

Bachelor or Master thesis BIOVIT 2023/24

## Topic/Title (Norwegian):

## Topic/Title (English): Heritability of dairy cows responsiveness towards humans



## Summary:

Good human animal contact is essential for good animal welfare. A valid behavior test of animal responsiveness towards humans is the Avoidance Distance test (ADF). The ADF has shown to be linked to milkers' behavior and other measures of human contact (Waiblinger et al., 2003). However, to our knowledge there are no studies that have explored if there is a genetic component in the human animal relationship. From an on-going research project on assessing animal welfare in dairy cattle (Welcow) we have access to unique data that could be used to examine whether behavior such as animals responsiveness to humans could be a heritable trait. A wide range of information, including the individual ADF score, has been collected on more than 5000 cows. The aim of this project is to estimate heritability of this behavior trait, and examine associations to current traits included in routine genetic evaluation of Norwegian Red. The thesis work will involve analyzing large field datasets and using available software for estimation of genetic parameters.

**Subject area** (keywords). animal breeding, animal behavior, quantitative genetics, dairy cattle, behavior and responsiveness towards humans

Language thesis (Norwegian and/or English): Norwegian or English

Bachelor or Master thesis: Master thesis

Credits: 30 or 60

**Project/company:** This project will be in collaboration with Faculty of Veterinary medicine, NMBU

and BOKU, Austria.

## Please contact:

Bjørg Heringstad, Biovit, e-mail: <a href="mailto:bjorg.heringstad@nmbu.no">bjorg.heringstad@nmbu.no</a>

Camilla Kielland, Faculty of veterinary medicine, e-mail: camilla.kielland@nmbu.no