Two bioinformatics postdoc positions available to create and study genome-scale metabolic network models of plants

Two postdoctoral researcher positions are available immediately in the laboratory of Dr. Sue Rhee at the Carnegie Institution for Science, Department of Plant Biology, to create and analyze genome-scale metabolic flux balance models of plants. Plants are essential to life on Earth and provide us with the air, food, fuel, clothing, and shelter. Plant metabolism is the engine that enables plants to provide these things. The Rhee lab strives to uncover how plant metabolism is organized, regulated, and evolves. We have two exciting projects to understand plant metabolism through the combination of modeling and experimental testing: 1) metabolic resource allocation between plant organs (shoot, root, seed) in bioenergy and feedstock relevant plants and 2) metabolic dependence of fungal pathogens on plant hosts.

Qualified candidates must have a Ph.D. or equivalent in Bioinformatics, Computational Biology, Biology, Plant biology, Microbiology, Systems Biology, Biochemistry or a related field, and a strong background in constraint-based metabolic model reconstruction or metabolism of plants or fungi.

Candidates should be proficient in at least one programming language, preferably Python and/or Perl. Experience in using MATLAB is highly desired. The successful candidates should also have demonstrated ability for independent and critical thinking, excellent communication and teamwork skills, and enthusiasm for learning new things.

The Carnegie Institution, a private, nonprofit organization engaged in basic research and advanced education in biology, astronomy, and the earth sciences, was founded and endowed by Andrew Carnegie in 1902 and incorporated by an act of Congress in 1904. Andrew Carnegie conceived the Institution’s purpose “to encourage, in the broadest and most liberal manner, investigation, research, and discovery, and the application of knowledge to the improvement of mankind.” The Department of Plant Biology engages in basic research on the mechanisms involved in the growth and development of plants and algae. The Department of Plant Biology is co-located with the Carnegie Department of Global Ecology on a seven-acre site on the campus of Stanford University.

Please apply for either position online at:


https://jobs.carnegiescience.edu/jobs/bioinformatics-postdoc-position-to-study-plant-host-pathogen-relationships/

Inquires about the positions can be directed to Sue Rhee (srhee@carnegiescience.edu).