

Genetics and Genomics of Aquaculture Species

Organised by a standing committee: YES

Meeting information

Date: Tuesday, July 9

Time: 9:00-12:30

Number of participants: 80

Chairs

Name: Francesca Bertolini

Affiliation: Technical University of Denmark

Contact email: franb@aqua.dtu.dk

Name: Ross Houston

Affiliation: The Roslin Institute

Contact email: ross.houston@roslin.ed.ac.uk

Agenda

09:00. Invited Workshop Speaker Laura Braden

Characterization of the putative host-parasite interactome in the salmon-louse relationship

9:30. Amin Mohamed



The molecular basis of salmon sexual maturation: An integrative multi-omics approach.

09:45. Lior David

Different transcriptional response of susceptible and resistant fish hints at the mechanism of KHV disease resistance in carp.

10:00. Tom Goldammer

Analysis of adaptive plasticity of pikeperch (Sander lucioperca L., 1758) after temperature change based on gene expression data.

10:15. Smaragda Tsairidou

Optimizing genotype imputation strategies for genomic selection in farmed Atlantic salmon.

11:00 Maria Saura

Genomic tools for an efficient management of genetic resources in Atlantic salmon.

11:15 Maria-Eugenia López

Determination of genetic structure and selection signatures in Coho salmon (Oncorhynchus kisutch) populations by genome-wide SNP analyses.

11:30 Luca Fontanesi

Identification of a major locus determining a coloration defect in gilthead seabream (Sparus aurata).

11:45 Maren Wellenreuther

From sea to plate: Genomically enabling the Australasian snapper (Chrysophrys auratus) for aquaculture.

12:00 Jose Manuel Yañez



Challenges and opportunities for genomics in selective breeding programs for marine massspawning fish species.

12:15 Workshop Business Meeting.

Summary of the meeting

Francesca Bertolini (FB) welcomed participants to the workshop on behalf of the committee. The meeting was co-chaired by FB and Ross Houston (RH), with FB introducing the speakers in the session before the break, and RH introducing the speakers in the second session. The scientific program attached below included ten speakers who talked about a range of applications of genetic and genomic and multi-omics approaches to understanding biology and improving the production of diverse aquaculture species. Nine of these speakers were chosen by the committee from the submitted abstracts, and one invited speaker was funded by ISAG. The standard of talks was very high and generated significant questions and discussion amongst the audience. During the business meeting, RH requested feedback from the audience regarding the future of this workshop at ISAG and ideas for improvements. Some of the points were also brought into the discussion from the session organizers meeting attended by the chairs. Particularly, the following main points were discussed:

- -The timing of the session. This year the aquaculture session overlapped with all the species-specific sessions. Distribution of these sessions during the conference like the past years would be preferred.
- -The possibility to include Lightning Talks, to give the possibility to a higher number of people, particularly PhD students, to present. The lighting talk (e.g. 5 minutes each) could be in the 15 minutes before the business meeting.

RH then asked if there were volunteers to join the committee. Lior David and Tiago Hori volunteered for this role.



The existing committee agreed that the formula of co-chairing is a winning one. We will also continue with the rule of co-chair rotation. Following this rule, Maria Saura will take over from RH.

Nobody had any objections

Finally, the chairs thanked the speakers, committee and local organizers.

Committee chairs (the new chairs)

Chair: Francesca Bertolini

Term of service: 2019-2021

Affiliation: Technical University of Denmark

E-mail address: franb@aqua.dtu.dk

Chair: Maria Saura

Term of service: 2019-2021

Affiliation: Instituto Nacional de Investigación y Tecnologia Agraria

E-mail address: saura.maria@inia.es

Committee members (the new committee)

Other members	term of service	E mail address
Bjorn Hoyheim	2019-2021	Bjorn.Hoyheim@nmbu.no
Ross Houston	2019-2021	ross.houston@roslin.ed.ac.uk
Lior David	2019-2021	lior.david@mail.huji.ac.il
Tiago Hori	2019-2021	<u>Tiago@canadiancove.pe.ca</u> .

