ Yumi Abiko, Yoshito Kumagai (Fac. Med., Univ. Tsukuba)
- PS-7 A dioxin-induced attenuation in the fetal expression of growth hormone: a search for novel factors which imprint the low growth of offspring produced by maternal exposure to dioxin**  
○ Yukiko Hattori<sup>1,2</sup>, Tomoki Takeda<sup>1</sup>, Yuji Ishii<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Kyushu Univ., <sup>2</sup>JSPS Res. Fellow.)
- PS-8 Diclofenac inhibits autophagic flux and sensitizes hepatocarcinoma cells to sorafenib-induced cell death**  
○ Seung-Hwan Jung, Seung-Hyeon Park, Kang-Yo Lee, Byung-Hoon Lee (College of Pharmacy and Research Institute of Pharmaceutical Sciences, Seoul National University, Seoul, Republic of Korea)
- PS-9 Vitamin D3-induced hypercalcemia increases carbon tetrachloride-induced hepatotoxicity through elevated oxidative stress in mice**  
○ Hiroki Yoshioka (Dept. Pharm., Kinjo Gakuin Univ.)



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- PS-10 Optimization and determination of the predictability of a newly developed alternative test for the photo-sensitization potential of chemicals using keratinocytic VEGF and IL-8**  
○ Beomseon Suh, Chanhee Yu, Young-Jun Shin, Ok-Nam Bae\* (College of Pharmacy Institute of Pharmaceutical Science and Technology, Hanyang University, Ansan, Republic of Korea)
- PS-11 A possible role of NF- $\kappa$ B in the anti-inflammatory effects of activated PXR**  
○ Maya Okamura<sup>1</sup>, Taiki Abe<sup>2</sup>, Satoshi Tsuruta<sup>1</sup>, Ryota Shizu<sup>1</sup>, Takuomi Hosaka<sup>1</sup>, Takamitsu Sasaki<sup>1</sup>, Susumu Kodama<sup>2</sup>, Kouichi Yoshinari<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Univ. of Shizuoka, <sup>2</sup>Grad. Sch. Pharmaceut. Sci., Tohoku Univ.)
- PS-12 Molecular mechanisms underlying trans-fatty acid-mediated enhancement of DNA damage-induced cell death**  
○ Saki Suzuki, Yusuke Hirata, Ryosuke Matsui, Miki Takahashi, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- PS-13 A synthesized chrysin-derivative attenuates skin inflammation through dual modulation of inflammatory signaling pathways of JAK2/STAT1 and Nrf2/HO-1**  
○ Chan-Hee Yu, Beomseon Suh, Young-Jun Shin, Ok-Nam Bae\* (College of Pharmacy Institute of Pharmaceutical Science and Technology, Hanyang University, Ansan, Republic of Korea)
- PS-14 Protective role of TCF3, a transcription factor activated by methylmercury, against methylmercury toxicity**  
○ Takashi Toyama, Yanjiao Wang, Akira Naganuma, Gi-Wook Hwang (Grad. Sch. Pharmaceut. Sci., Tohoku Univ.)
- PS-15 Leptin induces aromatase activation via COX-2 up-regulation in breast cancer cells**  
○ Sun Woo Jin, Yong An Kim, Gi Ho Lee, Hye Gwang Jeong (College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea)
- PS-16 Puerarin attenuates high glucose-induced lipid accumulation in HepG2 cells via CaMKK/AMPK and SIRT1 signaling pathway**  
○ Sun Woo Jin, Thi Hoa Pham, Tuyet Ngan Thai, Hye Gwang Jeong (College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea)

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- PS-17**    **A RING-type E3 ubiquitin ligase TRIM48 positively regulates oxidative stress-induced ASK1 activation and cell death**  
○ Keita Nagaoka, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- PS-18**    **A new therapeutic application of Auranofin, an anti-rheumatic gold compound, by suppressing the NLRP3 inflammasome**  
○ Seon Joo Lee, Gabsik Yang, Hye Eun Lee, Joo Young Lee (BK21plus Team, College of Pharmacy, The Catholic University of Korea, Jibongro 43, Bucheon, Republic of Korea)
- PS-19**    **The role of XRCC6, a tmRT1 binding protein, in activation of tmRT1 by methylmercury**  
○ Yi-An Chen<sup>1</sup>, Katsuhiko Osaki<sup>1,2</sup>, Takashi Toyama<sup>1</sup>, Akira Naganuma<sup>1</sup>, Gi-Wook Hwang<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Tohoku Univ., <sup>2</sup>Kohjin Life Science Co., Ltd.)
- PS-20**    **Altered mRNA and miRNA expression profiles associated with PHMG-phosphate-induced pulmonary toxicity in human alveolar adenocarcinoma (A549) cells**  
○ Da Young Shin<sup>1</sup>, Mi Ho Jeong<sup>1</sup>, In Jae Bang<sup>1</sup>, Ji Soo Park<sup>1</sup>, Young Ju Jung<sup>1</sup>, Eun Hye Jang<sup>1</sup>, So Hee Yoo<sup>1</sup>, Ha Ryoung Kim<sup>2</sup>, Kyu Hyuck Chung<sup>1</sup> (<sup>1</sup>School of Pharmacy, Sungkyunkwan University, Suwon, Gyeonggi-do, 16419, Republic of Korea, <sup>2</sup>Department of pharmaceutical engineering, Dongshin University, Naju-si, Jeollanam-do, 58245, Republic of Korea)
- PS-21**    **Per/polysulfide-mediated protection of protein tyrosine phosphatase 1B by reactive oxygen species derived from 9,10-phenanthrenequinone *in vitro***  
○ Nho Cong Luong<sup>1</sup>, Yumi Abiko<sup>1,2</sup>, Yoshito Kumagai<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Comp. Human Sci., Univ. Tsukuba, <sup>2</sup>Fac. Med., Univ. Tsukuba)
- PS-22**    **Effect of low-level environmental toxin on neuronal differentiation**  
○ Suzuna Go, Manami Hatano, Hisaka Kurita, Masatoshi Inden, Isao Hozumi (Laboratory of Medical Therapeutics and Molecular Therapeutics, Gifu Pharmaceutical University, Japan.)

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- PS-23**    **EP4 agonist CAY10598 induces degradation of HSP90 client proteins via ROS-dependent HSP90 cleavage in colon cancer HCT116 cells**  
○ In Gyeong Chae, Seung Mi Choi, Kyung-Soo Chun (College of Pharmacy, Keimyung University, 1095, Dalgubeol-daero, Dalseo-gu, Daegu, Republic of Korea)
- PS-24**    **CAR utilizes EGF signaling for activation**  
○ Ryota Shizu<sup>1,2</sup>, Masahiko Negishi<sup>2</sup>, Kouichi Yoshinari<sup>1</sup> (<sup>1</sup>Sch. Pharmaceut. Sci., Univ. of Shizuoka, <sup>2</sup>RDBL, NIEHS, NIH)
- PS-25**    **Thymoquinone suppresses migration of renal cancer cells via inhibition of EP2-mediated MMP-9 activity**  
○ Geumi Park, Kyung-Soo Chun (College of Pharmacy, Keimyung University, Daegu, South Korea)
- PS-26**    **Role of YAP in CAR-mediated proliferation of mouse hepatocytes**  
○ Yuto Amaike<sup>1</sup>, Taiki Abe<sup>1,2</sup>, Ryota Shizu<sup>1</sup>, Takuomi Hosaka<sup>1</sup>, Takamitsu Sasaki<sup>1</sup>, Atsushi Matsuzawa<sup>2</sup>, Kouichi Yoshinari<sup>1,2</sup> (<sup>1</sup>School of Pharmaceutical Sciences, University of Shizuoka, <sup>2</sup>Graduate School of Pharmaceutical Sciences, Tohoku University)

## **Forum I: Target Factor of Heavy Metal Toxicity and Its Molecular Mechanism**

September 1 (Fri) 9:00-11:00 Room A

Organizer: Masahiko Satoh (Sch. Pharm. Aichi Gakuin Univ.)

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

Yasumi Anan (Showa Pharm. Univ.)

***F1-1* Molecular targets and intracellular signal transduction in “Inflammation hypothesis” as pathology of cerebellum damage by methylmercury**

○ Eiko Yoshida, Yu Sasaki, Junko Kim, Toshiyuki Kaji  
(Fac. of Pharm. Sci., Tokyo Univ. of Sci.)

***F1-2* Involvement of extracellular Zn<sup>2+</sup> influx in age-related cognitive decline**

○ Haruna Tamano  
(School of Pharmaceutical Sciences, University of Shizuoka)

***F1-3* Role of spindle assembly checkpoint against arsenic induced-toxicity**

○ Kayoko Kita  
(Fac. Pharma-Sci., Teikyo Univ.)

***F1-4* The new molecular mechanism of cadmium renal toxicity**

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

## **Forum II: Paving the Way for the Revival of Forensic Toxicology in Pharmaceutical Sciences in Japan**

September 2 (Sat) 9:40-11:40 Room C

Organizer / Chair: Yasumitsu Ogra (Grad. Sch. Pharm. Chiba Univ.)

Shizuo Narimatsu (Minami Kyushu Univ.)

***F2-1* Present conditions and problem of the toxicological testing in the forensic medicine**

○ Hirotarō Iwase<sup>1,2</sup>

<sup>1</sup>Department of legal medicine, Graduate School of Medicine, Chiba University,

<sup>2</sup>Department of forensic medicine, Graduate School of Medicine, the University of Tokyo)

***F2-2* Analysis of Illegal Drugs by the Tokyo Metropolitan Government**

○ Jin Suzuki  
(Tokyo Metropolitan Institute of Public Health)

**F2-3 Legal chemistry and forensic toxicology playing role in scientific investigation**  
○ Yasuo Seto  
(Natl. Res. Inst. Police Sci.)

**F2-4 Role of pharmaceutical science in clinical toxicology**  
○ Yuji Fujita  
(Dev. Emerge. Med., Iwate Medical Univ.)

### **Forum III: Recent Advances in Nuclear Receptor Researches for Pharmaceutical and Health Sciences**

September 1 (Fri) 16:10-18:10 Room A

Organizer / Chair: Kouichi Yoshinari (Sch. Pharm. Sci., Univ. Shizuoka)  
Tsuyoshi Nakanishi (Gifu Pharm. Univ.)

**F3-1 Anti-metabolic syndrome effects of food ingredients on transcriptional regulation**  
○ Jun Inoue  
(Grad. Sch. Agricultural and Life Sci., The Univ. of Tokyo)

**F3-2 Regulation mechanism of xenobiotic receptor CAR**  
○ Yuichiro Kanno  
(Fac. Pharmaceut. Sci., Toho-Univ.)

**F3-3 Occurrence of nuclear receptors-mediated hazards in drinking water and their health risk**  
○ Tsuyoshi Nakanishi  
(Gifu Pharm. Univ.)

**F3-4 Hepatocyte proliferation regulated by xenobiotic-responsive nuclear receptors.**  
○ Kouichi Yoshinari  
(Department of Molecular Toxicology, School of Pharmaceutical Sciences, University of Shizuoka)

## Forum IV: Risk Assessment of Acrylamide in Food Cooked at High Temperature

September 1 (Fri) 16:10-18:10 Room B

Organizer / Chair: Yasunobu Aoki (National Institute for Environmental Studies)

Akihiko Hirose (National Institute of Health Sciences, Division of Risk Assessment)

### **F4-1 Hazard and exposure assessment of acrylamide**

○ Yasunobu Aoki

(National Institute for Environmental Studies)

### **F4-2 Assessment of dietary exposure to acrylamide by duplicate diet study**

○ Junko Kawahara<sup>1</sup>, Shuichi Adachi<sup>2</sup>, Daisuke Nakajima<sup>1</sup>, Yasuyuki Shibata<sup>1</sup>

(<sup>1</sup>National Institute for Environmental Studies, <sup>2</sup>Faculty of Nutritional Sci., Sagami Women's Univ.)

### **F4-3 Formation of acrylamide in foods by high temperature cooking and processing**

○ Mitsuru Yoshida

(Nippon Veterinary and Life Science University, Faculty of Applied Life Science)

### **F4-4 A benchmark dose method as a health risk assessment**

○ Akihiko Hirose

(National Institute of Health Sciences, Division of Risk Assessment)

## Forum V: From 0 Phase to 3 Phase in Drug Metabolism

September 2 (Sat) 9:40-12:00 Room A

Organizer / Chair: Yoshito Kumagai (Faculty of Medicine, University of Tsukuba)

Yuji Ishii (Grad. Sch. Pharmaceut. Sci., Kyushu Univ.)

