

**CAREER OPPORTUNITY:** The USDA-ARS Crop Diseases, Pests, and Genetics (CDPG) Research Unit located in the beautiful San Joaquin Valley of California is searching for two permanent Research Geneticists to advance *Prunus* (almond) and *Citrus* production through transdisciplinary research and cultivar development.

**THE MISSION:** Conduct independent and team research to identify germplasm with useful characteristics such as resistance to biotic and abiotic stressors, determine genetic control of fruit quality traits, and develop genome mapping and evaluation systems to detect and utilize diverse germplasm more efficiently.



**RESEARCH OBJECTIVES:** 1) evaluate crop germplasm for desirable traits (see below), 2) implement large-scale breeding and field management for genotyping and phenotyping of breeding populations to increase genetic gain for desirable traits, 3) develop genomic research tools for use by breeders and other researchers, and 4) enhance existing industry partnerships to validate horticultural characteristics of elite accessions. Desirable traits for almonds include self-compatibility, high nut quality, shell hardness, bloom time, and resistance to pests and diseases. Desirable traits for citrus include resistance to pests, diseases, and water stress while maintaining or improving consumer taste preferences such as fruit size and flavor, rind and flesh color, rind thickness, levels of acids and sugars, and numbers of seeds.



Scientists are responsible for assigned project milestones and submission of peer-reviewed manuscripts based on the research. Applicants will be expected to develop a strong basic and/or translational research program investigating the molecular, genetic, and/or genomic basis of product improvement.



**LOCATION:** The CDPG Research Unit is housed within the 120-acre USDA-ARS San Joaquin Valley Agricultural Sciences Center in Parlier,



California. This is a commercial crop production area and part of California's agroecosystem, which includes more than 400 commodities produced in 69,400 relatively small farms distributed in a geographic mosaic. The center is located about 10 miles from the nearest freeway (CA Hwy. 99) and 22 miles from the Fresno International Airport. The Unit occupies approximately 150 m<sup>2</sup> of office, 600 m<sup>2</sup> of laboratory, and 450 m<sup>2</sup> of greenhouse space, and has available a 260-m<sup>2</sup> containment facility for regulated pests and pathogens.

For additional information, please visit us at [www.ars.usda.gov/pacific-west-area/parlier/sjvasc/cdpg/](http://www.ars.usda.gov/pacific-west-area/parlier/sjvasc/cdpg/) or contact Dr. Rodrigo Krugner (email: [Rodrigo.Krugner@usda.gov](mailto:Rodrigo.Krugner@usda.gov), phone 559-596-2887).