

## **Data Management Plan for the Division of Ocean Sciences**

The overall goals of the proposed Data Management Plan are: 1) to promptly publish significant findings in appropriate peer-reviewed journals and with authorship that accurately reflects the contributions of participants, 2) to make data available to other researchers at minimal expense and within a reasonable time, 3) to carefully archive any samples and materials collected and to make these available to other researchers whenever possible, 4) to share methods developments, software or other innovations that are useful to the scientific community.

### *Data processing, management, and sharing*

The proposed work will result in multiple data sets describing the concentrations and compositions of amino acids in water samples collected from the field and laboratory experiments. This work will not generate any samples for long-term archiving. The data collected will be used to describe the origins and diagenetic state of organic matter in the ocean. All data will be developed using standards accepted by the scientific community and as depicted in our publications, many of which are cited in the Project Description. We do not foresee that our data will result in any issues of privacy, security, confidentiality, intellectual property, or other rights or requirements as described in NSF documentation. If such issues arise, privileged or confidential information will be released only in a form that protects the privacy of individuals and subjects involved. Our data will be entered into spreadsheets for analyses prior to publication and presentation to the scientific community, and metadata describing them will also be generated. Benner's typical laboratory practice is to attach descriptive, metadata worksheets to all spreadsheets developed in his lab. As such, specific user requests can be handled at minimal cost because our organizational efforts during data development will prevent responses from requiring significant further time investment. Publication will constitute our primary means of data sharing, though user-specific requests for more detailed data will be granted as appropriate. Many journals will publish Supplementary data along with the primary article. We have used this as a mechanism to widely disseminate data, and we will continue this practice. We anticipate publication of these results within a year of their generation. Publication authorship will be determined as data sets reveal their stories, and priority will be given to graduate students for first authorship when feasible.

### *Cruise aboard the Japanese research vessel Hakuho-maru*

The field component of the proposed research will be conducted in the NW Pacific Ocean aboard a Japanese research vessel (*Hakuho-maru*). Our invitation to participate of this cruise does not include any expenses to the NSF grant. Our only costs and charges to the NSF grant are for travel, shipping and supplies. The oceanographic data (i.e. environmental data) from this cruise will be deposited in the Japanese equivalent of the National Oceanographic Data Center (NODC). We will collect samples for the analysis of the concentration and composition of total dissolved amino acids. We have agreed to share these data with our Japanese colleagues, and we will provide the data to Dr. Hiroshi Ogawa, our collaborator on this project (see letter of invitation to join the cruise).

*Web access to databases*

The data and associated metadata collected during this project will be archived through the Biological and Chemical Oceanography Data Management Office (BCO-DMO; <http://www.bco-dmo.org>), which is funded by the NSF. BCO-DMO manages and serves oceanographic biogeochemical, ecological, companion physical data and related documentation developed in the course of scientific research and contributed by the originating investigators. The office is recognized in the 2011 Division of Ocean Sciences Sample and Data Policy (NSF, 2011) as one of several program specific data offices that support NSF OCE funded researchers.