### **F5-1 Effects of acetaminophen and its analog on CYP3A enzyme activity via inhibition of protein degradation**

○ Seigo Sanoh<sup>1,2</sup>, Masataka Santoh<sup>1</sup>, Yuya Ohtsuki<sup>2</sup>, Yoko Ejiri<sup>3</sup>, Yaichiro Kotake<sup>1,2</sup>, Shigeru Ohta<sup>1,2</sup>

(<sup>1</sup>Grad. Sch. of Biomed and Health Sci., Hiroshima Univ., <sup>2</sup>Fac. of Pharm. Sci., Hiroshima Univ., <sup>3</sup>Kuraray Co., Ltd.)

### **F5-2 UDP-Glucuronosyltransferases: multiplicity and substrate specificities**

○ Yuji Ishii

(Grad. Sch. Pharmaceut. Sci., Kyushu Univ.)

**F5-3 Interplay of drug metabolizing enzymes and transporters in hepatic disposition of xenobiotics**

○ Ikumi Tamai  
(Fac. Pharmaceut. Sci., Kanazawa Univ.)

**F5-4 The phase-zero reaction: capture and inactivation of electrophiles by persulfides**

○ Yoshito Kumagai  
(Faculty of Medicine, University of Tsukuba)

**F5-5 Sulfur respiration and sulfur stress: old but novel mitochondrial energy metabolism of mammals**

○ Takaaki Akaike<sup>1</sup>, Akira Nishimura<sup>1</sup>, Tomoaki Ida<sup>1</sup>, Tetsuro Matsunaga<sup>1</sup>,  
Masanobu Morita<sup>1</sup>, Hozumi Motohashi<sup>2</sup> (<sup>1</sup>Dept. Environ. Health Sci. Mol. Toxicol.,  
Tohoku Univ. Grad. Sch. Med., <sup>2</sup>Dept. of Gene Exp. Regulation, IDAC, Tohoku Univ.)

## **Forum VI: Merit and Demerit of Health Food**

September 2 (Sat) 15:20-17:20 Room A

Organizer / Chair: Kiyoshi Nagata (Tohoku Med. Pharm. Univ.)

Yasuo Watanabe (Yokohama University of Pharmacy)

**F6-1 Consumers' Purchase Situation and the Trend of Health Foods**

○ Takeshi Takeda (Global Nutrition Group, Inc.)

**F6-2 How to get good evidences of so called health foods**

○ Yasuo Watanabe, Shigetoshi Tsuzuki, Makoto Nakano, Kohsuke Hayamizu,  
Nobuo Izumo (General Health Medical Center, Yokohama University of Pharmacy)

**F6-3 Safety Evaluation of Health Food**

○ Tadashi Himeta (Japan Livestock Industry Association, Fellow of Food Safety  
Commission of Japan)

**F6-4 Drug-health food interaction**

○ Kiyoshi Nagata (Dept. Environ. Health Sci., Fac. Pharmaceut. Sci., Tohoku Med.  
Pharm. Univ.)

## Award Candidates Presentation

### Candidates for Young Investigator Award

September 1 (Fri) 9:00-10:00 Room B

Chair: Kiyoshi Nagata (Tohoku Med. Pharm. Univ.)

- P-149 The mechanism underlying the activation of the STING variants associated with an autoinflammatory disease**  
○ Emari OGAWA<sup>1</sup>, Tatsuya AKIBA<sup>1</sup>, Kojiro MUKAI<sup>1</sup>, Tomohiko TAGUCHI<sup>2</sup>, Hiroyuki ARAI<sup>1,2,3</sup> (<sup>1</sup>Dept. of Health Chem., Grad. Sch. of Pharm. Sci., Univ. of Tokyo, <sup>2</sup>Pathol. Cell Biol. Lab., Grad. Sch. of Pharm. Sci., Univ. of Tokyo, <sup>3</sup>AMED-CREST)
- P-004 Induction of behavioral changes and astrogliosis in the central nervous system of offspring mice following maternal inhalation of carbon black nanoparticle**  
○ Atsuto Onoda<sup>1,2,3</sup>, Karin S Hougaard<sup>4,5</sup>, Ulla B Vogel<sup>4</sup>, Ken Takeda<sup>2</sup>, Masakazu Umezawa<sup>2,6</sup> (<sup>1</sup>Grad. School Pharm. Sci. Tokyo Univ. Sci., <sup>2</sup>RIST, Tokyo Univ. Sci., <sup>3</sup>JSPS Research Fellow, <sup>4</sup>Nat. Res. Cen. Work. Environ. Denmark, <sup>5</sup>Inst. Pub. Health, Univ. Copen., <sup>6</sup>Fac. Indust., Tokyo Univ. Sci.)
- P-014 Sex difference of methylmercury-produced toxicity in the next generation: An analysis focusing on the male-specific elevation of corticosterone during the fetal stage**  
○ Masaya Hitomi<sup>1</sup>, Tomoki Takeda<sup>1</sup>, Yukiko Hattori<sup>1,3</sup>, Masatake Fujimura<sup>4</sup>, Yoshitaka Tanaka<sup>2</sup>, Yuji Ishii<sup>1</sup> (<sup>1</sup>Mol. Life Sci., <sup>2</sup>Pharmaceut. Cell Biol., Grad. Sch. Pharmaceut. Sci., Kyushu Univ., <sup>3</sup>JSPS Res. Fellow., <sup>4</sup>Pathol. Sci., Natl. Inst. Minamata Disease)
- P-028 A mechanism involved in the induction of TNF- $\alpha$  expression by methylmercury**  
○ Chika Kaneko, Takashi Toyama, Shun Fukagawa, Takuya Noguchi, Atsushi Matsuzawa, Akira Naganuma, Gi-Wook Hwang (Grad. Sch. Pharmaceut. Sci., Tohoku Univ.)
- P-046 Translational research in drug development against NASH using a cell-based chemical screening**  
○ Keita Nagaoka, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-052 Molecular mechanisms underlying trans-fatty acid-mediated enhancement of DNA damage-induced cell death**  
○ Saki Suzuki, Yusuke Hirata, Ryosuke Matsui, Miki Takahashi, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)



**P-067 Induction of metallothionein via TGF- $\beta$  signaling in vascular endothelial cells**  
○ Tsubasa Tsuchida<sup>1</sup>, Tomoya Fujie<sup>1,3</sup>, Eiko Yoshida<sup>1</sup>, Yasuyuki Fujiwara<sup>2</sup>,  
Chika Yamamoto<sup>3</sup>, Toshiyuki Kaji<sup>1</sup> (<sup>1</sup>Fac. of Pharm. Sci., Tokyo Univ. of Sci., <sup>2</sup>Sch. of  
Pharm., Tokyo Univ. Pharm. & Life Sci., <sup>3</sup>Fac. of Pharm. Sci., Toho Univ.)

**P-104 The role of YAP in CAR-mediated mouse hepatocyte proliferation**  
○ Yuto Amaike<sup>1</sup>, Taiki Abe<sup>1,2</sup>, Ryota Shizu<sup>1</sup>, Takuomi Hosaka<sup>1</sup>, Takamitsu Sasaki<sup>1</sup>,  
Atsushi Matsuzawa<sup>2</sup>, Kouichi Yoshinari<sup>1,2</sup> (<sup>1</sup>School of Pharmaceutical Sciences,  
University of Shizuoka, <sup>2</sup>Graduate School of Pharmaceutical Sciences, Tohoku  
University)

## Award Candidates Presentation

### Candidates for Rookies of the Year Award

September 1 (Fri) 10:00-11:00 Room B

Chair: Tomoki Kimura (Fac. Sci. Eng. Setsunan Univ.)

- P-150 Structures of novel Maillard reaction products in a hyperglycemic condition**  
○ Daisuke Imahori, Takahiro Matsumoto, Naoto Kojima, Megumi Sumii, Taishi Sumida, Tomohiro Hasei, Masayuki Yamashita, Tetsushi Watanabe (Kyoto Pharm. Univ.)
- P-002 Adsorption capability of strontium and cesium ions onto basil seed (*Ocimum basilicum*)**  
○ Yugo Uematsu, Fumihiko Ogata, Takehiro Nakamura, Naohito Kawasaki (Fac. Pharm., Kindai Univ.)
- P-029 Identification of the cells involved in the induction of TNF- $\alpha$  expression in mouse brains administered with methylmercury, and elucidation of its mechanism**  
○ Takayuki Hoshi, Takashi Toyama, Soichi Murakami, Akira Naganuma, Gi-Wook Hwang (Fac. Pharmaceut. Sci., Tohoku Univ.)
- P-044 Novel mechanisms of ALIS-mediated cellular dysfunction and death caused by antibacterial cephalosporins**  
○ Natsumi Mutoh, Midori Suzuki, Sayoko Miyagawa, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-089 Characterization of a model mouse for spermatogenesis disorder using Cre-loxP system**  
○ Yuta Nagao, Kyoko Mekada, Tsuyoshi Nakanishi, Hisamitsu Nagase (Gifu pharm. Univ.)
- P-092 The mechanism of methylmercury-induced peripheral neural degeneration in Wistar rat**  
○ Shunsuke Ehara<sup>1</sup>, Satoshi Tatsumi<sup>1</sup>, Tatsuro Amemiya<sup>1</sup>, Yo Shinoda<sup>1</sup>, Yu Sasaki<sup>2</sup>, Eiko Yoshida<sup>2</sup>, Tsutomu Takahashi<sup>1</sup>, Toshiyuki Kaji<sup>2</sup>, Yasuyuki Fujiwara<sup>1</sup> (<sup>1</sup>Sch. of Pharm., Tokyo Univ. of Pharm. and Life Sci., <sup>2</sup>Fac. of Pharm. Sci., Tokyo Univ. of Sci.)
- P-093 Rescue of amyloid  $\beta$ -induced memory impairment by hippocampal metallothionein induction**  
○ Wakana Hashimoto, Hiroki Suzuki, Yuta Koike, Haruna Tamano, Atsushi Takeda (Sch. Pharm. Sci., Univ. Shizuoka)
- P-095 Discovery of p62 nuclear accumulation induced by a Parkinson's disease-related neurotoxin and its mechanism**  
○ Yuka Kuwabara<sup>1</sup>, Masatsugu Miyara<sup>2</sup>, Shuichiro Sakamoto<sup>2</sup>, Keishi Ishida<sup>2</sup>, Wataru Tokunaga<sup>2</sup>, Yaichiro Kotake<sup>1,2</sup>, Shigeru Ohta<sup>1,2</sup> (<sup>1</sup>Fac. of Pharmaceut. Sci., Hiroshima Univ., <sup>2</sup>Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)

## Oral Session 1

### Metals, Neural Toxicity

September 1 (Fri) 16:10-16:58 Room C

Chair: Daigo Sumi (Fac. Pharm. Sci., Tokushima Bunri Univ.)

Yasuyuki Fujiwara (Sch. of Pharm., Tokyo Univ. Pharm.)

**01-1 Role of reactive sulfur species in protection against 1,2-naphthoquinone-induced cytotoxicity in human bronchial epithelial BEAS-2B cells**

○ Satoshi Yokota<sup>1</sup>, Shigeru Oshio<sup>1</sup>, Ken Takeda<sup>2</sup> (<sup>1</sup>Fac. Pharmaceut. Sci., Ohu Univ.,  
<sup>2</sup>Tokyo Univ. of Sci., Sanyo Onoda Yamaguchi)

**01-2 Adsorption of tungsten with a novel Fe-Mg type hydrotalcite prepared at different Mg<sup>2+</sup>/Fe<sup>3+</sup> ratios**

○ Fumihiko Ogata, Marina Kawakami, Takehiro Nakamura, Naohito Kawasaki (Fac. Pharm., Kindai Univ.)

**01-3 Analysis of hearing loss in mice exposed to manganese via drinking water**

○ Nobutaka Ohgami, Li Xiang, Reina Oshino, Masashi Kato (Grad. Sch. Med., Nagoya Univ.)

**01-4 The role of an apoptosis inhibitor, BIRC3, in cadmium-induced renal toxicity**

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

## Oral Session 2

### Others

September 1 (Fri) 16:58-17:46 Room C

Chair: Kazumi Sugihara (Fac. of Pharm. Sci., Hiroshima Int'l Univ.)

Akihisa Toda (Daiichi Univ. Pharm.)

**02-1 The relationship between fatty liver and down-regulation of Foxa2 through DNA methylation changes with metabolic syndrome**

○ Yasushi Kawasaki, Ayaka Sasaki, Hitomi Imamura, Reika Takahashi, Masafumi Murai, Fumika Ogawa, Yuri Saito, Tomoki Koizumi, Hikari Miura, Yuki Chiba, Sei Yonezawa, Akinori Sugiyama, Yasuhiro Natori (Sch. Pharmacy, Iwate Medical Univ.)

