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# PhD student in evolutionary genetics at the program Evolutionary Biology

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Uppsala University is a comprehensive research-intensive university with a strong international standing. Our ultimate goal is to conduct education and research of the highest quality and relevance to make a long-term difference in society. Our most important assets are all the individuals whose curiosity and dedication make Uppsala University one of Sweden's most exciting workplaces. Uppsala University has over 45,000 students, more than 7,000 employees and a turnover of around SEK 7 billion.

A PhD student position in evolutionary genetics is available at the Department of Ecology and Genetics, Evolutionary Biology.

The Department of Ecology and Genetics is an international environment with staff and students from all over the world. Our research spans from evolutionary ecology and genetics to studies of ecosystems. For more information, see [www.ieg.uu.se](http://www.ieg.uu.se).

The Evolutionary Biology Centre (<http://www.ebc.uu.se/?languageId=1>) is one of the world's leading research institutions in evolutionary biology. It is part of Uppsala University, which has been ranked very high among all European Universities in the subject of evolutionary biology. Our lab is part of the Program of Evolutionary Biology that excels in many aspects of genetics and evolution and offers an inspiring international atmosphere. There are ample opportunities for interaction with PhD-students, PostDocs and researchers working on related topics. We are tightly linked to the Science for Life Laboratory (<https://www.scilifelab.se/>) and have access to advanced laboratory infrastructure, high performance computing resources and bioinformatics support.

Note that we are announcing two PhD student positions at the program Evolutionary Biology. In this announcement we are looking for a PhD student to work on comparative genomics of phenotypic plasticity and in the other position (#ADD LINK to other position) on Y chromosome evolution.

**Project description/duties:** Phenotypic plasticity is one of the most important mechanisms used by plants and animals for adapting to changing environmental conditions and thus of major evolutionary interests. This project will combine fieldwork, laboratory experiments and comparative transcriptomic work and functional assays (using RNAi) to study how photoperiod affects plasticity in wing polyphenism in different species of waterstriders. Waterstriders are a well-known group of insects that show wing polymorphism both between species as well as within species, and plasticity is largely due to variation in photoperiod. Several different species of waterstriders will be studied and nymphs raised in the laboratory during different photoperiod for sampling of transcriptomic information followed by RNA seq analyzes to identify differentially expressed genes. Genetic crossing experiments as well as artificial selection experiments will also be set up to investigate inheritance patterns under different environmental conditions. Functional genetic work on differentially expressed genes of interests will be performed using established RNAi protocols developed and optimized for waterstriders. The overall goal of the project is to identify the gene regulatory network that is responsible for wing polyphenism and how it interacts with photoperiod and how this has allowed plasticity in wing development to evolve in the different species. The PhD student position includes research, courses and literature studies.

**Qualifications required:** To be eligible for a PhD-student position the applicant must hold a master degree (or equivalent) in evolutionary biology, cell and molecular biology or developmental biology or related fields. Candidates must be able to express themselves fluently in spoken as well as written English.

**Qualifications desired:** The ideal candidate is highly motivated and enthusiastic about evolutionary biology, particularly in population genomics and/or developmental biology. Experience with bioinformatic analysis and programming is advantageous.

**Type of employment:** Temporary position according to the Higher Education Ordinance chapter 5 § 7. The graduate program covers four years of full-time study. The position can be combined with teaching or other duties at the department

(maximum 20%), which prolongs the employment with the corresponding time. The salary will be set according to local agreements. Rules governing PhD candidates are set out in the Higher Education Ordinance Chapter 5, §§ 1-7 and in Uppsala university's rules and guidelines [http://regler.uu.se/search/?hits=30&languageId=1&search-language\\_en=English](http://regler.uu.se/search/?hits=30&languageId=1&search-language_en=English). More information about postgraduate studies at Uppsala University is available at <http://www.teknat.uu.se/education/postgraduate/>.

**Scope of employment:** 100%.

**Salary:** According to local agreement for PhD students.

**Starting date:** 2022-04-01 or as otherwise agreed.

**Application:** The application should include: 1) a letter of intent describing yourself, your research interests and motivation of why you want to do a PhD, and why you are suitable for the position, 2) your CV, 3) a short description of your education, 4) a copy of your master degree, your course grades and a copy of your master thesis, 5) the names and contact information to at least two reference persons (e-mail address and phone no.), 6) publications produced. The application should be written in English.

**For further information about the position please contact:** Assistant Professor, Arild Husby, [arild.husby@ebc.uu.se](mailto:arild.husby@ebc.uu.se), +46 18 471 41 20.

**Please submit your application by 31 January 2022, UFV-PA 2021/4908.**

Are you considering moving to Sweden to work at Uppsala University? [Find out more about what it's like to work and live in Sweden](#).

Please do not send offers of recruitment or advertising services.

**Submit your application through Uppsala University's recruitment system.**

**Placement:** Department of Ecology and Genetics

**Type of employment:** Full time , Temporary position longer than 6 months

**Pay:** Fixed salary

**Number of positions:** 1

**Working hours:** 100 %

**Town:** Uppsala

**County:** Uppsala län

**Country:** Sweden

**Union representative:** ST/TCO tco@fackorg.uu.se

Seko Universitetsklubben seko@uadm.uu.se

Saco-rådet sacco@uadm.uu.se

**Number of reference:** UFV-PA 2021/4908

**Last application date:** 2022-01-31

**Login and apply**