Wine grape physiology and vineyard adaptation to a changing climate

Position Summary and Purpose

Applications are invited for a 12-month, full-time (1.0 FTE) postdoctoral scholar position in the Department of Horticulture at Oregon State University (OSU) working at the Southern Oregon Research and Extension Center (SOREC). SOREC is in the heart of the beautiful Rogue Valley, a part of the Southern Oregon wine region. More details here.

The incumbent will independently conduct and manage several transdisciplinary applied research projects in the fields of plant ecophysiology, plant water relations, carbohydrate metabolism in the context of wine grape production and climate change. The incumbent will work closely with researchers at SOREC, those in the Horticulture and Food Science & Technology departments on-campus at OSU, as well as collaborate with researchers in analogous departments at Washington State University, UC-Davis, USDA-ARS, and other outside institutions. Finally, the incumbent will engage and collaborate with industry stakeholders locally and statewide.

Overall laboratory leadership and operational management – including leading work and collaborating with graduate and undergraduate students and research assistants – is expected. Specific duties will include designing and implementing applied research trials involving controlled smoke applications, spray applications, managing irrigation schedules, field data collection, sample processing and laboratory analyses, conducting outreach and demonstrations with industry, and publishing research results in peer-reviewed journals.

OSU is committed to a culture of civility, respect, and inclusivity. As an Affirmative Action/Equal Opportunity employer, OSU values diversity in our faculty and staff regardless of their self-identity; to that end, we particularly encourage applications from members of historically underrepresented racial/ethnic groups, individuals with disabilities, veterans, women, LGBTQ community members, and others who demonstrate the ability to help us achieve our vision of a diverse and inclusive community.
**Position Duties**

*60% Research.* Research duties will include but are not limited to:

- Maintain novel multi-vine smoking chamber system (in consultation with collaborating faculty research assistants and students) to apply controlled concentrations of simulated wildfire smoke.
- Coordinate with collaborating scientists and stakeholders to manage regional smoke sensor network.
- Monitor grapevine microclimate, growth/development, and physiology using various field instruments and sensors (e.g., pressure chamber and IRGAs).
- Monitoring invasive insect species with traps and coordinating with local growers, stakeholders, and research colleagues.
- Collect grapevine tissue samples for laboratory assays of size and composition using biochemical and analytical techniques (e.g., spectrophotometry and HPLC).
- Monitor and assist in wine making and analysis and collaborate with research collaborators in the main campus.

*20% Scholarship.* Publish research results as lead or co-author in peer-reviewed journals and other publications as appropriate. Present results to peers and/or industry at local, national, and international meetings.

*20% Project management, supervision, and professional development.* Plan, assign, and approve daily duties for student research assistants and laboratory technicians. Participate in training sessions to learn new skills, formal and informal, on- or off-site, as needed. Participate in group meetings, discussions, and staff events at the station. Prepare three-year strategic plan to achieve a professional goal. Plan and lead weekly lab meetings and present data in a regular systematic manner.

**Minimum Required Qualifications:**

- Ph.D. in plant physiology, horticulture, agronomy, or a closely related field of plant science within 5 years of hire.
- Demonstrated ability to contribute to scholarly activity through refereed journals and presentations at scientific meetings.
- Demonstrated excellence in lab skills.
- Demonstrated ability to collaborate, cooperate and work within a team structure.
- Demonstrated ability to work independently.
- Must be able to obtain a valid Oregon driver's license.

**Preferred Qualifications:**

- Experience in conducting applied plant ecophysiological research in perennial crops.
- Experience agricultural irrigation scheduling.
- Experience with basic grape and wine quality analyses.
- Experience working at an off-campus research station.
- Experience managing a research team.
- A demonstrable commitment to diversity and inclusiveness.
Working Conditions/Work Schedule:

- Research will be conducted at SOREC and at grower-collaborator field sites that will require travel using a SOREC vehicle.
- Work may require lifting, pushing or pulling up to 50 lbs.
- Tasks may require work outdoors in inclement weather such as extreme heat and smokey conditions.
- Must be able to walk on uneven terrain.
- Non-standard hours may be required during peak times of the field season.

Application:

Send one, combined PDF containing the following materials to Dr. Alexander Levin (alexander.levin@oregonstate.edu):

1) Cover letter outlining your interest, expertise, and technical skills relevant to this position.
2) Curriculum vitae.
3) Copies of transcripts (unofficial acceptable with application).
4) Two copies of publications – including one first author peer-reviewed paper – exemplary of your writing, knowledge, and relevant skills.
5) Contact information for at least three professional references including name, current position, email address, phone number, and relationship to you.

Department: Southern Oregon Research and Extension Center, Department of Horticulture

Location: Central Point, OR

Appointment: 100%

Basis: 12 months

Start Date: August 1, 2024

Notes on start date: Open until filled.

Notes on end date: May be renewed annually for up to three years with satisfactory performance and availability of funds.

Stipend and benefits:

Stipends depend on years of postdoctoral experience. More details can be found here.