

**The 8<sup>th</sup> JSP-CCTCNM-KSP Joint Symposium on Pharmacognosy**  
**September 13 (Sat), 2014, Fukuoka, Japan**

**PROGRAM**

8:15-9:00     **Registration**

9:00-9:10     **Opening Ceremony**

**Keynote Lecture**

Chairperson : Katsuko Komatsu (Institute of Natural Medicine, University of Toyama, Japan)

9:10-9:30

**SK Fumiyuki Kiuchi**

**A mixture can do more**

President, the Japanese Society of Pharmacognosy;  
Faculty of Pharmacy, Keio University, Japan

**Special Lecture**

Chairperson : Motomasa Kobayashi (Graduate School of Pharmaceutical Sciences, Osaka University, Japan)

9:30-10:15

**SS Matthias Hamburger**

**Library-based discovery of bioactive natural products – from screening to medicinal chemistry**

President, Society of Medicinal Plant and Natural Product Research;  
Department of Pharmaceutical Sciences, University of Basel, Switzerland

**Invited Lecture 1**

Chairperson : Shilin Chen (President of CCTCNM, Institute of Chinese Materia Medica, China Academy of Chinese Medical Sciences, China) & Young Ho Kim (President of KSP, Chungnam National University, Korea)

10:15-10:45

**SI-1 Hong-Xi Xu**

**Anticancer compounds from Garcinia plants**

School of Pharmacy, Shanghai University of Traditional Chinese Medicine, China

10:45-11:15

**SI-2 Kang Ro Lee**

**Cytotoxic secondary metabolites from Korean poisonous mushrooms**

School of Pharmacy, Sungkyunkwan University, Korea

11:15-11:45

**SI-3 Haruki Yamada**

**Comprehensive approaches on elucidation of pharmacological actions and active ingredients of Kampo medicines**

School of Pharmacy, Tokyo University of Pharmacy and Life Sciences, Japan

11:45-12:00

Announcement from the Editorial Board of JNM

Hisashi Matsuda (Chief Editor of Journal of Natural Medicines)

11:45-13:30 Lunch Break

**Invited Lecture 2**

Chairperson : Sang Kook Lee (College of Pharmacy, Seoul National University, Korea) & Hiroyuki Morita (Institute of Natural Medicine, University of Toyama, Japan)

13:30-14:00

**SI-4 Shi-Shan Yu**

**Study on bioactive compounds with novel structures and their biological significances from 20 toxic plants in China**

Institute of Materia Medica, Chinese Academy of Medical Sciences & Peking Union Medical College, China

14:00-14:30

**SI-5 Dong Chan Oh**

**LC/MS-guided discovery of new natural products from bacteria**

Natural Products Research Institute, College of Pharmacy, Seoul National University, Korea

14:30-15:00

**SI-6 Masayoshi Arai**

**Phenotypic Screening and Chemical Biology for Exploring New Medicinal Seeds and Drug Targets**

Graduate School of Pharmaceutical Sciences, Osaka University, Japan

15:00-15:15 Coffee Break

**Invited Lecture 3**

Chairperson : Nobuo Kawahara (Research Center for Medicinal Plant Resources, National Institute of Biomedical Innovation, Japan) & Hong-Xi Xu (School of Pharmacy, Shanghai University of Traditional Chinese Medicine, China)

15:15-15:45

**SI-7 MinKyun Na**

**Discovery of marine-derived cytotoxic metabolites via down-regulating  $\beta$ -catenin expression**

College of Pharmacy, Chungnam National University, Korea

15:45-16:15

**SI-8 Jun YIN**

**Studies on lignans isolated from *Schisandra chinensis* for anti-Alzheimer's activity**

School of Traditional Chinese Materia Medica, Shenyang Pharmaceutical University, China

**Poster Presentation**

9:00-17:45 **Display Hours**

16:15-17:00 (odd numbers) **Presentation**

17:00-17:45 (even numbers) **Presentation**

\*Best Poster Awards at the 8th JSP-CCTCNM-KSP Joint Symposium will be selected.

18:30-20:30 **Banquet**

## Poster Presentation

9:00-17:45 Display Hours

16:15-17:00 (odd numbers) Presentation

17:00-17:45 (even numbers) Presentation

- SP-01 Application of AQARI (Accurate Quantitative NMR with Internal Substance) to the reagents in the crude drug section of the Japanese Pharmacopoeia  
Takako Suematsu<sup>1</sup>, Junko Hosoe<sup>2</sup>, Naoki Sugimoto<sup>2</sup>, Yuko Yamada<sup>3</sup>, Toru Miura<sup>3</sup>, Masako Hayakawa<sup>3</sup>, Hiroki Suzuki<sup>3</sup>, Takao Katsuhara<sup>4</sup>, Hiroaki Nishimura<sup>4</sup>, Yuichi Kikuchi<sup>4</sup>, Tadatosh Yamashita<sup>5</sup>, and Yukihiro Goda<sup>2</sup>  
<sup>1</sup>JEOL RESONANCE Inc1, <sup>2</sup>National Institute of Health Science, <sup>3</sup>Wako Pure Chemical Industries, Ltd, <sup>4</sup>Tsumura & CO., <sup>5</sup>Tokiwa Phytochemical Co., Ltd.
- SP-02 Development of an immunoassay using anti-wogonin glucuronide monoclonal antibody  
Madan Kumar Paudel, Seiichi Sakamoto, Hiroyuki Tanaka, Satoshi Morimoto  
Department of Pharmacognosy, Graduate School of Pharmaceutical Sciences, Kyushu University
- SP-03 Simultaneous analysis of phenolics in *Artemisiae Iwayomogii* Herba by High Performance Liquid Chromatography combined with chemometrics  
So-Hwa Kim, Jin-Ah Kim, Ju-Hee Youn, Eun-Young Hong, Wan-Kyun Whang  
Pharmaceutical Botany Laboratory, College of Pharmacy Chung-Ang University.
- SP-04 Simultaneous determination of eight sesquiterpene glycosides in *Ixeris dentata* by high performance liquid chromatography coupled with tandem mass spectrometry  
SeonJu Park, Guijae Yoo, Taek Hwan Lee, Nanyoung Kim, YoonJae Kim, and Seung Hyun Kim\*  
College of Pharmacy, Yonsei Institute of Pharmaceutical Sciences, Yonsei University
- SP-05 Characterization of the newly developed ginger cultivar by metabolomics approach  
Ken Tanaka<sup>1</sup>, Masanori Arita<sup>2</sup>, Yasuhiro Tezuka<sup>3</sup>, Feng Li<sup>4</sup>, Naoaki Ono<sup>5</sup>, Shigehiko Kanaya<sup>5</sup>  
<sup>1</sup>College of Pharmaceutical Science, Ritsumeikan University, <sup>2</sup>Center for Information Biology, National Institute of Genetics, <sup>3</sup>Faculty of Pharmaceutical Sciences, Hokuriku University, <sup>4</sup>Institute of Natural Medicine, University of Toyama, <sup>5</sup>Graduate School of Information Science, Nara Institute of Science and Technology
- SP-06 Quantitative Determination of Compounds from *Akebia quinata* by High-Performance Liquid Chromatography  
Yeon Woo Jung<sup>1</sup>, Nguyen Thi Yen<sup>1</sup>, Nguyen Van Thu<sup>1</sup>, Mi Hee Woo<sup>1</sup>, Jeong Ah Kim<sup>2</sup>, Byung Sun Min<sup>1,\*</sup>  
<sup>1</sup>College of Pharmacy, Catholic University of Daegu, <sup>2</sup>College of Pharmacy, Research Institute of Pharmaceutical Sciences, Kyungpook National University
- SP-07 Change of growth stage on growth and accumulation of actives constituents in three species Korean endemic plant  
Byoung-Man Kang\*, Jun-Su Seo, Won-Seok Jung, Seong-Ho Ham, Guk-Yeo Lee, Hye-Kyung Jang, Jung-Hee Cho and Jun-Hwan Yeo  
Jeollanamdo Development Institute of Korean Traditional Medicine
- SP-08 Origin of the ‘Huashi’ (滑石) in Taipei markets  
Naoko Anjiki<sup>1</sup>, Hirotoshi Fushimi<sup>2</sup>, Naoko Fushimi<sup>2,3</sup>, Nobuo Kawahara<sup>1</sup>, Yukihiro Goda<sup>4</sup>  
<sup>1</sup>Research Center for Medicinal Plant Resources, National Institute of Biomedical Innovation (NIBIO), <sup>2</sup>Institute of Natural Medicine, University of Toyama, <sup>3</sup>Uchida Wakanyaku Ltd., <sup>4</sup>National Institute of Health Sciences (NIHS)
- SP-09 Authentication of Three “Snow Lotus” Herbs by by Light Microscopy and Scanning Electron Microscopy  
Qilei Chen, Tao Yi\*, Yina Tang, Zhongzhen Zhao, Hubiao Chen\*  
School of Chinese Medicine, Hong Kong Baptist University, Kowloon Tong, Hong Kong Special Administrative Region, People’s Republic of China
- SP-10 Investigation of Japanese folk medicines for enriching the contents of the Ethnomedicine Database  
Hirotoshi Fushimi, Naoko Fushimi, Katsuko Komatsu  
Institute of Natural Medicine, University of Toyama

