## **Post-Doctoral Position**

## Purdom Group

Department of Statistics, UC Berkeley www.stat.berkeley.edu/~epurdom

We invite applications for a post-doctoral researcher position in our group to work on the EPICON project. EPICON (Epigenetic Control of Drought) is a DOE-funded project spanning several labs and institutions that will be examining the epigenetic control of the sorghum plant's response to drought. The project will consist of multiple high-throughput datasets collected on the same samples over multiple time periods during the growing cycle of the plant, under both drought and regular watering conditions. The datasets collected on each sample will be diverse: mRNA-Seq, bisulfite sequencing (methylation), histone sequencing, small mRNA-Seq, proteomic mass-spectrometry, metabolomic mass-spectrometry, and metagenomic data on the bacteria found in the sorghum plant and surrounding soil.

The Purdom group will be statistically integrating these different high-throughput datasets to provide greater understanding of how these biological mechanisms work together in sorghum's response to drought, particularly biological changes and interactions that can be tested by further experimentation. The post-doctoral researcher will be responsible for the creation of a high-quality, integrative analysis that will drive further biological experiments and support biological publications. As part of this process, the post-doctoral researcher is expected to develop novel statistical or computational methods, as needed. As such, this position offers an opportunity to both create computational methods and deeply analyze complicated high throughput datasets. The post-doc will also be in direct contact with the biological scientists on the grant.

Candidates should have a PhD or equivalent degree in biostatistics, statistics, computational biology, or related fields by the start date. There are no required teaching duties. Oral and written proficiency in English is expected. Candidates are expected to have the necessary computational skills to implement methods as well as the statistical/bioinformatic skills to apply the analysis to the data in an appropriate way. Candidates should ideally have significant previous exposure to the analysis of high-throughput biological experiments (but are not required to have prior familiarity with *all* of the data types described above). Familiarity with more than one of the data types that will be generated by the EPICON project, OR experience in integrating different types of high-throughput experiments is desirable.

The starting date will be after May 1, 2016 and no later than July 1, 2016. The post-doctoral position is expected to last for at least two years, if not more (The EPICON project will run through the summer of 2020).

*TO APPLY*: send 1) your CV, 2) a written statement describing your background and how it fits with the needs of this project and outline your interest in the project, and 3) the names of two references to: **epurdom@stat.berkeley.edu**. Please clearly indicate the purpose of the email in your subject.

Applications will begin to be reviewed January 31, 2016, but applications will continue to be accepted until the position is filled.

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