Ph. D. position in animal ecology: the evolution of epigenetic inheritance

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Uppsala University is an international research university focused on the development of science and education. Our most important assets are all the individuals who with their curiosity and their dedication make Uppsala University one of Sweden’s most exciting work places. Uppsala University has 40,000 students, 7,000 employees and a turnover of SEK 6.5 billion.

Department of Ecology and Genetics spans from evolutionary ecology and genetics to studies of ecosystems, including a large number of high-profile projects addressing natural and sexual selection, local adaptation, speciation, molecular evolution, microbial diversity, and ecosystem processes. Our graduate school offers a creative and stimulating environment and a rich variety of seminars, journal clubs, courses and many possibilities to interact with other researchers and students. The working atmosphere is international with English as our operational language. See http://www.ieg.uu.se/ for more information.

Project description: The long-held belief that the genetic code is the sole basis for biological inheritance has recently been challenged by the discovery of trans-generational epigenetic inheritance, where environmentally induced phenotypes are inherited for several generations by factors that determine how DNA is read. However, the adaptive significance of a complementary inheritance system that is induced by the environment is enigmatic.

The applicant will investigate the evolution of adaptive epigenetic and trans-generational inheritance of fitness and ageing during adaptation to new environments (high or fluctuating temperature) in the powerful laboratory model system – the nematode Caenorhabditis remanei. We will use a combination of experimental evolution, trans-generational phenotypic assays of life history traits (fitness, ageing, growth, development) and gene expression approaches, as well as analyses of already existing selection lines. The applicant will join the lab of Dr. Martin Lind, and be part of the well-equipped nematode lab, at the moment led by three principal investigators (Dr. Lind, Dr. Bolund, Dr. Maklakov), interested in life-history evolution,
ageing and sexual selection. The project is supported by a grant from the Swedish research Council (VR).

**Qualifications:** A relevant master degree or equivalent in evolutionary biology, genetics, ecology or related field. We looking for you how are motivated, highly reliable, driven and well-organised, and have a broad interest in evolutionary biology. It is desirable if you have experience of laboratory work and/or animal husbandry (of any organism). Because the holder of this position will interact closely with other lab members, we put emphasis on personal ability, independence and ability to collaborate. You should have the capacity to express yourself well in speech and writing in English.

**Position:** The graduate program covers four years of full-time study. The position can be combined with teaching (maximum 20%), which prolongs the employment with the corresponding time. The successful candidate will receive salary and full social benefits according to local agreements. More information about salary levels: http://www.saco.fackorg.uu.se/verksamhet/doktorandfragor/doktorandstege

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/Rules_and_regulations_in_English/. More information about postgraduate studies at Uppsala University is available at http://www.teknat.uu.se/education/postgraduate/.

**Application:** The application should include 1) a letter of intent describing yourself, your research interests and motivation for why you apply for the current position and want to do a PhD, 2) a CV 3), a short description of your education, 4) an authorized copy of your master degree and course grades, 5) the names and email of at least two referees, 6) relevant publications including master thesis. The application should be written in English.

Uppsala University aims for gender balance and diversity in all activities in order to achieve a higher quality at all levels of the organization. We therefore welcome applicants of any gender and with different birth background, functionality and life experience.
Pay: According to local agreements

Starting: As soon as possible or as otherwise agreed.

Working hours: 100 %

For further information about the position please contact Dr. Martin Lind, email: martin.lind@ebc.uu.se +46 (0) 18 - 471 2613. More information about the research: http://katalog.uu.se/profile/?id=N12-1891

You are welcome to submit your application no later than 15th of March 2017, UFV-PA 2017/371.

We decline offers of recruitment and advertising help. We only accept the application the way described in the advertisement.

Placement: Department of Ecology and Genetics
Type of employment: Full time, Temporary position longer than 6 months
Pay: Fixed pay
Number of positions: 1
Working hours: 100%
Town: Uppsala
County: Uppsala län
Country: Sweden
Union representative: Marie Ols, TCO/ST 018-471 2459
Per Sundman, Saco-rådet 018-471 1485
Stefan Djurström, Seko 018-471 3315
Number of reference: UFV-PA 2017/371
Last application date: 2017-03-15

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