Post-doctoral position, evolution of plant development

Donald Danforth Plant Science Center

The Kellogg lab at the Donald Danforth Plant Science Center has funding for a post-doc interested in the evolution of genes, genomes, and morphology in the grasses. The project will investigate controls of inflorescence development in grasses related to maize and sorghum, and is a collaborative project with the McSteen lab at University of Missouri-Columbia. We are combining studies of genomics, molecular evolution, plant development, and gene expression to translate results from maize to other cereal crops and wild grasses. Specifically, we are investigating the gene *suppressor of sessile spikelet1*, which controls spikelet pairing, a fundamental aspect of inflorescence architecture in a major clade of grasses. The project will involve studying the molecular evolution of the protein and its genomic context, expression of the gene in the model system *Setaria viridis*, and construction of transgenic plants to test hypotheses of gene regulation.

The successful candidate should have a strong background in molecular evolution, genomics, and/or evolution of development. Candidates with a Ph.D. in plant biology, with strengths in phylogenomic analysis, plant morphology, and methods of studying gene expression are strongly encouraged to apply.

More information about the Kellogg lab is at <u>kellogglab.weebly.com</u> and at http://www.danforthcenter.org/scientists-research/principal-investigators/elizabeth-kellogg.

Send resume and three references to:

Donald Danforth Plant Science Center Human Resources RE: Postdoc/Kellogg lab 975 North Warson Rd. St. Louis, MO 63132

Or by email to: careers@danforthcenter.org with "Postdoc/Kellogg Lab" in the subject line.