# Scientific Program of the 2013 International Meeting of MSK

## Timetable

<table>
<thead>
<tr>
<th>May 1 (Wed.)</th>
<th>Gain Hall</th>
<th>Paul Hall</th>
<th>Room 252</th>
<th>Room 352</th>
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<tbody>
<tr>
<td>12:00~</td>
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<td></td>
<td>Registration</td>
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<tr>
<td>13:00-13:15</td>
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<td>Opening Ceremony (Hall A)</td>
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<tr>
<td>13:15-14:00</td>
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<td>Plenary Lecture 1 (Hall A_Dr. V. Narry Kim)</td>
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<tr>
<td>14:00-16:30</td>
<td>IS1 New Horizons in Microbial Diversity and Metagenomics</td>
<td>YS Young Scientists Session</td>
<td>GS1 Graduate Students’ Presentation Session 1</td>
<td>GS2 Graduate Students’ Presentation Session 2</td>
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<tr>
<td>17:00-18:30</td>
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<td>Jeonju Hanok Village Tour</td>
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<tr>
<th>May 2 (Thu.)</th>
<th>Gain Hall</th>
<th>Paul Hall</th>
<th>Room 252</th>
<th>Room 352</th>
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<tbody>
<tr>
<td>09:00-09:45</td>
<td></td>
<td></td>
<td>Plenary Lecture 2 (Hall A_Dr. Nenad Ban)</td>
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<tr>
<td>09:45-12:15</td>
<td>IS2 New Approaches in Clinical Microbiology</td>
<td>S1 Microbe-based Jeonbuk Glocal Technology 1</td>
<td>S2 Microbes and Global Climate Change</td>
<td>S3 New Insights into Synthetic Biology 1</td>
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<tr>
<td>12:15-13:15</td>
<td>Workshop</td>
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<td>Lunch</td>
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<tr>
<td>13:15-14:00</td>
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<td>Poster Presentation 1</td>
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<tr>
<td>14:00-16:30</td>
<td>IS3 Recent Approaches in Industrial Biotechnology</td>
<td>S4 Microbe-based Jeonbuk Glocal Technology 2</td>
<td>S5 Transcription and RNA</td>
<td>S6 New Insights into Synthetic Biology 2</td>
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<tr>
<td>16:30-16:55</td>
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<td>Move to Samsung Cultural Center</td>
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<td>16:55-17:40</td>
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<td>Plenary Lecture 3 (Samsung Cultural Center_Dr. Robert Huber)</td>
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<td>17:40-18:10</td>
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<td>Declaration of JEONBUK Vision</td>
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<td>18:10-18:40</td>
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<td>Cultural Event _ Korean Traditional Performance</td>
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<tr>
<td>18:40-21:00</td>
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<td>Welcome Reception</td>
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<tr>
<th>May 3 (Fri.)</th>
<th>Gain Hall</th>
<th>Paul Hall</th>
<th>Room 252</th>
<th>Room 352</th>
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<tbody>
<tr>
<td>09:00-11:30</td>
<td>IS4 Synthetic Perspective of Actinomycete Biology</td>
<td>S7 Genetic and Genomic Approaches to Fungal Biology</td>
<td>S8 Molecular Pathogenesis of Herpesviruses</td>
<td>S9 Industrialization of Useful Microbes from Healthy Functional Foods</td>
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<tr>
<td>11:30-12:15</td>
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<td>Plenary Lecture 4 (Hall A_Dr. Mervyn Bibb)</td>
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<tr>
<td>12:15-13:15</td>
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<td>Lunch</td>
<td>MSK GM (Room 361)</td>
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<tr>
<td>13:15-14:00</td>
<td>Retirement</td>
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<td>Poster Presentation 2</td>
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<tr>
<td>14:00-14:30</td>
<td>2013 MSK Award Lecture</td>
<td>HS (14:00-16:00) High School Students’ Presentation Session</td>
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<tr>
<td>14:30-17:00</td>
<td>S10 Advances in Biorefinery and Metabolic Engineering</td>
<td>Plenary Lecturer-Student Discussion Meeting (16:00-17:00)</td>
<td>S11 Host Defense against Microbes and Their Specificities</td>
<td>S12 Genomics and Metagenomics of Plant Microbes</td>
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<tr>
<td>17:00-17:30</td>
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<td>Closing Ceremony (Hall A)</td>
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</tbody>
</table>
Plenary Lectures

