

46th World Congress on

MICROBIOLOGY

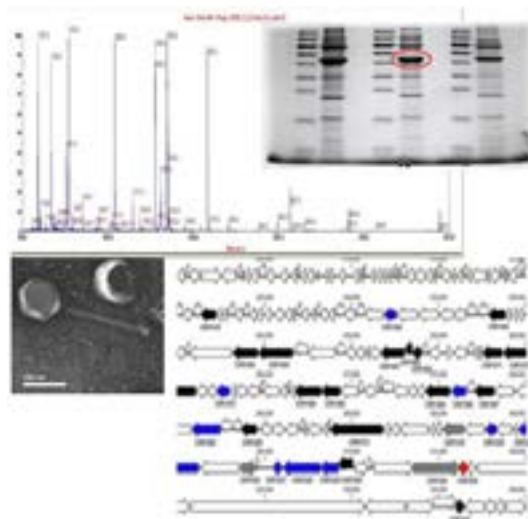
September 18-19, 2017 Dublin, Ireland

The Bacteriophage Bank of Korea

Kyoung Eun Cha and Heejoon Myung

Hankuk University of Foreign Studies, South Korea

The bacteriophage Bank of Korea (<http://www.phagebank.or.kr>) was established in 2010 and serves as the center of isolation, characterization, stocking, and distribution of bacteriophages. Bacteriophages are viruses infecting bacteria. Since first discovery in early 20th century, they served as antibacterial agents until the emergence of antibiotics. Beside their use as alternatives to antibiotics, phages were main object for understanding molecular biological aspects of life. In addition, phages are used as food additives, feed additives, means for displaying proteins and peptides, and targets for elucidating novel mechanisms such as CRISPR system. The Bacteriophage Bank has collected more than 1800 different phages from various environmental sources. They are characterized for host range, virion protein composition, mass spectral analysis of virion proteins, genomic DNA sequences, and morphological analysis using transmission electron microscope. Host bacteria include *Escherichia coli*, *Salmonella enterica*, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Klebsiella penumonia*, *Bacillus cereus*, *Acinetobacter baumannii*, *Enterococcus faecalis*, *Enterococcus faecium*, *Cronobacter sakazaki*, *Serratia marsescens*, *Campylobacter jejunii*, *Pseudomonas syrange*, and more entities are being added in the list.



Biography

Kyoungeun Cha is carrying out overall work of the Bacteriophage Bank of Korea. Her work is focused on collecting and characterizing phages from sewage, food, water-treatment plant, wetlands, and animal feces.

phagebank@hufs.ac.kr

Notes: