

The [Bartlett Lab](#) is recruiting a PhD student in plant physiology for Fall 2022 through the Horticulture and Agronomy graduate program at the University of California, Davis. The goals of this project are to identify genetic markers for drought tolerance in grape rootstocks and use root physiology traits to develop water- and cost-saving irrigation guidelines for wine grapes. The student will phenotype drought tolerance traits across a population generated from a drought tolerant/sensitive grape rootstock cross, and work with the genetic maps produced by project collaborators to identify genetic associations. The student will also use these traits to develop rootstock-specific irrigation guidelines and conduct field research with growers to evaluate the potential for water- and cost-savings in commercial vineyards. Outreach and communication with growers will be an important part of this project, and the student will be expected to share findings with stakeholders at grower meetings and extension events. The student will work with collaborators from across the UC Davis Department of Viticulture and Enology, including the [Cantu Lab](#), [McElrone Lab](#), and [Earles Lab](#). The student will be funded by a combination of research and teaching assistantships, including support from the California Department of Agriculture Specialty Crop Block Grant Program.

Qualifications

Applicants must meet the qualifications for the [Horticulture and Agronomy graduate program](#). Ideal candidates will have 1) research experience in plant biology or a related area and 2) excellent writing and quantitative skills (experience in R is a plus) and 3) be available to start working on the project as a paid research technician in summer 2022. The technician position will allow the student to jumpstart their PhD by collecting data during the 2022 growing season. Stipend and benefits will be standard for UC Davis seasonal technicians (beginning at \$20.14/hr, depending on prior experience, with [mid-level benefits](#)) and PhD students ([approx. \\$25,000/yr](#)).

Application

To start the application process, please email Megan Bartlett (mkbartlett@ucdavis.edu) the following documents by **December 10th**:

- 1) CV
- 2) Cover letter describing how candidates meet the above qualifications, including availability for a summer technician position, and the candidate's research interests and career goals
- 3) Most recent transcripts (undergraduate or graduate)
- 4) Contact information for 3 references

Top candidates will be interviewed the week of December 13th, and the selected candidate will be asked to apply to the UC Davis Horticulture and Agronomy Graduate Program by **January 5th**.