

Florida International University is a top public university that drives real talent and innovation in Miami and globally. Very high research (R1) activity and high social mobility come together at FIU to uplift and accelerate learner success in a global city by focusing in the areas of environment, health, innovation, and justice. Today, FIU has two campuses and multiple centers. FIU serves a diverse student body of more than 56,000 and 290,000 Panther alumni. U.S. News and World Report places dozens of FIU programs among the best in the nation, including international business at No. 2. Washington Monthly Magazine ranks FIU among the top 20 public universities contributing to the public good.

The USDA-ARS Subtropical Horticulture Research Station (SHRS), Miami, Florida is a national leader in tropical and subtropical crop research, advancing genetics, genomics, breeding, plant pathology, entomology, and physiology. With more than 200 acres of research orchards and state-of-the-art facilities, including robotics, advanced SNP genotyping, GC-MS, confocal microscopy, and powerful bioinformatics through USDA SCINet, SHRS offers exceptional resources for cutting-edge plant sciences. The Tropical Fruits Program preserves, evaluates, and improves key crops like avocado and mango through genomic characterization, SNP discovery, trait phenotyping, GWAS, marker development, and genomics-enabled breeding. As a mission-driven USDA program, we serve U.S. stakeholders by delivering science-based solutions to critical agricultural challenges and supporting a resilient, competitive tropical fruit industry.

Postdoctoral Associate Position

Position Description

The Department of Earth and Environment at Florida International University, in collaboration with the USDA-ARS Subtropical Horticulture Research Station in Miami, invites applications for a Postdoctoral Associate position in *Bioinformatics and Plant Genomics* within the [Conservation & Sustainable Horticulture Lab](#). The successful candidate will contribute to interdisciplinary research focused on characterizing fruit crop germplasm and understanding the molecular mechanisms underlying biotic and abiotic stress tolerance in economically and ecologically important plant species, primarily avocados and mangos. Research areas include transcriptomics, genomics, gene expression analysis, metabolomics, plant hormone signaling, and the integration of molecular and physiological data to address challenges related to diseases, salinity, drought, and temperature stress. The position is available immediately, and the successful candidate is expected to begin as soon as possible. The initial appointment is for one year, with the possibility of extension. Candidates must be authorized to work in the U.S. and be eligible to work without employer sponsorship. The primary position will be based at the FIU's MMC Campus with frequent travels to SHRS.

Required Qualifications

- Experience with RNA-seq, differential gene expression analysis, functional annotation, comparative genomics and GWAS.
- Experience with analyzing large genomic, metabolomic and transcriptomic data.
- Familiarity with plant stress physiology and molecular responses to biotic and abiotic stress.
- Experience working in collaborative and multidisciplinary research environments.
- Prior involvement in grant writing and proposal development.

Responsibilities

- Conduct independent and collaborative research in bioinformatics, genomics, and plant stress biology.
- Analyze and interpret large-scale genomic, transcriptomic and metabolomic datasets.
- Integrate molecular, physiological, metabolomic, and phenotypic datasets to address research objectives.
- Prepare and publish research findings in high-impact peer-reviewed journals.
- Contribute to the development of competitive research proposals.

Application Process

Applicants should submit: 1. A cover letter describing research experience, future research interests, funding experience, and career goals. 2. A current curriculum vitae (CV). 3. Contact information for at least three professional references, and email it as a single PDF file with the subject line **"FIU-USDA Postdoctoral Position"** to akhoddam@fiu.edu. Applications will be reviewed immediately and accepted until the position is filled. For additional information regarding the position, please contact: Dr. Amir Khoddamzadeh at akhoddam@fiu.edu and Dr. G. Shad Ali at Gul.Ali@usda.gov

FIU is a State University System of Florida member, Equal Opportunity, Equal Access, and Affirmative Action Employer for individuals with disabilities and veterans. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin, disability, or protected veteran status. For inquiries regarding nondiscrimination, contact FIU's Office of Civil Rights Compliance and Accessibility at 305.348.2785 or email ocerca@fiu.edu.