



**Postdoctoral Scholar in avocado genetics and genomics  
UCR Avocado Rootstock Breeding Program  
Department of Microbiology & Plant Pathology  
University of California, Riverside (UCR)**

**\*\*\* IMPORTANT: DO NOT SUBMIT YOUR APPLICATION VIA THIS WEBSITE. PLEASE READ THE JOB ADVERTISEMENT BELOW TO LEARN HOW TO APPLY FOR THIS POSITION. \*\*\***

*The UCR avocado rootstock breeding program is recruiting for a highly motivated postdoc to work on multiple projects recently funded by the USDA and various industry partners.* The UCR breeding program is a very active one, and is recognized worldwide. The goal of the program is to develop next-generation avocado rootstocks resistant to biotic (i.e. *Phytophthora cinnamomi*) and/or abiotic stresses (i.e. salinity, drought) using traditional breeding complemented with genomic-assisted breeding approaches.

**Description.** To lead existing and new projects focused on selecting new *P. cinnamomi*-resistant rootstocks and implementing molecular breeding tools for genomic selection in avocado. The appointee will use Next-Generation Sequencing (NGS) Technology to conduct genetic association studies in avocado using the existing avocado germplasm and mapping populations by exploring different approaches. Transcriptomic analyses will also be conducted to complement the genetic association studies. The successful candidate will also explore and develop high-throughput phenotypic methods for *P. cinnamomi* resistance screening under greenhouse and field conditions. This candidate will work with and assist U.S. and international collaborators on the development of the avocado genomic database and the validation of a sensor system for high-throughput phenotyping. This position entails laboratory, greenhouse, and field work. The appointee will write progress reports and publications in a timely manner.

**Minimum qualifications**

- A Ph.D. in plant genetics, plant genomics, plant breeding, or related areas including molecular plant pathology.
- Strong publication records in the area of plant genomics or plant improvement.
- Greenhouse and field experience.
- Strong statistical analyses skills.
- Demonstrated skills and experience analyzing NGS data.
- Experience with execution of bioinformatic pipelines.
- Demonstrated experience with marker association studies in plants.
- Excellent communication and writing skills, since this position involves preparing research progress reports and assisting the PI in publications and grant writing activities.
- Work independently and in a collaborative multidisciplinary environment. The appointee will interact with a big research team of ~14 Co-Project Directors with different areas of expertise including Horticulturist, Plant Pathologist, Engineers, Bioinformaticians, Farm Advisors, and Extension Faculties.

**Preferred qualifications**

- Experience working with tree genomics and genetics will be strongly considered.
- Knowledge of Linux and computer programming languages will be a plus.
- Experience working in plant pathology/plant-microbe interactions.
- Experience working with fungal or oomycete pathogens.

UCR is a world-class research university with an exceptionally diverse undergraduate student body. Its mission is explicitly linked to providing routes to educational success for underrepresented and first-generation college students. A commitment to this mission is a preferred qualification.

**How to Apply/Contact:** The position could commence as early as November 1<sup>st</sup>, 2020 but no later than January 15<sup>th</sup>, 2021. Screening will start on September 15<sup>th</sup> and will continue until the position is filled. Salary will be competitive and commensurate with qualifications and experience. The position is renewable for up to 4 years depending upon performance. **Candidates should apply directly to Dr. Patricia Manosalva via email by submitting a single PDF file containing: cover letter and curriculum vitae (CV) indicating how you meet the minimum qualifications and listing the contact information of three references to [patricia.manosalva@ucr.edu](mailto:patricia.manosalva@ucr.edu). The subject of the email should be “Postdoctoral Scholar in avocado genetics and genomics”.**

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability, protected veteran status, or any other characteristic protected by law.