

The Conservatory and Botanical Garden of Geneva (CJBG) and the department of Botany and Plant Biology from the University of Geneva is seeking an enthusiastic, independent postdoctoral researcher to work on an SNF-funded project on the ecological and molecular bases of flower color evolution.

The project aims to model the evolution of flower color and integrate comparative analyses of molecular evolution, gene expression, and anthocyanins production in a lineage of Neotropical plants, the Gesnerioideae. The amazing flower diversity present in this plant group and the frequent parallel evolution of bee, hummingbird and bat pollination will provide the necessary framework to identifying the role of pollinator-mediated selection on flower color evolution and to better characterize the biochemical and genetic mechanisms underlying color transitions. This project built on new transcriptomic resources available for the group, which will facilitate the identification of all genes involved in the anthocyanin biosynthetic pathway and their sequencing using target capture method.

The CJBG/University of Geneva is recruiting a postdoc to: 1) collect data on floral reflectance (in the field and from cultivated plants) and assess the level of convergence of flower colors and their association with pollinator color vision; 2) identify the floral flavonoids in a large sample of species to determine the biochemical bases of flower color and evolutionary constraints imposed by the biosynthetic pathways; 3) characterize the anthocyanin genes using NGS and quantitative PCR to analyze their evolution in the Gesnerioidea radiation. This is a collaborative project with the Computational Phylogenetics Group of Prof. Nicolas Salamin at the University of Lausanne.

We seek a collegial, self-motivated, independent, and intellectually curious individual. A PhD in evolutionary biology or related field is required. Applicants for this position must have strong bench skills and strong familiarity with bioinformatic analyses of next-gen sequencing data and/or comparative analyses. In addition, candidates must have demonstrated written and oral communication skills. The position is available for 24 months.

Applications should be sent by February 31, 2018 by email to Mathieu Perret (mathieu.perret@ville-ge.ch). Applicants are requested to send a single PDF file that includes a cover letter with names and contact information of three references, a CV and one or two representative publications. Preferred start date is April-May 2018.

Contact

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