

## Data Management Plan

Lead PI Sañudo-Wilhelmy will lead the data management effort with support from the other coPIs, technicians, and the graduate student. All data collected during the lab experiments and field work portions of the project will be securely stored in multiple redundant formats (hand-written lab notebooks, backed-up files on discs/hard drives) and indefinitely in the PI's offices. Three general types of data will be produced from this project: 1. Field experimental physiological and biological data on responses of experimentally manipulated natural communities, 2. Field process studies including measurements of B-vitamins, trace metals and inorganic nutrient concentrations from samples collected during the proposed cruise work, and 3. Genomic data from North Pacific bacteria and phytoplankton. Standards that would be applied for format, metadata content, etc.: We will work closely with the proprietors of the data and the National Oceanographic Data Center (NODC: <http://www.nodc.noaa.gov/>) to ensure that data used in our analyses and outcomes from our experiments are publicly available according to NSF guidelines. Further, all data made available will be accompanied by FGDC compliant metadata. Data from the experiments will also be further disseminated by posting it at the Biological-Chemical Oceanography Data Management Office (BCODMO: <http://www.bcodmo.org/>) centralized data collection site. Field and laboratory sequences generated from this work will be deposited in Genbank at the National Center for Biotechnology for Information (NCBI) within three months of the end of this project.

Provisions for archiving and preservation: All biochemical and genomic material produced will be stored at -20 or -80 °C, as appropriate for the sample type. Phytoplankton samples will be stored in 4% buffered glutaraldehyde. A database containing the location of all materials will be maintained for use by all PIs and submitted with the data to NODC. Access policies and provisions: Access to data will be given once the data is quality controlled and published. Availability will be in accordance with NSF guidelines for data accessibility. As we have always done in the past, we will continue to make the results of our work available to the marine science community through timely peer-reviewed publications and professional meeting presentations. Our budgets contain publication and travel funds that will cover the costs of free access publication and oral and poster presentations at professional venues like ASLO/Ocean Sciences, AGU, and Gordon Research Conferences. All physiological and taxonomic data will be submitted for archiving in public databases (e.g. NODC: <http://www.nodc.noaa.gov/> and OBIS: <http://www.iobis.org/>).