

## **Position Announcement**

### **Title: Research Associate – Genome Bioinformatics**

Dr. Toomajian's Molecular Population Genetics Lab  
Department of Plant Pathology  
Kansas State University, Manhattan, KS 66506  
[www.plantpath.ksu.edu](http://www.plantpath.ksu.edu)

Dr. Toomajian's Molecular Population Genetics Lab investigates genetic variation in natural populations of plants and fungi with an aim of understanding the genetics of adaptation. The lab spans the intersection of computational biology, evolution, and functional genomics. We are recruiting a postdoc to help analyze *Arabidopsis* next-generation transcriptome sequence to characterize gene expression variation. This project is laying the groundwork for studies of the genetic control and evolution of gene expression and the integration with population genomics data. The candidate will also participate in the lab's fungal population genomics projects, and training on techniques related to all projects is available.

Toomajian lab website <https://sites.google.com/site/toomajianlab/>

NSF Arabidopsis 2010 project website <http://seqr-1.biology.utah.edu/NSF2010/index.html>

The lab interacts with K-State's Ecological Genomics Institute <http://ecogen.ksu.edu/>

### **Duties and Responsibilities**

The area of emphasis for this position will be bioinformatics and genomics, and the successful candidate will demonstrate the potential to make significant contributions to ongoing plant and fungal genomics projects in the Toomajian lab. The job responsibilities include the planning, design, and execution of experiments in the Toomajian lab, the interpretation of results from these experiments, and the analysis of additional datasets from the lab. Additionally, the successful candidate may develop independent projects related to the main goals of the lab and will be expected to draft manuscripts of above research for publication and present results of research in poster and oral presentation format at various scientific conferences. This position requires excellent independent discretion and judgment and may involve some supervision of graduate and/or undergraduate students.

### **Qualifications**

#### **Required**

- PhD in a Biosciences field
- Computer programming skills (i.e., C/C++, Python, PERL, Ruby, or R)
- Familiarity with the UNIX/LINUX computer-operating environment and with databases
- Research experience in genetics and/or molecular biology
- Experience in and/or knowledge of bioinformatics and statistical analysis
- Strong quantitative skills
- Strong English communication skills

#### **Preferred**

- Previous experience and peer-reviewed publications in genomics
- Previous experience with molecular biology laboratory techniques
- Experience working with next-generation sequencing datasets and analysis tools
- Experience analyzing RNA-Seq data

- Knowledge of population genetics and/or molecular evolution
- Supervisory experience is a plus

**Application procedure:**

A complete application must include: 1) a cover letter that includes timing of availability for this position and lists your research interests in working in the lab of Dr. Toomajian; 2) a curriculum vitae; 3) a statement describing your relevant educational and research experiences and how they relate to the qualifications (necessary and preferred) of the position (2 pages maximum); 4) up to 3 reprints; and 5) arrange to have 3 professional letters of recommendation sent.

All application materials may be sent as hard copies *or* PDF documents electronically.

Hard copies should be sent to:

Department of Plant Pathology

Position # W0038204

4024 Throckmorton Plant Sciences Center

Kansas State University

Manhattan, KS 66506-5502

E-mailed applications should be sent to [plantpath@ksu.edu](mailto:plantpath@ksu.edu) Use “Genome bioinformatics position” in subject line of email to ensure your application materials are received.

Tel: 785-532-6176 for questions about the application process.

**Deadline for applications:** 02/20/2012.

Kansas State University is an equal opportunity, affirmative action employer and actively seeks diversity among its employees. Background checks required.