- SP-11 A list book recording the precious articles in the Museum of Material Medica, Institute of Natural Medicine, University of Toyama  
Hirotoshi Fushimi, Naoko Fushimi, Shu Zhu, Katsuko Komatsu  
Institute of Natural Medicine, University of Toyama
- SP-12 Transcriptome analysis of the *Cordyceps sinensis* fruiting body reveals putative genes involved in fruiting body development and cordycepin biosynthesis  
Li Xiang<sup>1</sup>, Ying Li<sup>2</sup>, Yingjie Zhu<sup>2</sup>, Hongmei Luo<sup>2</sup>, Chunfang Li<sup>2</sup>, Xiaolan Xu<sup>2</sup>, Jingyuan Song<sup>2</sup>, Chao Sun<sup>2</sup>, Liu He<sup>2</sup>, Shilin Chen<sup>1</sup>  
<sup>1</sup>China Academy of Chinese Medical Sciences, <sup>2</sup>National Engineering Laboratory for Breeding of Endangered Medicinal Materials, Institute of Medicinal Plant Development, Chinese Academy of Medical Sciences & Peking Union Medical College
- SP-13 Chloroplast genome of *Aconitum barbatum* var. *puberulum* (Ranunculaceae) derived from CCS reads by PacBio RS platform  
Xiaochen Chen, Qiushi Li, Jun Qian, Ying Li, Jianping Han\*  
Center for Computational Biology and Bioinformatics, Institute of Medicinal Plant Development, Chinese Academy of Medical Sciences and Peking Union Medical College
- SP-14 Study on the molecular mechanism of secondary metabolism regulation by moderate drought stress in *Glycyrrhiza uralensis* root  
Chunrong Zhang, Xiaomin Tang, Xueyu Sang, Meng Qu, Xuanxuan Cheng, Quan Yang\*  
School of Traditional Chinese Medicine, Guangdong Pharmaceutical University
- SP-15 Phylogenetic Relationship of the Medicinal *Terminalia* spp. Distributed in Thailand and Their Application to Authenticate by PCR-RFLP  
Aekthaluck Intharuksa<sup>1</sup>, Hirokazu Ando<sup>1</sup>, Katsunori Miyake<sup>1</sup>, Panee Sirisa-Ard<sup>2</sup>, Masayuki Mikage<sup>1</sup>, Yohei Sasaki<sup>1</sup>  
<sup>1</sup>Graduate School of Medical Science, Kanazawa University, <sup>2</sup>Faculty of Pharmacy, Chiang Mai University
- SP-16 Intraspecific variations in the genomic sequences of alliinase from garlic (*Allium sativum* L.)  
Aki Endo, Takaaki Taguchi, and Koji Ichinose  
Research Institute of Pharmaceutical Sciences, Musashino University
- SP-17 Enhanced plumbagin production in hairy root culture of *Plumbago zeylanica* by anti-plumbagin single-chain fragment antibody  
Seiichi Sakamoto<sup>1</sup>, Waraporn Putalun<sup>2</sup>, Benyakan Pongkitwitoon<sup>1</sup>, Yukihiro Shoyama<sup>3</sup>, Hiroyuki Tanaka<sup>1</sup>, Satoshi Morimoto<sup>1</sup>  
<sup>1</sup>Graduate School of Pharmaceutical Sciences, Kyushu University, <sup>2</sup>Faculty of Pharmaceutical Sciences, Khon Kaen University, <sup>3</sup>Faculty of Pharmaceutical Sciences, Nagasaki International University
- SP-18 cDNAs cloning of polyketide synthases from a rare liverwort *Radula perrottetii*  
Jia Xie<sup>1</sup>, Futoshi Taura<sup>1</sup>, Hiromichi Kenmoku<sup>2</sup>, Hironobu Takahashi<sup>2</sup>, Toshihiro Hashimoto<sup>2</sup>, Masao Toyota<sup>2</sup>, Fumiya Kurosaki<sup>1</sup> and Yoshinori Asakawa<sup>2</sup>  
<sup>1</sup>Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, <sup>2</sup>Faculty of Pharmaceutical Sciences, Tokushima Bunri University.
- SP-19 Analysis of DNA fragments encoding puerarin metabolizing enzyme from a human intestinal bacterium  
Kenichi Nakamura<sup>1</sup>, Mai Ryuse<sup>1</sup>, Shu Zhu<sup>2</sup>, Katsuko Komatsu<sup>2</sup>, Masao Hattori<sup>2</sup>, Makoto Iwashima<sup>1</sup>  
<sup>1</sup>Faculty of Pharmaceutical Sciences, Suzuka University of Medical Science, <sup>2</sup>Institute of Natural Medicine, University of Toyama
- SP-20 Macrolactins from the Marine Ascidian-Derived *Bacillus subtilis*  
Gwi Ja Hwang<sup>1</sup>, Eun La Kim<sup>1</sup>, Min Jung Kim<sup>1</sup>, Jong Ki Hong<sup>2</sup>, and Jee H. Jung<sup>1</sup>  
<sup>1</sup>College of Pharmacy, Pusan National University, <sup>2</sup>College of Pharmacy Kyung Hee University
- SP-21 Structures of new bromopyrrole alkaloids from an Okinawan marine sponge *Agelas* sp.  
Taishi Kusama<sup>1</sup>, Naonobu Tanaka<sup>1,2</sup>, Jun'ichi Kobayashi<sup>1</sup>  
<sup>1</sup>Graduate School of Pharmaceutical Sciences, Hokkaido University, <sup>2</sup>Graduate School of Pharmaceutical Sciences, The University of Tokushima
- SP-22 Chemical constituents and biological activities of the Korean endangered plant *Rhododendron brachycarpum*  
Wei Zhou<sup>1</sup>, Joonseok Oh<sup>2</sup>, Jong-Sup Bae<sup>3</sup>, Min Kyun Na<sup>1,\*</sup>  
<sup>1</sup>College of Pharmacy, Chungnam National University, <sup>2</sup>Department of Pharmacognosy and Research Institute of Pharmaceutical Sciences, School of Pharmacy, The University of Mississippi, University, <sup>3</sup>College of Pharmacy, Kyungpook National University

