

Subject: NSF REU in Plant Ecology and Genomics at Portland State

NSF Research Experience for Undergraduates (REU) in Plant Ecology and Genomics

We are looking for two enthusiastic students interested in enhancing their research skills and experience in plant ecology, genomics, and bioinformatics in the Cruzan lab at Portland State University in Portland, Oregon.

Successful applicants will become part of a research team working on dispersal and gene flow in upland prairie plants in Oregon and Washington under pressure from climate change. Dispersal is critical for colonization, gene flow, and range expansion – it is one of the most important but least understood aspects of the ecology of plants. Our research utilizes genomic techniques to detect the effects of dispersal over different spatial scales. This is an integrative research program that includes field work, wet lab preparation of genomic DNA for next-generation sequencing, bioinformatics processing of sequence data, and analysis of patterns of gene flow using GIS and landscape genetic methods. Students will be exposed to a wide range of methods and are expected to develop an independent research project within the scope of the larger research program. More information on our research is posted on our lab web site: <http://web.pdx.edu/~cruzan/index.html>.

Students will be fully supported for 10 to 12 weeks during the summer of 2016. Funding is provided from an REU supplement to our National Science Foundation Macrosystems Biology grant. Housing will be provided on campus along with a daily allowance for food and a \$500 weekly stipend. The start of the REU is negotiable with optimal start dates between May 1 and June 17.

To apply please email us an updated copy of your CV (including GPA) and a short (one page) statement of your research interests and experience, as well as goals for your education and career. Students with experience in computer programming and/or bioinformatics are encouraged to apply. Application deadline is 29 February 2016. Feel free to email us with questions.

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