

Academic Job Description
Plant Biology Section, SIPS, Cornell University
Postdoctoral Associate in Biochemical Genomics

Position Function

This advertisement seeks to fill an open postdoctoral position in the Moghe Lab in the Plant Biology Section at Cornell University. The lab is broadly interested in understanding the mechanisms behind the emergence of plant metabolic diversity, and identifying ways to harness it for human endeavors. Our integrative research spans the fields of biochemistry, genomics, evolutionary biology, computational biology, and agricultural science. We work with a number of plant model systems such as tomato, *Brachypodium*, morning glories, and Euphorbias to address an array of questions.

This position requires a researcher with expertise in molecular biology and experimental biochemistry. The researcher will partly work on a USDA funded project on metabolite phenotyping from field-grown crops, as well as carry forward other research projects on evolution of enzyme families and characterization of metabolic pathways from agriculturally important crop species. The candidate must be proficient with molecular biochemistry methods such as cloning, RNAi/CRISPR-Cas9/overexpression mutant-based analyses, protein purification, and enzyme assays. Familiarity with LC-MS operation and data analysis as well as familiarity with bioinformatics methods will be added advantages.

The researcher will have opportunities to present at national/international conferences, attend workshops, participate in collaborative projects and enhance their teaching credentials through occasional guest lectures. Given the multi-disciplinary nature of the lab, the researcher will also have opportunities to learn different bioinformatics and mass spectrometry skills, making them highly competitive for future academic or industry careers. We work with a number of collaborators at Cornell and beyond, allowing researchers to develop wider personal networks. More information about the Moghe Lab research program can be found at <https://www.moghelab.org>.

This is a one-year term appointment, with possible extension depending on funding and performance. The expected start date is August/September 1, 2020.

Anticipated Division of Time

75% : Experimental research as described above

15% : Manuscript preparation, presentations

10% : Mentoring and professional development

Requirements

PhD in Plant Biology, Biochemistry, Genetics or other related field.

Required skills:

- Experience in handling and manipulating model or non-model plant species
- Proficiency with basic molecular biology and gene cloning techniques
- Proficiency with enzyme purification, assay and kinetics
- Experience with generating RNAi/CRISPR/over-expression lines in plants
- Excellent written and verbal communication skills
- Evidence of performing high-quality research individually and as part of a team

Preferred skills:

- Hands-on experience with LC-MS and/or NMR
- RNA-seq data analyses
- Familiarity with or motivation to learn bioinformatics

Supervision Exercised

The researcher will be expected to mentor undergraduate and/or early graduate students.

How to Apply

Interested applicants should email their CV, statement of research interests and accomplishments, copies of two publications, and a diversity statement as a single zip file to Dr. Moghe (gdm67@cornell.edu). The rationale for requesting a diversity statement and suggestions on drafting it can be found here: <https://bit.ly/2zJQ217>. Upon request, applicants should also arrange for two reference letters to be sent directly to the above email address.

About the Institution

The postdoctoral researcher will join a vibrant, internationally-renowned and highly collaborative research community in Cornell's School of Integrative Plant Science (SIPS). For more information about SIPS, visit <http://sips.cals.cornell.edu/>.

Cornell University is a member of the Ivy League. The main campus of Cornell University, which overlooks 40-mile-long Cayuga Lake, is located in the Finger Lakes region of Upstate New York, a scenic environment of spectacular lakes, waterfalls, gorges, rolling hills, farmland, vineyards, and state parks. It is an area with outstanding recreational and summer and winter sports opportunities for individuals and families. The Cornell campus itself is one of the most beautiful in the country. The Ithaca community is culturally diverse with excellent theater, music, sports, and other activities befitting a major university town, yet also has the warmth and friendliness of a small community. The area is known for its many bookstores and restaurants, an extensive walking trail system, arboretum, Laboratory of Ornithology, marina, Farmers Market, a hands-on Science Center, and art and science museums. For more information and links to individual attractions, visit <http://www.visitithaca.com/>.

Cornell University is an innovative Ivy League university and a great place to work. Cornell's inclusive community of scholars, students and staff impart an uncommon sense of larger purpose and contribute creative ideas to further the university's mission of teaching, discovery and engagement.