Plenary Lecture 1
May 1 (Wed.), Gain Hall
Chair: Doo Hyun Nam, Yeungnam University
13:15-14:00
Biogenesis and Regulation of microRNA
V. Narry Kim, Seoul National University

Plenary Lecture 2
May 2 (Thu.), Gain Hall
Sponsored by KRIBB and the Mol. Microbiol. Lab., Sogang University
Chair: Young-Ho Jeon, Korea University
09:00-09:45
Crystal Structures of the Eukaryotic Ribosome and Insights into the Regulation and Initiation of Protein Synthesis
Nenad Ban, ETH Zurich (Swiss Federal Institute of Technology), Switzerland
*KRIBB: Korea Research Institute of Bioscience and Biotechnology

Plenary Lecture 3
May 2 (Thu.), Samsung Cultural Center
Partially sponsored by KRIBB
Chair: Jai Myung Yang, Sogang University
16:55-17:40
Prokaryotic and Eukaryotic Protease Machines, Paradigms for Molecular Evolution
Robert Huber, Max-Planck-Institut für Biochemie, Germany
(Foreign Collaborator, World Class Institute, KRIBB)

Plenary Lecture 4
May 3 (Fri.), Gain Hall
Organized by Korean Research Group for Actinomycete
Chair: Jung-Hye Roe, Seoul National University
11:45-12:15
Understanding and Manipulating Antibiotic Production in Actinomycetes
Mervyn Bibb, John Innes Institute, UK
International Symposia

**New Horizons in Microbial Diversity and Metagenomics**

May 1 (Wed.), Gain Hall

*Sponsored by KRIIBB and the Bio & Medical Technology Development Program of NRF*

**Chairs:** Sa-Youl Ghim, Kyungpook National University  
Jung Sook Lee, Korea Research Institute of Bioscience and Biotechnology

**IS1-1  14:00-14:30**  
Microbiomics and Metagenomics of the Marine Ecosystems  
Jihyun F. Kim, Yonsei University

**IS1-2  14:30-15:00**  
Structural Basis for the Initiation and Patterning of Heterocyst Differentiation  
Cong-Zhao Zhou, University of Science and Technology of China, China

**IS1-3  15:00-15:30**  
Metagenomic Analysis of Diversity of Glycoside Hydrolase Genes among Human and Animal Fecal Microbiota  
GwangPyo Ko, Seoul National University

**IS1-4  15:30-16:00**  
Exploration of Thermophilic Microorganisms from Terrestrial Hot Springs  
Takashi Itoh, RIKEN BioResource Center, Japan

**IS1-5  16:00-16:30**  
SIP-based Metagenomic Analysis Revealed Bioremediation Potential of Iron-reducing Bacteria in Tidal Flat  
Sung-Keun Rhee, Chungbuk National University

**New Approaches in Clinical Microbiology**

May 2 (Thu.), Gain Hall

**Chairs:** Dong-Kwon Rhee, Sungkyunkwan University  
Dong Wook Kim, Hanyang University

**IS2-1  09:45-10:20**  
Detection of Stalk Hemagglutinin Specific Antibodies Using Recombinant Chimeric Protein: Potential Correlate of Broad Protection against Influenza  
Huan Huu Nguyen, International Vaccine Institute
IS2-2  10:20-10:55
Structural Insights into the Substrate Specificity of *Streptococcus pneumoniae* (1,3)-Galactosidase BgaC
Yuxing Chen, University of Science and Technology of China, China

IS2-3  10:55-11:30
Loop-mediated Isothermal Amplification (LAMP) Assays for the Diagnosis of Bacterial Meningitis in Developing Countries
Mitsuko Seki, Nihon University, Japan

IS2-4  11:30-12:15
Loop-mediated Isothermal Amplification (LAMP): Principle, Characteristics, and Future Prospects
Tsugunori Notomi, Eiken Chemical Co., Ltd., Japan

**Recent Approaches in Industrial Biotechnology**

*May 2 (Thu.), Gain Hall*

*Sponsored by CJ CheilJedang Corp.*

Chairs: Jung-Hoon Sohn, KIRIBB & Jae Jun Song, KIRIBB

IS3-1  14:00-14:30
Launching an Automated Micro Plate Cultivation Platform for Enhanced Bioprocess Optimization
Marco Oldiges, Forschungszentrum Jülich, Germany

