Doctoral students in biology with focus on ecophysiology of fish

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The University of Gothenburg tackles society's challenges with diverse knowledge. 56 000 students and 6 600 employees make the university a large and inspiring place to work and study. Strong research and attractive study programmes attract researchers and students from around the world. With new knowledge and new perspectives, the University contributes to a better future.

Doctoral positions in biology with focus on ecophysiology of fish

At the Department of Biological and Environmental Sciences (BioEnv) we have teaching and research activities that stretch from the alpine ecosystem, through forests, cultivated land and streams, all the way into the marine environment. In these environments we study different levels of biological organisation from genes, individuals, and populations, to communities and ecosystems. We work within ecology, evolution, physiology, systematics, and combinations of these fields to understand the impact of natural and anthropogenic changes of the environment.

The department is placed at two different localities: in Natrium at Medicinaregatan 7B in Gothenburg and at the Kristineberg marine research station operated by the Marine Infrastructure at the University of Gothenburg. The current employment is based at Natrium in Gothenburg.

General information about being a doctoral student at the University of Gothenburg can be found on the university's doctoral student pages.
https://medarbetarportalen.gu.se/doktorand/?languageId=100001&skipSSOCheck=true

We offer

The University of Gothenburg is a state authority, which means special benefits, more holidays and a great pension. You can read more about our employment benefits here.

Project description

The theme of the PhD project is the physiological, behavioural, and evolutionary responses of fishes to temperature change.

Common responses of fishes to climate warming include migration, acclimation, and adaptation. The projects will investigate both the acclimation and adaptation potential of fishes to changes in water temperature. The PhD projects aims to fill major knowledge gaps in the field of thermal biology. The main questions that will be addressed are:

- What are the physiological mechanisms underlying thermal performance and tolerance limits?
- What is the acclimation and adaptation potential of these mechanisms?
- Which physiological, molecular, and behavioural traits are important for shaping ecological fitness in a warming world?

Duties

The University of Gothenburg is seeking two new graduate student (PhD studentship) to research thermal biology in fish. The position starts in spring 2024.

The main task is to conduct the PhD thesis work under supervision, which includes development of the PhD student's methodological experience, analytical skills, as well as theoretical depth and breadth.

To answer the questions above, the PhD students will use various physiological and behavioural measurements. The techniques will likely include in- vivo animal experiments, multi-generational experiments, thermal exposures, exercise respirometry, and more. Zebrafish, three-spined sticklebacks, and other species will be used. The work will mainly be done at the well-equipped fish labs at GU, but research abroad is also likely (e.g., Kristineberg in Fiskebäckskil and at NTNU in Trondheim, Norway).

The Jutfelt Ecophysiology Lab investigates many different aspects of thermal biology in freshwater and marine fishes. The main supervisor will be Professor Fredrik Jutfelt. One of the positions includes close collaboration with research groups in Scotland and will be co-supervised by Natalie Pilakouta and Shaun Killen, and may include fieldwork in Iceland.

Duties of the position:

- Leading various experiments with fish.
- Robust data handling and analyses.
- Writing scientific papers.
- Presenting at meetings and conferences.
- Teaching (optional).

Education at third-cycle level comprises four years of full-time study, and leads to a doctoral degree. As part of your employment as a doctoral student, you may have departmental duties corresponding to up to 20 % of full-time employment, distributed throughout your study period. Departmental duties usually consist of teaching at first- and second-cycle levels, but may also include research and administration.

Eligibility

Education at third-cycle level requires general eligibility and, where appropriate, specific eligibility as set out in the general syllabus for the subject.

The general eligibility requirements for education at third-cycle level are:

1. having completed a degree at second-cycle level, or
2. the fulfilment of course requirements totalling at least 240 credits, of which at least 60 credits must be at second-cycle level, or
3. the acquisition of equivalent knowledge in some other way, either in Sweden or abroad.

To meet the specific entry requirements for third-cycle studies, applicants must:

1. have a second-cycle (advanced-level) degree in a relevant* subject area in the natural sciences, or
2. have completed studies for at least 60 higher education credits at a second-cycle level in relevant subject areas in the natural sciences, or

3. have completed a corresponding programme of relevance to the planned third-cycle programme, in Sweden or in another country, or have equivalent qualifications.

   *Relevant subject for the planned third-cycle education is biology.

Assessment criteria

The selection of applicants who meet the basic and specific eligibility requirements will be based on the ability to assimilate the education at third-cycle level.

It is a requirement that the applicants have:

- You must have a professionally relevant background in animal physiology or functional ecology.
- Your education must correspond to a five-year European degree programme, where 120 credits are obtained at master's level
  or equivalent in animal physiology.
- Excellent communication skills in English, both written and spoken, are necessary since we work in an international environment.

Other desirable qualifications are:

- Experience with animal experiments or fieldwork.
- Fish experience is a plus but not a requirement.
- Experience with relevant practical and statistical methods.
- Good ability to collaborate.
- Ability to contribute to a good working climate.

The applications should be written in English and must include:

- A short cover letter with the applicant’s justification for the application, i.e., that describes how the applicant meets the selection criteria (Maximum one A4 page) as well as a justification for the employment.
- An attested list of qualifications (CV).
- Examination certificates and a transcript of courses with grades.
- A copy of the Master thesis (or equivalent).
- Copy of MSc report and other reports that may be of interest.
- Other documents deemed important by the applicant.
- Name and email address of three referees.

The top ranked candidates will be selected for an interview, which might be held in English and could also be performed digitally.

Employment

Once you have been admitted for education at third-cycle level, you will be employed as a doctoral student at the University of Gothenburg.

The provisions for employment as a doctoral student can be found in ordinance SFS 1993:100.

Initial employment as a doctoral student may apply for a maximum of one year, and may be renewed by a maximum of two years at a time.

A doctoral student may be employed as a doctoral student for a maximum of eight years, but the total period of employment may not be longer than the equivalent of full-time education at third-cycle level for four years.

Placed at the department of Biological and Environmental Sciences. Extent: 100%. First day of employment: spring 2024 or upon agreement. This advertisement concerns the employment of two doctoral students.

The University applies a local agreement on salaries for doctoral students.

Contact information

For further information please contact:

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Unions

Union representatives at the University of Gothenburg can be found here:
https://www.gu.se/om-universitetet/jobba-hos-oss/hjalp-for-sokande

Application

You should apply to be admitted for education at third-cycle level via the University of Gothenburg's recruitment portal: Apply

It is your responsibility to ensure that the application is complete as per the vacancy notice, and that the University receives it by the final application deadline.

Applications must be received by: 31st of January 2024

Information for International Applicants

Choosing a career in a foreign country is a big step. Thus, to give you a general idea of what we and Gothenburg have to offer in terms of benefits and life in general for you and your family/spouse/partner please visit:

https://www.gu.se/en/about-the-university/welcome-services
https://www.movetogothenburg.com/

The University works actively to achieve a working environment with equal conditions, and values the qualities that diversity brings to its operations.

Salaries are set individually at the University.

In accordance with the National Archives of Sweden's regulations, the University must archive application documents for two years after the appointment is filled. If you request that your documents are returned, they will be returned to you once the two years have passed. Otherwise, they will be destroyed.

In connection to this recruitment, we have already decided which recruitment channels we should use. We therefore decline further contact with vendors, recruitment and staffing companies.

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