

Job Title: Postdoctoral Research Associate

Date Posted: September 12th, 2016

Location: University of Massachusetts, Amherst, MA 01003 USA

Degree Required: Doctorate

Area of Study: Plant biology, evolutionary biology or related field.

Description: A postdoctoral position is available in the Bartlett lab at the University of Massachusetts Amherst to work on an NSF-funded project on stem cell homeostasis and the CLAVATA-network genes. The CLAVATA (CLV) genes encode receptor-like kinases and their protein ligands, and have conserved roles controlling stem cell (meristem) homeostasis. This role in regulating meristem biology makes the CLV-network genes central players in the development of plant form, and in the evolution of plant form under domestication. Both the CLV receptors and the CLV ligands are members of highly redundant gene families with complicated evolutionary histories, impeding the accurate assessment of CLV-network gene function. In collaboration with the Jackson (CSHL), Lippman (CSHL) and Nimchuk (UNC) labs, we are working to understand this redundancy by determining the evolutionary histories of CLV-network genes, and by determining how these genes regulate meristem homeostasis, particularly in maize floral development.

The successful applicant to this position would work primarily on a molecular evolution project, uncovering the evolutionary history of the CLV-network genes in vascular plants. The project will involve extensive phylogenetic analysis of CLV-network gene families as well as analyses of non-coding sequences controlling CLV-network gene expression. Depending on the interests and expertise of the person hired, this project could include elucidating the molecular function of CLV-network genes in maize floral development, in a reverse genetics project using CRISPR/Cas9 genome editing.

This is a benefited, full-time Postdoctoral Research Associate position. Initial appointment is for one year, reappointment beyond the first year (up to two additional years) is contingent upon job performance and availability of funding. It is expected that the appointee will work extended hours as necessary to complete individual experiments. Postdoctoral Research Associates at the University of Massachusetts are unionized and receive standard salary and benefits, depending on years of experience. Salary is subject to bargaining unit contract. UMass Amherst is home to a vibrant research community, with strengths in genomics, molecular biology, plant biology, and evolutionary biology. Opportunities exist both to learn a range of cutting edge experimental and analytical methods, and to develop new research projects. The Pioneer Valley, where the town of Amherst is located, is a great place to live and work. The area is naturally beautiful, and UMass Amherst is part of a consortium of [five colleges](#) in the area, making for an intellectually rich environment. The position is available immediately, but the start date is negotiable. Candidates must apply online by submitting a cover letter, CV, and the contact details of three references willing to provide letters of recommendation to: <http://umass.interviewexchange.com/jobofferdetails.jsp?JOBID=76408>. Questions can be addressed to Dr. Madelaine Bartlett at mbartlett@umass.edu. Review of applications will begin September 28, 2016 and continue until the position is filled. The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer of women, minorities, protected veterans, and individuals with disabilities and encourages applications from these and other protected group members.

Required Qualifications: Qualified candidates are required to have a Ph.D. in plant biology, evolutionary biology, or a similar field of study, conferred within the last six years. Expertise in molecular phylogenetics, and in the analysis of genomic data in an evolutionary context is required. A keen interest in plant development and evo-devo is essential.

Preferred Qualifications: Molecular lab experience working with DNA, RNA, and protein is preferred.

Application Instructions: Candidates must apply online by submitting a cover letter, CV, and the contact details of three references willing to provide letters of recommendation to: <http://umass.interviewexchange.com/jobofferdetails.jsp?JOBID=76408>.

Extra: Contact Lisa Barry at lisab@bio.umass.edu for more information.