RESEARCH PLANT PATHOLOGIST (POSTDOC)

The U.S. Department of Agriculture, Agricultural Research Service, Crop Improvement and Protection Unit, Salinas, California, invites applications for a Postdoctoral Research position. This position is located in Salinas CA, a center for agriculture production of specialty crops that has a Mediterranean type climate. Salinas is approximately 100 miles south of San Francisco with close proximity to beautiful Monterey Bay and Big Sur.

Selectee will conduct research to identify and develop molecular diagnostic techniques for important soilborne pathogens of strawberry. The focus will be on development of rapid, field deployable assays using technology such as the isothermal technique recombinase polymerase amplification. The target pathogens will include Pythium, Verticillium, Macrophomina and other fungal pathogens (Phytophthora has already been developed). The laboratory has significant genomic information for the project, which will hopefully facilitate rapid development of markers. Additionally, we have many isolates of each pathogen so markers can be validated thoroughly to ensure sensitivity and specificity. The selectee will also collaborate with Tim Miles a former postdoctoral researcher in who is currently an assistant professor at California State University-Monterey Bay (approximately 15 miles from the USDA-ARS Station). During this time there may also be opportunities to mentor students, and teach a guest lecture on campus if there is interest. It is also anticipated that the selectee will collaborate with local and regional industries, regulatory agencies and participate in technology transfer. There are a number of other research programs ongoing in the lab that tie in with this project and will provide an opportunity for additional collaborations.

This position requires a Ph.D. in plant pathology, molecular biology, microbiology, plant breeding, plant physiology, biological sciences or a related field. Required experience would include the development of molecular biology assays (primer design, assay verification, and trouble shooting) and could include conventional PCR, real-time PCR or isothermal amplification. Knowledge of current methods and techniques used in plant pathology, genomic studies, Illumina sequencing, genetics, and/or strawberry research is preferred but not required. A little over 2 years of funding is currently available for the position but applicants will be appointed for an initial 13-month probationary period with the possibility of extension following adequate progress on the project. Salary is $68,643 per annum, GS-11/01. A comprehensive federal benefits package is available.

Applicants should send a cover letter describing qualifications, a resume or CV with names, addresses, and phone numbers of three references, college transcripts, and a one-page abstract of Ph.D. thesis to Dr. Frank Martin, USDA-ARS, 1636 E. Alisal Street, Salinas, CA 93905. (831) 755-2873, frank.martin@ars.usda.gov.

The position is open immediately until filled. USDA/ARS is an equal opportunity employer.

Recent publications related to this work:
Miles et al. 2014. Development of rapid isothermal amplification assays for detection of Phytophthora species in plant tissue. Phytopathology (First Look)