



HELSINGIN YLIOPISTO  
HELSINGFORS UNIVERSITET  
UNIVERSITY OF HELSINKI

## Doctoral Researcher in Urban evolutionary ecology



We (Matthew Nielsen, Pauliina Rautio, and Marjo Saastamoinen) are seeking a PhD researcher for a Research Council of Finland funded, interdisciplinary PhD-project that complements evolutionary ecology with science education to understand adaptive benefits of urban evolution. The candidate will work with local schools to conduct an experiment testing the potential benefits of urban adaptation, while also giving students first-hand experience with the scientific process.

### Position description

The PhD researcher will participate in a project studying the adaptive benefits of urban evolution in a common butterfly, *Pieris napi* (Green-veined White, Lanttuperhonen). We will test whether previously identified evolution of this species in Helsinki provides an adaptive benefit by raising offspring of both urban and rural butterflies in outdoor cages in both locations.

To conduct these experiments, we will work with local schools (grades 5 and 6) in Helsinki and the surrounding rural areas, involving students directly in planning and conducting the experiments. This will allow the project to also grant new insights for science education and for the role of young people in science.

The PhD Researcher will also be involved in other projects related to the urban evolution of *P. napi*. They will have room to incorporate their own research interests into the project and develop their individual focus.

The position is planned to start by 1 January 2024, but an earlier or later start date can be arranged. The Doctoral Researcher will be appointed for a fixed-term contract until August 2027, and the position is fully funded until then. The student will join the Doctoral Programme of Wildlife Biology Research ([LUOVA](#)).

### Supervision

I, **Matthew Nielsen**, am the main PI of the project and will lead the supervision of the PhD candidate. My research focuses on how butterflies adapt to environmental change, particularly climate change and urbanization. I am a new Junior Professor at the University of Bremen in Germany with a joint appointment at the University of Helsinki, where I will also have a small research group (the PhD researcher and one Postdoc). I will spend 1-2 months per year in Helsinki, and the research project will fund visits by the PhD researcher to Bremen for training and mentoring. At times when we are not in the same place, regular online meetings will be carried out with me and my group in Bremen. As a mentor, I will seek to support your personal and career development and goals. I welcome applicants from all backgrounds. I am queer and am building a lab that welcomes and supports people of all genders, races/ethnicities, sexual orientations, and abilities/disabilities.

The Project is co-supervised by **Pauliina Rautio** (University of Oulu) and **Marjo Saastamoinen** (University of Helsinki). Pauliina studies human-animal relations, participation of young people in ecological citizen science, and develops practices and theories of multispecies education. She will help support the education component of the project. Marjo's research focuses on understanding how natural populations and communities respond to and potentially cope via adaptive strategies with anthropogenic environmental pressures. Marjo has a research group with diverse background and expertise at the University of Helsinki that will provide a local home for the PhD candidate. They will be able to join her regular group meetings and get feedback from her and other members of her lab.

### Requirements

Applicants must have a Master's degree in biology or a related topic before starting the position. The appointee should either already have the right to pursue a doctoral degree at the University of Helsinki by the start of the appointment or apply for the right and obtain it within the probationary period of six months of their appointment. If the candidate does not already have the right to pursue a doctoral degree at the University of Helsinki, it must be applied for separately, please see: <https://www.helsinki.fi/en/research/doctoral-education/the-application-process-in-a-nutshell>

Applicants should be interested in the main themes of the project: global change and education. Previous experience working with insects in the field or lab is

desirable, but not required. Because of the need to work with school classes, fluency in Finnish is required. The applicant should also be comfortable writing and communicating in English, which is the working language of the research groups. A valid driver's license is a plus because it will facilitate field work and classroom visits.

The starting salary of the doctoral researcher will be based on level 2 of the demands level chart for teaching and research personnel in the salary system of Finnish universities. In addition, the appointee will be paid a salary component based on personal performance. The starting salary of the Doctoral researcher will be ca. 2200-2400 euros/month, depending on the appointee's qualifications and experience.

The University of Helsinki offers comprehensive services to its employees, including occupational health care and health insurance, unemployment and pension fund, a generous holiday package, sports facilities, and opportunities for professional development. A six-month trial period will be applied. Read more about the employee benefits at the University of Helsinki and why the University of Helsinki is an excellent career choice: <https://www.helsinki.fi/en/about-us/careers>

#### HOW TO APPLY

Applications must contain:

- 1) Cover letter (at most 2 pages) describing your interest in the position and relevant experience and qualifications,
- 2) CV, and
- 3) contact information for two references (who may be contacted during the review of applications).

All materials should be in English. If you have any questions about the position, please contact Matthew Nielsen (information below). I am happy to discuss it further.

Please submit your application using the University of Helsinki recruitment system via the button "Apply now".

Applicants who are employees of the University of Helsinki are requested to leave their application by using the employee login.

The University of Helsinki welcomes applicants from a variety of genders, linguistic and cultural backgrounds.

**The closing date for applications is 24 November 2023 at 23:59 EET.**

## Further information

- The position: Principal investigator, Junior Professor Matthew Nielsen, paul.nielsenm@uni-bremen.de or [matthew.nielsen@helsinki.fi](mailto:matthew.nielsen@helsinki.fi)
- Recruitment system: HR Specialist Mirkka Juntunen, mirkka.juntunen@helsinki.fi
- Viikki Campus: <https://www.helsinki.fi/en/about-us/campuses/viikki-campus>
- Support for international staff: <https://www.helsinki.fi/en/about-us/careers/welcome> and <https://ihhelsinki.fi> (International House Helsinki)

## About us

The Faculty of Biological and Environmental Sciences is Finland's most high-profile and extensive hub of research and teaching in the field. The Faculty educates experts to meet the needs of universities, research institutes, government, schools and the business sector. The Faculty is comprised of three units or research programmes: Ecosystems and Environment, [Organismal and Evolutionary Biology](#), and Molecular and Integrative Biosciences. <https://www.helsinki.fi/en/faculty-of-biological-and-environmental-sciences>

The University of Helsinki is among the leading multidisciplinary research universities in the world. In addition to its 11 faculties, the University includes several independent institutes, some of which are jointly operated with other universities. Some 35,000 students are currently pursuing an undergraduate or a postgraduate degree at the University of Helsinki. The University of Helsinki is an equal employer.

## Open position

**Due Date:** 24.11.2023

**Unit:** Faculty of Biological and Environmental Sciences

**Sub-unit:** Organismal and Evolutionary Biology Research Progr

**ID:** 2668

## Working for the world

Science has the power to change the world. Join one of the best research universities in the world – an international community united through bold thinking, science, research, and learning, with over 30,000 students and 8,000 employees.

We are defined by our multidisciplinary approach. This, combined with a dedication for cross-border collaboration, gives us our potential to find real solutions and build hope for a better, more sustainable future.

We are united by our values – truth, bildung, freedom, and inclusivity – as well as our passion for work that truly matters.

Join us: work for the future – work for the world.

**Any questions?**

[See our recruitment system FAQ](#)

**Apply now »**