**02-2 Move to P-150**

- O2-3 Quality and safety evaluations for supplements in Japan**  
○ Eiko Sakurai<sup>1</sup>, Yukari Ueda<sup>2</sup>, Eiichi Sakurai<sup>2</sup> (<sup>1</sup>Fac. Pharmacy, Iwaki Meisei Univ.,  
<sup>2</sup>Fac. Pharmaceutical Sci., Tokushima Bunri Univ.)
- O2-4 Reduction of atmospheric contamination by pharmaceutical drugs using a tablet crusher, SafeCrush™**  
○ Tsuyoshi Murahashi, Ayaka Suzuki, Miho Arai, Narumi Kinoshita, Toshiyuki Higuchi (Nihon Pharmaceutical University)

## Oral Session 3

### Cellular Responses 1

September 2 (Sat) 9:40-10:40 Room B

Chair: Takuya Noguchi (Grad. Sch. of Pharm. Sci., Tohoku Univ.)

Masato Sasaki (Tohoku Med. Pharm. Univ.)

- O3-1 Endocytosis of particulate matter and cytokine production of neutrophils induced oxidative stress**  
○ Yasuhiro Yoshida, Duo Wang, Tadahiro Miyake, Kentaro Morita (Dep. Immunology and Parasitology, School of Sci., Univ. of Occupational and Environmental Health, Japan)
- O3-2 Move to P-149**
- O3-3 Saturated phospholipids induce inflammatory response**  
○ Yusuke Ohki<sup>1</sup>, Mayuka Kanda<sup>1</sup>, Yuta Shimanaka<sup>1</sup>, Nozomu Kono<sup>1,2</sup>, Hiroyuki Arai<sup>1,3</sup> (<sup>1</sup>Grad. Pharm. Sci., The Univ. of Tokyo, <sup>2</sup>PRIME, AMED, <sup>3</sup>AMED-CREST, AMED)
- O3-4 Molecular mechanisms by which FGF19 improves NASH**  
○ Mayuka Yamada<sup>1</sup>, Mei Tsuchida<sup>1</sup>, Miki Takahashi<sup>1</sup>, Yusuke Hirata<sup>1</sup>, Masaaki Miyata<sup>2</sup>, Kouichi Yoshinari<sup>1,3</sup>, Takuya Noguchi<sup>1</sup>, Atsushi Matsuzawa<sup>1</sup> (<sup>1</sup>Grad. Sch. of Pharmaceut. Sci., Tohoku Univ., <sup>2</sup>Dept. of Food Sci. Tech., National Fisheries Univ., <sup>3</sup>Grad. Sch. of Pharmaceut. Sci., Univ. of Shizuoka)
- O3-5 Phenotype analysis in polyunsaturated fatty acids (PUFA)-depleted cells**  
○ Yuki Ishino<sup>1</sup>, Yuri Saito<sup>1</sup>, Kojiro Mukai<sup>1</sup>, Tomohiko Taguchi<sup>2</sup>, Hiroyuki Arai<sup>1,2,3</sup> (<sup>1</sup>Department of Health Chemistry, Grad. Sch. of Pharmaceut. Sci., Tokyo Univ., <sup>2</sup>Pathological Cell Biology Laboratory, Grad. Sch. of Pharmaceut. Sci., Tokyo Univ., <sup>3</sup>AMED-CREST)

## Oral Session 4

### Cellular Responses 2

September 2 (Sat) 10:40-11:40 Room B

Chair: Shuzo Takeda (Fac. Pharm. Sci., Hiroshima Int'l Univ.)

Atsushi Inose (Tohoku Med. Pharm. Univ.)

**04-1 Effect of Pitavastatin on LPS or poly(I:C)-activated Macrophages**

○ Kaito Tsujinaka, Atsusi Koike, Fumio Amano (Osaka Univ Pharm Sci.)

**04-2 Novel mechanisms of gefitinib-induced enhancement of cellular dysfunction and death**

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

**04-3 Acute lethal toxicity by cisplatin**

○ Satomi Onosaka, Tadahiro Okano (Faculty of nutrition, Kobegakuin University)

**04-4 Heregulin promotes cell growth and migration via AhR expression and activation in cultured HER2 overexpressed breast cancer cells**

○ Naoya Yamashita<sup>1</sup>, Nao Saito<sup>1</sup>, Shuai Zhao<sup>1</sup>, Kensuke Terai<sup>2</sup>, Shinsaku Kanazawa<sup>2</sup>, Nobuyuki Hiruta<sup>2</sup>, Hideaki Bujo<sup>2</sup>, Kiyomitsu Nemoto<sup>1</sup>, Yuichiro Kanno<sup>1</sup> (<sup>1</sup>Fac. Pharmaceut. Sci., Toho Univ., <sup>2</sup>Toho Univ Sakura Medical Center)

**04-5 Cannabidiolic acid (CBDA)-mediated down-regulation of COX-2 expression through inhibition of PPAR $\beta$**

○ Masayo Suzuki<sup>1</sup>, Shuso Takeda<sup>1</sup>, Hiroyuki Okazaki<sup>2</sup>, Kazuhito Watanabe<sup>2</sup>, Hironori Aramaki<sup>2</sup>, Masufumi Takiguchi<sup>1</sup> (<sup>1</sup>Fac. Pharmaceut. Sci., Hiroshima Intl. Univ., <sup>2</sup>Daiichi Univ. Pharm.)

## Oral Session 5

### Biochemistry · Oxidative Stress

September 2 (Sat) 15:20-16:20 Room B

Chair: Tsuyoshi Nakanishi (Gifu Pharm. Univ.)

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

**05-1 Generation and phenotypic analysis of ketone body-utilizing enzyme knockout mice**

○ Shinya Hasegawa<sup>1</sup>, Masahiro Yamasaki<sup>1</sup>, Masahiko Imai<sup>1</sup>, Tetsuya Fukui<sup>2</sup>, Noriko Takahashi<sup>1</sup> (<sup>1</sup>Dept. of Health Chem., Sch. of Pharm. Sci., Hoshi Univ., <sup>2</sup>Dept. of Pharm., Coll. of Pharm. Sci., Ritsumeikan Univ.)

- 05-2 Fasting-induced expression of hepatic *fat-specific protein 27* is repressed by insulin**  
 ○ Daisuke Aibara<sup>1</sup>, Kimihiko Matsusue<sup>1</sup>, Kohei Matsuo<sup>1</sup>, Soichi Takiguchi<sup>2</sup>, Shigeru Yamano<sup>1</sup> (<sup>1</sup>Faculty of Pharmaceutical Science, Fukuoka University, <sup>2</sup>Institute for Clinical Research, National Kyushu Cancer Center)
- 05-3 Role of Lipo-3 gene in GPx4 depletion induced novel cell death**  
 ○ Kahori Oka, Kaduki Mizusawa, Rie Fukuda, Moe Nagahisa, Masaki Matsuoka, Hirotaka Imai (Grad. Sch. Pharmaceut. Sci., Kitasato Univ.)
- 05-4 Analysis of lipid peroxidation-dependent novel cell death suppression mechanism in SMS2 overexpressing cells**  
 ○ Takeshi Kumagai<sup>1</sup>, Ririka Oya<sup>1</sup>, Seira Hirasawa<sup>1</sup>, Yui Hesaka<sup>1</sup>, Taro Sakamoto<sup>1</sup>, Naomichi Baba<sup>2</sup>, Hirotaka Imai<sup>1</sup> (<sup>1</sup>Sch. of Pharm. Sci., Kitasato Univ., <sup>2</sup>Bizen Chemical Co. Ltd.)
- 05-5 Role of cysteine residues of hydrogen peroxide sensor protein BAG-1 in the susceptibility to anticancer drug**  
 ○ Atsushi Inose, Sae Tsuchiya, Kouki Takeda, Hayato Irokawa, Shusuke Kuge (Dep. Microbiol., Fac. Pharmaceut. Sci., Tohoku Medical and Pharmaceutical Univ.)

## Oral Session 6

### Immunotoxicity · Infectious Disease, Others

September 2 (Sat) 16:20-17:20 Room B

Chair: Tomofumi Okuno (Fac. Pharm. Sci., Setsunan Univ.)

Hideto Jinno (Fac. Pharm. Meijo Univ.)

- 06-1 Inhibitory effect of biotinylated peptides on anaphylactic reactions**  
 ○ Akira Sato<sup>1</sup>, Keiichi Ebina<sup>1,2</sup> (<sup>1</sup>Fac. Pharm., Iwaki Meisei Univ., <sup>2</sup>Grad. Sch. Sci. Eng, Iwaki Meisei Univ.)
- 06-2 Effects of Fetal Exposure to PM2.5 on the Immune System in Male Offspring**  
 ○ Seiichi Yoshida<sup>1</sup>, Naomi Muraki<sup>2</sup>, Tsuyoshi Ito<sup>2</sup>, Keiichi Arashidani<sup>3</sup>, Takamichi Ichinose<sup>1</sup> (<sup>1</sup>Oita Univ. NHS, <sup>2</sup>JARI, <sup>3</sup>UOEH)
- 06-3 Effect of oxidized olive oil on splenic T cell subpopulation and cytokine expression in mouse contact hypersensitivity**  
 ○ Hirofumi Ogino, Shingo Yamada, Masashi Okada, Tomohiro Arakawa, Tomofumi Okuno, Hitoshi Ueno (Fac. Pharmaceut. Sci., Setsunan Univ.)

**06-4 Cell wall "Galactofuranose" sugar-chains are reconstructed by environmental stress signaling and disturb pattern recognition**

○ Yutaka Tanaka<sup>1</sup>, Takuji Oka<sup>2</sup>, Fumie Ito<sup>1</sup>, Masato Sasaki<sup>1</sup>, Nobuyuki Shibata<sup>1</sup> (<sup>1</sup>Tohoku Medical and Pharmaceutical University, <sup>2</sup>Sojo University)

**06-5 Hepatic glucuronidation of 4-*tert*-octylphenol in humans: inter-individual variability and responsible UDP-glucuronosyltransferase isoforms**

○ Takashi Isobe<sup>1</sup>, Susumu Ohkawara<sup>1</sup>, Toshiko Tanaka-Kagawa<sup>1</sup>, Hideto Jinno<sup>2</sup>, Nobumitsu Hanioka<sup>1</sup> (<sup>1</sup>Fac. Phar. Yokohama Univ. Phar., <sup>2</sup>Fac. Phar., Meijo Univ.)

## Poster Session

Odd: September 1 (Fri) 13:30-14:30 Room PB

Even: September 2 (Sat) 13:00 14:00 Room PB

### Environmental Pollutants

**P-001 Seasonal Fluctuation of the Concentrations of Endotoxin, Protein and Ionic Substances in Outdoor Air and their Effect on Asthmatic Patients**

○ Mohammad Shahriar Khan<sup>1</sup>, Nami Furukawa<sup>1</sup>, Yuuki Kubo<sup>1</sup>, Yusuke Nakaoji<sup>1</sup>, Yumi Kawase<sup>1</sup>, Tomohiro Hasei<sup>1</sup>, Takahiro Matsumoto<sup>1</sup>, Yoshitaka Yano<sup>1</sup>, Yuya Deguchi<sup>2</sup>, Hiroaki Nagaoka<sup>2</sup>, Makoto Miura<sup>3</sup>, Yukio Nagasaka<sup>3</sup>, Nobuyuki Yamagishi<sup>4</sup>, Tetsushi Watanabe<sup>1</sup> (<sup>1</sup>Kyoto Pharm. Univ., <sup>2</sup>Fac. Pharm. Sci., Nagasaki Int. Univ., <sup>3</sup>Rakuwakai Otowa Hospital, <sup>4</sup>Fac. Pharm. Sci., Setsunan. Univ.)

**P-002 Adsorption capability of strontium and cesium ions onto basil seed (*Ocimum basilicum*)**

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

**P-003 Participation of copper in inflammatory responses and exacerbation of lung allergic inflammation by PM2.5**

○ Takamichi Ichinose, Seiichi Yoshida (Oita Univ. Nurs Health Sci)

**P-004 Induction of behavioral changes and astrogliosis in the central nervous system of offspring mice following maternal inhalation of carbon black nanoparticle**

○ Atsuto Onoda<sup>1,2,3</sup>, Karin S Hougaard<sup>4,5</sup>, Ulla B Vogel<sup>4</sup>, Ken Takeda<sup>2</sup>, Masakazu Umezawa<sup>2,6</sup> (<sup>1</sup>Grad. School Pharm. Sci. Tokyo Univ. Sci., <sup>2</sup>RIST, Tokyo Univ. Sci., <sup>3</sup>JSPS Research Fellow, <sup>4</sup>Nat. Res. Cen. Work. Environ. Denmark, <sup>5</sup>Inst. Pub. Health, Univ. Copen., <sup>6</sup>Fac. Indust., Tokyo Univ. Sci.)

**P-005 Effect of tetrabromobisphenol A (TBBP-A) on the gene expression of ketone body-utilizing enzymes in 3T3-L1 and ST-13 adipocytes**

○ Masahiro Yamasaki, Rina Matsumoto, Yuta Miyawaki, Syunji Moriya, Miyako Yagara, Mihoko Matsubayashi, Shinya Hasegawa, Noriko Takahashi (Dept. of Health chemistry, Sch. of pharm., Hoshi Univ.)