- SP-23 Plant-derived anti-influenza A virus agents: Study on the roots of *Salvia miltiorrhiza*  
Natsuki Kobayakawa<sup>1</sup>, Ai Hirata<sup>1</sup>, Sang-Yong Kim<sup>1,2</sup>, Naonobu Tanaka<sup>1</sup>, Hirofumi Shibata<sup>1</sup>, Yoshiki Kashiwada<sup>1</sup>  
<sup>1</sup> Graduate School of Pharmaceutical Sciences, The University of Tokushima, <sup>2</sup> Faculty of Pharmaceutical Sciences, Health Sciences University of Hokkaido
- SP-24 Chemical constituents of *Zanthoxylum schinifolium* and their bioactivities  
Wei Li<sup>1,2</sup>, Wei Zhou<sup>2</sup>, Ya Nan Sun<sup>2</sup>, Xi Tao Yan<sup>2</sup>, Seo Young Yang<sup>2</sup>, Hee Kyoung Kang<sup>3</sup>, Sang Hee Shim<sup>1</sup>, and Young Ho Kim<sup>2,\*</sup>  
<sup>1</sup>School of Biotechnology, Yeungnam University, <sup>2</sup>College of Pharmacy, Chungnam National University, <sup>3</sup>School of Medicine and Institute of Medical Science, Jeju National University
- SP-25 Anti-oxidative compounds from the leaves of *Syzygium samarangense*  
Mamdouh Nabil Samy<sup>1,2</sup>, Sachiko Sugimoto<sup>1</sup>, Katsuyoshi Matsunami<sup>1</sup>, Hideaki Otsuka<sup>1,3</sup>, Mohamed Salah Kamel<sup>2</sup>  
<sup>1</sup>Department of Pharmacognosy, Graduate School of Biomedical & Health Sciences, Hiroshima University, <sup>2</sup>Department of Pharmacognosy, Faculty of Pharmacy, Minia University, <sup>3</sup>Department of Natural Products Chemistry, Faculty of Pharmacy, Yasuda Women's University
- SP-26 Compounds from *Piper hymenophyllum* and Their Inhibitory Activities of Acetylcholinesterase and Butyrylcholinesterase  
Byung-Sun Min<sup>1,\*</sup>, Viet-Dung Hoang<sup>2</sup>, Dao-Cuong To<sup>1</sup>, Jae-Sue Choi<sup>4</sup>  
<sup>1</sup>College of Pharmacy, Catholic University of Daegu, <sup>2</sup>Centre of Pharmaceutical Research –Training, Vietnam Military Medical University, <sup>3</sup>Faculty of Food Science and Biotechnology, Pukyung National University
- SP-27 Inhibition of angiotensin converting enzyme by lanostanoids from reishi (*Ganoderma lingzhi*): structure-activity relationship and inhibition pattern  
Hai Bang Tran, Kuniyoshi Shimizu  
Laboratory of Systematic Forest and Forest Products Sciences, Faculty of Agriculture, Kyushu University
- SP-28 Structure–activity relationship of triterpenoids from leaves of *Eriobotrya japonica* in the inhibition of osteoclast differentiation  
Hui Tan, Kuniyoshi Shimizu  
Department of Agro-environmental Sciences, Faculty of Agriculture, Kyushu University
- SP-29 Isolation and Purification of Flavonoids from *Lespedeza cuneata*  
Guijae Yoo, Seonju Park, Nanyoung Kim, Yoonjae Kim, Taek Hwan Lee, Seung Hyun Kim\*  
College of Pharmacy, Yonsei Institute of Pharmaceutical Sciences, Yonsei University
- SP-30 *In vitro* Apoptotic Effect of Cassaine-type Diterpene Amides from *Erythrophleum fordii* on PC-3 Prostate Cancer Cells  
Tran Manh Hung<sup>1,2</sup>, To Dao Cuong<sup>1</sup>, Jeong Ah Kim<sup>2</sup>, Jeong Hyung Lee<sup>4</sup>, Mi Hee Woo<sup>1</sup>, Byung Sun Min<sup>1,\*</sup>  
<sup>1</sup>College of Pharmacy, Catholic University of Daegu, <sup>2</sup>Faculty of Chemistry, University of Science, Vietnam National University-HoChiMinh City, <sup>3</sup>College of Pharmacy, Research Institute of Pharmaceutical Sciences, Kyungpook National University, <sup>4</sup>College of Natural Science, Kangwon National University
- SP-31 The phytochemical analysis on flavonol glycosides of Mei-gui Hua (Rose tea) by UPLC-PDA: Identification of botanical origin  
Ochir Sarangowa<sup>1</sup>, Makoto Nishizawa<sup>2</sup>, Tsutomu Kanazawa<sup>3</sup>, Takashi Yamagishi<sup>3</sup>  
<sup>1</sup>Academy of Mongolian Medicine, Inner Mongolia Medical University, <sup>2</sup>Faculty of Bio-Industry, Tokyo University of Agriculture, <sup>3</sup>Kitami Institute of Technology
- SP-32 Structures of hikiokoshins A–I, diterpenes from the leaves of *Isodon japonicus*  
Naonobu Tanaka<sup>1,2</sup>, Eri Tsuji<sup>2</sup>, Yoshiki Kashiwada<sup>2</sup>, Jun'ichi Kobayashi<sup>1</sup>  
<sup>1</sup> Graduate School of Pharmaceutical Sciences, Hokkaido University, <sup>2</sup> Graduate School of Pharmaceutical Sciences, The University of Tokushima
- SP-33 Study on the constituents of *Hypericum* plants (38): Structures of prenylated coumarins from *H. perforatum*  
Mamiko Ito<sup>1</sup>, Naonobu Tanaka<sup>1</sup>, Shin-Ichiro Kurimoto<sup>1,2</sup>, Enkhjargal Dorival, Davaadagva Damdinjav, Yoshiki Kashiwada<sup>1</sup>  
<sup>1</sup>Graduate School of Pharmaceutical Sciences, The University of Tokushima, <sup>2</sup>Faculty of Pharmaceutical Sciences, Himeji Dokkyo University, <sup>3</sup>School of Pharmacy and Bio-medicine, National Mongolian University of Medical Sciences

