







# Notice of Vacancy Position # 114567

Assistant Professor or Associate Professor
Crop Physiology
Washington State University

The Department of Crop and Soil Sciences (CSS) at Washington State University (WSU) is seeking to fill a 9-month, 80% Research-20% Academic Programs tenure-track position at the assistant or associate professor rank based on background and qualifications. The incumbent will develop an internationally recognized research program in crop physiology with a focus on fundamental aspects of cereal crop responses to biotic or abiotic environmental stress, to nitrogen, and/or to factors that improve yield. The position is part of a cluster hire initiative intended to contribute to the development of crop plants and crop management systems that support highly productive agriculture within challenging and dynamic environments. A main goal of the approach is the rapid identification of growth characteristics (phenotyping) that can be used to predict superior plant productivity. The incumbent will also work with teams of plant and soil scientists to discover and understand the physiological mechanisms and roles of genes and pathways presumed to improve crop plants with an emphasis on cereals.

## Responsibilities

The successful applicant will conduct a program of research consistent with the mission of the WSU Agricultural Research Center (<a href="http://arc.wsu.edu/">http://arc.wsu.edu/</a>). Through collaborative efforts with WSU and USDA-ARS scientists, the incumbent will conduct research to: i) evaluate and better understand to the influence of environmental stresses on crop performance; ii) characterize the physiological changes in crop plants conferred by genes (both transgenic and non-transgenic) that are known or discovered to influence water use efficiency and drought tolerance, nitrogen use efficiency, or tolerance to biotic stresses with an overarching emphasis on improving cereal crop productivity; iii) develop and employ new phenomic methods and technologies that will aid in identifying crop plants with improved performance at early stages of plant development. The incumbent is expected to aggressively pursue extramural, competitive funding, to actively advise and train graduate students, and to publish research findings in scientific journals. For the Academic Programs portion of the appointment, the incumbent will teach graduate and undergraduate courses in crop plant physiology and actively contribute to student recruitment and retention.

## Qualifications

## Required

- 1. Ph.D. in crop science, plant biology, plant physiology, crop physiology, plant biophysics or related field and an academic record and experience sufficient to achieve tenure, if applying for associate professor rank.
- 2. Outstanding record of publishing in peer-reviewed journals commensurate with career level.
- 3. Demonstrated ability to collaborate with other scientists.

## Preferred

- 1. Outstanding communication skills, both written and verbal.
- 2. Demonstrated working knowledge of molecular biology, genetics and/or genomics.
- 3. Demonstrated record of competitive grant success commensurate with career level.
- 4. Demonstrated knowledge and ability to work effectively with individuals and groups of diverse cultures, backgrounds, and ideologies.

## **DESCRIPTION OF JOB SITE:**

Background and resources: Washington State University (WSU) is a comprehensive land-grant research institution located in Pullman, with additional campuses in Spokane, the Tri-Cities (Richland, Pasco and Kennewick), and Vancouver, Washington. There are ten colleges and a graduate school. More than 18,600 undergraduate and graduate students are served by the Pullman campus. WSU offers some 245 fields of study including more than 150 majors plus many minors, options and certificate programs. Bachelor's degrees are available in all major areas, with master's and doctoral degrees available in most. Washington State University is one of the largest residential universities in the West. Pullman offers a friendly, small-town living environment. To learn more about the Pullman community, visit: <a href="www.pullmanchamber.com">www.pullmanchamber.com</a>. The university's web page (<a href="www.wsu.edu">www.wsu.edu</a>) offers information about WSU and the surrounding area.

The Department of Crop and Soil Sciences (www.css.wsu.edu) has 35 faculty members, including three endowed chairs (wheat breeding and genetics; cropping systems pathology; small grains extension and research [weed science]) and one distinguished professor (barley breeding and genetics), located at the Pullman campus and three research and extension centers throughout the state. In addition, five USDA-ARS research units (Wheat Genetics, Quality, Physiology and Disease; Land Management and Water Conservation; Root Disease and Biological Control; Grain Legume Genetics and Physiology; Western Region Plant Introduction Station) are located at WSU with scientists integrated with university departments. Facilities include the Western Wheat Quality Laboratory (www.wsu.edu/~wwql/php/index.php), the Western Regional Genotyping Laboratory, a pilot Phenomics facility, state-of-the-art plant growth facilities (www.pgf.wsu.edu/index.html), the new Orville A. Vogel Plant Bioscience Building (www.virtualtour.wsu.edu/tour-campus/biosciences/index.html), DNA and protein (http://crb.wsu.edu/corelaboratories/molecularBiologyCore.html), sequencing Murdock Metabolomics Laboratory (http://www.murdockmetabolomics.wsu.edu/), and a network of university-owned research farms representing major agroecological zones for conducting germplasm evaluations and long-term cropping systems research. The Department offers M.S. and Ph.D. degrees in Crop Science and Soil Science and contributes to college-level interdisciplinary B.S. degrees in Integrated Plant Sciences (ips.wsu.edu) and Agricultural and Food Systems (afs.wsu.edu). Faculty members in the Department also advise graduate students in the Molecular Plant Sciences program (mps.wsu.edu) as well as three other departments or academic units. According to the Chronicle of Higher Education, in 2007 WSU plant science programs were ranked 2nd in the nation; agronomy was ranked 7th (2nd in the west) (chronicle.com/stats/productivity).

#### **APPLICATION SUBMISSION PROCESS:**

Application screening will begin on August 15, 2012. To apply, visit <a href="https://www.wsujobs.com">https://www.wsujobs.com</a>. Be prepared to submit a letter of application addressing all of the required and preferred qualifications for the position and include your research interests as well as a statement of vision for teaching, a current curriculum vita, copies of official graduate transcripts, and provide the names and contact information of four people willing to serve as references. For questions about the position, contact Dr. Michael M. Neff, mmneff@wsu.edu, 509-335-7705.

WASHINGTON STATE UNIVERSITY IS AN EQUAL OPPORTUNITY/ AFFIRMATIVE ACTION EDUCATOR AND EMPLOYER. Members of ethnic minorities, women, special disabled veterans, veterans of the Vietnam-era, recently separated veterans, and other protected veterans, persons of disability and/or persons age 40 and over are encouraged to apply.

WSU is committed to excellence through diversity, has faculty friendly policies including a partner accommodation program, and a NSF ADVANCE Institutional Transformation grant (see <a href="http://www.excelinse.wsu.edu/">http://www.excelinse.wsu.edu/</a>.)

WSU employs only US citizens and lawfully authorized non-US citizens. All new employees must show employment eligibility verification as required by the U.S. Citizenship and Immigration Services.

Washington State University is committed to providing access and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation in the application process, contact Human Resource Services: 509-335-4521(v), Washington State TDD Relay Service: Voice Callers: 1-800-833-6384; TDD Callers: 1-800-833-6388, 509.-335-1259(f), or hrs@wsu.edu.