



Aquaculture Genomics

Newsletter 49

- ❖ **Aquaculture Workshop – PAG XXIX Call for Papers (Oral and Poster):** The Aquaculture Genomics Group of the USDA-NIFA National Research Support Project 8 (NRSP-8) will be hosting the *Aquaculture Workshop* on **January 8, 2022** at the *International Plant and Animal Genome Conference (PAG) XXIX* in San Diego, CA, USA. Registration for the conference is open now through January 6, 2022; Early Registration ends on October 31, 2022, and onsite registration will be available (<https://www.intlpag.org/2022/attend/registration-and-fees>).

Abstract submissions are due to the Aquaculture Workshop Coordinators on **October 29, 2021** and oral presentations will be selected from the abstract submissions by the Species Coordinators, Aquaculture Coordinators, and Workshop Coordinators. All oral abstracts for the Aquaculture Workshop should be submitted directly through the PAG website and to the Workshop Coordinators, Dr. Mohamed Salem at mosalem@umd.edu and Dr. Rafet Al-Tobesei at Rafet.Al-Tobesei@mtsu.edu. All workshop participants will be invited to the *Aquaculture Genomics Group Poster Session and Reception* on the evening of **January 8, 2022**. Participants are not required to submit and present posters in the conference-wide PAG poster session to participate in the Aquaculture Workshop and Aquaculture Genomics Group Session and Reception. If you only plan to present at or attend the Aquaculture workshop and weekend sessions at PAG, you can register for the weekend only. All final versions and approved Workshop abstracts are due to the PAG organizing committee by **December 14, 2021**.

- ❖ **Students and Postdoctoral Fellows of Aquaculture Travel Awards:** The Aquaculture Genomics Group of the NRSP-8 is offering a limited number of Travel Awards of up to \$1,000 to support the attendance of graduate students and postdoctoral fellows to the *Aquaculture Workshop* on **January 8, 2022** at the *International Plant and Animal Genome Conference (PAG) XXIX* in San Diego, CA, USA. The deadline for travel award applications is **October 29, 2021**. Previous winners are ineligible to apply for this award; all other graduate students and postdoctoral fellows who submit an abstract are eligible to apply. Applications must include: (1) a complete application form (<https://www.intlpag.org/2022/attend/travel-grants>); (2) a letter from the applicant's advisor verifying student or postdoctoral fellow status and (3) an abstract. Please email completed applications to the Workshop Coordinators, Dr. Mohamed Salem at mosalem@umd.edu and Dr. Rafet Al-Tobesei at Rafet.Al-Tobesei@mtsu.edu. Award

selections will be made by the Species Coordinators, Aquaculture Coordinators, and Workshop Coordinators and awardees will be notified soon after the deadline. Awardees will be invited to give an oral presentation at the Workshop as well as a poster at the *Aquaculture Genomics Group Poster Session and Reception*. Awards will be paid after the meeting as a travel stipend/travel reimbursement or lodging and registration for the conference will be provided to awardees up to \$1,000. For additional information please see *Aquaculture Species Group Student and Postdoctoral Fellowship Bursaries* at <https://www.intlpag.org/2022/attend/travel-grants>

- ❖ **Annual Report due to Species Coordinators:** The NRSP-8 Aquaculture Coordinators need to submit the annual report in advance of the 2022 PAG XXIX meeting. There are two reports: one is the Workshop Report, which was canceled in 2021 due to COVID 19 related travel restrictions; the other is the Annual Progress Report. Once again, for the annual progress report our strategy will be to assemble individual species reports that will combine into an aquaculture report, which is eventually combined into the NRSP-8 project report. Unfortunately, space is limited; therefore, we can really only fit a short paragraph (2-3) sentences for each group under each objective (below). Please send your report information to your Species Coordinators: *Catfish*: Dr. Sylvie Quiniou (Sylvie.Quiniou@usda.gov); *Salmonids*: Dr. Yniv Palti (Yniv.Palti@usda.gov); *Striped bass*: Dr. Ben Reading (bjreadin@ncsu.edu); *Oyster*: Dr. Dina Proestou (Dina.Proestou@usda.gov); For all other species, send your report to Dr. Ben Reading (bjreadin@ncsu.edu). Please send in your reports to the Species Coordinators before **December 3, 2021**, to cover the following objectives:

Objective 1: Advance the quality of reference genomes for all aquaculture species by providing high contiguity assemblies, deep functional annotations of these assemblies, and comparison across species to understand structure and function of animal genomes.

Objective 2: Advance genome-to-phenome prediction by implementing strategies and tools to identify and validate genes and allelic variants predictive of biologically and economically important phenotypes and traits.

Objective 3: Advance analysis, curation, storage, application, and reuse of heterogeneous big data to facilitate genome-to-phenome research in animal species of agricultural interest.

A publication list is required from each species for those papers published in 2020-2021 and also please include any major grants or other leveraged funding for NRSP-8 priority aquaculture species in 2020 and 2021, especially for those who have received *NRSP-8 Small Funding Possibilities for US Aquaculture Groups*. Species Coordinators, please send in your reports by **December 10, 2021**, to Dr. Ben Reading (bjreadin@ncsu.edu) so that

he can assemble the full NRSP-8 Aquaculture Report prior to the PAG Aquaculture Workshop.

- ❖ **Small Funding Possibilities for US Aquaculture Groups:** The NRSP-8 Aquaculture Coordinators request proposals for activities that support community research efforts for United States Aquaculture species, including catfish, oysters, salmon, rainbow trout, shrimps, striped bass, tilapia, and other fishes and shellfishes of agricultural importance. The objective of providing these funds will be to support the development and annotation of genomes of economically relevant food fishes (including vertebrate and invertebrate fishes) raised in aquaculture, to subsidize the generation of shared reagents and tools, and to support the generation of preliminary data for grant submissions. Proposals should specifically address one or more current NRSP-8 Objectives:

Objective 1: Advance the quality of reference genomes for all aquaculture species by providing high contiguity assemblies, deep functional annotations of these assemblies, and comparison across species to understand structure and function of animal genomes.

Objective 2: Advance genome-to-phenome prediction by implementing strategies and tools to identify and validate genes and allelic variants predictive of biologically and economically important phenotypes and traits.

Objective 3: Advance analysis, curation, storage, application, and reuse of heterogeneous big data to facilitate genome-to-phenome research in animal species of agricultural interest.

Principal Investigators should be based at United States institutions. Proposals should be no more than 1 page in length and funding requests should not exceed \$10,000. The project duration will be 12 months (1 year). No indirect cost (F&A) is allowed due to the nature of the funds. Proposals should identify the relevant research community and outline how funds will be used for research support activities. Such activities may include, but are not limited to, training, workshops, industry outreach, development of high throughput genotyping platforms, genome sequence assembly and annotation, and developing and/or supporting community databases and websites. Proposals should be sent to Dr. Ben Reading (bjreadin@ncsu.edu) by **December 3, 2021**. Proposals will be reviewed and ranked by the Species Coordinators and Aquaculture Coordinators and awardees will be notified in early 2022 after the PAG meeting.