

### ***Resource coordination workshops focused on oysters and other shellfish***

There is a wealth of information regarding genomic attributes and associated phenotypic traits that has not been exploited from the enormous datasets being generated from high throughput sequencing. The nature of this data often can answer specific research questions of a project and also contain other valuable information that is not readily of interest in those carrying out the experiments. More importantly, the substantial advance in furthering our understanding of genomic and phenotypic relationship will only occur once disparate datasets are integrated. This proposal sets out to meet several objectives of the USDA-NIFA National Research Support Project 8 by requesting funds (\$7000) to host workshops that will focus on bringing together those in the oyster community to a) discuss challenges and solutions in genomic analyses b) improve functional annotation of the genome, c) produce a sustaining platform for curation, distribution, and *application* of genomic datasets.

This proposal sets out to build on results of our group's prior effort to develop an open platform for querying disparate oyster datasets using SQLShare and other freely available resources (see <http://oystergen.es/query>). In collaboration with the eScience Institute at the University of Washington we have deployed this platform and successfully used it in many efforts. At this point we realize there are biological questions that are beyond the scope of our program and feel that bringing the community together for in person discussion will allow us to work together effectively to address questions, and importantly reveal new questions that likely would not surface without direct person-person interactions. For instance our group primarily focuses on organismal physiology and we have limited experience with population genetics or breeding design. We propose two workshops that would occur in Fall 2014 at the University of Washington and Spring 2015 at a location to be determined. The first workshop will be key, setting the framework going forward and will be done in conjunction with the eScience Institute, making use of state of the art computational collaborative spaces on campus. Funds will be used to support travel of researchers, with funds specifically set aside for student support. The workshop will focus on *Crassostrea gigas*, however we will advertise to, and welcome those working with other commercially important shellfish. For the initial workshop (University of Washington), the focus will be on aggregating data and education on means to effectively query data. We will make all tutorials publicly available and also decide on a online means for continued improvement of genome annotation. All of our activities will be publicly accessible and well documented in order to provide a template for other research communities to implement resource coordination workshops as more genomes become available.