IS3-2  14:30-15:00
Exploring Biocatalysts for Stereoselective Synthesis by the Investigation of the Biosynthesis of Natural Products
Shuangjun Lin, Shanghai Jiaotong University, China

IS3-3  15:00-15:30
Identification and Application of a Novel Enzyme from Soil Metagenomic Libraries
Hyuk Lee, Korea Research Institute of Chemical Technology

IS3-4  15:30-16:00
Development of *Klebsiella pneumonia* Strains to Produce Biochemicals
Chulho Kim, Korea Research Institute of Bioscience and Biotechnology (KIRIBB)

IS3-5  16:00-16:30
Perspective and Strategy of CJ BIO for the Bio-based Chemical Production Industry
Kuk Ki Hong, CJ CheilJedang Corp.
IS4

Synthetic Perspective of Actinomycete Biology

Organized by Korean Research Group for Actinomycete
Chairs: Doo Hyun Nam, Yeungnam University & Soon-Kwang Hong, Myongji University

IS4-1 09:00-09:40
Developmental Defects of *Streptomyces coelicolor* Respiratory Mutants
Kenji Ueda, Nihon University, Japan

IS4-2 09:40-10:20
Bioprospecting Novel Natural Products for Potential Anti-infective Drugs
Lixin Zhang, Institute of Microbiology, China

IS4-3 10:20-10:55
Bioactive Secondary Metabolites from Marine-derived Actinomycetes
Sang-Jip Nam, Ewha Womans University

IS4-4 10:55-11:30
Glycosylation of Small Molecules: Synthesis of Flavonoid Glycosides
Jae Kyung Sohng, SunMoon University

Symposia

S1

Microbe-based Jeonbuk Glocal Technology 1

Chair: Kwang-Yeop Jahng, Chonbuk National University

S1-1 09:45-10:15
Hypoviral Regulation of Signaling in the Chestnut Blight Fungus *Cryphonectria parasitica*
Jung-Mi Kim, Wonkwang University

S1-2 10:15-10:55
Gene Silencing, Heterochromatin Formation and DNA Methylation in *Neurospora*
Eric U. Selker, University of Oregon, USA
Break 10:55-11:05

S1-3 11:05-11:35
Enzymatic Approaches for the Pretreatment of Lingocellulosic Biomass
Seung-Moon Park, Chonbuk National University

S1-4 11:35-12:15
Dissection of Fungal Virulence Mechanisms by Proteomics and Functional Genomics
Baoshan Chen, Guangxi University, China

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S2

Microbes and Global Climate Change

May 2 (Thu.), Room 252

Sponsored by Marine Biotechnology Research Center, KIOST
Chair: Jong-Shik Kim, Gyeongbuk Institute for Marine Bio-Industry

S2-1 09:45-10:15
Effects of Global Climate Change on Microbes in Wetlands
Hojeong Kang, Yonsei University

S2-2 10:15-10:45
The Hot and Cold of Aerobic Carbon Monoxide Oxidation: Lessons from Kilauea Volcano
Gary M. King, Louisiana State University, USA

S2-3 10:45-11:15
Environmental Perturbation Changes Microbial Community, Soil Enzyme Activities, Abundance of Genes Involved in Nitrogen Cycle in Antarctic Soils
Woojun Park, Korea University

S2-4 11:15-11:45
Bridging Microbial Community Ecology and Terrestrial Ecosystem Functioning
Laurent Philippot, INRA, France

S2-5 11:45-12:15
Symbiotic Nitrogen Fixation: Evolutionary, Environmental, and Agricultural Perspectives on Climate Change
Woo-Suk Chang, University of Texas-Arlington, USA
New Insights into Synthetic Biology 1

Sponsored by Intelligent Synthetic Biology Center
Chair: Byung-Kwan Cho, Korea Advanced Institute of Science and Technology

S3-1 09:45-10:15
Pro and Con of a High Cellular Energy Harboring Synthetic Bacterial System and a Basic Study to Overcome
Pil Kim, The Catholic University of Korea

S3-2 10:15-10:45
Inhibitory Effects of Helicobacter pylori-derived Antimicrobial Peptide HPA3NT3 against Acne Vulgaris
Peter I. Song, University of Arkansas for Medical Sciences, USA

S3-3 10:45-11:15
Recognition and Discrimination of Target mRNAs by sRNAs for Gene Silencing in Escherichia coli
Younghoon Lee, Korea Advanced Institute of Science and Technology