- SP-34 Comparative Analysis of Phenolic Peroxynitrite-Scavengers in Nine Korean Wild Vegetables of Compositae  
 Agung Nugroho<sup>1</sup>, Sang-Cheol Lim<sup>2</sup>, Subash Karki<sup>3</sup>, Jae Sue Choi<sup>3</sup>, Hee-Juhn Park<sup>4</sup>  
<sup>1</sup>Department of Agro-industrial Technology, Lambung Mangkurat University; <sup>2</sup>Department of Horticulture and Landscape;  
<sup>4</sup>Department of Pharmaceutical Engineering, Sangji University; <sup>3</sup>Department of Food and Nutrition, Pukyong University;
- SP-35 Aromatic natural products from Actinomycetes with TRAIL-resistance overcoming activity  
 Xuefeidan Liu, Kazufumi Toume, Kentaro Tsukahara, Masami Ishibashi  
 Grad. Sch. Pharm., Chiba Univ.
- SP-36 Elmenol A and B, new benzofuran-naphthalenes from *Streptomyces* sp. IFM11490  
 Yixizhuoma, Kazufumi Toume, Kentaro Tsukahara, Masami Ishibashi  
 Grad. Sch. Pharm. Sci., Chiba Univ.
- SP-37 Unique Polyketides from the Jellyfish-derived Fungus *Paecilomyces variotii*  
 Haibo Wang<sup>1</sup>, Eun La Kim<sup>1</sup>, Jongki Hong<sup>2</sup>, Kyung Sook Bae<sup>3</sup> and Jee H. Jung<sup>1,\*</sup>  
<sup>1</sup>College of Pharmacy, Pusan National University, <sup>2</sup>College of Pharmacy, Kyoung Hee University, <sup>3</sup>Korea Research Institute of Bioscience and Biotechnology
- SP-38 Changes in ginsenoside composition of ginseng flower buds extracts after a ultrasonication process  
 Yun Min Nam<sup>1</sup>, Jue Hee Kwon<sup>2</sup>, Hye Jung An<sup>2</sup>, Sung Hyun Yoon<sup>2</sup>, Sung Kwon Ko<sup>2,\*</sup>  
<sup>1</sup>Research Institute, Koyon, <sup>2</sup>The Department of Oriental Medical Food & Nutrition, Semyung University
- SP-39 Phenolic Antioxidants from *Aconogonon molle*  
 Khem Raj Joshi<sup>1,2</sup>, Hari Prasad Devkota<sup>1,2</sup>, Takashi Watanabe<sup>3</sup>, Shoji Yahara<sup>1</sup>  
<sup>1</sup>Graduate School of Pharmaceutical Sciences, Kumamoto University, <sup>2</sup>Program for Leading Graduate Schools “HIGO (Health life science: Interdisciplinary and Glocal Oriented) Program”, Kumamoto University, <sup>3</sup>Research Organization for Regional Alliances, Kochi University of Technology
- SP-40 A new polyoxygenated cyclohexane and other constituents from *Kaempferia rotunda* and their cytotoxic activity  
 Subehan<sup>1,2</sup>, Hiroyuki Morita<sup>1</sup>  
<sup>1</sup>Institute of Natural Medicine, University of Toyama, <sup>2</sup>Hasanuddin University
- SP-41 Secondary metabolites from cultures of marine fungus *Penicillium glabrum*  
 Jin-Young Min, Sang Hee Shim\*  
 School of Biotechnology, Yeungnam University
- SP-42 Three new neolignans isolated from feces of *Troglodytes xanthipes*  
 Yuna Kim<sup>1</sup>, So Yoon Baek<sup>1</sup>, Byung-sun Min<sup>2</sup>, Sang Hee Shim<sup>1,\*</sup>  
<sup>1</sup>School of Biotechnology, Yeungnam University, <sup>2</sup>College of Pharmacy, Catholic University of Daegu
- SP-43 Flavonoid Glycosides from Leaves of *Crateva unilocularis*  
 Hari Prasad Devkota<sup>1,2</sup>, Khem Raj Joshi<sup>1,2</sup>, Takashi Watanabe<sup>3</sup>, Shoji Yahara<sup>2</sup>  
<sup>1</sup>Program for Leading Graduate Schools, Health life science: Interdisciplinary and Glocal Oriented (HIGO) Program, Kumamoto University, <sup>2</sup>Graduate School of Pharmaceutical Sciences, Kumamoto University, <sup>3</sup>Research Organization for Regional Alliances, Kochi University of Technology
- SP-44 Crataegusin A and B, novel flavanocoumarins from the dried fruits of *Crataegus pinnatifida* var. *major*  
 Kohei Kazuma<sup>1</sup>, Yuka Isobe<sup>1</sup>, Haruka Asahina<sup>2</sup>, Motoyoshi Satake<sup>2</sup> and Katsuhiko Konno<sup>1</sup>  
<sup>1</sup>Institute of Natural Medicine, University of Toyama, <sup>2</sup>Institute of Environmental Science for Human Life, Ochanomizu University
- SP-45 New Flavonoid Glycosides from *Linaria japonica*  
 Retno Widyowati<sup>1,2</sup>, Sachiko Sugimoto<sup>1</sup>, Yoshi Yamano<sup>1</sup>, Hideaki Otsuka<sup>1,3</sup>, Katsuyoshi Matsunami<sup>1</sup>  
<sup>1</sup>Graduate School of Biomedical and Health Sciences, Hiroshima University, <sup>2</sup>Faculty of Pharmacy, Airlangga University, <sup>3</sup>Faculty of Pharmacy, Yasuda Women's University
- SP-46 Barceloneic acid C, a new polyketide from an endophytic fungus *Phoma* sp. JS752 and its antibacterial activities  
 Sunghee Bang, Changyeol Lee, Xuekui xia, Sang Hee Shim\*  
 School of Biotechnology, Yeungnam University

