**Michigan State University**

**Job Opportunity**

**Work type:** Faculty/Academic Staff
**Department:** Great Lakes Bioenergy Research Center
**Location:** East Lansing, Michigan
**Categories:** Full Time, Fixed Term Academic Staff

**Position Summary**

**Project title: Engineering Plant Cell Walls for Improved Biomass**

A position for a Research Associate is available with the Great Lakes Bioenergy Research Center (GLBRC), in the Plant Research Laboratory at Michigan State University. The position will be located in the research laboratory of Dr. Federica Brandizzi, with a starting date of December 1, 2020.

The Great Lakes Bioenergy Research Center (GLBRC) is a US Department of Energy (DOE)-funded Bioenergy Research Center led by the University of Wisconsin–Madison, with Michigan State University as a primary partner. We are developing sustainable biofuels and bioproducts made from dedicated energy crops grown on marginal lands. Our mission is simple: creating biofuels and bioproducts that are economically viable and environmentally sustainable.

Research will focus on the biology of cell wall deposition in monocot model species and crops, using multidisciplinary approaches that include proteomics, biochemistry, cellular and molecular biology, genomics, advanced live-cell imaging, and computational biology. We are interested in characterizing the mechanisms for cell wall biogenesis and differentiation during growth. The successful candidate will:

* Obtain necessary input data for simulations and interpretation of modeling results for guiding and executing experimentation for hypothesis testing
* Disseminate results through publications, reports and presentations at scientific meetings
* Work with the Brandizzi team to set up relevant objectives and design experiments

**Required Degree**

Doctorate -Cell Biology-Molecular Biology/Gene Regulation; Biochemistry or similar field of study.

**Minimum Requirements**

Candidates for the position should have:

* PhD in cell biology, molecular biology/gene regulation, or similar field;
* Record of publication in peer-reviewed journals;
* Strong background in statistics and uncertainty analysis.
* Experience with bioinformatics workflows for large scale omics analyses is necessary.

**Desired Qualifications**

Experience in plant molecular biology and biochemistry is desirable.

*Specialties:* Cell Biology - Molecular Biology/Gene Regulation; Biochemistry, Genetics, Proteomics, Crop genomics, Machine learning and Natural language processing.

***Application Instructions:***

**Please submit a cover letter, a brief description of research experience, current curriculum vitae, and the names and contact information of three references, *Application Instructions:* All applications must be submitted through the MSU Careers Website. To access this posting, please use this link:** [**https://careers.msu.edu/en-us/job/503715/research-associatefixed-term**](https://careers.msu.edu/en-us/job/503715/research-associatefixed-term)

For questions please contact Dr Federica Brandizzi (E-mail: fb@msu.edu). Review of Applications will begin immediately.