Norwegian University of Life Sciences

Jobbnorge ID: 278363
Deadline: 4/30/2025
Website: http://www.nmbu.no
Scope: Fulltime
Duration: Fixed Term

We need you as our new explorer in utilization of oats as feed to dairy cows!

PhD scholarship within ruminant nutrition and physiology

About the position

The Department of Animal and Aquacultural Sciences, Faculty of Biosciences at the Norwegian University of Life Sciences (NMBU) has a vacant 3-year PhD-position related to research within the area of oats as feed for ruminants. Oats is an important feed grain with potential to improve milk quality and reduce methane emissions. In addition, it is an important plant in crop rotation systems.

The position is a part of the project 'Boosting Healthy Oat Feed Production in Norway' funded by the Research Council of Norway (project no. 353201). The project is carried out in close collaboration with the Norwegian dairy industry (TINE), feed industry (Felleskjøpet Fôrutvikling) and plant breeding industry (Graminor). There is international cooperation through Aarhus University (AU) and University of Minnesota (MN).

The aim of the project is to improve our knowledge in production and use of oats as animal feed as well as human food in Norway. The project focuses on "boosting" the production and utilization of oats by developing oat cultivars with reduced susceptibility to fusarium infection and thus less challenges with mycotoxin contamination.

The nutritive value of these oat cultivars in ruminant diets will be addressed and the main objective is to ensure optimal utilization of oats in the diet, and thereby to ensure that oats strengthen its position as a highly valuated cereal crop in Norway.

The expected outcome of the research is improved knowledge on oats as both human food and animal feed. The focus in the PhD-position is to characterize and evaluate the benefits of oats as feed to Norwegian dairy cows. This will be addressed evaluating emerging oat cultivars in vitro. Promising cultivars will be taken into experiments with dairy cows evaluating the influence on production, nutrient utilization, enteric methane emissions. Finally, nutritive quality of dairy products from oat fed cows will be evaluated using research facilities at NMBU.

The applicant is made aware that an application for a PhD position at NMBU is at the same time an application for admission to a PhD program at the institution. The documentation that is necessary to ensure that the admission requirements are met must be uploaded as an attachment.

Main tasks

- Improve scientific skills by attending and completing relevant PhD courses.
- Take part in planning and conducting of experiments.
- Carry out laboratory work and analyses related to the experiments.
- Collect and process data including statistical analyses.
- Write and publish scientific articles in reputable international journals in collaboration with the supervisory group.
- Participate in meetings with the industry partners in the project.
- Participate and present project results at national and international conferences.
- Complete and submit a PhD-thesis within three years.

The successful candidate is expected to enter a plan for the progress of the work towards a PhD degree during the first months of the appointment, with a view to complete a doctorate within the PhD scholarship period.

Competence

To be considered for the position, the applicant must meet the conditions defined for admission to a PhD programme at NMBU. A master's degree of at least 120 credits (ECTS) based on a bachelor's degree of at least 180 credits (ECTS) is required. Comparable or integrated master degrees of at least 300 credits (ECTS) can be considered. The applicant must have a documented strong academic background from previous studies, and be able to document good English skills, both written and oral. For more detailed information on the admission criteria please see the PhD Regulations and the relevant PhD programme description.

The applicant must document expertise and interest in the research subject.

Required Academic qualifications:

- Master degree in animal science or comparable fields.
- Strong communication skills in English, written and spoken.
- The candidate which finishes their education within the spring/summer of 2025 can also apply but must provide documentation of their degree before employment.

Experiences and skills that will be emphasized:

- Good skills in oral and written Scandinavian languages
- Experience in ruminant nutrition or dairy production
- Experience within handling of large ruminants
- Experience in experimental work within agriculture and livestock.
- Experience in laboratory work.
- Great interest in ruminant nutritional physiology.
- Knowledge in Norwegian dairy production.
- Good skills in processing data and statistics

You need to:

- Be motivated for career and competence development.
- Be timely, curious and highly motivated for research.
- Be accurate and patient when performing experimental work.
- Have good communicative skills, both written and oral.
- Have good ability to work both independently and in teams.

