Data Management Plan

1. **Data and Samples Collected**

Data collection for this project will include a series of physiological measurements and genetic data including sequence data (ITS, psbA minicircle, microsatellite flanking regions) and genetic data (cp-23S rDNA and microsatellite fragment sizes). We will collect symbiont DNA from the *Symbiodinium* cultures, the octocoral polyps, as well as cultured isolates from field collections. We will also collect DNA from the parental hosts used in Expt. 3.

2. **Sample and Data Storage**

Although little tissue remains after DNA extraction, remaining tissue samples will be stored at the University at Buffalo in -80° C freezers. DNA remaining after analysis will be archived in the Coffroth laboratory.

Symbiodinium cultures will be maintained by both PIs in their respective laboratories. Coffroth and terHorst each currently have two separate environmental chambers to rear *Symbiodinium* cultures. In terHorst's lab, replicate cultures are housed in each environmental chamber, at different temperatures. Coffroth's chambers currently house her extensive culture collection and will not maintain temperatures above about 28^{o} C. Therefore a smaller environmental chamber for Coffroth is requested to rear cultures in the elevated temperature experiments.

Data generated in each lab will be backed up weekly to a web-based server at California State University, Northridge, to which both PIs will have access. Lab notebooks and field notes will be scanned and archived as pdf files along with the metadata. Data will be archived in the original data format (e.g. Excel, SAS, SYSTAT) and also in a more common, non-proprietary format to facilitate future uses of the data.

3. **Data Sharing and Public Access**

Data will be uploaded to both Dryad and the Biological and Chemical Oceanography Data Management Office for storage and public access upon publication or within three years of data generation. All sequence data will be deposited with NCBI's Genbank. We will make data available to researchers upon request, including available molecular data, maps of collection locations, and physiological data.

4. **Dissemination of Results**

The chief venue for the dissemination of results will be via meeting presentations and publication of results. Both PIs have a strong record of presenting data at well-attended scientific meetings (e.g. Ecological Society of America, International Coral Reef Symposium, Benthic Ecology Meeting, Society for Integrated and Comparative Biology, International Symbiosis Society) and publishing papers in highly regarded journals.

5. **Responsibilities for Data Management**

Responsibilities for data management for each portion of the project will be split between the two co-PIs as follows:

Dr. Casey terHorst will be responsible for overseeing and managing the database on the web-based server at MSU. He will also be responsible for archival of data generated from each of the three experiments.

Dr. Mary Alice Coffroth will be responsible for maintaining the culture collection, depositing genetically distinct isolates with National Center for Marine Algae and Microbiota, Bigelow and the generation and submission of genetic data to Genbank.