**P-006 Production of inflammation mediators by antiseptic isothiazolinones in BEAS-2B cells**

○ Susumu Ohkawara<sup>1</sup>, Eriko Nakamura<sup>1</sup>, Takashi Isobe<sup>1</sup>, Nobumitsu Hanioka<sup>1</sup>, Hideto Jinno<sup>2</sup>, Toshiko Tanaka-Kagawa<sup>1</sup> (<sup>1</sup>Yokohama Univ. of Pharm., <sup>2</sup>Fac. of Pharm. Meijo Univ.)



- P-007 Assessment of the contribution of polycyclic aromatic hydrocarbon quinones on the generation of reactive oxygen species by atmospheric particulate matters**  
 ○ Akira Toriba<sup>1</sup>, Ayaka Morii<sup>1</sup>, Yuki Teramura<sup>1</sup>, Chiharu Homma<sup>1</sup>, Ning Tang<sup>1,2</sup>, Kazuichi Hayakawa<sup>2</sup>, Ryo Suzuki<sup>1</sup> (<sup>1</sup>Institute of Medical, Pharmaceutical and Health Sciences, <sup>2</sup>Institute of Nature and Environmental Technology, Kanazawa University)
- P-008 Study of malodorous compounds from secondhand smoke in tobacco smoke and thirdhand smoke**  
 ○ Hiroshi Sato<sup>1</sup>, Momoka Kuriyama<sup>1</sup>, Saki Maeda<sup>1</sup>, Naoko Ouchida<sup>1</sup>, Kanako Baba<sup>1</sup>, Miwa Sohda<sup>1</sup>, Miyuki Noguchi<sup>2</sup>, Yoshika Sekine<sup>3</sup>, Hidetaka Matsubara<sup>4</sup>, Keiichi Arashidani<sup>5</sup> (<sup>1</sup>Fac. Pharmaceut. Sci., Nagasaki International Univ., <sup>2</sup>Seikei Univ., <sup>3</sup>Tokai Univ., <sup>4</sup>Chuken Laboratory for Life and Environment, <sup>5</sup>Univ. of Occupational and Environmental Health)
- P-009 The relationships between fish bodyweight, methylmercury and omega-3 polyunsaturated fatty acids in fish**  
 ○ Miyuki Iwai-Shimada<sup>1</sup>, Kunihiko Nakai<sup>2</sup>, Shoji F. Nakayama<sup>1</sup>, Hiroshi Satoh<sup>2</sup> (<sup>1</sup>National Institute for Environmental Studies, <sup>2</sup>Tohoku Univ. Grad. School of Med.)
- P-010 Involvement of transcription factor WT1 in arsenite-induced cytotoxicity**  
 ○ Hiroshi Tanaka, Tsuyoshi Nakano, Tsutomu Takahashi, Yo Shinoda, Yasuyuki Fujiwara (Sch. of Pharm., Tokyo Univ. of Pharm.)
- P-011 Effects of chlorine disinfection on the ecotoxicity of PPCPs in WWTP**  
 Kazunori Kunisawa<sup>1</sup>, Satoshi Okada<sup>1</sup>, Mio Dowaki<sup>1</sup>, Sayaka Inoue<sup>1</sup>, Ryo Shimizu<sup>1</sup>, Shigeyuki Kitamura<sup>2</sup>, Shigeru ohta<sup>3</sup>, ○ Kazumi Sugihara<sup>1</sup> (<sup>1</sup>Facal. Pharm. Sci., Hiroshima International Univ., <sup>2</sup>Nihon Pharm. Univ., <sup>3</sup>Grad. Sch. Biomed. Sci., Hiroshima Univ.)

## Metals

- P-012 Adsorption ability of lead ion onto zeolite prepared from fly ash by alkaline hydrothermal reaction**  
 ○ Yuhei Kobayashi, Fumihiko Ogata, Takehiro Nakamura, Eri Nagahashi, Naohito Kawasaki (Fac. Pharm., Kindai Univ.)
- P-013 Adsorbability of zinc onto phenolic natural high-molecular compounds**  
 ○ Eri Nagahashi, Fumihiko Ogata, Takehiro Nakamura, Yuhei Kobayashi, Naohito Kawasaki (Fac. Pharm., Kindai Univ.)

- P-014 Sex difference of methylmercury-produced toxicity in the next generation: An analysis focusing on the male-specific elevation of corticosterone during the fetal stage**  
○ Masaya Hitomi<sup>1</sup>, Tomoki Takeda<sup>1</sup>, Yukiko Hattori<sup>1,3</sup>, Masatake Fujimura<sup>4</sup>, Yoshitaka Tanaka<sup>2</sup>, Yuji Ishii<sup>1</sup> (<sup>1</sup>Mol. Life Sci., <sup>2</sup>Pharmaceut. Cell Biol., Grad. Sch. Pharmaceut. Sci., Kyushu Univ., <sup>3</sup>JSPS Res. Fellow., <sup>4</sup>Pathol. Sci., Natl. Inst. Minamata Disease)
- P-015 A zinc complex that strongly promotes vascular endothelial cell proliferation**  
○ Takehiro Nakamura<sup>1,2</sup>, Eiko Yoshida<sup>2</sup>, Ryo Takita<sup>3</sup>, Fumihiko Ogata<sup>1</sup>, Naohito Kawasaki<sup>1</sup>, Masanobu Uchiyama<sup>3</sup>, Toshiyuki Kaji<sup>2</sup> (<sup>1</sup>Fac. Pharm., Kindai Univ., <sup>2</sup>Fac. of Pharm. Sci., Tokyo Univ. of Sci., <sup>3</sup>Grad. Sch. of Pharm. Sci., Univ. Tokyo.)
- P-016 Molecular mechanisms for suppression of the synthesis of a large heparan sulfate proteoglycan, perlecan, which is involved in the inhibitory effect of lead on vascular endothelial cell proliferation**  
○ Reina Kumagai<sup>1</sup>, Takato Hara<sup>1,3</sup>, Eiko Yoshida<sup>1</sup>, Yasuyuki Fujiwara<sup>2</sup>, Chika Yamamoto<sup>3</sup>, Toshiyuki Kaji<sup>1</sup> (<sup>1</sup>Fac. of Pharm. Sci., Tokyo Univ. of Sci., <sup>2</sup>Sch. of Pharm., Tokyo Univ. Pharm. & Life Sci., <sup>3</sup>Fac. of Pharm. Sci., Toho Univ.)
- P-017 Induction of syndecan-4 by copper(II) bis(diethyldithiocarbamate) in vascular endothelial cells**  
○ Hiroko Tatsuishi<sup>1</sup>, Takato Hara<sup>1,2</sup>, Tomoya Fujie<sup>1,2</sup>, Eiko Yoshida<sup>1</sup>, Chika Yamamoto<sup>2</sup>, Hiroshi Naka<sup>3</sup>, Toshiyuki Kaji<sup>1</sup> (<sup>1</sup>Fac. of Pharm. Sci., Tokyo Univ. of Sci., <sup>2</sup>Fac. of Pharm. Sci., Toho Univ., <sup>3</sup>Res. Center Mater. Sci., Nagoya Univ.)
- P-018 Differences in biokinetics and nutritional availability between oral and intravenous administrations of bioselenocompounds**  
○ Kazuaki Takahashi, Noriyuki Suzuki, Yasumitsu Ogra (Grad. Sch. Pharm. Sci., Chiba Univ.)
- P-019 Tributyltin induces epigenetic changes and decreases the expression of nuclear respiratory factor-1**  
○ Saki Hanaoka<sup>1</sup>, Keishi Ishida<sup>2</sup>, Saki Tanaka<sup>2</sup>, Yaichiro Kotake<sup>1,2</sup>, Shigeru Ohta<sup>1,2</sup> (<sup>1</sup>Fac. of Pharm. Sci., Hiroshima Univ., <sup>2</sup>Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)
- P-020 In vitro analysis of the effects of cadmium on proximal tubular reabsorption efficiency**  
○ Nobuki Otera, Hazuki Yamamoto, Hitomi Fujishiro, Seiichiro Himeno (Fac. Pharmaceut. Sci., Tokushima Bunri Univ.)

- P-021 Merit and demerit of persulfides/polysulfides: CSE deletion-mediated enhancement of electrophilic stress and an adaptive response to reductive stress cause by CSE overexpression**  
○ Masahiro Akiyama<sup>1</sup>, Eiji Warabi<sup>1</sup>, Takamitsu Unoki<sup>1</sup>, Yasuhiro Shinkai<sup>1</sup>, Takaaki Akaike<sup>2</sup>, Yoshito Kumagai<sup>1</sup> (<sup>1</sup>Fac. of Med., Univ. of Tsukuba, <sup>2</sup>Grad. School of Med., Tohoku Univ.)
- P-022 Evaluation of the Katsuo extract as selenium source using cultured cell**  
○ Shomi Maruyama<sup>1</sup>, Sakura Yoshida<sup>1</sup>, Mamoru Haratake<sup>2</sup>, Takeshi Fuchigami<sup>1</sup>, Morio Nakayama<sup>1</sup> (<sup>1</sup>Graduate School of Biomedical Sciences, Nagasaki University, <sup>2</sup>Faculty of Pharmaceutical Sciences, Sojo University)
- P-023 Analysis of selenium in Gazami (Watarigani) crab**  
○ Yuka Tomari<sup>1</sup>, Sakura Yoshida<sup>2</sup>, Miho Iwataka<sup>2</sup>, Kaori Koga<sup>1</sup>, Mamoru Haratake<sup>3</sup>, Takeshi Fuchigami<sup>2</sup>, Morio Nakayama<sup>2</sup> (<sup>1</sup>School of Pharmaceutical Sciences, Nagasaki University, <sup>2</sup>Graduate School of Biomedical Sciences, Nagasaki University, <sup>3</sup>Faculty of Pharmaceutical Sciences, Sojo University)
- P-024 Arsenite inhibits c-Cbl-dependent EGFR degradation system**  
○ Daigo Sumi, Yumi Satoh, Seiichiro Himeno (Fac. Pharmaceut. Sci., Tokushima Bunri Univ.)
- P-025 Elucidation of the metabolism and toxicity mechanism of arsenolipids based on mass spectrometry – The second report**  
○ Yayoi Kobayashi<sup>1</sup>, Noriyuki Suzuki<sup>2</sup>, Yasumitsu Ogra<sup>2</sup>, Seishiro Hirano<sup>1</sup> (<sup>1</sup>NIES, <sup>2</sup>Grad. Sch. Pharm. Sci., Chiba Univ.)
- P-026 The mechanism of the anti-inflammatory effects of oral chrotherapeutic gold compound, Auranofin**  
○ Masamichi Yamashita (Fac. Bioresource. Sci., Nihon Univ.)
- P-027 Determination of 11 metals in tobacco fillers from Japanese and foreign cigarette brands sold in Japanese market**  
○ Yohei Inaba, Shigehisa Uchiyama, Naoki Kunugita (Department of Environmental Health, National Institute of Public Health)
- P-028 A mechanism involved in the induction of TNF- $\alpha$  expression by methylmercury**  
○ Chika Kaneko<sup>1</sup>, Takashi Toyama<sup>1</sup>, Shun Fukagawa<sup>1</sup>, Takuya Noguchi<sup>2</sup>, Atsushi Matsuzawa<sup>2</sup>, Akira Naganuma<sup>1</sup>, Gi-Wook Hwang<sup>1</sup> (<sup>1</sup>Department of Molecular & Biochemical Toxicology, Graduate School of Pharmaceutical Sciences, Tohoku University, <sup>2</sup>Laboratory of Health Chemistry, Graduate School of Pharmaceutical Sciences, Tohoku University)