Remuneration and further information

The position is placed in position code 1017 PhD Fellow, normally NOK 536.200 per year upon employment. The position follows ordinary meriting regulations.

Employment is conducted according to national guidelines for University and Technical College PhD scholars.

For further information, please contact Prof. Egil Prestløkken (main supervisor), E-mail: egil.prestlokken@nmbu.no; phone +47 67 23 26 54

Information for PhD applicants and general Information to applicants

Application

To apply online for this vacancy, please click on the 'Apply for this job' button above. This will route you to the University's Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.

Application deadline: 30.04.2025

Your CV must be entered in JobbNorge's CV form and not just included as an attachment. This is to be able to comply with the regulations of §15 of the Public Administration Act.

In the application, the candidate must confirm that information and documentation (in the form of attachments) submitted via the job application can also be used by NMBU in a possible admission process.

Applicants invited for an interview are expected to present original diplomas and certificates.

The following documents must be attached to the application:

- Motivation letter (maximum 1 page)
- Complete CV
- Certified copies of academic diplomas and certificates. (i.e. Diploma, transcript. Diploma supplement for both bachelor and master). Diplomas, transcripts and diploma supplements that are not in Norwegian or English must be uploaded in the original language. An English translation of these documents must also be attached.
- Applicants from universities outside Norway are kindly requested to send a diploma supplement, or a similar document, which describes in detail the study program and grading system. Number of ECTS in bachelor (minimum 180), master (minimum 120), or comparable studies (minimum 300) must be specified.
- Documentation of proficiency in written and oral English in accordance with NMBU PhD regulation section 5-2 (3).
- Names and contact details for two references

Additional relevant documentation of professional knowledge (for example, list of scientific works). If it is difficult to judge the applicant's contribution for publications with multiple authors, a short description of the applicant's contribution must be included.

About The Faculty of Biosciences

The Faculty of Biosciences (BIOVIT) aims to shape the future of food and bioproduction through teaching and research in biology and sustainable production and use of plants, livestock and fish. The faculty has a large project portfolio and an annual turnover of approximately NOK 250 million.

BIOVIT is organized into seven research groups: Genome Biology, Breeding, Genetics and Food Production Systems, Ruminant Nutrition and Physiology, Ethology and Animal Welfare, Nutrition and Physiology for Monogastric Animals, Plant Biology, Sustainable Food Systems and Integrated Plant Protection, and Genetics, Evolution and Sustainable Plant Production. Additionally, the faculty has seven research support and laboratory units.

BIOVIT is responsible for bachelor's and master's programs in aquaculture, biology, animal science, and plant science, as well as English-language master's programs in Agroecology, Plant Sciences, Feed Manufacturing Technology, and Genome Sciences. BIOVIT also offers Ph.D. programs in animal science and plant science. Currently, the faculty has about 550 bachelor's and master's students and 90 Ph.D. students. BIOVIT employs approximately 230 staff members and has its own faculty administration.

The Norwegian University of Life Sciences (NMBU)

NMBU will contribute to securing the future of life through outstanding research, education, communication and innovation. We have the country's most satisfied university students, who receive research-based education in a unique student environment. Our graduates gain a high level of competence in interdisciplinary collaboration and are popular in the labor market.

NMBU has internationally leading research environments in several subjects. Together with our partners in society and business, we contribute to solving some of the biggest societal challenges of our time. We focus on innovation, communication and entrepreneurship because we believe these challenges are best solved with joint efforts. We believe that a good working environment is characterized by diversity.If necessary, workplace adaptations will be made for persons with disabilities. More information about NMBU is available at www.nmbu.no/en

Additional information

Contact person:

Professor Egil Prestløkken, Main supervisor
Phone: +47 67 23 26 54 | E-mail: egil.prestlokken@nmbu.no

Place of service:

Universitetstunet 3 1430 Ås (Ås Municipality)