

Department of Plant Pathology and Microbiology, University of California Riverside (UCR)

Molecular Plant - *Phytophthora cinnamomi* (*Pc*) interactions, *P. cinnamomi* biology and pathogenesis, Next Generation of Sequencing (NGS), UCR Avocado Rootstock Breeding Program

A postdoctoral position is available in the Manosalva lab at UC Riverside.

The primary research goal of the Manosalva lab is elucidating the molecular and genetic basis of plant immunity against oomycete pathogens with an emphasis on *Phytophthora cinnamomi* (*Pc*) in model plants and avocado. The identification of candidate genes associated with resistance against this pathogen will be a key aspect for the generation of molecular markers for Marker Assisted Selection (MAS) to develop new avocado rootstocks resistant varieties. The postdoctoral fellow is expected to work in any of the research areas at Dr. Manosalva's lab: 1) Understanding plant - *Pc* and Solanaceae - *P. infestans* interactions using molecular, genetic, biochemical, and genomic approaches (RNAseq and SmallRNAs), 2) Identification and characterization of *Pc* proteins required for pathogen virulence. In addition, we want to understand the molecular basis of the broad host specialization of *Pc* using comparative genomics, 3) Implementation of molecular breeding tools (ie. Single Nucleotide Polymorphism (SNPs) discovery and transcriptome analyses) for a more targeted avocado genomic selection in the UCR Avocado rootstock breeding program.

Minimum qualifications: Applicants for the postdoctoral position should be within 2 years of receiving their PhD. Applicants should have research experience in molecular biology techniques, experience working with microorganisms and plants; ability to communicate effectively in English; ability to work independently and as a member of a multidisciplinary team.

Preferred qualifications: I am particularly interested in candidates that have a strong background and publication record in plant pathology/plant-microbe interactions (experience working with oomycete pathogens will be a plus). Experience with next generation of sequencing approaches and analysis of large data sets (ie. RNAseq, Small RNAs). Candidates with a proven record in these areas will be seriously considered.

Salary range: Depending on experience and qualifications \$42,840-46,344. One year contract, but renewable upon satisfactory job performance.

How to Apply / Contact: Candidates should submit a single PDF containing: cover letter, curriculum vitae, and contact information of three references to patricia.manosalva@ucr.edu. The subject of the email should be "Plant-oomycete interaction position".