- SP-47 Bioactive Constituents from the Red Sea Sponge *Mycale euplectellioides*  
Reda F. A. Abdelhameed<sup>1,2</sup>, Safwat A. Ahmed<sup>2</sup>, Koji Yamada<sup>1</sup>  
<sup>1</sup>Graduate School of Biomedical Sciences, Nagasaki University, <sup>2</sup>Faculty of Pharmacy, Suez Canal University
- SP-48 Comprehensive Analysis of Sequencing Proanthocyanidin Oligomers in Rhubarb by HPLC-ESI-MS<sup>n</sup>  
Yue-Wei Ge<sup>1</sup>, Kohei Kazuma<sup>1</sup>, Shu Zhu<sup>1</sup>, Kayo Yoshimatsu<sup>2</sup>, Katsuko Komatsu<sup>1</sup>  
<sup>1</sup>Institute of Natural Medicine, University of Toyama, <sup>2</sup>Research Center for Medicinal Plant Resources (Tsukuba Division), National Institute of Biomedical Innovation
- SP-49 Analysis of Kakkonto by a novel comprehensive two-dimensional liquid chromatography  
Daisuke Nakayama, Tetsuo Iida, Yoshiyuki Watabe, Junichi Masuda, Yoshihiro Hayakawa and Tadayuki Yamaguchi  
Shimadzu Corporation
- SP-50 Comparing the contents of main components in the roots of Bonten, a medicinal cultivar of *Paeonia lactiflora* after different post-harvest processing  
Shu Zhu<sup>1</sup>, Aimi Shirakawa<sup>1</sup>, Yanhong Shi<sup>1</sup>, Xiaoli Yu<sup>1</sup>, Takayuki Tamura<sup>2</sup>, Kayo Yoshimatsu<sup>3</sup>, Katsuko Komatsu<sup>1</sup>  
<sup>1</sup>Institute of Natural Medicine, University of Toyama; <sup>2</sup>Toyama Prefectural Medicinal Plants Center; <sup>3</sup>Research Center for Medicinal Plant Resources (Tsukuba Division), National Institute of Biomedical Innovation
- SP-51 Stereochemistry of black tea pigment theacitrins  
Yosuke Matsuo, Ryosuke Oowatashi, Yoshinori Saito, Takashi Tanaka  
Graduate School of Biomedical Sciences, Nagasaki University
- SP-52 Simultaneous quantitative analysis of alkaloids with melanogenesis inhibitory activity in “lotus flower”, the flower buds of *Nelumbo nucifera*  
Toshio Morikawa<sup>1</sup>, Niichiro Kitagawa<sup>1,2</sup>, Shuhei Okugawa<sup>1,2</sup>, Taku Matsumoto<sup>1</sup>, Kiyofumi Ninomiya<sup>1</sup>, Iyori Kamei<sup>1</sup>, I-Jung Lee<sup>3</sup>, Seikou Nakamura<sup>4</sup>, Hisashi Matsuda<sup>4</sup>, Masayuki Yoshikawa<sup>4</sup>, and Osamu Muraoka<sup>1</sup>  
<sup>1</sup>Pharmaceutical Research and Technology Institute, Kinki University, <sup>2</sup>Koshiro Co., Ltd., <sup>3</sup>National Research Institute of Chinese Medicine, <sup>4</sup>Kyoto Pharmaceutical University
- SP-53 Xanthine Oxidase Inhibitors from the Fruit of *Citrus depressa*  
Masanori Inagaki<sup>1,\*</sup>, Masahiko Iha<sup>2</sup>, Hideaki Otsuka<sup>1</sup>  
<sup>1</sup>Faculty of Pharmacy, Yasuda Women's University, <sup>2</sup>South Product Ltd.
- SP-54 Coprisamides A-C, New Cyclic Peptides from a Gut Bacterium of the Dung Beetle *Copris tripartitus*  
Soohyun Um<sup>1</sup>, Hea-Son Bang<sup>2</sup>, Ki-Bong Oh<sup>3</sup>, Jongheon Shin<sup>1</sup>, Dong-Chan Oh<sup>1</sup>  
<sup>1</sup>Natural Products Research Institute, College of Pharmacy, Seoul National University, <sup>2</sup>Department of Agricultural Environment, National Academy of Agricultural Science, <sup>3</sup>Department of Agricultural Biotechnology, College of Agriculture and Life Science, Seoul National University
- SP-55 New Polycyclic Antibiotics from a Wetland-derived Marine Actinomycete  
Kyuho Moon<sup>1</sup>, Ki-Bong Oh<sup>2</sup>, Sang Kook Lee<sup>1</sup>, Jongheon Shin<sup>1</sup>, and Dong-Chan Oh<sup>1</sup>  
<sup>1</sup>Natural products Research Institute, College of Pharmacy, Seoul National University, <sup>2</sup>Department of Agricultural Biotechnology, College of Agriculture and Life Science, Seoul National University
- SP-56 Suncheonosides A-D, New Benzothioate Glycosides from a Marine-derived *Streptomyces* sp.  
Bora Shin, Sang Kook Lee, Jongheon Shin, and Dong-Chan Oh\*  
Natural Products Research Institute, College of Pharmacy, Seoul National University
- SP-57 Interaction of standardized extracts of *Leonurus japonicus* ( 益母草 ), *L. cardiaca*, and their isolated constituents with the GABA<sub>A</sub> receptor  
Hans Wilhelm Rauwald<sup>1</sup>, Kenny Kuchta<sup>1</sup>, Alex Savtschenko<sup>1</sup>, Alexander Brückner<sup>1</sup>, Christian Rusch<sup>1</sup>, Kurt Appel<sup>2</sup>  
<sup>1</sup>Pharmaceutical Biology, Leipzig University, <sup>2</sup>VivaCell Biotechnology
- SP-58 H1N1 influenza inhibitory effect of protopanaxadiol saponin enriched fraction (GS-3K8) using ultrafiltration  
Mi Kyung Pyo<sup>1</sup>, Su Yeon Seol<sup>1</sup>, Ji Hyun Yoo<sup>1</sup>, Se Chul Hong<sup>1</sup>, Myeong Hwan Oh<sup>1</sup>, Il Sik Cho<sup>1</sup>, Young Sik Park<sup>1</sup>, Shanmugam Parthasarathi<sup>1</sup>, Hak Yong Lee<sup>2</sup>, Young Mi Park<sup>2</sup>, Hong Geun Oh<sup>2</sup>, JongHwan Sung<sup>3</sup>, Jong Dae Park<sup>1</sup>  
<sup>1</sup>International Ginseng & Herb Research Institute, <sup>2</sup>Huvet Co., Ltd., Wonkwang University Business Incubator Center, <sup>3</sup>Ginseng Research Institute, ILHWA Co., LTD

