

POSTDOC POSITION – GALAPAGENOMES

In the Chaves-Dumbacher Lab at San Francisco State University
and the California Academy of Sciences



We are excited to announce a fantastic opportunity for a highly motivated and skilled postdoctoral researcher to join the GalapaGenomes Project at San Francisco State University (SFSU) and the California Academy of Sciences (CAS). This interdisciplinary initiative aims to sequence and assemble whole genomes of Galapagos species and use them in population genomic and phylogenetic studies. The postdoc will use cutting-edge bioinformatic techniques with the invaluable resources of museum specimens and modern samples. There will also be opportunities to develop undergraduate curricula using genome sequence data, mentor students, and for professional development at SFSU, CAS, and institutions in the US and Ecuador. In compliance with our commitment to diversity and inclusivity, we encourage applications from individuals of all backgrounds and experiences.

Position Details

Duration: 16.5 months

Salary: \$58,000 (12 months) + 41,880 (4.5 months); fringe rate 85.17% and eligible for benefits (total time of employment 16.5 months)

Location: San Francisco, Bay Area (California)

Research based at: San Francisco State University and California Academy of Sciences

Start date: Flexible (preferably July 2024)

Responsibilities:

- Process, curate, and analyze genomic data from museum specimens and contemporary samples.
- Conduct de novo genome assembly and annotation.
- Apply population genomic analyses to investigate patterns of genetic variation and evolution within Galapagos species.
- Perform phylogenetic analyses to elucidate the evolutionary relationships and historical biogeography of Galapagos species.
- Collaborate with undergraduate and graduate mentorship and curriculum development.
- Prepare and publish scientific papers, and present findings at conferences and workshops.
- Contribute to the development and optimization of bioinformatic pipelines for genomic data analysis.

Required Qualifications:

- Ph.D. in Evolutionary Biology, Bioinformatics, Genomics, Computational Biology, Conservation Genetics, or a related field.
- Experience in bench work with aDNA/museum specimens is strongly preferred (amplicon-based aDNA and library preparation).
- Demonstrated interest and experience in genome assembly and annotation.
- Proficiency in bioinformatics tools and methods for handling genomic data as well as programming languages commonly used in bioinformatics (e.g., Python, R, Perl, etc.).
- Proficiency in population genomic analyses, such as variant calling, population structure analysis, and selection scans.
- Solid understanding of phylogenetic methods and their application to evolutionary questions.
- Previous experience with analyzing genomic data from museum specimens is a plus.
- Excellent data analysis, problem-solving, and communication skills.
- Ability to work collaboratively in a team and independently, with a strong sense of initiative.
- A passion for conservation genomics and biodiversity research.
- Interest in developing courses for undergraduates using genome analysis tools and mentoring graduate students.

Project Environment:

The GalapaGenomes Project offers a unique and dynamic research environment, combining fieldwork opportunities in the Galapagos Islands with access to state-of-the-art genomic facilities and computational resources at CAS and SFSU. The successful candidate will be part of a vibrant research community, collaborating with leading scientists and institutions in the fields of biology and conservation.

To apply:

Please submit the following documents to jachaves@sfsu.edu

- Cover letter detailing your interest in the position and motivation to join this effort.
- Curriculum Vitae (CV) including a list of publications.
- Contact information for 3 professional references.

For full consideration, please submit an application by June 1st, 2023. After this date, applications will be reviewed on a rolling basis until the position is filled.

Don't hesitate to reach out to Jaime Chaves at jachaves@sfsu.edu or to Jack Dumbacher at jdumbacher@calacademy.org

More information at galapagosresearchlab.com