- P-029 Identification of the cells involved in the induction of TNF- $\alpha$  expression in mouse brains administered with methylmercury, and elucidation of its mechanism**  
○ Takayuki Hoshi, Takashi Toyama, Soichi Murakami, Akira Naganuma, Gi-Wook Hwang (Fac. Pharmaceut. Sci., Tohoku Univ.)
- P-030 Identification of the binding proteins of transcription factor tmRT1, which enhances methylmercury toxicity**  
○ Yuta Togashi<sup>1</sup>, Katsuhiko Osaki<sup>1,2</sup>, Yi-An Chen<sup>1</sup>, Takashi Toyama<sup>1</sup>, Akira Naganuma<sup>1</sup>, Gi-Wook Hwang<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Tohoku Univ., <sup>2</sup>Kohjin Life Science Co., Ltd.)
- P-031 Capture of cadmium by reactive persulfides/polysulfides attenuates cadmium-induced adaptive responses and hepatotoxicity**  
○ Yasuhiro Shinkai<sup>1</sup>, Masahiro Akiyama<sup>1</sup>, Takamitsu Unoki<sup>1</sup>, Isao Ishii<sup>2</sup>, Yoshito Kumagai<sup>1</sup> (<sup>1</sup>Fac. of Med., Univ. of Tsukuba, <sup>2</sup>Showa Pharmaceutical University)
- P-032 Accumulation and metabolism of tellurium in rats ingesting plant-Te metabolites**  
○ Yasumi Anan<sup>1</sup>, Shigenori Inoue<sup>1</sup>, Masato Hidano<sup>1</sup>, Isao Ishii<sup>1</sup>, Yasumitsu Ogra<sup>2</sup> (<sup>1</sup>Showa Pharmaceut. Univ., <sup>2</sup>Grad. Sch. Pharmaceut. Sci., Chiba Univ.)
- P-033 Induction of the expression of metallothionein in vascular endothelial cells selectively by dithiocarbamate complexes**  
○ Tomoya Fujie<sup>1</sup>, Azusa Tsuchida<sup>1</sup>, Hiroshi Naka<sup>2</sup>, Toshiyuki Kaji<sup>3</sup>, Chika Yamamoto<sup>1</sup> (<sup>1</sup>Fac. Pharm. Sci., Toho Univ., <sup>2</sup>Res. Center Mater. Sci., Nagoya Univ., <sup>3</sup>Fac. Pharm. Sci., Tokyo Univ. Sci.)
- P-034 A zinc complex that reduces the size of chondroitin sulfate chains in vascular smooth muscle cells**  
○ Atsuya Ikeda<sup>1</sup>, Tomoya Fujie<sup>1</sup>, Takato Hara<sup>1</sup>, Takehiro Nakamura<sup>2</sup>, Toshiyuki Kaji<sup>3</sup>, Chika Yamamoto<sup>1</sup> (<sup>1</sup>Fac. Pharm. Sci., Toho Univ., <sup>2</sup>Fac. Pharm., Kindai Univ., <sup>3</sup>Fac. Pharm. Sci., Tokyo Univ. Sci.)
- P-035 Basic study on cytotoxicity of metals using cultured cells**  
○ Jun Kobayashi<sup>1</sup>, Keiichi Ikeda<sup>2</sup>, Hideo Sugiyama<sup>3</sup>, Mariko Mochizuki<sup>1</sup> (<sup>1</sup>Fac. Vet. Med., Nippon Veterinary and Life Science Univ., <sup>2</sup>Fac. Pharmaceut. Sci., Hokuriku Univ., <sup>3</sup>Grad. Sch. Heal. Sci., Matsumoto Univ.)

## Health Foods

- P-036 Structures of antimutagenic constituents in the peels of *Citrus limon***  
○ Takahiro Matsumoto, Kazuki Takahashi, Yuka Nakano, Sumire Kanayama, Masumi Kibi, Eriko Inoue, Tomohiro Hasei, Tetsushi Watanabe (Kyoto Pharm. Univ.)
- P-037 Comparison of Dissolved Hydrogen Concentration in Commercial Drinking Water (Part 2)**  
○ Toshiyuki Kimura, Kana Nishimura, Sachi Ogawa, Yasunori Sato (Fac. Pharmaceut. Sci., Hokuriku Univ.)
- P-038 Hepatic n-3/n-6 polyunsaturated fatty acid shift reverses hepatomegaly and disrupted hepatic function due to the lack of FXR signaling**  
○ Masaaki Miyata, Kouhei Shinno, Tomoki Kinoshita, Yoshimasa Sugiura (Dept. Food Sci. and Technol., Natl. Fisheries Univ.)
- P-039 Effects of health foods on Cyp gene induction in mouse liver**  
○ Yumemi Watanabe<sup>1</sup>, Takeshi Kumagai<sup>1</sup>, Takamitsu Sasaki<sup>2</sup>, Kiyoshi Nagata<sup>1</sup> (<sup>1</sup>Fac. Pharmaceut. Sci., Tohoku Medical and Pharmaceutical Univ., <sup>2</sup>Sch. Pharmaceut. Sci., Shizuoka Univ.)
- P-040 Effect of quercetin and related flavonoids on the activity of breast cancer resistance protein (BCRP) transporter**  
○ Mariko Hanada, Hiroaki Fujimoto, Hiroki Tanaka, Jun Kamishikiryo, Makoto Seo, Narumi Sugihara (Fac. Pharm. Pharmaceut. Sci., Fukuyama Univ.)

## Foods and Pesticides

- P-041 Influence of pH on the stability of aspartame and its degradation products**  
○ Yuya Deguchi, Naoka Yamaguchi, Ayaka Yamazaki, Tomohiro Kishi, Megumi Hamano Nagaoka, Hiroaki Nagaoka (Fac. of Pharm. Sci., Nagasaki International University)

## Analytical Chemistry

- P-042 Quantitation of catechins in the several tea-drinks using the fluorescent derivatization**  
○ Nahoko Mukae, Syunsuke Ootsubo, Tomohiro Kishi, Yuya Deguchi, Megumi Nagaoka, Hiroaki Nagaoka (Fac. Pharmaceut. Sci., Nagasaki International University)

## Cellular Responses

- P-043**    **A potential role of FGD1, a guanine nucleotide exchange factor toward Cdc42, in the regulation of cell-cell attachment by modulating N-glycosylation of N-cadherin**  
○ Hiroki Wakasa, Shunsuke Fujiwara, Toshiyuki Oshima, Makio Hayakawa (Sch. Pharmacy, Tokyo Univ. Pharm. & Life Sci.)
- P-044**    **Novel mechanisms of ALIS-mediated cellular dysfunction and death caused by antibacterial cephalosporins**  
○ Natsumi Mutoh, Midori Suzuki, Sayoko Miyagawa, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-045**    **Elucidation of the trans-fatty acid-specific effects on the stress-responsive kinase ASK1-mediated immune responses**  
○ Yusuke Hirata, Miki Takahashi, Yuki Kudoh, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-046**    **Translational research in drug development against NASH using a cell-based chemical screening**  
○ Keita Nagaoka, Yusuke Hirata, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-047**    **Biochanin A enhances ROR $\gamma$  activity through STAT3-mediated recruitment of NCOA1**  
○ Ryuta Muromoto<sup>1</sup>, Miki Takahashi<sup>1</sup>, Hiroyuki Kojima<sup>2</sup>, Shinji Takeuchi<sup>2</sup>, Tadashi Matsuda<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharm. Sci., Hokkaido Univ., <sup>2</sup>Hokkaido Institute of Public Health)
- P-048**    **Up-regulation of macrophage activation by sodium bicarbonate**  
○ Tomoya Kawakami, Atsushi Koike, Fumio Amano (Osaka Univ. Pharm. Sci.)
- P-049**    **Effect of glutathione-protected gold cluster on fibrinolytic activity of cultured human coronary endothelial cells**  
○ Yuki Kyo<sup>1</sup>, Eiko Yoshida<sup>1</sup>, Yuichi Negishi<sup>2</sup>, Toshiyuki Kaji<sup>1</sup> (<sup>1</sup>Fac. of Pharm. Sci., <sup>2</sup>Fac. of Sci., Tokyo Univ., of Sci.)
- P-050**    **Extracellular calcium ion regulated p53 dependent stress response by inhibiting degradation of MDM2 in Normal human epidermal keratinocyte**  
○ Yutaro Mori, Yuko Chida, Kenji Hattori, Kazuyuki Isii (Department of Hygienic Chemistry Meiji Pharmaceutical University)

- P-051 The difference of absorption rate of crystal form of titanium dioxide nanoparticle can elucidate the difference of cytotoxicity between anatase and rutile form**  
 ○ Etsuko Yoshimura, Yuko Chida, Kenji Hattori, Kazuhiko Nakadate, Yuki Ogasawara, Kazuyuki Ishii (Fac.Pharmacy, Meiji Pharmaceutical Univ.)
- P-052 Molecular mechanisms underlying trans-fatty acid-mediated enhancement of DNA damage-induced cell death**  
 ○ Saki Suzuki, Yusuke Hirata, Ryosuke Matsui, Miki Takahashi, Takuya Noguchi, Atsushi Matsuzawa (Lab. of Health Chem., Grad. Sch. of Pharmaceut. Sci., Tohoku Univ.)
- P-053 Synergistic activation of human nociceptor TRPA1 by two agonists with different mechanisms of action**  
 ○ Risa Maekawa<sup>1</sup>, Akira Aoki<sup>1</sup>, Yoshinori Okamoto<sup>1</sup>, Koji Ueda<sup>1</sup>, Susumu Ohkawara<sup>2</sup>, Nobumitsu Hanioka<sup>2</sup>, Toshiko Tanaka-Kagawa<sup>2</sup>, Hideto Jinno<sup>1</sup> (<sup>1</sup>Faculty of Pharmacy, Meijo University, <sup>2</sup>Yokohama University of Pharmacy)
- P-054 Role of aryl hydrocarbon receptors in steroidogenesis during the developmental stage and sexual maturation after growing up**  
 ○ Tomoki Takeda<sup>1</sup>, Arisa Nakamura<sup>1</sup>, Yukiko Hattori<sup>1,2</sup>, Haruki Fukumitsu<sup>1</sup>, Yuji Ishii<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Kyushu Univ., <sup>2</sup>JSPS Res. Fellow.)
- P-055 Nuclear import mechanism of constitutive active/androstane receptor (CAR)**  
 ○ Arisa Udagawa, Kohei Marumo, Yuka Noyama, Nami Kikawa, Kiyomitsu Nemoto, Yuichiro Kanno (Fac. Pharmaceut. Sci., Toho-Univ.)
- P-056 A possible role of NF-κB in the anti-inflammatory effects of activated PXR**  
 ○ Maya Okamura<sup>1</sup>, Taiki Abe<sup>2</sup>, Satoshi Tsuruta<sup>1</sup>, Ryota Shizu<sup>1</sup>, Takuomi Hosaka<sup>1</sup>, Takamitsu Sasaki<sup>1</sup>, Susumu Kodama<sup>2</sup>, Kouichi Yoshinari<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharmaceut. Sci., Univ. of Shizuoka, <sup>2</sup>Grad. Sch. Pharmaceut. Sci., Tohoku Univ.)
- P-057 Polysulfide Na<sub>2</sub>S<sub>4</sub> regulates 1,4-naphthoquinone-mediated activation of the PTEN/Akt/CREB signaling and cytotoxicity through its sulfur adducts formation**  
 ○ Takamitsu Unoki<sup>1</sup>, Yumi Abiko<sup>1</sup>, Yasuhiro Shinkai<sup>1</sup>, Reiko Hirose<sup>1</sup>, Takashi Uehara<sup>2</sup>, Yoshito Kumagai<sup>1</sup> (<sup>1</sup>Fac. Med., Univ. of Tsukuba, <sup>2</sup>Grad. Sch. Med. Den. Pharm. Sci., Okayama Univ.)
- P-058 Splicing reporter unveils the physiological significance of PKM-splicing switch**  
 ○ Yasuka Ode, Haruka Kura, Kenji Suzuki, So Masaki (Department of Pharmaceutical Sciences, Ritsumeikan University)

- P-059 Necdin controls BDNF signaling linked to neuronal differentiation**  
○ Erika Miyashita, Kosuke Nakamura, So Masaki, Kenji Suzuki (Department of Pharmaceutical Sciences, Ritsumeikan University)
- P-060 Reduction of membrane protein CRIM1 causes a decrease in E-cadherin and elevation of MMP, enhancing the migration and invasive ability of renal cell carcinoma cells**  
○ Akinori Sugiyama<sup>1</sup>, Nobutaka Ogasawara<sup>1</sup>, Tamami Kudo<sup>1</sup>, Masaki Sato<sup>1</sup>, Yasushi Kawasaki<sup>1</sup>, Sei Yonezawa<sup>1</sup>, Yohei Miyagi<sup>2</sup>, Satoru Takahashi<sup>3</sup>, Yasuhiro Natori<sup>1</sup> (<sup>1</sup>Sch. Pharm., Iwate Medical Univ., <sup>2</sup>Kanagawa Cancer Center Res. Inst., <sup>3</sup>Sch. Pharmaceutical Sci., Mukogawa Women's Univ.)
- P-061 The role of RhoE, a member of Rho GTPase, in TGF- $\beta$ 1-induced epithelial to mesenchymal transition**  
○ Rina Komada, Shigehiro Osada, Michiko Shirane, Masayoshi Imagawa, Makoto Nishizuka (Fac. Pharm. Sci., Nagoya City Univ.)
- P-062 Influence of amyloid  $\beta$  against the oxidative stress defense system of human astrocytoma U-251MG cells**  
○ Tomofumi Okuno, Mami Ebisu, Daiki Hayase, Naoki Okudaira, Yousuke Akai, Koichi Murano, Hirofumi Ogino, Tomohiro Arakawa, Hitoshi Ueno (Fac. Pharmaceut. Sci., Setsunan Univ.)
- P-063 Mechanism of Follistatin Induction by Selective Androgen Receptor Modulator YK11 via AR**  
○ Tomofumi Yatsu, Taichi Kusakabe, Keisuke Katou, Kiyomitsu Nemoto, Yuichiro Kanno (Fac. Pharmaceut. Sci., Toho Univ.)
- P-064 Inhibitory effect of selenomethionine on IgE-mediated allergic responses in RBL-2H3 cells**  
○ Tomohiro Arakawa, Haruki Okubo, Hirofumi Ogino, Tomofumi Okuno, Hitoshi Ueno (Fac. Pharmaceut. Sci., Setsunan Univ.)
- P-065 Regulation of AhR-transcriptional activity by its ligands**  
○ Nao Saito, Naoya Yamashita, Kiyomitsu Nemoto, Yuichiro Kanno (Fac. Pharmaceut. Sci., Toho Univ.)
- P-066 Cell density-dependent induction of syndecan-4 by FGF-2 in cultured vascular endothelial cells**  
○ Takato Hara<sup>1,2</sup>, Shiori Yabushita<sup>1</sup>, Eiko Yoshida<sup>1</sup>, Chika Yamamoto<sup>2</sup>, Toshiyuki Kaji<sup>1</sup> (<sup>1</sup>Fac. Of Pharm. Sci., Tokyo Univ. Sci., <sup>2</sup>Fac. Pharm. Sci., Toho Univ.)