- SP-59 Enrichment of estrogen-like effective fraction of *Maaekia amurensis*  
Dong Wang<sup>1\*</sup>, Tao Yin<sup>2</sup>, Dong-Chun Liu<sup>1</sup>, Ying-Hui Dai<sup>1</sup>, Ikuro Abe<sup>3</sup>  
<sup>1</sup>School of Traditional Chinese Material Medica, Shenyang Pharmaceutical University, <sup>2</sup>Harbin Pharmaceutical Group Traditional Chinese Medicine, Co. Ltd., <sup>3</sup>Graduate School of Pharmaceutical Sciences, The University of Tokyo
- SP-60 Design of PPAR- $\gamma$  Ligands Based on a Marine Natural Product  
So Hyeon Eom<sup>1</sup>, Mingzhi Su<sup>1</sup>, Jongki Hong<sup>2</sup>, Hae Young Chung<sup>1</sup>, Jee H. Jung<sup>1</sup>  
<sup>1</sup>College of Pharmacy, Pusan National University, <sup>2</sup>College of Pharmacy, Kyung Hee University
- SP-61 Antimitotic Polyketides from the Jellyfish-derived Fungus, *Paecilomyces variotii*  
Ju Hee Park<sup>1</sup>, Gwi Ja Hwang<sup>1</sup>, Haibo Wang<sup>1</sup>, Soma Kundu<sup>1</sup>, Hyung Sik Kim<sup>2</sup>, Jee H. Jung<sup>1</sup>  
<sup>1</sup>College of Pharmacy, Pusan National University, <sup>2</sup>College of Pharmacy, SungKyunKwan University
- SP-62 Structure Activity Relationship of Flavonoids Isolated from *Angelica Shikokiana* and Other Analogues as Acetylcholin Esterase Inhibitors  
Amira Mira<sup>1,2</sup>, Kuniyoshi Shimizu<sup>1\*</sup>  
<sup>1</sup>Division of Systematic Forest and Forest Products Sciences, Department of Agro-environmental Sciences, Faculty of Agriculture, Graduate School of Kyushu University, <sup>2</sup>Department of Pharmacognosy, Faculty of Pharmacy, Mansoura University
- SP-63 Influenza Neuraminidase Inhibitory Activity of Triterpenoids from *Ganoderma Lingzhi* and Their Structure-Activity Relationships  
Qinchang Zhu<sup>1</sup>, Tran Hai Bang<sup>1</sup>, Koichiro Ohnuki<sup>2</sup>, Takashi Sawai<sup>3</sup>, Ken Sawai<sup>3</sup>, Kuniyoshi Shimizu<sup>1</sup>  
<sup>1</sup>Department of Agro-environmental Sciences, Faculty of Agriculture, Kyushu University, <sup>2</sup>Department of Biological and Environmental Chemistry, Kinki University, <sup>3</sup>Toyotanshien Co Ltd.
- SP-64 Comparison of physiochemical properties and biological activities between of white and red ginsengs  
Ji Hyun Yoo, Se Chul Hong, Myeong Hwan Oh, Il Sik Cho, Young Sik Park, Su Yeon Seol, Shanmugam Parthasarathi, Mi Kyung Pyo, Jong Dae Park  
International Ginseng & Herb Research Institute
- SP-65 Isolation and analysis of bioactive piperlonguminine isomers  
Narisu Bao<sup>1</sup>, Sarangowa Ochir<sup>2</sup>, Ma Chunjie<sup>2</sup>  
<sup>1</sup>Institute of Mongolian Medicinal Chemistry, Inner Mongolia University, <sup>2</sup>Academy of Mongolian Medicine, Inner Mongolian Medical University
- SP-66 The synthesis and structure comparison of piperlonguminine and it's effectiveness analysis  
Jian Liu, Narisu Bao  
Institute of Mongolian Medicinal Chemistry, Inner Mongolia University
- SP-67 Antitumor *Allium* Sulfides  
Yukio Fujiwara<sup>1</sup>, Kotaro Murakami<sup>2</sup>, Tsuyoshi Ikeda<sup>2</sup>, Masateru Ono<sup>3</sup>, Motohiro Takeya<sup>1</sup>, Toshihiro Nohara<sup>2</sup>  
<sup>1</sup>Graduate School of Medicinal Sciences, Faculty of Life Sciences, Kumamoto University, <sup>2</sup>Faculty of Pharmaceutical Sciences, Sojo University, <sup>3</sup>School of Agriculture, Tokai University
- SP-68 Medicinal Flowers: Alkaloid Constituents from Flower Buds of *Nelumbo nucifera* with Melanogenesis Inhibitory Activity in B16 Melanoma Cells  
Seikou Nakamura<sup>1</sup>, Souichi Nakashima<sup>1</sup>, Genzoh Tanabe<sup>2</sup>, Yoshimi Oda<sup>1</sup>, Takahiro Matsumoto<sup>1</sup>, Tomoe Ohta<sup>1</sup>, Keiko Ogawa<sup>1</sup>, Osamu Muraoka<sup>2</sup>, Masayuki Yoshikawa<sup>1</sup>, Hisashi Matsuda<sup>1</sup>  
<sup>1</sup>Department of Pharmacognosy, Kyoto Pharmaceutical University, <sup>2</sup>School of Pharmacy, Kinki University
- SP-69 Development of a Novel Botanical Drug for the Treatment of Diabetic Nephropathy  
Young-June Shin<sup>1,2</sup>, Do-Hoon Kim<sup>1</sup>, Soo Im Chang<sup>1</sup>, Kang Ro Lee<sup>2</sup>  
<sup>1</sup>Phytomedicine Research Team, R&D center, Ahngook Pharm. Co. Ltd., <sup>2</sup>Natural Products Laboratory, School of Pharmacy, Sungkyunkwan University
- SP-70 Isolation of Isoflavone Compounds from *Belamcanda chinensis* and Anti-inflammatory effect of water extract in lipopolysaccharide-stimulated RAW 264.7 macrophage cells  
Ho Kyung Jung, Gyeong Hwan Lee, Tae Kyung Sung, Ji Hun Jang, Byoung Kwan An, Ki Ho Lee, Ah Hyun Kim, Jung Hee Cho and Hyun Woo Cho\*  
Jeollanamdo Development Institute of Korean Traditional Medicine



