

3-year research position in Evolutionary Genetics at Centre for Ecological and Evolutionary Synthesis (CEES), University of Oslo (UiO)

The project is part of a larger research program entitled "On the role of hybridisation in evolution" – the case of Eurasian Passer Sparrows – funded by the Norwegian Research Council. Hybridization can have different evolutionary outcomes, ranging from speciation reversals to hybrid speciation. The Italian sparrow (*Passer*

italiae

italiae

) is the first documented case of hybrid speciation in birds (Hermansen et al. 2011). This bird originated from past events of hybridization between two divergent parental species, the house sparrow (*P. domesticus*

P. domesticus

) and the Spanish sparrow (*P. hispaniolensis*

P. hispaniolensis

) some thousands of years ago. Today, the hybrid taxon is sympatric or parapatric with both parent species in certain regions, enabling investigations of current gene flow and the nature of reproductive barriers. Moreover, the parent species live sympatrically in large regions around the Mediterranean Sea, enabling comparisons of the reproductive barriers that isolate the parent species with those that isolate the hybrid species from either parent. The project integrates evolutionary genetic, genomic, quantitative genetic and ecological approaches to investigate the consequences of hybridization in the interplay with recombination and selection. Phenotypes of interest include beak morphology, plumage coloration, vocalization, migration behaviour and intrinsic reproductive barriers (genetic incompatibilities). Of genomic resources we have de novo assembled the house sparrow genome, which will be used as a reference for re-sequencing and genotyping efforts in this project. We aim at increasing our understanding of the modularity of the genome and of the processes of adaptation and speciation. The successful candidate will be allowed to choose aspects of the larger program as best fits her/his skills and research interests. She/he will also be encouraged to develop additional, complementary avenues of research. The candidate must have a PhD or other corresponding education in a relevant field, such as evolutionary biology, genomics, genetics and/or bioinformatics. Documented skills in population genetic/genomic and/or quantitative genetic analysis will be emphasized. The research will be conducted in close collaboration with Prof. SÅstre and his group at CEES. The research team will also include other scientists from Norway, Sweden and Finland. The working language will be English. Fieldwork may be conducted at a variety of locations, including Italy and other Mediterranean countries. The application must include: Application letter, CV, copies of educational certificates, transcript of records, A complete list of publications and up to 5 academic works, Names and contact details of 2-3 references.

Apply online within 24th March via Easyrecruit:

<http://uio.easycruit.com/vacancy/1351119/96871?iso=no>

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