

Title: Research Assistant positions working on Citrus transformation and gene editing at Yale University

Posting Date: \*November 17, 2022\*

Two positions are currently available to work on a USDA-funded interdisciplinary project in the laboratories of Vivian Irish and Yannick Jacob at Yale University (Department of Molecular, Cellular and Developmental Biology). The U.S. citrus industry is facing unprecedented challenges from the spread of citrus greening disease (i.e Huanglongbing or HLB) in citrus-growing states like Florida, Texas and California. The overall goal of this USDA-supported project is to utilize the extensive molecular information available for HLB infected citrus to develop a large-scale population of CRISPR/Cas9 gene-edited citrus plants that can be screened for tolerance to HLB. Position 1 will focus on training in plant tissue culture and transformation and position 2 will center on training in molecular genetics. For more information on the project, please see the project website at: <https://crisprcitrus.org/> &lt;<http://crisprcitrus.org/>>.

**\*Training\***

For position 1, training will include learning basic laboratory handling of chemicals and reagents, sterile technique, tissue culture approaches, plant husbandry, database management and other relevant skills. For position 2, training will include developing skills in bioinformatics, DNA extraction, PCR, and other molecular techniques. If desired, the PGA can learn additional techniques related to the project. The PGAs will meet with the entire team on a weekly basis to discuss project progress, and are encouraged to take advantage of lectures, departmental conferences, and other opportunities to enhance their research expertise. Anticipated start date will be January 2, 2023 (or as soon as possible thereafter).

**\*Mentorship\***

The PGA will be mentored by a postdoctoral associate on a daily basis, to learn and apply skills to the project needs. The goal is to develop a degree of research independence, while learning to working closely and effectively with members of a team. In addition, the PGA will meet with the P.I. of the project on a weekly basis to discuss weekly project progress, professional growth, and longer term career goals. Additional informal mentorship will come from working closely with other lab members and collaborating with other researchers with overlapping

scientific interests.

**\*Education\***

Applicants with a recent B.A. or B.S. degree in biology, plant science, biochemistry, genomics, or other related fields are encouraged to apply. Highly motivated individuals with experimental and/or computational skills are especially welcome. The position is for 1 year (extendable for one additional year with a 2 year maximum).

To apply, please send a CV to Vivian Irish ([vivian.irish@yale.edu](mailto:vivian.irish@yale.edu)<<mailto:vivian.irish@yale.edu>>) that includes the names and complete contact information of three previous supervisors/mentors or referees. A brief cover letter describing which position interests you, your current scientific interests and career goals, and how they would fit with the research projects would be helpful. Please write "CITRUS APPLICATION" in the subject line of the email.