

**Postdoctoral position available immediately.**

Plant Pathologist/Bacteriologist/Molecular Biologist in the Trouillas Lab, Department of Plant Pathology, UC Davis and Kearney Agricultural Research and Extension Center. <https://flotrouillas.faculty.ucdavis.edu/>

**DESCRIPTION:** The emphasis of this position will be to develop molecular methods to improve knowledge of the biology of *Pseudomonas syringae* causing bacterial blast and bacterial canker of almond in California. *Pseudomonas syringae* is a global bacterial pathogen responsible for severe diseases in many perennial crops including pome and stone fruit trees in California. The selected candidate will use molecular approaches to describe the bacterium population genetic diversity and will be develop and validate a real-time PCR assay for the specific detection and quantification of *P. syringae* almond-adapted pathogenic strains. The ultimate goals of this position will be to improve disease prediction and identify risk factors (meteorological, cultural) associated with disease occurrence in almond. This study will be conducted in collaboration with the almond industry of California, partners from the University of California Cooperative Extension network and faculty colleagues at the University of California, Riverside.

The applicant may also be asked to contribute to related, on-going projects in the laboratory that aim to improve knowledge of the biology, epidemiology, and management of additional bacterial diseases impacting fruit and nut crops in California.

**Specific Duties and Responsibilities will include:**

- Generate relevant gene sequences and conduct phylogenetic analyses.
- Develop specific molecular markers (primers) for the detection and quantification of *Pseudomonas syringae* almond-adapted pathogenic strains for use in real-time PCR.
- Determine the seasonal population dynamics of the almond pathovar(s) of *Pseudomonas syringae* in susceptible almond tissues and asymptomatic plant parts.
- Travel to field sites in various almond producing counties.
- Support decision making and develop disease management guidelines.
- Preparation of annual research report.
- Participate in grant applications.
- Analyze data, prepare manuscripts for publication, and communicate results.

**QUALIFICATION REQUIREMENTS:** Ph.D. or Doctoral degree in Plant Pathology or related Microbiological Science is required. Knowledge and experience working with bacteria and utilizing molecular techniques in microbial ecology including real-time PCR will be required.

Highly motivated individuals with a strong background in plant pathology, bacteriology, phylogeny, bioinformatics, and molecular biology are encouraged to apply. Excellent communication skills in oral and written English are essential.

**LOCATION:** The position will be with the Department of Plant Pathology, University of California, Davis, and located at the Kearney Agricultural Research and Extension Center in Parlier 30 mins away from the metropolitan Fresno area in the center of the San Joaquin Valley of California. This is the largest, off-campus Agricultural Research and Extension Center owned by the University and housing academic personnel from UC Davis, UC Riverside, and UC Berkeley. The Center is located about 3 hours away from the main UC Davis campus.

**START DATE:** June/July 2021. The full time position is for one year with possibility of extension. Applications will be accepted until position is filled.

**APPLICATION PROCEDURES:**

The following documents should be sent by email to:

Dr. Florent Trouillas,  
Associate Specialist in Cooperative Extension  
Department of Plant Pathology  
University of California, Davis  
[flotrouillas@ucanr.edu](mailto:flotrouillas@ucanr.edu)

- 1.) Curriculum Vitae.
- 2.) Cover letter stating relevant experience, career goals and research interests.
- 3.) Name of three (3) references with contact information.