The Bacteriophage Bank of Korea

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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 pneumonia, Baccilus cereus, Acinetobacter baumanii, Enterococcus faecalis, Enterococcus faecium, Cronobacter sakazaki, Serratia marsescens, Campylobacter jejuni, Pseudomonas syrangi, and more entities are being added in the list.

Biography

Kyoung Eun 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.

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