

The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life. On 1 January 2016, NTNU will merge with the University Colleges of Ålesund, Gjøvik and Sør-Trøndelag. The merger will give us more comprehensive educational offerings and larger research environments. Together, our four institutions will create Norway's most exciting, innovative and largest university.

**Faculty of Natural Sciences**  
**Department of Biology**

# PhD position in “Spread mechanisms of sea lice in open sea-based salmon aquaculture”

A PhD position is available at the Department of Biology. The appointment has duration of 3 years with the possibility of until 1 year extension with 25% teaching duties in agreement with the department.

The position is financed by NTNU and has a special responsibility for the internal funded pilot program in “Environmental interactions of sea based aquaculture”.

## Information about the department

The strategy of the Department of Biology is to understand biological processes of life to preserve the environment. The current research fields at the Department include aquaculture, ethology, evolutionary biology, environmental toxicology, plant and animal physiology, marine biology, molecular biology, natural resource management and general ecology. Further information is available at: <http://www.ntnu.edu/biology/research>

## Job description

The PhD study at Department of Biology is part of a pilot research program on “Environmental interaction of seabased aquaculture”, where PhDs and postdocs from different departments will cooperate in a research centre with focus on aquaculture environmental interaction. An important research task is to determine physical and biological conditions within salmon farms that affect sea lice infection of farmed salmon. This can include net structures, biofouling on the nets, association of sea lice in the biofouling flora/fauna and water transport situations in the seacages. The work also aims to characterize the effects of biotic conditions in water masses, as algal blooms and effects of algae metabolites on sea lice infection on the salmon. Possible effects of using extracts in the fish feed to the farmed salmon will also be examined. The spread of free living stages of sea lice between fish farms will be studied, and the mechanisms will be verified by counting and molecular biological trace substances.

Detailed information on our PhD programs is found at: <http://www.ntnu.edu/nt/research/phd>

## Qualifications

The applicant must have an MSc (or equivalent) in marine biology, marine biotechnology or equivalent.

The regulations for PhD programmes at NTNU state that a Master degree or equivalent with at least 5 years of studies and an average grade of A or B within a scale of A-E for passing grades (A best) for the two last years of the MSc is required, and C or higher of the BSc.

Candidates from universities outside Norway are kindly requested to send a Diploma Supplement or a similar document, which describes in detail the study and grade system and the rights for further studies associated with the obtained degree:

[http://ec.europa.eu/education/tools/diploma-supplement\\_en.htm](http://ec.europa.eu/education/tools/diploma-supplement_en.htm)

The candidate must have proven background in biological, biochemical and / or molecular methods. In addition, he/she should have experience in marine biology/marine ecology with understanding of the planktonic food chain and marine chemistry/biochemistry. Experience from experimental work in sea-based aquaculture will be considered an advantage.

The successful candidate should be creative, with a strong ability to work problem oriented. He/she should also enjoy interdisciplinary research and take keen interest in learning and working in teams.


The position requires spoken and written fluency in English language. Applicants from non-English-speaking countries outside Europe must document English skills by an approved test. Approved tests are TOEFL, IELTS and Cambridge Certificate in Advanced English (CAE) or Cambridge Certificate of Proficiency in English (CPE).

## Terms of employment

The appointment of the PhD fellows will be made according to Norwegian guidelines for universities and university colleges and to the general regulations regarding university employees. Applicants must agree to participate in organized doctoral study programs within the period of the appointment and have to be qualified for the PhD-study.

NTNU's personnel policy objective is that the staff must reflect the composition of the population to the greatest possible extent.

The position as PhD is remunerated according to the Norwegian State salary scale. There is a 2% deduction for superannuation contribution.

Further information can be obtained from professor Kjell Inge Reitan, Department of Biology, NTNU, Tel. +47 735 90 841  / 93013045, E-mail: [kjell.i.reitan@ntnu.no](mailto:kjell.i.reitan@ntnu.no)

Further information about the Department can be found at <http://www.ntnu.edu/biology>

## The application

Applications with CV, certificates from both Bachelor and Master, possible publications and other scientific works, copies of transcripts, (copies of documentation on English language proficiency test) and reference letters should be submitted.

of documentation on English language proficiency test, and reference letters should be submitted.

Applications must be submitted electronically through [www.jobbnorge.no](http://www.jobbnorge.no).

Applications submitted elsewhere will not be considered.

The reference number of the position is: NT- 72/15

Application deadline: December 13

Jobbnorge ID: 119231, Deadline: Closed