

FACULTY POSITION IN QUANTITATIVE GENETICS

Notice of Vacancy, Position #38296



Title: Assistant/Associate Professor, Quantitative Geneticist

Location: Washington State University (WSU), Pullman, WA

Salary: Competitive and commensurate with training and experience

Effective: July 1, 2013 or negotiable

The Department of Crop and Soil Sciences (CSS) at Washington State University (WSU) is seeking to fill a 9- or 12-month (negotiable), tenure-track position as assistant or associate professor in Quantitative Genetics. The incumbent will develop and lead an internationally recognized, extramurally funded, interdisciplinary and collaborative research program in quantitative genetics with a focus on the development of novel approaches to trait improvement and plant/cereal breeding, with application to improving biotic and abiotic stress tolerance, enhanced nutrient use efficiencies, nutrition, end-product quality, or biomass/bio-energy. The position capitalizes on WSU's internationally recognized and productive programs in cereal breeding, molecular genetics, and cropping systems and new positions in crop physiology, sensor technology, and other emerging areas in plant phenomics. The position will facilitate integration of statistical genetics and bioinformatics with rapidly improving genotyping and phenotyping technologies to improve crop and farm profitability. The incumbent will also work with teams of plant and soil scientists to discover and understand the roles of genes and pathways involved in the adaptation of crop plants, particularly cereals, to a changing environment.

Responsibilities: The successful applicant will conduct a program of research consistent with the mission of the WSU Agricultural Research Center (<http://arc.wsu.edu/>). Through collaborative efforts the incumbent will conduct research to: i) develop new statistical approaches to exploit advances in next generation sequencing, genotyping, and phenotyping in plant breeding and in understanding and manipulating plant genomes, ii) develop methods to estimate haplotype effects and breeding values for complex traits in plants, and iii) develop new statistical approaches to quantify genotype interaction with abiotic and biotic influences in the environment. The incumbent is expected to aggressively pursue extramural, competitive funding, to actively advise and train students at all levels, and to publish research findings in scientific journals. The Academic Programs portion of the appointment includes the development and teaching of a graduate course related to application of quantitative genetics to crop improvement. Active contribution to student recruitment and retention and participation in departmental, university, and professional service and outreach activities is also expected.

Qualifications

Required

1. Ph.D. in plant or animal science, biology, genetics, statistical genetics/genomics, or a related field at the time of hire.
2. Outstanding record of publishing in peer-reviewed journals commensurate with career level and sufficient to achieve tenure, if applying for associate professor rank.
3. Demonstrated expertise in the application of quantitative genetics to study traits of economic interest.

Preferred

1. Outstanding communication skills, both written and verbal.
2. Demonstrated working-knowledge in data-mining.
3. Demonstrated research excellence in the application of high-density marker information including next generation sequencing data to plant/ animal breeding programs.
4. Demonstrated record of competitive grant success commensurate with career level.
5. Demonstrated ability to collaborate with other scientists, including cereal breeders.
6. Demonstrated desire, ability and success in classroom teaching.
7. Demonstrated knowledge and ability to work effectively with individuals and groups of diverse cultures, backgrounds, and ideologies.

DESCRIPTION OF JOB SITE: 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. WSU 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: www.pullmanchamber.com. The university's web page (www.wsu.edu) offers information about WSU and the surrounding area.

The Department of Crop and Soil Sciences (www.css.wsu.edu) has 25 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. Cereals are the largest focused breeding and genetics effort in the department. Other plant breeding programs located at WSU include annual and woody perennial crops. In addition, six 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; and Animal Diseases) are located at WSU with scientists integrated with university departments. Facilities include the USDA-Western Wheat Quality Laboratory (www.wsu.edu/~wwql/php/index.php), state-of-the-art plant growth facilities (www.pgfw.wsu.edu/index.html), the new Orville A. Vogel Plant Bioscience Building (www.virtualtour.wsu.edu/tour-campus/biosciences/index.html), the USDA-Western Regional Small Grains Genotyping Laboratory and a network of university-owned research farms. 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 (www.ips.wsu.edu) and Agricultural and Food Systems (www.afs.wsu.edu). CSS faculty members also advise graduate students in the Molecular Plant Sciences program (www.mps.wsu.edu) as well as four other departments or academic units. According to the Chronicle of Higher Education, WSU's plant science programs were ranked 2nd in the nation and agronomy was ranked 7th (2nd in the West) in 2007. (chronicle.com/stats/productivity).

APPLICATION SUBMISSION PROCESS: Please apply online via <https://www.wsujobs.com>. The online application must include a cover letter, a current curriculum vita, copies of official graduate transcripts, and the names and contact information for four people willing to serve as references. The cover letter should address, concisely, and in distinct sections, all of the required and preferred qualifications for the position (emphasizing your areas of expertise), a statement of your research interests, and a statement of your teaching philosophy. Application screening will begin on March 25, 2013 and continue until a suitable candidate is identified. For questions about the position, contact Beverly Brantner (brantner@wsu.edu) ((509) 335-3943).

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 <http://www.excelinse.wsu.edu/>.)

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.