- SP-71 Genetic and chemical diversity of *Gentiana* plants and drugs (4) –Isolation of constituents with anti-inflammatory activity from *Gentianae Macrophyllae Radix*  
Yumin He<sup>1</sup>, Shu Zhu, Xiaoting Wu, Yuewei Ge, Katsuko Komatsu  
 Division of Pharmacognosy, Institute of Natural Medicine, University of Toyama
- SP-72 Antidepressant like effects of the sesquiterpenoids from the rhizome of *Atractylodes japonica*  
Takahiro Konishi, Jun Takahashi, Hiroaki Takemoto, Tatsuo Fukuda, Yoshinori Kobayashi  
 Department of Pharmacognosy, School of Pharmacy, Kitasato University
- SP-73 Glycosylation of oleanolic acid at C28 by using Flow Microreactor and evaluation of adjuvant activity against influenza virus  
Naruki Konishi<sup>1</sup>, Tatsuya Shirahata<sup>1</sup>, Takayuki Nagai<sup>2</sup>, Nozomu Hirata<sup>1</sup>, Masaki Yokoyama<sup>1</sup>, Tatsuya Katsumi<sup>1</sup>, Takashi Nishino<sup>1</sup>, Kazuishi Makino<sup>1</sup>, Hiroaki Kiyohara<sup>2</sup>, Haruki Yamada<sup>2</sup>, Eisuke Kaji<sup>1</sup>, Yoshinori Kobayashi<sup>1</sup>  
<sup>1</sup>School of Pharmacy, Kitasato University., <sup>2</sup>Kitasato Institute for Life Sciences, Kitasato University, and Graduate School of Infection Control Sciences, Kitasato University.
- SP-74 Application of metabolomics for quality evaluation of licorice (*Glycyrrhiza uralensis* Fisher)  
Kazuo Harada<sup>1</sup>, Tomoka Oda<sup>1</sup>, Akari Sumi<sup>1</sup>, Natsumi Ueno<sup>1</sup>, Mareshige Kojima<sup>2</sup>, Yutaka Yamamoto<sup>3</sup>, Shu Zhu<sup>4</sup>, Katsuko Komatsu<sup>4</sup>, Kazumasa Hirata<sup>1</sup>  
<sup>1</sup>Graduate School of Pharmaceutical Sciences, Osaka University, <sup>2</sup>Faculty of Pharmaceutical Sciences, Health Sciences University of Hokkaido, <sup>3</sup>Tochimoto Tenkaido Co. Ltd., <sup>4</sup>Institute of Natural Medicine, University of Toyama
- SP-75 Effects of Constituents from Hooks of *Uncaria rhynchophylla* on Neurite Outgrowth and TNF- $\alpha$ -induced Cell Damage  
Kiyofumi Ninomiya, Toru Minamino, Kaiten Ozeki, Natsuko Matsuo, Chihiro Kawabata, Takao Hayakawa, and Toshio Morikawa  
 Pharmaceutical Research and Technology Institute, Kinki University
- SP-76 Tubulin-polymerizing activity of Ganoderma triterpenoids and production of their monoclonal antibody  
Toshitaka Kohno<sup>1</sup>, Tran Hai Bang<sup>2</sup>, Kuniyoshi Shimizu<sup>2</sup>, Seiichi Sakamoto<sup>1</sup>, Hiroyuki Tanaka<sup>1</sup>, Satoshi Morimoto<sup>1</sup>  
<sup>1</sup>Graduate School of Pharmaceutical Sciences, Kyushu University, <sup>2</sup>Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University
- SP-77 Pharmacological Functions of Tomato Saponin  
 Toshihiro Nohara<sup>1</sup>, Yukio Fujiwara<sup>2</sup>, Jian-Rong Zhou<sup>1</sup>, Yoshiyuki Kimura<sup>3</sup>, Kotaro Murakami<sup>1</sup>, Tsuyoshi Ikeda<sup>1</sup>, Kazumi Yokomizo<sup>1</sup>, Masateru Ono<sup>4</sup>  
<sup>1</sup>Faculty of Pharmaceutical Sciences, Sojo University, <sup>2</sup>Graduate School of Medicinal Sciences, Kumamoto University, <sup>3</sup>Graduate School of Medicine, Ehime University, <sup>4</sup>School of Agriculture, Tokai University
- SP-78 Development of an *in vivo* assay method for natural sleep-promoting substances using measurement of skin temperature and skin blood flow  
Yuko Ogawa, Ayana Minamizawa, Sachie Tada, Tenji Konishi  
 Faculty of Pharmaceutical Sciences, Doshisha Women's College of Liberal Arts
- SP-79 Intervention effect of Eerdun-urilon rabbit atherosclerotic vulnerable plaque\*  
Chunjie Ma, Yanqing Di  
 Inner Mongolian Medical University
- SP-80 A novel chroman derivative induced apoptosis on human cervical carcinoma HeLa cell via mitochondria-dependent pathway  
Yu Mi Shin<sup>1</sup>, Hyunjin Jeong<sup>1</sup>, Dong Soo Shin<sup>2</sup>, Dong-Kyoo Kim<sup>1</sup>  
<sup>1</sup>Department of Biomedical chemistry, Inje University, <sup>2</sup>Department of Chemistry, Changwon Natl. University
- SP-81 Anticancer effects of S32 are associated with mitochondria-mediated apoptosis in human cervical carcinoma HeLa cells  
Hyunjin Jeong<sup>1</sup>, YuMi Shin,<sup>1</sup> Yi Xu,<sup>1</sup> Dong Soo Shin,<sup>2</sup> Dong-Kyoo Kim<sup>1</sup>  
<sup>1</sup>Department of Biomedical Chemistry, Inje University, <sup>2</sup>Department of Chemistry, Changwon Natl. University
- SP-82 Total polyphenols and antioxidant activity of *Allium* species plants  
Hyeon-Su So, Jun-Su Seo, Jae-Hyung Ko, Won-Seok Jung, Seong-Ho Ham, Jung-Hee Cho and Jun-Hwan Yeo\*  
 Jeollanamdo Development Institute of Korean Traditional Medicine