S3-4 11:15-11:45
Unnatural Biochemical Production via Genome-scale Metabolic Pathway Engineering
Duhee Bang, Yonsei University

S3-5 11:45-12:15
Synthetic Biology for Isoprenoids Production from E. coli as a Platform Strain
Seon-Won Kim, GyeongSang National University

Microbe-based Jeonbuk Glocal Technology 2

S4-1 14:00-14:30
Use of Bacteriophages to Control Bacillus cereus in Fermented Foods
Kwang-Pyo Kim, Chonbuk National University

S4-2 14:30-15:10
Bacteriophage Ecology in Industrial Vegetable Fermentations
Jean Lu, Kennesaw State University, USA
Break 15:10-15:20

S4-3 15:20-15:50
Production of Cellulosic Oil Using Heterotrophic Microalga Auratiochytrium sp. KRS101
Jeong-Woo Seo, Korea Research Institute of Bioscience and Biotechnology

S4-4 15:50-16:30
Development of Microbial Cell Factories for Bio-refinery
Akihiko Kondo, Kobe University, Japan

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S5 Transcription and RNA
May 2 (Thu.), Room 252
Sponsored by the Mol. Microbiol. Lab., Sogang University
Chair: Yeong-Jae Seok, Seoul National University

S5-1 14:00-14:30
Regulation of Genes Encoding Ni-SOD and Fe-SOD through a Metal-specific Regulator and Small RNA
Jung-Hye Roe, Seoul National University

S5-2 14:30-15:00
Modulation of Bacterial Physiology by Endoribonucleases
Kangseok Lee, Chung-Ang University

S5-3 15:00-15:30
Control of Bacterial Cell Wall Biosynthesis by a Hierarchically Acting Cascade of Two Small RNAs
Boris Görke, Georg-August-University, Germany

S5-4 15:30-16:00
Iron Acquisition and Regulation in the Human Fungal Pathogen Cryptococcus neoformans
Won Hee Jung, Chung-Ang University

S5-5 16:00-16:30
Context Dependent Histone Modification during Transcription Elongation
Jung-Shin Lee, Kangwon National University
New Insights into Synthetic Biology 2

May 2 (Thu.), Room 352

Sponsored by Systems & Synthetic Agrobiotech Center
Chair: Seon-Won Kim, GyeongSang National University

S6-1  14:00-14:30
Improved Production of L-threonine Using a DNA Scaffold System in *Escherichia coli*
Jun Hyoung Lee, Korea Advanced Institute of Science and Technology

S6-2  14:30-15:00
Engineering of Glycosylation and Secretion Pathway in Yeast for Production of Therapeutic Enzymes
Doo-Byoung Oh, Korea Research Institute of Bioscience and Biotechnology

S6-3  15:00-15:30
Generation of Human Drug Metabolites by Bacterial Cytochrome P450 Enzymes
Chul-Ho Yun, Chonnam National University

S6-4  15:30-16:00
Elucidation of the Role of a Novel Transcription Factor SK01
Sung Kuk Lee, Ulsan National Institute of Science and Technology

S6-5  16:00-16:30
Application of Two-Component Signal Transduction Systems in Synthetic Biology
Ohsuk Kwon, Korea Research Institute of Bioscience and Biotechnology

Genetic and Genomic Approaches to Fungal Biology

May 3 (Fri.), Paul Hall

Chair: Hyoung Tae Choi, Kangwon National University

S7-1  09:00-09:30
Roles of MpkB MAP Kinase in the Growth and Development of *Aspergillus nidulans*
Kwang-Yeop Jahng, Chonbuk National University

