RUI: The genetic legacy of an Asian oyster introduction and its disease-causing parasite

Data Policy Compliance

The project investigators will comply with the data management and dissemination policies described in the NSF Award and Administration Guide (AAG, Chapter VI.D.4) and the NSF Division of Ocean Sciences Sample and Data Policy.

Pre-Cruise Planning

Description of Data Types

Data for this project will include physical collections for biological samples. Specifically, tissues from 100s of oysters will be obtained, and these will be stored at room temperature in 95% ethanol at CofC. Extracted DNA will be kept at -20°C in freezers until dissemination of publication.

Data produced will include digital images of electrophoretic gels for DNA extraction and conventional PCR, and millions of genetic sequences through HiSeq Illumina sequencing.

Metadata will be recorded during every sample collection including location, date and time of collection.

Data and Metadata Formats and Standards

Metadata will be recorded into appropriate laboratory notebooks at the time of collection/analysis (i.e., waterproof pages for field work) and transferred to Google Drive spreadsheets within one week of collection.

Data Storage and Access During the Project

Master copies of all notebooks will be maintained in the offices of the co-PIs and will be kept for at least 5 years after the end of the project. Additionally, all entered data or digital images will be backed up daily onto University servers or Google Drive under password protection. Genetic data are stored at Illumina's online cloud storage service BaseSpace, and will be archived on external hard-drives.

Mechanisms and Policies for Access, Sharing, Re-Use, and Re-Distribution

The specified embargo period associated with these data extends from the projected beginning date until six months after project conclusion date. Upon cessation of the embargo, all data and metadata will be submitted to the Biological and Chemical Oceanography Data Management Office (BCO-DMO) for assistance with data stewardship, dissemination and storage; and, will be made available upon request. We expect DNA sequences will be uploaded into the NCBI's GenBank system; all accession numbers will be reported in any published work.

Through the course of this project period, and beyond, we will publish our results in appropriate peer-reviewed journals and scholarly texts, using open access formats whenever feasible. Results will also be reported broadly through presentations at local, state, regional, national and international venues, including meetings of stakeholder groups as well as scientific societies.

Plans for Archiving

Physical samples will be curated and archived in the respective laboratories of the PIs. All datasets will be uploaded to open-source servers available and linked to peer-reviewed journal articles (e.g., Dryad; BCO-DMO). Physical samples will be stored in a redundant system to ensure that samples are not lost in the case of power outages or other unforeseen failures.

Roles and Responsibilities

Both coPIs will be responsible for updating and preserving datasheets and ensuring overall compliance with this Data Management Plan.