Viral Abundances

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Project Goals

The goal of this project is to evaluate viral abundances within the cellular fraction (0.22 Sterivex PC filter) and viral fraction (0.02 Anotop Filter)

Sampling

Two liters of water were taken from the surface from every other bio-cast, and the last three bio-cast for a total of 14 stations sampled. Samples were sequentially filtered through a 0.22 sterivex and 0.02 anotop filter for 1.5-2.5 hours or when the filter clogged. Below is a table of stations and amount filtered. The filters were then frozen at -80C and hand carried back to UCSB to organize shipping to University of Exeter for further analysis. The filters will then be used for DNA extractions at University of Exeter to describe cell associated viruses and free viral particles (Martinez-Hernandez)

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| Station\_Cast | Amount Filtered | Amount of Time |
| 131\_01 | 650mL | 1.5 hours |
| 137\_01 | 600mL | 1.5 hours |
| 143\_01 | 500mL | 1.5 hours |
| 149\_01 | 800mL | 2 hours |
| 155\_01 | 500mL | 2 hours |
| 161\_01 | 550mL | 1.75 hours |
| 167\_01 | 500ml | 1.5 hours |
| 173\_01 | 600mL | 2 hours |
| 179\_01 | 600mL | 1.5 hours |
| 185\_01 | 600mL | 1.5 hours |
| 191\_01 | 400mL | 2 hours |
| 197\_02 | 500mL | 2 hours |
| 200\_01 | 250mL | 2.5 hours |
| 203\_01 | 270mL | 1.5 hours |

Martinez-Hernandez, Francisco, Inmaculada Garcia-Heredia, Monica Lluesma Gomez, Lucia, Maestre-Carballa, Joaquín Martínez Martínez, and Manuel Martinez-Garcia. 2019. “Droplet Digital PCR for Estimating Absolute Abundances of Widespread Pelagibacter Viruses.” *Frontiers in Microbiology* 10 (June): 1226.