

PhD-student position on the genomic architecture of a hybrid species at University of Oslo

A position as PhD Research Fellow is available at the Centre for Ecological and Evolutionary Synthesis (CEES), Department of Biosciences, Faculty of Mathematics and Natural Sciences.

The PhD project is entitled "The genomic architecture of a hybrid species" and is part of a larger Research Program entitled "On the role of hybridization in evolution – the case of Eurasian *Passer* sparrows" funded by the Norwegian Research Council.

Tentative starting date: June-August 2015.

The PhD-project will be part of a larger project using the Italian sparrow (*Passer italiae*), the first documented case of hybrid speciation in birds (Hermansen et al. 2011), and its parent species (*P. domesticus* and *P. hispaniolensis*) to investigate how hybridization can generate novel variation and result in speciation. The genome of the Italian sparrow is a composite mosaic of DNA from both parent species' genomes. However, little is known about the processes molding a homoploid hybrid genome.

This project applies genomic approaches to develop an understanding of which factors that have formed the genome of the Italian sparrow. Whole genome ressequencing and RAD-tag data from three putatively independently formed island populations will be used to investigate this. Three questions that will be addressed is the role of transposable elements in forming the genome, whether entire networks of genes are repeatedly inherited from the same parent species, and how genetic integration compares to phenotypic integration. The successful candidate will be allowed to choose aspects of genomics of the larger study as best fits her/his research interests. She/he will also be encouraged to develop additional, complementary avenues of research. There will be available genomic data to work on from day one, but there will also be field work

on Mediterranean islands!

We are looking for an ambitious candidate who is passionate about science and has a strong background in evolutionary biology/genomics/bioinformatics. Interested candidates should have a Master degree or equivalent in a relevant field of biology. A special interest in the field of speciation and speciation genetics is a plus. The candidate should be interested in learning and applying genomic skills to answer evolutionary questions regarding hybrid speciation. A strong interest in bioinformatics and experience with independent programming in unix/python/perl, and genomic data analysis in R is meriting. We are primarily looking for a candidate with a strong track record who is highly motivated and interested in a future career in science.

The position is affiliated with the Centre for Ecological and Evolutionary Synthesis (CEES), under the supervision of Dr. Anna Runemark and Prof. Glenn-Peter SÅŠtre and the work will be done in collaboration with our research group currently consisting of four senior researchers, three PhD-students and several MSc-students. The working language will be English.

Please contact Anna Runemark Anna.Runemark@ibv.uio (or g.p.satre@ibv.uio.no) for further information regarding the position!

Please find a link to the announcement here:

<http://uio.easycruit.com/vacancy/1373165/96871?iso=no> .

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