S7-2  09:30-10:00
Functional Genomics of Transcription Factors in the Ascomycete Fungus, *Fusarium graminearum*
Hokyoung Son, Seoul National University
<table>
<thead>
<tr>
<th>Session</th>
<th>Time</th>
<th>Topic</th>
<th>Speaker(s)</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>S7-3</td>
<td>10:00-10:30</td>
<td>Global Functional Analysis of Transcription Factors in <em>Cryptococcus</em></td>
<td>Yong-Sun Bahn, Yonsei University</td>
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<tr>
<td>S7-4</td>
<td>10:30-11:00</td>
<td>Lagging DNA Synthesis and Genome Stability</td>
<td>Yeon-Soo Seo, Korea Advanced Institute of Science and Technology</td>
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<td>S7-5</td>
<td>11:00-11:30</td>
<td>Dual Action of Dual-Specificity LAMMER Kinase in G1/S Cell Cycle Progression</td>
<td>Hee-Moon Park, Chungnam National University</td>
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<td><strong>Molecular Pathogenesis of Herpesviruses</strong></td>
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<td>S8-1</td>
<td>09:00-09:30</td>
<td>Regulation of Protein ISGylation in Human Cytomegalovirus Infection</td>
<td>Jin-Hyun Ahn, Sungkyunkwan University</td>
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<tr>
<td>S8-2</td>
<td>09:30-10:00</td>
<td>Control of Gammaherpesvirus Latency</td>
<td>Paul M. Lieberman, The Wistar Institute, USA</td>
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<td>S8-3</td>
<td>10:00-10:30</td>
<td>Host Cell Dysregulation by Kaposi’s Sarcoma-Associated Herpesvirus</td>
<td>Taegun Seo, Dongguk University</td>
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<td>S8-4</td>
<td>10:30-11:00</td>
<td>Functional Interaction between IRAK1 and CaMKII in EBV LMP1-induced</td>
<td>Yoon-Jae Song, Gachon University</td>
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<tr>
<td>S8-5</td>
<td>11:00-11:30</td>
<td>Targetting of Carcinoembryonic Antigen-expressing Cancer by Receptor-restricted Herpes Simplex Virus type 1 and a Bispecific Adaptor</td>
<td>Heechung Kwon, Korea Institute of Radiological &amp; Medical Sciences</td>
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</table>
Industrialization of Useful Microbes from Healthy Functional Foods

May 3 (Fri.), Room 352

Sponsored by Center for Nutraceutical and Pharmaceutical Materials
Chair: Geun Eog Ji, Seoul National University

S9-1 09:30-10:00
Probiotic Characteristics and Industrialization of Plant-Originated *Lactobacillus plantarum* PMO 08
Young Joo Oh, Pulmuone Holdings Co., Ltd.

S9-2 10:00-10:30
Health Functions of *Bifidobacterium* and Safety Regulations of Probiotics
Geun Eog Ji, Seoul National University

S9-3 10:30-11:00
Development of Functional Food from Black Soybean Peptides
Chang-Won Ahn, Nongshim Co., Ltd.

S9-4 11:00-11:30
The Development of Functional Foods Containing *Cordyceps militaris*
Tae Ho Lee, Dong-A ST Co., Ltd.

Advances in Biorefinery and Metabolic Engineering

May 3 (Fri.), Gain Hall

Sponsored by CJ CheilJedang Corp.
Chair: Eung-Soo Kim, Inha University

S10-1 14:30-15:00
Gene Discovery for the Reconstruction of Synthetic Pathways Using Next-Generation Sequencing
Byung-Kwan Cho, Korea Advanced Institute of Science and Technology

S10-2 15:00-15:30
Biosynthetic and Genomic Studies on Polyether Antibiotic Salinomycin
Linquan Bai, Shanghai Jiaotong University, China
Production Technology of PLA (Polylactic acid) as Bioplastic
Yong Hwan Kim, Kwangwoon University

Downstream Process for Biofuel Production from Microalgae
Jeong-Geol Na, Korea Institute of Energy Research

Metabolic Engineering of Microorganisms for the Production of Biopolymer and Biochemical
Si Jae Park, Myongji University

Host Defense against Microbes and Their Specificities
May 3 (Fri.), Room 252
Chair: Dong-Kwon Rhee, Sungkyunkwan University

How Strong is Korean H. pylori?
Jeong-Heon Cha, Yonsei University

Molecular Mechanism of CueP in the Intracellular Pathogen Salmonella Typhimurium
Nam-Chul Ha, Pusan National University

Signal Transduction Mechanisms and Their Tight Regulation in Nontypeable Haemophilus influenzae Infection
Hirofumi Jono, Kumamoto University, Japan

Measles, a Vaccine Preventable Acute Respiratory Illness also Plays a Role for Chronic Disease of Central Nervous System
Kisoon Kim, Korea National Institute of Health, KCDC

A New Type of Biofilm Derived from 3D Bacterial Cell Culture
Yong-Gyun Jung, QuantaMatrix Inc.
Genomics and Metagenomics of Plant Microbes

May 3 (Fri.), Room 352

Sponsored by the Agricultural Genome Center
Chair: Beom-Seok Park, National Academy of Agricultural Science