- SP-83 **Experimental Studies of Mongolia Zhong Lun A Tang on Long-term Toxicity\***  
Qiumei Dong, Chunbo Shen  
 College of Traditional Chinese Medicine, Inner Mongolia Medical University
- SP-84 **The therapeutic effect of DW-3102 on hyperlipidemia induced by high-cholesterol diet in Rat**  
Sangwook Park, Seil Sohn, Jhongjae Lim, Eunmi Jun, Minji Jun and Hongwoo Lee  
 Central Research laboratory, Daewon pharm.Co. Ltd.
- SP-85 **Development of adjuvant for effective oral vaccine application**  
Bo Yoon Chang<sup>1</sup>, Bo Hyun Youm<sup>2</sup>, Ji Hye Han<sup>1</sup>, Da Eun Kim<sup>1</sup>, Ji Hye Park<sup>1</sup> and Sung Yeon Kim<sup>1</sup>  
<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, <sup>2</sup>Institute of Zoonosis Research Center and Department Infection Biology, College of Medicine, Wonkwang University
- SP-86 **Mutagenicity and safty evaluation of *Morus alba* L. fruits**  
Bo Yoon Chang, Ji Hye Han, Da Eun Kim, Ji Hye Park and Sung Yeon Kim  
 Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University
- SP-87 **Immune Stimulation of WK4 in Small Intestinal Epithelium**  
Bo Hyun Youm<sup>1</sup>, Bo Yoon Chang<sup>2</sup>, Ji Hye Han<sup>2</sup>, Thida Svay<sup>2</sup>, Da Eun Kim<sup>2</sup>, Ji Hye Park<sup>2</sup> and Sung Yeon Kim<sup>1</sup>  
<sup>1</sup>Institute of Zoonosis Research Center and Department Infection Biology, College of Medicine, Wonkwang University, <sup>2</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University
- SP-88 **Antibacterial Activity of WK3 against Escherichia coli via Immune-stimulation of Macrophages**  
Thida Svay<sup>1</sup>, Bo Hyun Youm<sup>2</sup>, Bo Yoon Chang<sup>1</sup>, Ji Hye Han<sup>1</sup>, Da Eun Kim<sup>1</sup>, Ji Hye Park<sup>1</sup> and Sung Yeon Kim<sup>1</sup>  
<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, <sup>2</sup>Institute of Zoonosis Research Center and Department Infection Biology, College of Medicine, Wonkwang University
- SP-89 **Extractive optimization of bioactive for development of herbal therapeutics**  
Da Eun Kim<sup>1</sup>, Bo Yoon Chang<sup>1</sup>, Ji Hye Han<sup>1</sup>, Ji Hye Park<sup>1</sup>, Bo Hyun Youm<sup>2</sup> and Sung Yeon Kim<sup>1</sup>  
<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, <sup>2</sup>Institute of Zoonosis Research Center and Department Infection Biology, College of Medicine, Wonkwang University
- SP-90 **Optimization of an effective growth medium for culturing probiotic bacteria**  
Ji Hye Han<sup>1</sup>, Bo Yoon Chang<sup>1</sup>, Da Eun Kim<sup>1</sup>, Ji Hye Park<sup>1</sup>, Bum Suk Cha<sup>2</sup>, Ju Hee Kim<sup>2</sup>, Sung-Ho Ann<sup>2</sup> and Sung Yeon Kim<sup>1</sup>  
<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, <sup>2</sup>Young Science Scharlau Korea, Jeonnam Biotechnology Research Center
- SP-91 **Effect of Ginkgo semen extract on the respiratory disorders**  
Jung Hwan Kim<sup>1</sup>, Jin Kee Hong<sup>1</sup>, Ji Hye Han<sup>1</sup>, Da Eun Kim<sup>1</sup>, Ji Hye Park<sup>1</sup>, Dae Sung Kim<sup>2</sup>, Hyoung Kwon Cho<sup>2</sup> and Sung Yeon Kim<sup>1</sup>  
<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, <sup>2</sup>Hanpoong Pharm. CO., Ltd.
- SP-92 **Ginger-stimulated expression of substance P in mouse tongue tissues**  
Ayumu Hirata<sup>1,2</sup>, Michiro Iiduka<sup>1</sup>, Yusuke Yagi<sup>1,2</sup>, Megumi Nakai<sup>1,2</sup>, Hisashi Shiraishi<sup>1,2</sup>, Kohei Jobu<sup>1</sup>, Junko Yokota<sup>1</sup>, Yoshiyasu Fukuyama<sup>3</sup>, Mitsuhiro Miyamura<sup>1,2</sup>  
<sup>1</sup>Department of Pharmacy, Kochi Medical School Hospital, <sup>2</sup>Department of Pharmacy, Kochi Medical Graduate School Hospital, <sup>3</sup>Faculty of Pharmaceutical Sciences, Tokushima Bunri University
- SP-93 **Comparative study for constituents of black raspberry according to ripening stage**  
Yong Joon Jung<sup>1</sup>, Yu Su Shin<sup>2</sup>, Seung-Ok Yang<sup>2</sup>, Se Chan Kang<sup>1</sup>  
<sup>1</sup>Department of Biological Science, Gachon University, <sup>2</sup>Department of Herbal Crop Research, NIHHS, RDA
- SP-94 **Protective effect of unripened *Rubus coreanus* on ovariectomized mice**  
Dae Won Park, Jung Eun Kwon, Seon A Jang, Yong Joon Jung, Hyun Jung Koo, Se Chan Kang  
 Department of Biological Science, Gachon University
- SP-95 ***Commiphora myrrha* extract ameliorates scopolamine-induced memory impairment in mice**  
Samrat Baral<sup>1</sup>, Jiun Ahn<sup>1</sup>, Dae-Sung Kim<sup>2</sup>, Hyoung-Kwon Cho<sup>2</sup>, Sung Yeon Kim<sup>1</sup>, Hyuncheol Oh<sup>1</sup>, Youn-Chul Kim<sup>1</sup> and Jungwon Seo<sup>1</sup>  
<sup>1</sup>Institute of Pharmaceutical Research and Development, College of Pharmacy, Wonkwang University, <sup>2</sup>Hanpoong Pharm & Foods Co., Ltd.

- SP-96 Induction of G0/G1 cell cycle arrest and apoptosis mediated by CSME through PI3K/Akt pathway in HCT116 human colon cancer cells  
Cholomi Jung<sup>1</sup>, Hwa-Jin Chung<sup>1</sup>, Ji In Kang<sup>1</sup>, Eun Jeong Jang<sup>1</sup>, So Hyun Park<sup>1</sup>, Ji-Young Hong<sup>1</sup>, Kyun Ho Son<sup>2</sup>, Sang Kook Lee<sup>1</sup>  
<sup>1</sup>Natural Products Research Institute, College of Pharmacy, Seoul National University, <sup>2</sup>College of Human Ecology, Andong National University
- SP-97 Anti-proliferative Effect of Columbianadin (CBN) in HCT-116 Human Colon Cancer Cells by Induction of Necroptosis  
Ji In Kang<sup>1</sup>, Eun Jeong Jang<sup>1</sup>, So Hyun Park<sup>1</sup>, Cholomi Jung<sup>1</sup>, Ji-Young Hong<sup>1</sup>, Hyen Joo Park<sup>1</sup>, Yoonho Shin<sup>1</sup>, Jae-Sue Choi<sup>2</sup>, Sang Kook Lee\*  
<sup>1</sup>College of Pharmacy, Natural Products Research Institute, Seoul National University, <sup>2</sup>Department of Food Science and Nutrition, Pukyong National University
- SP-98 Oxypeucedanin Induces G2/M Phase Cell Cycle Arrest in Human Hepatoma SK-Hep-1 Cells  
So Hyun Park, Ji In Kang, Eun Jeong Jang, Cholomi Jung, Ji-Young Hong, Hyen Joo Park, Jinwoong Kim, Sang Kook Lee\*  
 College of Pharmacy, Seoul National University
- SP-99 Evolution of Plant extracts on the anti-proliferative and Wnt/ $\beta$ -catenin signaling pathway in human colon cancer cell  
Eun Jeong Jang<sup>1</sup>, Ji In Kang<sup>1</sup>, So Hyun Park<sup>1</sup>, Eun Ju Jeong<sup>1</sup>, Yoonho Shini<sup>1</sup>, Won Kyung Kim<sup>1</sup>, Je Do Oh<sup>1</sup>, Hyen Joo Park<sup>1</sup>, Ji Young Hong<sup>1</sup>, Sei Ryang Oh<sup>2</sup>, Sang Kook Lee<sup>1\*</sup>  
<sup>1</sup>College of Pharmacy, Seoul National University, <sup>2</sup>Korea Research Institute of Bioscience and Biotechnology International Biological Material Research Center
- SP-100 Effects of *Leonurus japonicus* ( 益母草 ) and its constituents leonurine and stachydrine on the activity of PPAR $\alpha$ ,  $\beta/\delta$ , and  $\gamma$   
Kenny Kuchta<sup>1</sup>, Nobuyasu Matsuura<sup>2</sup>, Hans Wilhelm Rauwald<sup>3</sup>, Munekazu Iinuma<sup>4</sup>  
<sup>1</sup>Natural Products Research, Sanyo Gakuen, <sup>2</sup>Life Science, Okayama University of Science, <sup>3</sup>Pharmaceutical Biology, Leipzig University, <sup>4</sup>Pharmacognosy, Gifu Pharmaceutical University