

# Topic/Title

Genotype-miljø samspel for tidleg kjønnsmodning hos regnbogeaure

### Topic/Title

Genotype by environment interaction for early sexual maturity in rainbow trout.

### Summary

The master student will analyze several year-classes of historical data from several grow-out farms collected during the 1980s in the selective breeding program for rainbow trout started by AKVAFORSK (now Nofima).

<u>Background</u>: Rainbow trout that become sexual mature before the desired marketing size has a very low economic value and thus a problem for the industry. However, reliable genetic parameters for the trait is missing, and in particular the magnitude of the genotype by environment interaction that can be measured as the genetic correlation between the trait at different grow-out farms.

<u>The topic of this thesis</u>: The main objective is to obtain estimates of the genetic variation for the either/or trait early sexual maturity and of the magnitude of the genetic correlation between the trait at different grow out farms.

<u>Type of work:</u> The student will acquire knowledge in how to analyze high number of unique sexual maturity records of good quality by use of the statistical software package ASReml, and how to interpret the result output.

#### Subject area

Genotype by environment interaction, early sexual maturity, rainbow trout

Language thesis (Norwegian and/or English)

Optional

Master thesis, Credits 30

Project/company

Nofima



Bachelor or Master thesis BIOVIT 2021/22

# Please contact



Bjarne Gjerde, Prof-II at NMBU/Senior Scientist at Nofima bjarne.gjerde@nofima.no, mobil: 93061541



M. Luqman Aslam e-post: luqman.aslam@nofima.no