Ph.D. Graduate Assistantship
Application of Phenomics and Genomics in Barley Breeding
Washington State University, Pullman, WA

Description of Research Opportunity:
This project will enhance our ability to develop successful barley and quinoa cultivars by applying the new technologies of phenomics and genomics. Nutritional quality a very important trait for both of these crops, and increasing the nutritional quality will have global effect. The goal of this project is to use GWAS to identify genomic regions controlling nutritional quality in barley and quinoa. Students will use high-throughput phenotyping to evaluate nutritional quality as well as the latest genomic technology to identify regions associated improved quality. Students will then use this information to select breeding lines high end-use quality, thereby leading to new cultivars for release to growers. This assistantship also offers a great opportunity for flexibility in experiencing and exploring the broad research fields of genomics and phenomics.

Desired Qualifications:
Background related to biology, crop science, plant breeding, or genetics, with an interest in applied field based plant breeding and genetics.

Contact:
Please contact Dr. Arron Carter for more details about this opportunity. He can be reached at ahcarter@wsu.edu. He will also be at WSU’s booth at the ASA Graduate Student Forum (Table 19) on Monday, Nov. 16th, from 11:00 am to 1:00 pm and Nov. 17th from 3:00 to 4:00 pm.

Apply:
Interested persons may apply through either the Department of Crop and Soil Sciences (CSS) or the Molecular Plant Sciences (MPS) programs. Please visit CSS at http://css.wsu.edu or MPS at http://mps.wsu.edu. These websites provide details about the application requirements and links to the online application. The priority application deadline for Fall 2016 term is January 10, 2016.

Assistantship Details: Graduate assistantships are formal half-time, academic-year appointments accompanied by a summer stipend, with an annual estimated total of $19,700. Graduate assistants are also provided tuition waivers, as well comprehensive health (medical/dental) insurance. Qualifying recruits may be nominated by the program director for prestigious ARCS fellowship which provides $17,500 award in addition to the research assistantship.