

## PhD Position

# Genomics of Hybridization, Speciation, and Plumage Coloration

**A PhD position on the genomics of hybridization, speciation, and plumage color evolution in a color-polymorphic songbird radiation is available in Reto Burri's lab in the Population Ecology Group at Friedrich-Schiller-University Jena, Germany (<https://www.popecol.uni-jena.de/burri.html>). The position is funded by the German Research Foundation (DFG) for 3 years, and offers a salary according to German remuneration level 13 (65%). The position is available from January 1<sup>st</sup> 2019 or according to agreement.**

We are looking for a highly motivated PhD student with a background in population genomics and/or bioinformatics, who is eager to work on questions related to hybridization, speciation, and phenotypic adaptation.

The project will make use of replicated hybrid zones in a versatile system of pervasively hybridizing, color-polymorphic songbirds and of phenotypes replicated across the genus' phylogeny to infer genomic regions involved in reproductive isolation and in the parallel evolution of color phenotypes. The successful candidate will apply population genomic and phylogenomic approaches to analyze whole-genome re-sequencing data from several hundred birds, backed up with a high-quality reference genome. Furthermore, she/he will be involved in fieldwork in destinations including southern Europe, the Balkans, the Caucasus, and the Middle East.

We offer an interesting job in a young, dynamic, and supportive research group and department, with close interactions both within the group as well as internationally. You will work with cutting-edge genomic resources and data, and have rich opportunities to get proficient with bioinformatics, and population genomic and phylogenomic analysis of large-scale genomic data. You will be involved in all major steps of the research project, from fieldwork in fantastic locations, over data preparation and analysis, to writing publications.

Your profile:

- You hold an MSc degree or equivalent in evolutionary biology, bioinformatics or related fields before starting the position.
- You have a background in population genetic and phylogenetic analysis, ideally of genome-scale data.
- You have experience with bioinformatics and scripting, ideally in relation to genome analyses.
- You collaborate well with local and international team members.
- You are proficient in English, both spoken and written
- Experience with bird identification, and especially catching and handling birds is a plus.
- Experience in the wet lab (especially with the isolation of high-molecular weight DNA) is a plus.

The lab is located in Jena, a lively student city of about 100'000 inhabitants in the heart of beautiful Thuringia. FSU Jena is one of the oldest universities in Germany. Several external research institutes (including three Max Planck Institutes) illustrate the strength of the scientific environment and possibilities for collaboration. Our research group is also part of the Integrative Center for Biodiversity Research (iDiv) Halle-Jena-Leipzig, a worldwide leading consortium in biodiversity research.

Please send your application, including (i) a letter of motivation highlighting your research interests and how you meet the indicated qualifications, (ii) your CV, and (iii) contact information (e-mail and telephone number) for two to three references, all merged in a single PDF document to Reto Burri ([reto.burri@uni-jena.de](mailto:reto.burri@uni-jena.de)). The evaluation of applications starts on October 1<sup>st</sup> 2018 and will continue until the position is filled.



	<i>O. hispanica</i>	Hybrids				<i>O. pleschanka</i>
white-throated						
black-throated						
Back	white	white	black-tipped	narrow black	reduced black	black
Neck-sides	white	black	white	black	white	black