DATA MANAGEMENT PLAN:

This project will generate model output from the one-dimensional Spatially Heterogeneous Dynamic Plankton (SHiP) model. Five year simulations of the Bermuda Atlantic Time-series Station (BATS) and the Hawaii Ocean Time-series (HOT) will be conducted. These model outputs will be compared against publically available observational datasets from the APEX/ISUS project (*www.mbari.org/chemsensor/APEXISUS.htm*), BATS (bats.bios.edu/), and HOT (hahana.soest.hawaii.edu/hot/). In addition, output for an idealized double gyre using the Regional Ocean Modeling System (ROMS) will be generated.

Mean monthly output for the SHiP and ROMS simulations generated during this project will be made publically available through the Biological & Chemical Oceanography Data Management Office (BCO-DMO) data system (http://bco-dmo.org/data/) immediately after publication of the results. I have been in contact with the BCO-DMO office and their staff will work with me to upload and manage the modeling results generated by this project. The model output will be uploaded as NetCDF files and will meet BCO-DMO's formatting requirements. A project website will be created that will describe the project and findings, and will direct researchers interested in downloading the model simulations to the BCO-DMO data system.

This project will lay the foundation for the development of a three-dimensional SHiP model. The ultimate goal is for the 3-D SHiP model to be open-source to encourage community use. This will be accomplished through the development of a SHiP-Parallel Ocean Program (POP) model component of the Community Earth System Model (CESM).