

Poster B-17**MARINE RNA VIRUS COMMUNITIES OF OCEANIC SEAWATERS IN THE VICINITY OF THE ANTARCTIC PENINSULA**

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Viruses play an important role in the biogeochemical cycle and the gene flux in marine plankton ecosystems. Multiple lines of evidence that RNA viruses comprise a significant fraction of viroplankton are emerging. However, no data on oceanic RNA viromes in the Antarctic seas are available. During the IBRV Araon cruise in 2013, each 50 L of surface seawaters at 4 offshore stations was collected and filtered to concentrate viruses by the FeCl₃ flocculation method. Marine viruses were recovered and purified by the CsCl gradient ultracentrifugation. Nucleic acids of viral fractions were extracted and subsequently DNAs were removed by adding DNase. Metagenome libraries were generated from RNAs using the random priming-mediated sequence-independent single-primer amplification. Size ranges of 300-600 bp in the libraries were selected and sequenced by 454 pyrosequencing with the GS-FLX Titanium chemistry, yielding 333 Mb with 764,764 reads as raw data in total. In the presentation, results and its implications will be discussed.

KEYWORDS: RNA, VIRUS, METAGENOME, ANTARCTIC, SEAWATER