#### Data Management Plan

The overall NSF philosophy of data management and dissemination is embodied in the NSF Award and Administration Guide (AAG):

Investigators are expected to share with other researchers, at no more than incremental cost and within a reasonable time, the primary data, samples, physical collections and other supporting materials created or gathered in the course of work under NSF grants. Grantees are expected to encourage and facilitate such sharing.

As PI on the grant proposal, I am committed to follow this policy throughout the project duration and beyond.

## 1. Types and Format of Data

Field Collections – Three main types of data will be collected: (1) field measurements of abiotic and biotic variables, (2) photographs of leaves, and (3) spatially-based observations of fungal incidence. Field measurements will be recorded in waterproof notebooks and entered into Excel spreadsheets daily. Photographs used to assess fungal incidence will be downloaded daily. Spatial-based data from drone surveys and observations of fungal incidence will be organized using ArcGIS and archived as shape files. All data will be backed up daily on external hard drives.

*Laboratory Analysis* – The primary output will be DNA sequences that will be immediately archived in GenBank (<a href="http://www.ncbi.nlm.nih.gov/genbank/">http://www.ncbi.nlm.nih.gov/genbank/</a>). Cultures of the pathogen(s) will be maintained and stored in the laboratory.

### 2. Access to Data and Data Sharing Practices and Policies

Following NSF policy, complete data sets will be provided to NSF no more than 2 years after collection. The relevant office for our data storage will be The Biological and Chemical Oceanography Data Management Office (BCO-DMO). This is text from the Division of Ocean Sciences Sample Data Policy:

The BCO-DMO data system facilitates data stewardship, dissemination, and storage on short and intermediate time-frames. The office works with PIs on data quality control; maintains an inventory of available data and program thesaurus based on a controlled vocabulary; generates metadata records required by Federal agencies; ensures submission of data to national data centers; supports and encourages data synthesis by providing new, online, web-based display tools; facilitates interoperability between BCO-DMO and distributed data portals; and facilitates regional, national, and international data and information exchange.

The Biological and Chemical Oceanography Programs expect PIs to utilize BCO-DMO as their primary data management source. When awards are initialized investigators should immediately contact BCODMO and register their projects by submitting project metadata. This should be followed by timely submission of deployment and dataset metadata and finally the data. Progress on compliance with the data sharing should be addressed in annual and final reports. For projects where data cannot be served by BCO-DMO, or where it is more appropriately served by other community data bases.

We commit to comply with all of these guidelines and policies.

## 3. Policies for Re-Use, Re-Distribution

All policies regarding re-use and re-distribution will follow guidelines of the BCO-DMO office. Any questions we have regarding re-use or re-distribution will be resolved with that office.

# 4. Archiving of Data

Long-term archives will be in BCO-DMO and GenBank, in addition to our lab's own long-term archive hard drives.