**P-067 Induction of metallothionein via TGF- $\beta$  signaling in vascular endothelial cells**  
○ Tsubasa Tsuchida<sup>1</sup>, Tomoya Fujie<sup>1,3</sup>, Eiko Yoshida<sup>1</sup>, Yasuyuki Fujiwara<sup>2</sup>,  
Chika Yamamoto<sup>3</sup>, Toshiyuki Kaji<sup>1</sup> (<sup>1</sup>Fac. of Pharm. Sci., Tokyo Univ. of Sci., <sup>2</sup>Sch. of  
Pharm., Tokyo Univ. Pharm. & Life Sci., <sup>3</sup>Fac. of Pharm. Sci., Toho Univ.)

**P-068 Inhibition of cancer cell migration by Cannabidiolic Acid (CBDA), a main component of the fiber-type cannabis: The mechanism associated with the formation of actin stress fiber**  
○ Hiroyuki Okazaki<sup>1</sup>, Shuso Takeda<sup>2</sup>, Masayo Suzuki<sup>2</sup>, Kazuhito Watanabe<sup>1</sup>,  
Masufumi Takiguchi<sup>2</sup>, Hironori Aramaki<sup>1</sup> (<sup>1</sup>Daiichi Univ. Pharm., <sup>2</sup>Fac. Pharmaceut.  
Sci., Hiroshima Intl. Univ.)

**P-149 The mechanism underlying the activation of the STING variants associated with an autoinflammatory disease**  
○ Emari OGAWA<sup>1</sup>, Tatsuya AKIBA<sup>1</sup>, Kojiro MUKAI<sup>1</sup>, Tomohiko TAGUCHI<sup>2</sup>,  
Hiroyuki ARAI<sup>1,2,3</sup> (<sup>1</sup>Dept. of Health Chem., Grad. Sch. of Pharm. Sci., Univ. of Tokyo,  
<sup>2</sup>Pathol. Cell Biol. Lab., Grad. Sch. of Pharm. Sci., Univ. of Tokyo, <sup>3</sup>AMED-CREST)

## Oxidative Stress

**P-069 Effect of dihydropyrazine on inflammatory reactions**  
○ Madoka Esaki<sup>1</sup>, Takumi Ishida<sup>1</sup>, Shinji Takechi<sup>1</sup>, Shunji Itoh<sup>2</sup>, Masaki Yoshida<sup>3</sup> (<sup>1</sup>Div.  
Pharmaceut. Sci., Sojo Univ., <sup>2</sup>Dept. Health Sci., Grad. Sch. Health Sci., Kansai Univ.  
Health Sci., <sup>3</sup>Fac. Bio-Sci., Nagahama Inst. Bio-Sci. Technol.)

**P-070 Per/polysulfide-mediated protection of protein tyrosine phosphatase 1B by reactive oxygen species derived from 9,10-phenanthrenequinone *in vitro***  
○ Nho C. Luong<sup>1</sup>, Yumi Abiko<sup>1,2</sup>, Yoshito Kumagai<sup>1,2</sup> (<sup>1</sup>Grad. Sch. Comp. Human Sci.,  
Univ. Tsukuba, <sup>2</sup>Fac. Med., Univ. Tsukuba)

**P-071 Non-toxic Level of Acetaminophen Potentiates Carbon Tetrachloride-induced Hepatotoxicity In Mice**  
○ Shiori Fukaya<sup>1</sup>, Hiroki Yoshioka<sup>1</sup>, Yoshimi Ichimaru<sup>1</sup>, Nobuhiko Miura<sup>2</sup>,  
Akito Nagatsu<sup>1</sup>, Tunemasa Nonogaki<sup>1</sup> (<sup>1</sup>Dept. Pharm., Kinjo Gakuin Univ., <sup>2</sup>Natl Inst  
Occu Safety Health.)

**P-072 An investigation about mechanism by which tripeptide Gly-His-Lys suppresses oxidative stress**  
○ Yuki Ito, Satoru Sakuma, Yohko Fujimoto (Lab. Physiol. Chem., Osaka Univ.  
Pharmaceut. Sci.)

**P-073 The difference in the sensitivity to ROS of S1, S2, and S3 segment-specific proximal tubule cells**

○ Hitomi Fujishiro, Rie Yamagami, Seiichiro Himeno (Fac. Pharmaceut. Sci., Tokushima Bunri Univ.)

**P-074 The roles of selenium as an antioxidative factor in neural cells producing A $\beta$**

○ Ryunosuke Kadotomi<sup>1</sup>, Sakura Yoshida<sup>1</sup>, Nobuhisa Iwata<sup>1</sup>, Masashi Asai<sup>1</sup>, Takeshi Fuchigami<sup>1</sup>, Mamoru Haratake<sup>2</sup>, Kei Maruyama<sup>3</sup>, Morio Nakayama<sup>1</sup> (<sup>1</sup>Grad. Sch. Biomed. Sci., Nagasaki Univ., <sup>2</sup>Fac. Pharmaceut. Sci., Sojo Univ., <sup>3</sup>Saitama Med Univ.)

**P-075 Analysis of growth suppression in nucleolar glutathione peroxidase 4 overexpression cells**

○ Hayato Ikeda, Shunsuke Nakayama, Taro Sakamoto, Hiroataka Imai (Grad. Sch. Pharmaceut. Sci., Kitasato Univ.)

**P-076 Formation of perthiyl radicals during reaction of persulfide with environmental electron acceptors**

○ Yumi Abiko<sup>1,2</sup>, Yumi Nakai<sup>3</sup>, Nho Cong Luong<sup>2</sup>, Yoshito Kumagai<sup>1,2</sup> (<sup>1</sup>Fac. Med., Univ. of Tsukuba, <sup>2</sup>Grad. Sch. Comp. Human Sci., Univ. of Tsukuba, <sup>3</sup>JEOL RESONANCE Inc.)

**P-077 Identification of redox-sensitive cysteine residues of pyruvate kinase, the rate-limiting enzyme on glycolysis**

○ Satoshi Numasaki, Hayato Irokawa, Atushi Inose, Shusuke Kuge (Fac. Pharmaceut. Sci., Tohoku Medical and Pharmaceutical Univ.)

**P-078 Induction of oxidative stress genes response to photodynamic therapy using talaporfin sodium in rat meningioma KMY-J cells**

○ Tsutomu Takahashi<sup>1</sup>, Saki Suzuki<sup>1</sup>, Suzuka Misawa<sup>1</sup>, Yo Shinoda<sup>1</sup>, Jiro Akimoto<sup>2</sup>, Yasuyuki Fujiwara<sup>1</sup> (<sup>1</sup>Sch. of Pharm., Tokyo Univ. of Pharm. and Life Sci., <sup>2</sup>Tokyo Med. Univ.)

## Biochemistry

**P-079 Effects of ACSL4 deficiency on macrophage functions**

○ Hiroshi Kuwata, Eriko Nakatani, Takahiro Mizunuma, Shuntaro Hara (Sch. Pharm. Showa Univ.)

**P-080 Role of Prostaglandin Terminal Synthases in Chemical-induced Contact Hypersensitivity**

○ Yuka Sasaki<sup>1</sup>, Tsubasa Ochiai<sup>1</sup>, Chieko Yokoyama<sup>2</sup>, Shuntaro Hara<sup>1</sup> (<sup>1</sup>Sch. of Pharmacy, Showa Univ., <sup>2</sup>Kanagawa Inst. of Tech.)

- P-081 Search for proteins associating with prostaglandin E synthases**  
 ○ Yoshihito Nakatani<sup>1</sup>, Kaede Kasahara<sup>1</sup>, Ayaka Watanabe<sup>1</sup>, Rina Kasai<sup>1</sup>, Ryoya Seino<sup>1</sup>, Rikako Masumoto<sup>1</sup>, Toshihiro Aiuchi<sup>2</sup>, Shuntaro Hara<sup>1</sup> (<sup>1</sup>Div. Health Chem., Sch. Pharmacy, Showa Univ., <sup>2</sup>Div. Biol. Chem., Sch. Pharmacy, Showa Univ.)
- P-082 The effect of TRPA1 activation on browning in 3T3-L1 adipocyte**  
 ○ Kento Sakatani, Akira Aoki, Kota Ibaraki, Haruka Shiroyama, Yoshinori Okamoto, Koji Ueda, Hideto Jinno (Faculty of Pharmacy, Meijo Univ.)
- P-083 Regulation of ErbB family via phosphorylation of a conserved juxtamembrane domain located threonine in breast cancer cells**  
 ○ Yuki Kawasaki, Hiroaki Sakurai (Dept. Cancer Cell Biol., Grad. Sch. Med. and Pharm. Sci., Univ. Toyama)
- P-084 Histological and molecular features of aged mouse thymus**  
 ○ Haruka Sanaki, Laurensius K. Lie, Junsuke Hirono, kimie Nakagawa, Hiroshi Hasegawa (Kobe Pharmaceut. Univ.)
- P-085 The Ca<sup>2+</sup>-activated K<sup>+</sup> channel K<sub>Ca</sub>3.1 suppresses adipocyte differentiation**  
 ○ Tomoka Nakano, Sachiyo Narita, Shigehiro Osada, Michiko Shirane, Masayoshi Imagawa, Makoto Nishizuka (Grad. Sch. of Pharm. Sci., Nagoya City Univ.)
- P-086 Pregnancy-induced hypertension and pup neglect in cystathionine gamma-lyase-deficient mice, a model for cystathioninuria**  
 ○ Noriyuki Akahoshi, Hiroki Handa, Isao Ishii (Health Chemistry, Showa Pharmaceutical Univ.)
- P-087 Abnormal amino acid components of milk whey in cystathionine gamma-lyase-deficient mice, a model for cystathioninuria**  
 ○ Hiroki Handa, Akira Yokoyama, Noriyuki Akahoshi, Isao Ishii (Health Chemistry, Showa Pharmaceutical Univ.)

## Endocrine Disruptors

- P-088 Identification and characterization of Retinoid X receptor ortholog in *Mytilus galloprovincialis***  
 ○ Takayuki Miyagi<sup>1</sup>, Youhei Hiromori<sup>1,2</sup>, Ryo Akimoto<sup>1</sup>, Tsuyoshi Nakanishi<sup>1</sup>, Hisamitsu Nagase<sup>1</sup> (<sup>1</sup>Gifu Pharmaceutical Univ., <sup>2</sup>College of Pharm, Suzuka medical science Univ.)
- P-089 Characterization of a model mouse for spermatogenesis disorder using Cre-loxP system**  
 ○ Yuta Nagao, Kyoko Mekada, Tsuyoshi Nakanishi, Hisamitsu Nagase (Gifu pharm. Univ.)

**P-090 Development of *in vivo* screening assay for anti-osteoporosis agents using estrogen reporter "E-Rep" mice**

○ Motoshi Furukawa, Natsuki Kanaeda, Tsuyoshi Nakanishi, Hisamitsu Nagase (Gifu pharm. Univ.)

**P-091 Comprehensive investigation of oil/solvent vehicles for use in toxicology studies on external genitalia formation**

○ Kazuki Tamai, Takeuchi masaki, Masanari Onda, Tsuyoshi Nakanishi, Hisamitsu Nagase (Gifu Pharm. Univ.)

## Neural Toxicity

**P-092 The mechanism of methylmercury-induced peripheral neural degeneration in Wistar rat**

○ Shunsuke Ehara<sup>1</sup>, Satoshi Tatsumi<sup>1</sup>, Tatsuro Amemiya<sup>1</sup>, Yo Shinoda<sup>1</sup>, Yu Sasaki<sup>2</sup>, Eiko Yoshida<sup>2</sup>, Tsutomu Takahashi<sup>1</sup>, Toshiyuki Kaji<sup>2</sup>, Yasuyuki Fujiwara<sup>1</sup> (<sup>1</sup>Sch. of Pharm., Tokyo Univ. of Pharm. and Life Sci., <sup>2</sup>Fac. of Pharm. Sci., Tokyo Univ. of Sci.)

