

Postdoc position in Molecular Ecology and Evolution at Lund University, Sweden **Research Topic:**

Sexual Selection and Introgression in Lizards

Background Gene transfer between species or sub-species via hybridization is increasingly recognized as an important source of diversification and adaptation. However, only rarely are systems sufficiently well understood to predict the degree and direction of hybridization, which makes current studies largely exploratory and reliant on post-hoc explanations. To circumvent this problem we have experimentally established the causes of hybridization between two sub-species of the common wall lizard, *Podarcis muralis*. These studies suggest that introgression in secondary contact will be driven by sexual selection, with a number of predictions regarding the direction, extent, and phenotypic and genomic patterns of introgression. We now wish to test these predictions in independent regions of hybridization using extensive phenotypic data and generation of genome-wide nucleotide markers that can be mapped onto the draft genome of the species. **Job assignment** The tasks involve (i) Planning research; (ii) Generating, processing and analyzing data on single nucleotide polymorphism; (iii) performing analyses to establish genomic and geographic patterns of introgression using sequence and phenotypic data; (iv) field work to collect further samples; and (v) preparation of results for publication. The successful applicant is expected to contribute to the intellectual environment of the host group through active participation in discussion groups, meetings, and other activities. We encourage maintaining and establishing new collaborations. Co-supervision of MSc students may be part of the assignment. The position is funded by a grant from the Swedish Research Council to Dr Tobias Uller (<http://www.biology.lu.se/tobias-uller>)

) and is initially for two years, with the possibility of a one-year extension. **Eligibility/ Entry requirements** The applicant must have a PhD in Molecular Ecology, Evolution or associated fields and have extensive experience with analyses of high-throughput sequence data. A background in the application of genome data to non-model organisms is highly meritorious. Applicants must be highly motivated to pursue research in ecology and evolution, show outstanding organizational skills, and have a track record of completed research projects. **Basis for assessment** Applicants are evaluated based on documented ability to develop and carry out high-quality research. Such evidence may include a strong track record of publications in scientific journals, documentation of successful completion of research projects, high intellectual capacity and problem-solving ability, technical and analytical know-how, organizational skills, enthusiasm, dedication, and an ability to work both independently and in a team. Where possible, statements to these effects should be accompanied by objective or independent assessment of the candidate's track record and potential (e.g., via letters of support). Applicants should follow the instructions on the following webpage when preparing their application:

<http://www.lu.se/lediga-anstallningar-available-jobs?x=3D0&Dnr=3D651840&Type=E>

For further details or informal contact, please contact Tobias Uller at tobias.uller@biol.lu.se

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