DATA MANAGEMENT PLAN

I. Types of data

This project will generate quantitative PCR data from a suite of molecular markers for iron (Fe) stress from laboratory-based experimental bottle incubations of multiple diatom species. In addition to qPCR data, physiological data from the incubation experiments will be generated including growth rate data and photosynthetic physiology data.

II. Data and Metadata Standards

All experimental data will be submitted to the data archive managed by the **Biological & Chemical Oceanography Data Management Office (BCO-DMO)**; these data sets will be available online from the BCO-DMO data system (http://bco-dmo.org/data/) and archived permanently at the **National Oceanographic Data Center (NDOC) database (www.nodc.noaa.gov).** PI Chappell received training on BCO-DMO data management practices at the 2012 Ocean Carbon Biogeochemistry Workshop in Woods Hole, MA. Physiological data will be assembled and organized in electronic spreadsheets and stored on local and backup servers, prior to submission to BCO-DMO. **We will submit ALL data upon publication to the Biological & Chemical Oceanography Data Management Office (BCO-DMO).** We will keep NSF abreast of our compliance with data management through our annual reports.

III. Policies for access and sharing and provisions for appropriate protection/privacy

Data deposited to the National Oceanographic Data Center (NODC) will have no charge to access, no privacy issues, and data will not be covered by copyright. All data will be published in peer-reviewed journals. Efforts will be made to publish in open access journal or to make publications open access if that is an option.

IV. Policies and provisions for re-use, re-distribution

There will be no permission restrictions needed for these data. The data may be of interest to chemical and biological oceanographers, and ecologists. The intended and forseeable users of the data are oceanographers, modelers, ecologists, and microbial ecologists within academia and government labs. There are no reasons not to share these data.

V. Plans for archiving and preservation of access

Initially, data will be archived on desktop computers in the Chappell Lab, and backed up onto a remote server at ODU. Data will also be backed up onto terabyte-drives in the laboratory. Data will be submitted to public databases (NODC), where they will be permanently archived to preserve access to the public. A hard copy of all notes (i.e. lab notebooks) will be retained in the laboratory. Research publications generated from this work will include all relevant data and refer readers to public databases where data is permanently archived.