Position Information:

- Department: Botany and Plant Pathology
- Position Title: Postdoctoral Scholar
- Job Location: Corvallis
- Faculty Status: Post Doctorate
- Tenure Status: Fixed-Term
- Pay Method: Salary
- Recommended Full-Time Salary: $52,704

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 for an additional 12-24 months is at the discretion of the Department Head.

A postdoctoral scholar position for the design and evaluation of phytohormone sensors in cereal grain species is open in the laboratory of Dr. Samuel Leiboff. Phytohormones are plant-specific diffusible factors that act in the establishment, patterning, and maintenance of all plant tissues. Plant researchers working in advanced model systems have studied the tissue dynamics of plant hormones by generating and observing transgenic plants with fluorescent proteins driven by hormone-responsive gene promoters or synthetic hormone sensors. The applicant will be responsible for the adaptation and evaluation of published auxin, cytokinin, jasmonic acid, and gibberellic acid sensors for expression in Sorghum bicolor, Hordeum vulgare, and other cereal grains that do not have similar genetic resources. The applicant will use molecular cloning techniques to assemble constructs and evaluate them using a transient expression system such as biolistic bombardment of immature embryos, and then confirm expression by qPCR, SIM fluorescence microscopy, and/or western blotting. The applicant will use their system to study late embryogenesis, or another developmental process of their determination in planta. Research will be conducted primarily in the lab but will require propagation of germplasm/explants in the greenhouse.

The applicant is required to have a recent Ph.D. in the biological sciences related to plant developmental biology, molecular biology, genetic engineering, or biotechnology. Required skills include basic molecular biology, scar-free cloning design, experience with plant transformation, protein expression and microscopy.

The applicant will work closely with the project PI, graduate and undergraduate students, and/or technicians and will be responsible for, analyzing results, writing manuscripts, and contributing to the development of research approaches and directions. No prior postdoctoral experience is required. The position will be renewed annually, dependent upon achieving project goals. The position is based at Oregon State University, Corvallis, Oregon.

To be considered for this position, send a CV, copies of up to three relevant publications, a cover letter that includes 1) professional interests 2) general research interests and 3) dimensions of diversity important to your career, and the names and contact information for up to three references to leiboffs@oregonstate.edu. Please include “Hormone Sensing Postdoc” in the subject header. Informal
inquiries are welcome at the same address. Review of applications will begin April 20, 2020 and will continue until the position is filled.

**Position Duties:**

80% Research

- Design, acquire, synthesize, and clone hormone reporter constructs
- Transiently express constructs in grass explants
- Evaluate expression by qPCR, fluorescent microscopy, and western blot
- Use constructs to understand developmental process

20% Writing and Reporting

- Carefully catalogue construct design and clones
- Write manuscripts based on results from experiments
- Present posters and make oral presentations of research results at regional and national meetings.

**Minimum/Required Qualifications:**

Recent (no earlier than 07/2015) Ph.D. in the biological sciences related to plant developmental biology, molecular biology, genetic engineering, or biotechnology

Basic molecular biology skills, scar-free cloning design, experience with plant transformation, protein expression and microscopy

**Preferred (Special) Qualifications:**

A demonstrable commitment to promoting and enhancing diversity

**Working Conditions / Work Schedule:**

Research will be conducted in the greenhouse and lab. Occasional support in field 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: 07/01/2020
Anticipated Appointment End Date:
Posting Date: 04/19/2020
Closing Date: 06/20/2020

**Special Instructions to Applicants:**

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

1) A resume/CV; and

2) A cover letter indicating professional interests, general research interests, and dimensions of diversity important to your career.
3) You will also be required to submit the names of at least three professional references and their e-mail addresses as part of the application process.

For additional information please contact Sam Leiboff at leiboffs@oregonstate.edu

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.