Data Management Plan

Lead PI Gomez-Consarnau will lead the data management effort with support from the other coPI, and the graduate students. All data collected during the lab and field work of this project will be securely stored in multiple redundant formats (hand-written lab notebooks, backed-up files on several hard drives) and indefinitely in the PI's offices. Two general types of data will be produced from this project: 1) Field process studies including measurements of pigments, inorganic nutrient concentrations from CTD profiles collected during the proposed cruise work, 2) Genomic data from marine bacteria and phytoplankton and 3) bacterial growth data from incubation experiments with natural microbial communities and pure cultures. Standards that would be applied for format, metadata content, etc.: We will work closely with the proprietors of the data and the National Centers for Environmental Information (NCEI: https://www.ncei.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 (BCO-DMO: http://www.bcodmo.org/) centralized data collection site. If any field and laboratory sequences are generated from this work, they 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. A database containing the location of all materials will be maintained for use by all PIs and submitted with the data to NCEI. 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. We will 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 the ISME symposium. All physiological and taxonomic data will be submitted for archiving in public databases (e.g. NCEI: https://www.ncei.noaa.gov/ and OBIS: http://www.iobis.org/).