**P-093 Rescue of amyloid  $\beta$ -induced memory impairment by hippocampal metallothionein induction**

○ Wakana Hashimoto, Hiroki Suzuki, Yuta Koike, Haruna Tamano, Atsushi Takeda (Sch. Pharm. Sci., Univ. Shizuoka)

**P-094 Extracellular  $Zn^{2+}$  is required for picomolar A $\beta$  concentration-induced memory impairment**

○ Shuhei Kobuchi, Miku Sasaki, Munekazu Tenpaku, Haruna Tamao, Atsushi Takeda (Sch. Pharm. Sci., Univ. Shizuoka)

**P-095 Discovery of p62 nuclear accumulation induced by a Parkinson's disease-related neurotoxin and its mechanism**

○ Yuka Kuwabara<sup>1</sup>, Masatsugu Miyara<sup>2</sup>, Shuichiro Sakamoto<sup>2</sup>, Keishi Ishida<sup>2</sup>, Wataru Tokunaga<sup>2</sup>, Yaichiro Kotake<sup>1,2</sup>, Shigeru Ohta<sup>1,2</sup> (<sup>1</sup>Fac. of Pharmaceut. Sci., Hiroshima Univ., <sup>2</sup>Grad. Sch. of Biomed. and Health Sci., Hiroshima Univ.)

**P-096 Effect of low-level environmental toxin on dopaminergic neuronal differentiation**

○ Suzuna Go, Manami Hatano, Hisaka Kurita, Masatoshi Inden, Isao Hozumi (Laboratory of Medical Therapeutics and Molecular Therapeutics, Gifu Pharmaceutical University, Japan.)

- P-097 Analysis of protective roles and expression mechanism of *SLC30A10* against dopamine neurotoxin exposure**  
 ○ Manami Hatano<sup>1</sup>, Suzuna Go<sup>1</sup>, Kazuki Yokoo<sup>1</sup>, Hisaka Kurita<sup>1</sup>, Masatoshi Inden<sup>1</sup>, Taiho Kambe<sup>2</sup>, Isao Hozumi<sup>1</sup> (<sup>1</sup>Laboratory of Medical Therapeutics and Molecular Therapeutics, Gifu Pharmaceutical University, <sup>2</sup>Division of Integrated Life Science, Graduate School of Biostudies, Kyoto University)
- P-098 Autophagy in cerebellar neuron induced by exposure to acrylamide**  
 ○ Masahiro Yamamura<sup>1</sup>, Kyo Morita<sup>1</sup>, Tomoyuki Matsuzoe<sup>1</sup>, Lingyi Zhang<sup>2</sup>, Cai Zhong<sup>1</sup>, Daichi Nagashima<sup>1</sup>, Toshihiro Sakurai<sup>1</sup>, Sahoko Ichihara<sup>2</sup>, Gaku Ichihara<sup>1</sup> (<sup>1</sup>Fac. Pharmaceut. Sci., Tokyo University of science. , <sup>2</sup>RIKEN. , <sup>3</sup>Sch. Medicine., Jichi Medical Univ.)
- P-099 Neurotoxicity of artificial sweetener neotame via induction of oxidative stress**  
 ○ Chihiro Sasaki, Yoshinori Okamoto, Akira Aoki, Koji Ueda, Hideto Jinno (Fac. Pharm., Meijo Univ.)
- P-100 Involvement of intracellular Zn<sup>2+</sup> signal in Parkinson's syndrome induced with 6-hydroxydopamine and its rescue**  
 ○ Ryusuke Nishio, Hiroki Morioka, Haruna Tamano, Atsushi Takeda (Grad. Sch. Pharm. Sci., Univ. Shizuoka)
- P-101 Clioquinol (quinoform) induces mRNA expression of metallothionein in human neuroblastoma SH-SY5Y cells**  
 Hiroyuki Waragai<sup>1</sup>, Kengo Matsumoto<sup>1,2</sup>, Misaki Kawamoto<sup>1</sup>, Kenji Matsuura<sup>1</sup>, Keita Yamada<sup>1</sup>, Masato Katsuyama<sup>3</sup>, ○ Fumitoshi Sakazaki<sup>1</sup> (<sup>1</sup>Fac. Pharmacy, Osaka-Ohtani Univ., <sup>2</sup>Nagoya Univ. Grad. Sch. Med., <sup>3</sup>Kyoto Pref. Univ. Med.)

## Carcinogen

- P-102 Detoxification of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK)**  
 ○ Takahito Nishiyama, Hiromi Yanagita, Nahoko Hayashi, Naoki Kakurai, Ryo Koike, Tomokazu Ohnuma, Kenichiro Ogura, Akira Hiratsuka (Dept. Drug Metab. Mol. Toxicol., Sch Pharm., Tokyo Univ. Pharm. Life Sci.)
- P-103 Relationship between hepatocarcinogenesis and the activation of nuclear receptors in rats**  
 Misako Tanabe, Ryota Shizu, Takuomi Hosaka, Takamitsu Sasaki, ○ Kouichi Yoshinari (School of Pharmaceutical Sciences, University of Shizuoka)

**P-104 The role of YAP in CAR-mediated mouse hepatocyte proliferation**  
○ Yuto Amaike<sup>1</sup>, Taiki Abe<sup>1,2</sup>, Ryota Shizu<sup>1</sup>, Takuomi Hosaka<sup>1</sup>, Takamitsu Sasaki<sup>1</sup>, Atsushi Matsuzawa<sup>2</sup>, Kouichi Yoshinari<sup>1</sup> (<sup>1</sup>School of Pharmaceutical Sciences, University of Shizuoka, <sup>2</sup>Graduate School of Pharmaceutical Sciences, Tohoku University)

**P-150 Structures of novel Maillard reaction products in a hyperglycemic condition**  
○ Daisuke Imahori, Takahiro Matsumoto, Naoto Kojima, Megumi Sumii, Taishi Sumida, Tomohiro Hasei, Masayuki Yamashita, Tetsushi Watanabe (Kyoto Pharm. Univ.)

## **Immunotoxicity · Infectious Diseases**

**P-105 Effect of carboxy-terminal length of hepatitis C virus core on the endoplasmic-stress response**  
○ Fumito Nagase, Shota Takahashi, Atushi Inose, Shusuke Kuge (Fac. Pharmaceut. Sci., Tohoku Medical and Pharmaceutical Univ.)

**P-106 Analysis of *Salmonella*-induced macrophage death and its resistant mutants**  
○ Atsushi Koike, Kiyoko Kohama, Fumio Amano (Osaka Univ. Pharm. Sci.)

**P-107 Effects of parabens on contact hypersensitivity induced by fluorescein isothiocyanate**  
○ Yukina Endo, Takeshi Matsuoka, Wakana Suzuki, Kota Sekiguchi, Erina Ogawa, Kohta Kurohane, Yasuyuki Imai (Lab. Microbiol. Immunol., Pharm. Sci., Univ. Of Shizuoka)

**P-108 Major Urinary Protein 1 acts as a novel carrier-protein for some potential skin sensitizers**  
○ Erina Shiraishi, Akiko Ido, Kento Tanaka, Tsuyoshi Nakanishi, Hisamitsu Nagase (Gifu Pharm. Univ.)

**P-109 Activation-dependent signaling pathways for cytokine production in murine Bone marrow-derived basophils and mast cells**  
○ Takuma Kitano<sup>1</sup>, Masanari Shibata<sup>1</sup>, Kohta Hasuike<sup>1</sup>, Shinsuke Taki<sup>2</sup>, Saotomo Itoh<sup>1</sup>, Shigeaki Hida<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharmaceut. Sci. Nagoya-City Univ., <sup>2</sup>Sch. Med, Shinshu Univ.)

## **Drug Metabolism**

**P-110 A novel transactivation of the CYP3A4 gene**  
○ Kouki Watanabe<sup>1</sup>, Reo Odagiri<sup>1</sup>, Yusuke Aratsu<sup>1</sup>, Takamitsu Sasaki<sup>2</sup>, Sawako Shindo<sup>1</sup>, Takeshi Kumagai<sup>1</sup>, Kiyoshi Nagata<sup>1</sup> (<sup>1</sup>Fac. Pharmaceut. Sci., Tohoku Medical and Pharmaceutical Univ., <sup>2</sup>Sch. Pharmaceut. Sci., Shizuoka Univ.)

- P-111 Development of a reporter assay system to detect low concentrations of retinoic acid by use of CYP26A1 reporter gene**  
 ○ Kenta Mori<sup>1</sup>, Hiroyuki Suzuki<sup>1</sup>, Anari Shioya<sup>1</sup>, Takamitsu Sasaki<sup>2</sup>, Sawako Shindo<sup>1</sup>, Takeshi Kumagai<sup>1</sup>, Kiyoshi Nagata<sup>1</sup> (<sup>1</sup>Fac. Pharmaceut. Sci., Tohoku Medical and Pharmaceutical Univ., <sup>2</sup>Sch. Pharmaceut. Sci., Shizuoka Univ.)
- P-112 Sex differences in toxicity of *gin-nan* food poisoning-inducing substance in rats (7)**  
 ○ Mika Ishikawa, Minami Ito, Shota Kamada, Teruki Yoshimura, Daisuke Kobayashi, Keiji Wada (School of Pharmaceutical Sciences, Health Sciences University of Hokkaido)
- P-113 Determination of a novel ER localization signal of UGT2B7**  
 ○ Yuu Miyauchi<sup>1,2</sup>, Sora Kimura<sup>2</sup>, Keiko Fujimoto<sup>1</sup>, Yuko Hirota<sup>1</sup>, Peter I. Mackenzie<sup>3</sup>, Yuji Ishii<sup>2</sup>, Yoshitaka Tanaka<sup>1</sup> (<sup>1</sup>Division of Pharmaceutical Cell Biology, <sup>2</sup>Laboratory of Molecular Life Sciences, Graduate School of Pharmaceutical Sciences, Kyushu University, <sup>3</sup>Flinders University School of Medicine, Flinders Medical Center)
- P-114 Nrf2 depletion attenuates drug metabolism and induction of cytochrome P450 by phenobarbital**  
 ○ Takashi Ashino<sup>1</sup>, Masayuki Yamamoto<sup>2</sup>, Satoshi Numazawa<sup>1</sup> (<sup>1</sup>Div. Toxicol., Showa Univ. Sch. Pharm., <sup>2</sup>Dept. Med. Biochem., Tohoku Univ. Grad. Sch. Med.)

## Preventive Pharmacology

- P-115 The search for molecules in the brain involved in the improvement of nocturia-like symptoms in aged mice based on the effect of an enriched environment**  
 ○ Fumio Soeda<sup>1,2</sup>, Akihisa Toda<sup>1</sup>, Natsumi Goto<sup>2</sup>, Shinnosuke Sameshima<sup>2</sup>, Takayuki Koga<sup>1</sup>, Shogo Misumi<sup>2</sup>, Kazuo Takahama<sup>2,3</sup> (<sup>1</sup>Daiichi Univ. Pharm., <sup>2</sup>Grad. Sch. Pharmaceut. Sci., Kumamoto Univ., <sup>3</sup>Kumamoto Health Sci. Univ.)
- P-116 Curcumin restores clozapine-induced adipogenesis in 3T3-L1 preadipocytes**  
 ○ Chisato Noda, Satoru Sakuma, Yohko Fujimoto (Lab. Physiol. Chem., Osaka Univ. Pharmaceut. Sci.)
- P-117 Effects of  $\beta$ -carotene on the skin of mice fed with a magnesium deficient diet**  
 ○ Noriko Takahashi, Takamichi Kake, Shinya Hasegawa, Masahiro Yamasaki, Masahiko Imai (Lab. of Physiol. Chem., Inst. of Medic. Chem., Hoshi Univ.)
- P-118 Effect of cold water stress on brown adipose tissue and involvement of metallothionein**  
 Takashige Kawakami, Tomomi Nakayama, Yoshito Kadota, Shinya Suzuki (Public health, Faculty of Pharmaceutical Sciences, Tokushima Bunri University)

