Position Information:

- Department of Botany and Plant Pathology
- Position Title: Postdoctoral Scholar
- Job Location: Corvallis, Oregon
- Faculty Status: Post Doctorate
- Tenure Status: Fixed-Term

Position Summary:

The Department of Botany and Plant Pathology invites applications for a full-time (1.0 FTE), 12-month, fixed-term Postdoctoral Scholar position. Reappointment is at the discretion of the Department Head.

Oregon State University is to conduct critical research on boxwood blight, an emerging disease caused by Calonectria pseudonaviculata that is threatening Oregon’s $23 million boxwood industry. Due to the dry Oregon summer climate, infections by the pathogen may occur infrequently and symptoms can be mild and difficult to find, thus making detection by nursery managers and state inspection agencies difficult. As a consequence, infected plants may be accidentally shipped to other locations around the U.S. where the environment is more conducive for severe disease outbreaks. Conditions in shipping containers may also play an important role in disseminating the pathogen and predisposing plants to infection. Research is needed to develop new, more sensitive methods for detecting boxwood blight and to evaluate shipping container conditions for their potential role in infection and disease spread. The postdoctoral scholar will lead collaborative work to: 1) develop, refine, and implement detection methods for low levels of infection in nursery fields and plant samples, including molecular methods (PCR, ELISA), detection dogs, or other tactics; and 2) evaluate nursery shipping container environments for effects on disease development and disease spread. The postdoctoral scholar will also provide support in developing or refining an existing PCR method for detecting C. pseudonaviculata in plant and soil samples for an ongoing survey for boxwood blight in Oregon nurseries. This research will yield improved methods for detecting C. pseudonaviculata and a better understanding of the boxwood shipping environment, thereby decreasing the chances for accidentally moving this pathogen to new sites. The position provides a competitive stipend and health insurance. The appointment is available immediately and is for one year, with renewal contingent upon satisfactory performance and continued funding availability.

The position is located at USDA Horticultural Crops Research Laboratory in Corvallis, OR. This project is a component of a multi-state, multi-disciplinary initiative focused on mitigating the negative impact of boxwood blight disease in the United States. Greenhouses, growth chambers, molecular biology equipment, and proximity to boxwood nurseries (1-2 hour drive) are in place to support research progress. For more information about the postdoctoral scholar appointment, see http://gradschool.oregonstate.edu/postdocs
**Position Duties:**

- Develop, refine, and implement sensitive detection methods for low infection levels of *Calonectria pseudonaviculata*.
- Characterizing boxwood shipping environment and determining effects on disease development and spread.
- Using, troubleshooting, and refining qPCR or other molecular assays to detect and quantify *C. pseudonaviculata* from plant and soil samples.
- Writing manuscripts describing research results for publication in peer-reviewed scientific journals and grants for additional funding.
- Presenting results at scientific and/or grower meetings.
- Travel will be required to visit field sites and to attend conferences and/or meetings.

**Minimum/Required Qualifications:**

Recent Ph.D. (≤ 5 years) in Plant Pathology, Mycology, or related field. The successful candidate will possess:

1) Effective interpersonal skills, including ability to collaborate with a diverse team of researchers, students, and staff;
2) The ability to work independently and maintain attention to detail, meet deadlines, and prioritize competing demands;
3) Experience with traditional plant pathological techniques, including aseptic technique, pathogen isolation and inoculation methods, and environmental monitoring;
4) Experience using, troubleshooting, and refining molecular biology techniques, including DNA extraction, PCR and qPCR, and sequence analysis;
5) Excellent verbal and written communication skills, including a solid record of peer-reviewed publications.

**Preferred (Special) Qualifications:**

A demonstrable commitment to promoting and enhancing diversity

**Working Conditions / Work Schedule:**

Research will be conducted in the lab and in the field. Occasional support work may be required including paid, nonstandard working hours (e.g., evening and/or weekend work).

**Posting Detail Information:**

Number of Vacancies: 1
Anticipated Appointment Begin Date: 08/01/2020
Anticipated Appointment End Date: 
Posting Date: 06/29/2020
Closing Date: Until filled
Special Instructions to Applicants:

When applying you will be required to attach the following electronic documents:

1) A letter of application describing why you are interested in the position, your research interests and career goals, and a brief overview explaining how your research experience will help you succeed with the position duties;
2) A Curriculum Vitae;
3) The names and contact information (including email addresses) for three professional references.

For additional information please contact: Jerry Weiland at Jerry.Weiland@usda.gov or Carolyn.Scagel@usda.gov

OSU commits to inclusive excellence by advancing equity and diversity in all that we do. We are an Affirmative Action/Equal Opportunity employer, and particularly encourage applications from members of historically underrepresented racial/ethnic groups, women, individuals with disabilities, veterans, LGBTQ community members, and others who demonstrate the ability to help us achieve our vision of a diverse and inclusive community.