A bioinformatics/computational biology postdoctoral research position available to analyze biological networks in plants

A bioinformatics postdoctoral position is available immediately in the laboratory of Dr. Sue Rhee at the Carnegie Institution, Department of Plant Biology (Stanford, CA), to analyze biological networks of a model plant organism Arabidopsis thaliana. Our group, in collaboration with other labs, has generated genome-wide membrane protein interaction data, gene function association data, and metabolic pathway data in Arabidopsis. We are interested in developing and applying computational methods to analyze these data to reveal novel patterns in how genes and proteins function together. More specifically, we are interested in characterizing networks using concepts and methods from graph, information and network theories and developing novel methods for identifying functional modules and discovering relationships between them. We have a wet-lab component to experimentally verify the computational predictions.

Qualified candidates must have a Ph.D. or equivalent in Computer Science, Physics, Mathematics, Engineering, Mathematics, Biology or related field, and a strong background in algorithm development, statistics and programming. The successful candidate should have a demonstrated ability for independent and critical thinking, excellent communication and teamwork skills.

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 email a brief letter describing your research experience, plus your CV and contact information for 3 references to Sue Rhee (rhee@acoma.stanford.edu).