

Data Management Plan

This Data Management Plan for the project titled “*Aggregation of Marine Picoplankton*” describes how the project will conform to NSF policy on the dissemination and sharing of research results. The policy for this project also fully conforms with the Sample and Data Policy established by the NSF Division of Ocean Sciences (<http://www.nsf.gov/pubs/2011/nsf11060/nsf11060.pdf>).

The team recognizes the need for an open policy on data, samples, and results. We fully recognize the importance of publication of the results and analyses in the peer-reviewed scientific literature and in more accessible public outreach media and will encourage joint publication when data and samples are used by third parties.

The Biological & Chemical Oceanography Data Management Office (BCO-DMO), located at the Woods Hole Oceanographic Institution, will serve as our central data repository. Data submitted to BCO-DMO will include growth rates, aggregate properties and sinking rates, and cellular TEP/CSP production of the various phytoplankton strains investigated in this project.

We will also isolate and characterize multiple strains of aggregation enhancing bacteria. Strains of new species or higher taxonomical levels will be submitted for public deposition to the American Type Culture Collection (ATTC) and German Collection of Microorganisms and Cell Cultures (DSMZ) for taxonomic recognition, while remaining strains (new variants of recognized species) will be deposited in the Roscoff Culture collection (roscoff-culture-collection.org) for marine microorganisms or keep as lyophilized copies in the Center for Fundamental and Applied Microbiomics at ASU.

The Methods section in the project description provides an overview of the procedures used in the collection, handling, preservation, processing and analysis of samples and observations in this project. Samples will be stored in the labs of the PI and Co-PIs at -80°C until processing, as will the nucleic acids extracts subsequently generated from these samples. All freezers are linked to emergency backup power and have alarm systems.

DNA based sequencing data from the field collected aggregates will be made publically available upon publication via GenBank; all genomic data will be listed on the data inventory at BCO-DMO with a unique accession number to ensure that the genomic data is tied to the cruise data.