

Genetics for methane emissions in dairy cattle

Department and supervisor

(Name, title, mail, phone)

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Physical location of the project and students work

QGG Aarhus

Project start

To be decided in agreement to the supervisor

Main subject area

Animal Genetics, Dairy cattle, Methane and feed efficiency

Short project description

The main aim would be to do research about methane emissions in dairy cattle, and its interaction with feed efficiency, in order to be able to select for low methane emitting animals and help to the reduction of greenhouse gas emissions.

Project 1. Breed comparison in terms of methane production and feed efficiency for Jersey and Holstein cows. This could include estimation of genetic parameters and identification of genetic regions (alone and in common) associated with methane production and feed efficiency.

Project 2. Investigate further the phenotype for methane concentration, including homogenisation of raw methane data, and determining which distribution or transformation would fit better for methane gas emissions in dairy cattle.

Extent and type of project

30 ECTS-60 ECTS

Additional information

Use of any of these software packages would be useful:

R, Python, SAS