DATA MANAGEMENT PLAN

Availability of resources developed through this project

In accordance with NSF regulations, data derived from this project will be placed in public databases after production and quality checks to ensure that only useful, high quality raw and processed data are released. The following data and samples will be collected and shared:

1) **Cyanophage isolates.** Cyanophage isolates will be preserved and stored in the Martiny and Marston labs. We will provide samples of the isolates to other researchers upon request, within reason (our collection contains thousands of isolates and it would take a huge amount of time and effort to share the entire collection with someone).

2) **Metadata.** Environmental variables will be measured at the time of taking environmental samples. These variables include air and water temperature, salinity, pH, cyanobacterial counts, and nutrients (ammonia, nitrate + nitrate, nitrite, silicate, phosphate). The final data will be supplied to the BCO-DMO data management facility, as we have done for previously funded projects.

3) **Genomic data.** Genomic data will be submitted to NCBI. Metagenome sequence data from environmental samples will be submitted to the Genome Projects Database at NCBI as a Metagenome Project. The data will be submitted as raw reads, culled for quality. Sequence data from cyanophage and *Synechococcus* isolates will be submitted as whole annotated genomes to the NCBI Genomes Database. Multiple alignments of particular genes will also be made available on Martiny's website and from the PIs upon request.

4) **Protocols.** Methodological protocols including specialized scripts and software pipelines developed in the course of the project will be released to the community at Martiny's website.

5) **Curriculum material.** As we have done in the past, the curriculum and video demonstrations developed as part of this project will be publically available on Martiny's website and at UCI's Center for the Learning Arts, Science, and Sustainability.

Intellectual property

We do not anticipate the development of patentable intellectual property. In the event it arises, intellectual property will be handled by UCI's technology transfer office. In such cases, all materials will be made freely available via a Materials Transfer Agreement for research purposes.