

2015 한국미생물학회연합 국제학술대회

International Meeting of the Federation of Korean Microbiological Societies

5 (Thu.) ~ 6 (Fri.), November 2015, KINTEX, Korea



Organized by

The Federation of Korean Microbiological Societies (FKMS)

Hosted by

The Korean Society for Microbiology and Biotechnology (KMB)
The Korean Society of Virology (KSV)
The Korean Society of Mycology (KSMY)
The Microbiological Society of Korea (MSK)
The Korean Society for Microbiology (KSMi)

Sponsored by

Gyeonggi Tourism Organization
Initiative for Biological Function & Systems, Yonsei University
Korea National Microorganisms Research Resources Center
Korea Research Institute of Bioscience and Biotechnology
National Research Foundation of Korea
The Korean Federation of Science and Technology Societies



Symposium

S1 Marine Microbial Genomics and Ecology

Chair: Song-gun Kim (KRIBB)

November 5 (Thu.)
09:00-11:00 Grand Ballroom A

- S1-1** 09:00-09:30
Chung Yeon Hwang (Korea Polar Research Institute)
Metagenomic Analysis of Marine RNA Virioplankton in the Vicinity of the Antarctic Peninsula 75
- S1-2** 09:30-10:00
KaeKyoung Kwon (Korea Institute of Ocean Science and Technology)
Metabolic Collaboration of Thermophilic Microorganisms, Evidence by Metabolic and Genomic Analysis 76
- S1-3** 10:00-10:30
Sung-Keun Rhee (Chungbuk National University)
Meta-Omics Analysis of Bacterioplankton Community Involved in Carbon Remineralization in a Polynya of Amundsen Sea, Western Antarctica 77
- S1-4** 10:30-11:00
Che Ok Jeon (Chung-Ang University)
Genome-Wide Transcriptional Responses of *Alteromonas* sp. SN2 to Contaminated Seawater and Marine Tidal Flat Sediment 78

S2 Ecology of Soil Microorganisms

Chair: Jong-Chan Chae (Chunbuk National University)
Jung-Sook Lee (KRIBB)

November 5 (Thu.)
09:00-11:00 Rm 306, 307

- S2-1** 09:00-09:30
Seon-Woo Lee (Dong-A University)
Microbiome Analysis of Tomato Rhizosphere to Enhance Plant Growth and Health 80
- S2-2** 09:30-10:00
Woo Jun Sul (Chung-Ang University)
Volcanic Jeju Island: The Hidden Jewel of Soil Microbial Ecology 81
- S2-3** 10:00-10:30
Jong-Shik Kim (Gyeongbuk Institute for Marine Bio-industry)
Microbial Community Function and Structure of Gotjawal Forest Soil, Jeju 82
- S2-4** 10:30-11:00
Ok-Sun Kim (Korea Polar Research Institute)
Comprehensive Study on Soil Bacterial Community Composition on Barton Peninsular and Around Terra Nova Bay, Antarctica 83

S2-4

Comprehensive Study on Soil Bacterial Community Composition on Barton Peninsular and Around Terra Nova Bay, Antarctica

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Antarctica is the coldest and driest continent in our planet. Over the last few decades, the terrestrial ecosystems in Antarctica had been recognized as an aseptic place because of the extreme habitat conditions for life. With the dedicated terrestrial biological research, we begin to understand the uniqueness and complexity of these fragile ecosystems. Through the application of molecular techniques and further development of next generation sequencing technology in microbiology era, we realized that the microorganisms are highly diverse and their community structure is much more complex. In ecological function in these harsh habitats containing simple diversity of flora and fauna, microorganisms paly more significant role. Therefore, it is important and essential to understand what the dominant bacterial taxa are and what environmental variables predict bacterial community structure. Here in this presentation, the study on soil bacterial community structures and the correlation with physicochemical properties on Barton Peninsular in King George Islands of Antarctic Peninsular and around Terra Nova Bay in Victoria Land will be presented and discussed.

Keywords: Antarctica, Barton Peninsular: Terra Nova Bay, 16S rRNA gene, Bacteria, physicochemical properties