S12-1  14:30-15:00
Genomic Analysis of Field Isolates Belonging to the *Fusarium graminearum* Species Complex in Korea
Sung-Hwan Yun, Soonchunhyang University

S12-2  15:00-15:30
Comparative Genomic Analyses on Compatible Monokaryons of *Flammulina velutipes* for Molecular Breeding
Won-Sik Kong, National Institute of Horticultural and Herbal Science

S12-3  15:30-16:00
Functional Pathogenomics of Plant-Pathogenic *Pantoea ananatis*
Jinwoo Kim, GyeongSang National University

S12-4  16:00-16:30
Comparative Genomics and Transcriptomics of the Rice Pathogenic *Burkholderia* Species
Young-Su Seo, Pusan National University

S12-5  16:30-17:00
Comparison of the Rhizosphere Metagenomes between Plant Cultivars Resistant or Susceptible to Bacterial Wilt
Seon-Woo Lee, Dong-A University
Young Scientists’ Session

YS-1  14:00-14:10
A Gene Expression Study of the Activities of Aromatic Ring-cleavage Dioxygenases in Mycobacterium gilvum PYR-GCK to Changes in Salinity and pH during Pyrene Degradation
Abimbola Comfort Badejo, Hanyang University

YS-2  14:10-14:20
Molecular Cloning, Expression and Characterization of Thermostable Lipase Gene from Bacillus thermoleovorans KLMM2 in Escherichia coli DH5α
Mathur Nadarajan Kathiravan, Chosun University

YS-3  14:20-14:30
Biofouling Control in Membrane Bioreactor for Wastewater Treatment by Quorum Quenching Bacteria
Hyun-Suk Oh, Seoul National University

YS-4  14:30-14:40
Genomic Makeup of the Marine Flavobacterium Nonlabens dokdonensis DSW-6 and Identification of a Novel Class of Rhodopsins
Soon-Kyeong Kwon, Yonsei University

YS-5  14:40-14:50
Diversity for Proteorhodopsin Gene of Flavobacteria Isolated from Marine Environment
Yong Min Kwon, Korea Institute of Ocean Science & Technology

YS-6  14:50-15:00
Distribution and Abundance of Spirochaetes in Full-scale Anaerobic Digesters
Sang-Hoon Lee, Korea University

YS-7  15:00-15:10
Changes in CO₂ and CH₄ Fluxes and Related Microorganisms in Northern Arctic Soils under Different Temperature
Inyoung Jang, Yonsei University
YS-8 15:10-15:20
A Common Transcriptional Regulator for Multiple Plays; NdgR for Amino Acid Metabolism in *Streptomyces coelicolor*
Songhee H. Kim, Seoul National University

YS-9 15:20-15:30
Regulation of Long-term Survival and Meiosis by a Novel Transcription Factor Phx1 in *Schizosaccharomyces pombe*
Ji-Yoon Kim, Seoul National University

YS-10 15:30-15:40
An Apoptosis-Inducing Metalloprotease is Negatively Regulated by Quorum-Sensing Mechanism in *Vibrio vulnificus*
Mi-Ae Lee, Sogang University

YS-11 15:40-15:50
Antimicrobial Peptides Containing Lysine-tryptophan Motifs Exhibit Potent Bactericidal Activity against Drug Resistant Bacteria
Ramamourthy Gopal, Chosun University

YS-12 15:50-16:00
Proteomic Analysis of Early Phase of Conidia Germination in *Aspergillus nidulans*
Young Taek Oh, Yonsei University

YS-13 16:00-16:10
Oxidative Stress Adapted *Corynebacterium glutamicum*
Joo-Young Lee, The Catholic University of Korea

YS-14 16:10-16:20
Conserved Amino Acid Sequence-based Semi-rational Approach for Engineering Industrial Enzymes
Sang-Jae Lee, Kyungpook National University
Graduate Students’ Presentation Sessions

Graduate Students’ Presentation Session 1
May 1 (Wed.), Room 252
Chair: Dong-Woo Lee, Kyungpook National University

GS1-1 14:00-14:10
In vivo DNA Loop Formation Mediated by ArgR-binding
Juhee Kim, Korea Advanced Institute of Science and Technology

GS1-2 14:10-14:20
Regulation of Gene Expression by RNase III in Escherichia coli in Response to Stresses
Boram Lim, Chung-Ang University

