



**Norwegian University  
of Life Sciences**

**Jobbnorge ID:** 190218  
**Deadline:** 8/2/2020  
**Website:** <http://www.nmbu.no>  
**Scope:** Fulltime  
**Duration:** Fixed Term

Are you interested in animal nutrition and gut health?

## PhD scholarship within the area animal nutrition and health

### About the position

The Nutrition and Health Research Unit at the Department of Paraclinical Sciences, Faculty of Veterinary Medicine, at the Norwegian University of Life Sciences (NMBU), has a vacant 3-year PhD-position related to the nutrition and health of salmon.

The unit is involved in several research projects addressing the health effects of new feed ingredients for salmon and other domestic animals. Our research is funded by both public and private research grants. The group has a substantial professional network and most research projects involve collaboration with the industry. Nutrition and gut health is the main focus of all the group's projects, involving feeding experiments with various animal species, such as Atlantic salmon, zebrafish, mink and chicken. Our group also works with the nutrition of horses and pets. Our analytical tools range from the classical, to the most up to date biochemical, physiological and molecular tools, including characterization of microbiota, clinical and histopathological methods. Fish gut in vitro model systems are used to address mechanistic effects of feed components and additives. The group has several highly skilled co-workers who collaborate according to expertise and project milestones.

We are now seeking an outstanding candidate with a background in veterinary medicine or other relevant biological sciences to join our team. The position will be linked to an extension of the research project "GutMatters", financed by the Norwegian Seafood Research Fund (FHF).

Combined experience from the Gut Matters project and our groups further research has shown, that salmon fed a plant-based diet develop steatosis/lipid malabsorption due to lack of choline in the diet. In the extension of GutMatters, we will investigate how dietary and environmental factors and fish size and growth may affect dietary choline requirement. The PhD candidate will also use fish gut cell cultures to study the underlying physiological mechanisms and epigenetic regulations of choline on gut health and function. Methods used will be of high relevance for comparative studies in other domestic animals.

### Main tasks

- Participate in feeding trials with salmon
- Design and perform studies with fish gut cells in culture
- Perform classical nutritional, biochemical, histological and molecular analyses on samples obtained from in vivo and in vitro studies
- Interpret results and present the results for international publication
- Compulsory training covering a minimum of 30 ECTS credits in accordance with regulations on the PhD degree at NMBU. The education must be in line with international standards, with the completion of a scientific work, training in professional dissemination and introduction to research ethics, science theory and method of science.

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 completing a doctorate within the PhD scholarship period.

### Qualification requirements, desired experiences, knowledge and personal qualities

The successful applicant must meet the conditions defined for admission to a PhD programme at NMBU. For more detailed information on the admission criteria please see the [PhD Regulations](#) and the relevant PhD programme description.

#### Required academic qualifications:

- Degree in veterinary medicine, or a MSc degree in physiology, cell biology, molecular biology, biochemistry or related fields. The degree must correspond to a five-year Norwegian degree program, where 120 credits are at MSc degree level.
- Knowledge in fish nutrition, gut health and digestive physiology
- Experience with classical nutritional, biochemical, histological and/or molecular laboratory techniques

#### Desired academic qualifications:

- Experience with cell cultivation
- Knowledge within the field of epigenetic regulation
- Knowledge in statistical analyses of biological data

#### Desired personal qualities

- Result-oriented and highly motivated

- High work capacity
- Collaborative, including ability to establish contacts, develop network and cooperate with different persons
- Ability to work independently under varying conditions
- Proficiency in both spoken and written English
- Ability to start work as soon as possible

## Remuneration and further information

The position is placed in government pay scale position code 1017 PhD. Fellow, salary grade 54-62 (NOK 479.600 - 552.800). PhD. Fellows are normally placed in pay grade 54 on the Norwegian Government salary scale upon employment and follow ordinary meriting regulations.

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

For further information, please contact Associate Professor Trond M. Kortner

E-mail: [Trond.Kortner@nmbu.no](mailto:Trond.Kortner@nmbu.no); phone +47 918 08 343

[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: 02.08.2020

Applications should include (electronically) a letter of intent, curriculum vitae, full publication list, copies of degree certificates and transcripts of academic records (all certified), and a list of two persons who may act as references (with phone numbers and e-mail addresses).

Publications should be included electronically within the application deadline. The relevant NMBU Department may require further documentation, e.g. proof of English proficiency.

Printed material which cannot be sent electronically should be sent by surface mail to the Norwegian University of Life Sciences, Faculty of Paraclinical Sciences, P.O. Box 5003, NO-1432 Ås, within 02.08.2020. Please quote reference number 20/02558.

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 Veterinary Medicine

The Faculty of Veterinary Medicine at NMBU is the country's only veterinary professional education and provide expertise in veterinary medicine and veterinary public health. The Faculty educates veterinarians, animal nurses and doctoral students in Veterinary Science and researches in veterinary medicine and related biomedical fields. We have 500 students and 430 employees.

The faculty consists of the departments Basal and Aquamedicine, Food Safety and Infection Biology, Production Animal Medicine and Sports and Family Animal Medicine. We also run the University Animal Hospital, which is closely linked to our research and education, and receives patients from all over the country.

NMBU currently has a campus in Ås and in Oslo. The Veterinary College is currently on the campus Adamstuen in Oslo, but when the new veterinary building is completed it will be co-located with the other faculties in Ås.

## The Norwegian University of Life Sciences (NMBU)

NMBU has a special responsibility for research and education that ensures the basis of life for future generations.

Sustainability is rooted in everything we do and we provide knowledge for life.

NMBU has 1700 employees and 5200 students and is organized in seven faculties. NMBU has a campus in Ås and in Oslo. In the autumn of 2020 we are co-located in Ås. Further information on NMBU is available at [www.nmbu.no](http://www.nmbu.no)

## Additional information

### Place of service:

Ullevålsveien 72 0454 Oslo (Oslo Municipality)