- P-119 Effect of vizantin on high-fat diet-induced fatty liver in mice**  
Takashige Kawakami, ○ Hiromi Sato, Yoshito Kadota, Mayo Nakano, Hirofumi Yamamoto, Shinya Suzuki (Public health, Faculty of Pharmaceutical Sciences, Tokushima Bunri University)
- P-120 Effects of amino acid supplementation on development of chemical-induced dermatitis**  
○ Takayuki Koga<sup>1</sup>, Kie Inoue<sup>1</sup>, Fuka Hirayama<sup>1</sup>, Tomoki Takeda<sup>2</sup>, Yuji Ishii<sup>2</sup>, Fumio Soeda<sup>1</sup>, Makoto Hiromura<sup>1</sup>, Akihisa Toda<sup>1</sup> (<sup>1</sup>Daiichi Univ. Pharm., <sup>2</sup>Grad. Sch. Pharmaceut. Sci., Kyushu Univ.)
- P-121 Identification of the antimicrobial ingredients emitted from strain TM-I-3 and study of the antimicrobial activity of TM-I-3 under spore state**  
○ Chihiro Usui<sup>1</sup>, kouki Oura<sup>1</sup>, Miku Matsumoto<sup>1</sup>, Yukiko Ogawa<sup>1</sup>, Miwa Sohda<sup>1</sup>, Yukihiko Nakashima<sup>2</sup>, Kazutoshi Sugita<sup>3</sup>, Miyuki Noguchi<sup>4</sup>, Shinji Urakawa<sup>5</sup>, Hidetaka Matsubara<sup>6</sup>, Masaki Nagaishi<sup>7</sup>, Hiroshi Sato<sup>1</sup> (<sup>1</sup>Fac. Pharmaceut. Sci., Nagasaki International Univ, <sup>2</sup>Fac. Pharmaceut. Sci., Fukuoka Univ, <sup>3</sup>Fac. Veterinary., Azabu Univ, <sup>4</sup>Fac. Engineering Sci., Seikei Univ, <sup>5</sup>T.M Enterprise, <sup>6</sup>Chuken Laboratory for Life and Environment, <sup>7</sup>Ceramic Research Center of Nagasaki)
- P-122 Effect of selenoproteins on insulin resistance induction**  
○ Koichi Murano, Misaki Nakae, yuki Nishida, Yuto Kishida, Hirofumi Ogino, Tomohiro Arakawa, Tomofumi Okuno, Hitoshi Ueno (Fac. Pharmaceut. Sci., Setsunan Univ.)
- P-123 Health risk assessment of human pharmaceutical ingredients present in urban rivers**  
○ Tetsuji Nishimura<sup>1</sup>, Yuki Kosugi<sup>2</sup>, Kimiyo Watanabe<sup>2</sup>, Toshinari Suzuki<sup>2</sup> (<sup>1</sup>Fac. Pharmaceut. Sci., Teikyo Heisei Univ., <sup>2</sup>Div. Environment. Health, Tokyo Metro. Inst. of Public Health)
- Others**
- P-124 Study on relationship between mineral concentration in hair and anti-aging for skin or alopecia**  
○ Kaito Yamashiro<sup>1</sup>, Fumihiko Ogata<sup>1</sup>, Takehiro Nakamura<sup>1</sup>, Naohito Kawasaki<sup>1,2</sup> (<sup>1</sup>Department of Pharmacy, Faculty of Pharmacy, Kindai University, <sup>2</sup>Anti-aging Center, Kindai University)
- P-125 The effect of reactive nitrogen species on the proliferation of Caco-2 cells**  
○ Kanna Yamaguchi, Satoru Sakuma, Yohko Fujimoto (Lab. Physiol. Chem., Osaka Univ. Pharmaceut. Sci.)



**P-126 The influence of single-nucleotide mutations on the homodimerization of androgen receptor**

○ Ryota Shizu<sup>1,2</sup>, Su-Jun Lee<sup>2</sup>, Masahiko Negishi<sup>2</sup>, Kouichi Yoshinari<sup>1</sup> (<sup>1</sup>School of Pharmaceutical Sciences, University of Shizuoka, <sup>2</sup>Reproductive and Developmental Biology Laboratories, National Institute of Environmental Health Sciences, National Institutes of Health)

**P-127 The effect of a hydrogen sulfide-generating chemical GYY4137 on the proliferation of Caco-2 cells**

○ Maya Takase, Satoru Sakuma, Yohko Fujimoto (Lab. Physiol. Chem., Osaka Univ. Pharmaceut. Sci.)

**P-128 High sensitivity of testicular function to titanium dioxide**

○ Nobuhiko Miura, Katsumi Ohtani (Natl Inst Occu Safety Health)

**P-129 Determination of seven phenolic compounds in mainstream smoke of Japanese 11 cigarette brands**

○ Masahiro Ono<sup>1</sup>, Yohei Inaba<sup>2</sup>, Kazutoshi Sugita<sup>1</sup>, Shigehisa Uchiyama<sup>2</sup>, Yukihiro Takagi<sup>1</sup>, Naoki Kunugita<sup>2</sup> (<sup>1</sup>School of Veterinary Medicine, Azabu Univ., <sup>2</sup>Department of Environmental Health, National Institute of Public Health)

**P-130 Adverse effect of titanium dioxide nanoparticle on testicular function in mice**

○ Katsumi Ohtani, Rieko Hojo, Nobuhiko Miura (Natl Inst Occu Safety Health)

**P-131 Environmental microbiota in a pharmaceutical manufacturing facility**

○ Yuji Takahashi<sup>1</sup>, Mako kawai<sup>2</sup>, Masao Nasu<sup>3</sup>, Tomoaki Ichijo<sup>1</sup> (<sup>1</sup>Grad. Sch. Pharm. Sci., Osaka Univ., <sup>2</sup>Fac. Pharm. Sci., Himeji Dokkyo Univ., <sup>3</sup>Fac. Pharm., Osaka Ohtani Univ.)

**From Korea**

**P-132 Induction of inflammatory responses from THP-1 cells by Kathon CG<sup>TM</sup>**

○ BoYoon Chang<sup>1</sup>, Kyu Hyuck Chung<sup>2</sup>, SungYeon Kim<sup>1\*</sup> (<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, Iksan, Jeonbuk 54538, South Korea, <sup>2</sup>School of Pharmacy, Sungkyunkwan University, Suwon, 440-746, Korea)

**P-133 Protective host immune responses to *Salmonella* infection by *Morus alba* L.**

○ BoYoon Chang<sup>1</sup>, DaEun Kim<sup>1</sup>, JiHye Park<sup>1</sup>, BongSung Koo<sup>2</sup>, Hyun cheul Lee<sup>2</sup>, SungYeon Kim<sup>1</sup> (<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, Iksan, Jeonbuk 54538, South Korea., <sup>2</sup>ForBioKorea Co., Ltd. 14, Gasan digital 2-ro, Geumcheon-gu, Seoul, Republic of Korea)

- P-134 Anti-oxidants and inhibitor of various matrix-metalloproteinases(MMPs) expression from seed of *Litchi chinensis* Sonn.**  
 ○ DaEun Kim<sup>1</sup>, BoYoon Chang<sup>1</sup>, Yeon Sil Hwang<sup>1</sup>, JiHye Park<sup>1</sup>, DaeSung Kim<sup>2</sup>, HyeSoo Kim<sup>2</sup>, HyoungKwon Cho<sup>2</sup>, SungYeon Kim<sup>1</sup> (<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, Iksan, Jeonbuk 54538, South Korea., <sup>2</sup>Hanpoong Pharm. CO., Ltd, 333-24 1st Palbok-dong, Deokjingu, Jeonju 561-841, Jeonbuk, Republic of Korea)
- P-135 Differential expression of metallothionein isoforms in various breast cancer cell lines**  
 ○ Se Jong Kim, Sun Woo Jin, Hye-Gwang Jeong (College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea)
- P-136 3-Caffeoyl, 4-dihydrocaffeoylquinic acid mediates endothelial nitric oxide synthase activation via multiple signaling pathways**  
 ○ Sun Woo Jin, Chuanfeng Zheng, Min Hee Kang, Hye Gwang Jeong (College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea)
- P-137 Tetrabromobisphenol A promotes MMP-9 production in human breast cancer MCF-7 cells.**  
 ○ Gi Ho Lee, Sun Woo Jin, Seul Mi Kim, Hye Gwang Jeong (College of Pharmacy, Chungnam National University, Daejeon, Republic of Korea)
- P-138 Activation of GPR43 by organic acids leads to the inhibition of lipolysis and suppression of free fatty acids secretion in adipocytes.**  
 ○ Dong-Gwang Kim, Byung-Hoon Lee (College of Pharmacy and Research Institute of Pharmaceutical Sciences, Seoul National University, Seoul, Republic of Korea)
- P-139 The role of endothelial progenitor cell dysfunction by methylglyoxal in delayed wound healing in diabetic condition**  
 ○ Jeong Hyeon Kim, Haram Kim, Kyeong-A Kim, Eun-Sun Kim, Ok-Nam Bae\* (College of Pharmacy Institute of Pharmaceutical Science and Technology, Hanyang University, Ansan, Republic of Korea)
- P-140 The inhibitory effect of 3-(6-(3-aminophenyl)-7H-pyrrolo[2,3-d] pyrimidin-4-yl oxy) phenol on antigen-induced allergic response in mast cells.**  
 ○ So Young JO, Young Mi KIM (College of Pharmacy, Duksung Women's University, Seoul, Republic of Korea)

- P-141 Interaction of polyhexamethylene guanidine phosphate with cytoplasmic organelles**  
 ○ Ha Ryong Kim<sup>1</sup>, Sohee You<sup>2</sup>, Eun Hye Jang<sup>2</sup>, Kyu Hyuck Chung<sup>2</sup> (<sup>1</sup>Department of Pharmaceutical Engineering, Dongshin University, 185, Geonjae-ro, Naju-si, Jeollanam-do, Republic of Korea, <sup>2</sup>School of Pharmacy, Sungkyunkwan University, Suwon, Gyeonggi-do, 16419, Republic of Korea)
- P-142 *Dendropanax morbifera* ameliorates on thioacetamide-induced hepatic fibrosis**  
 ○ Hoon Yong Yang, Kyeung Seok Kim, Hyung Sik Kim\* (School of Pharmacy, Sungkyunkwan University, Serobu-ro, 2066, Suwon, Republic of Korea)
- P-143 Protective Effect of *Dendropanax morbifera* on the Diabetes-Induced Renal Damage**  
 ○ Ji Young Kim, Ji Yeon Son, Hyung Sik Kim\* (School of Pharmacy, Sungkyunkwan University, Serobu-ro, 2066, Suwon, Republic of Korea)
- P-144 Dermal penetration of butylated hydroxytoluene across excised rat skins**  
 ○ Sungwook Park<sup>1</sup>, Junwoo Park<sup>1</sup>, Sun Dong Yoo<sup>1</sup>, Joo Young Lee<sup>2</sup>, Kyu-Bong Kim<sup>3,\*</sup> (<sup>1</sup>School of Pharmacy, Sungkyunkwan University, Suwon, Gyeonggi-do, Korea, <sup>2</sup>The Catholic University of Korea, Bucheon, South Korea, <sup>3</sup>College of Pharmacy, Dankook University, Cheonan, Chungnam, Korea)
- P-145 In vitro percutaneous absorption of butylated hydroxyanisole, a free radical scavenger, across the rat skins**  
 ○ Junwoo Park<sup>1</sup>, Sungwook Park<sup>1</sup>, Sun Dong Yoo<sup>1</sup>, Joo Young Lee<sup>2</sup>, Kyu-Bong Kim<sup>3,\*</sup> (<sup>1</sup>School of Pharmacy, Sungkyunkwan University, Suwon, Gyeonggi-do, Korea, <sup>2</sup>The Catholic University of Korea, Bucheon, South Korea, <sup>3</sup>College of Pharmacy, Dankook University, Cheonan, Chungnam, Korea)
- P-146 Development of effective antibacterial therapeutics against *Vibrio vulnificus* using antimicrobial peptide-loaded gold nanoparticle-DNA aptamer conjugates**  
 ○ Boeun Lee, Minkyung Ryou, Suchan Kim, Minjoo Joo, Ji-Hyun Yeom, Kangseok Lee, Jeehyeon Bae (Department of Life Science and School of Pharmacy, Chung-Ang University, Seoul 06974, Republic of Korea)
- P-147 Phenolics and neolignans isolated from the fruits of *Juglans mandshurica* Maxim. and their effects on lipolysis in adipocytes**  
 ○ Yun-Hee Lee\*, Sang-Nam Kim, Seung Hyun Kim (College of Pharmacy, Yonsei University, Incheon, 21983, South Korea)
- P-148 Genetic Variations in Tobacco Smoking Exposure and Behavior**  
 ○ Mihi Yang (College of Pharmacy, Research Center for Cell Fate Control Sookmyung Women's University, Yongsan-gu, Seoul, 140-742, Korea)

## **Banquet**

September 1 (Fri) 19:00-21:00

Site: KOYO GRAND HOTEL

**Scientific Award Ceremony**

**Kanehara Award Ceremony**

**Presentation of Young Investigator Award Winners and Conferment Ceremony**

**Presentation of Candidates for Rookies of the Year Award Winners and Conferment Ceremony**

**Presentation of Chief Organizer Award Winners and Conferment Ceremony**

**2017 Japan/Korea Joint Symposium on Pharmaceutical Health Science and**

**Environmental Toxicology · Best Poster Award Winners and Conferment Ceremony**