GS1-3 14:20-14:30
Transcriptional and Post-Translational Regulation of Hemolysin (VvhA) Production in Vibrio vulnificus
Jeong-A Kim, Sogang University

GS1-4 14:30-14:40
Functional and Regulatory Characteristics of Vibrio vulnificus IscR, A Novel Global Regulator Essential for Survival and Virulence
Jong Gyu Lim, Seoul National University

GS1-5 14:40-14:50
Programmable Synthetic Pathway: Fine-tuned by Inverting Promoter
Dong-Hee Choe, Korea Advanced Institute of Science and Technology

Break 14:50-15:00

GS1-6 15:00-15:10
Functional Genomic Approach in Degradation of 2-Hydroxyphenylacetate by Comamonas testosteroni Strain P19
Jun Hyuk Park, Chonbuk National University
Trivalent Human Papillomavirus (16,18,58) DNA Vaccines Encapsidated in Single Non-replicable Baculovirus Nano-carriers
Hansam Cho, Konkuk University

Real-time PCR Analysis of Kaposi’s Sarcoma-associated Herpesvirus Latent Replication
Seho Cha, Dongguk University

The Tumor Protection of Human Papillomavirus E6/E7 DNA Vaccine
Yoonki Heo, Konkuk University

Functional Role of RNase G in Salmonella typhimurium SL1344
Soonhye Hwang, Chung-Ang University

Graduate Students’ Presentation Session 2
May 1 (Wed.), Room 352
Chair: Sang Sun Yoon, Yonsei University

cAMP Level Influences Sir2’s Role for PMA1 Transcription in Yeast
Woo Kyu Kang, Chungnam National University

Anaerobic D-lactate Overproduction by Genome-wide Systems Metabolic Engineering
Hyun Ju Kim, University of Science and Technology, and Korea Research Institute Bioscience & Biotechnology

Adaptive Laboratory Evolution of a Reduced Genome Escherichia coli
Jayoung Kim, Korea Advanced Institute of Science and Technology

Comparative Metagenomic Analysis of the Rhizosphere Microbial Communities of Tomato Cultivars That Are Resistant or Susceptible to Bacterial Wilt
Min-Jung Kwak, University of Science and Technology, and Yonsei University
GS2-5  14:40-14:50  
Community Analysis and Characterization of Soil Humic Substances-Degrading Bacteria from Polar Regions  
Ha Ju Park, Korea Polar Research Institute, and Inha University

Break  14:50-15:00

GS2-6  15:00-15:10  
Identification and Characterization of a Novel Interaction between Two Distinct Peroxiredoxins, Prx2 and Bcp, of Vibrio vulnificus  
Ye-Ji Bang, Seoul National University

GS2-7  15:10-15:20  
Functional Analysis of a Tannic Acid-inducible and Hypoviral-Regulated CpsHsp1 from the Chestnut Blight Fungus Cryphonectria parasitica  
Jin-Ho Baek, Chonbuk National University

GS2-8  15:20-15:30  
Application of Synthetic Inducers and Cloning of Polyketide Synthase Genes for Overproduction of Phleichrome in Phytopathogenic Fungus Claadsporium phlei  
Kum Kang So, Chonbuk National University

GS2-9  15:30-15:40  
Mining of Industrial Novel Enzymes by a Culture-independent PCR-based Screening Method  
Sun-Mi Shin, Kyungpook National University

GS2-10  15:40-15:50  
Regulation of Biofilm Formation by Quorum Sensing-Mediated Capsular Polysaccharide Production in Vibrio vulnificus  
Kyung-Jo Lee, Sogang University
Retirement Commemorative Lecture

**Retirement Commemorative Lecture**

May 3 (Fri.), Gain Hall

Chair: Joon Kim, Korea University

13:15-14:00

*My Karma with *Salmonella* for 30 Years*

Yong Keun Park, Korea University

2013 MSK Award Lecture

**2013 MSK Award Lecture**

May 3 (Fri.), Gain Hall

Chair: Heung-Shick Lee, Korea University

14:00-14:30

*Bacterial Response toward Oxidative Stress*

Jung-Hye Roe, Seoul National University

Workshop

**Chunlab, Inc.**

May 2 (Thu.), Gain Hall

Chair: Yuseok Oh, ChunLab, Inc.

12:30-13:15

*Bioinformatics for Comparative Genomics and mRNA-Seq Based on Next Generation-sequencing*

Jongsik Chun, ChunLab, Inc., and Seoul National University