

Topic/Title (English)

Estimating microbiability and heritability in Atlantic salmon for feed efficiency



THE HOLOGENOME

Image credit: EU H2020 HoloFoods

Summary

Feed efficiency is a key goal for a profitable and sustainable Atlantic salmon industry. A key piece of the feed efficiency puzzle is the role of gut microbiota which assist in digesting the feed. In livestock microbial genetics and genetics of the host are increasingly combined into a holobiomic framework of evolution. Presently, no research just been conducted into comparing heritability with microbiability in aquaculture species. The candidate will combine quantitative genetic models use in breeding and selection with 16S rRNA microbial sequencing to answer these questions.

Subject area keywords:

Microbiomics, Quantitative genetics, Microbiability, Selection & Breeding, Feed Efficiency, Atlantic salmon

Language thesis: English

Master thesis

Credits: 30 or 60 credits depending on top candidates needs

Project/company: Collaboration between NMBU breeding and genetics, the SFI Foods of Norway as and AquaGen.

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