Postdoctoral Research Opportunities
in Systems Microbiology & Bio-Energy

Post-doctoral research positions are available at Rutgers University in the field of systems biology to investigate the metabolism of microorganisms of importance for the conversion of solar energy to fuels and biomass. The recipient will collaborate with a diverse team of scientists seeking to understand the fundamental molecular basis of energy conversion with applications to biotechnology of photoautotrophs. One of the goals involves quantitative dissection of energy metabolism and the molecular basis of the “carbon decision tree’ in microalgae for the production of hydrogen, lipids and carbohydrates. Another goal involves the application of computational tools for the simulation of metabolic networks and interpretation of experimental data from proteomic and metabolomic investigations. A third goal involves development of methods and tools for interrogation of intracellular metabolism via fluorescence, electrochemical, tandem mass spectrometric and NMR methods. This research engages collaborations with several research groups at Rutgers, including the Dismukes lab, the Falkowski lab, the Lun lab, the Bhattacharya lab, and the Dixon lab. A second project involves the application of genetic engineering to modify the cellular metabolism of cyanobacteria for faster growth and redirection of carbon into desired products. This project involves inter-institutional collaborations within the BioSolarH2 team of investigators.

The successful applicant will join an extended team of scientists and students in the Waksman Institute of Microbiology, the Department of Chemistry and Chemical Biology, the Center for Advanced Biotechnology and the Protein Data Bank. Professional development in areas of sustainable energy is provided through the Rutgers Energy Institute and the Bloustein Center for Energy, Economics and Environmental Policy.

Preferred backgrounds include mass spectrometry, bioinformatics, analytical chemistry, systems biology, microbial cellular metabolism. Exceptional opportunities are available for highly motivated candidates with strong publication records, regardless of their specific area of expertise. A list of prior publications from these projects is attached.

The position is open until filled. Posted Nov 10, 2010. Funding for up to three years is possible for a junior level (new) postdoc. Applications should include a curriculum vita, list of publications and a brief statement (less than 3 pages) of research interests and goals. On the application, please list three references that you have asked to send letters of recommendation. Reference letters should be sent to the address below. All other materials must be sent to the following address with the following subject line:

YOUR NAME_YOUR FILE NAME_METABOLOMICS PD
RutgersPDMetabolomics@waksman.rutgers.edu

Email or send reference letters only to:
Dismukes Laboratory Research Associate
c/o Judith Kopchala
Waksman Institute
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Department of Chemistry & Chemical Biology

Rutgers University is an equal opportunity/affirmative action employer committed to diversity. Women, minorities, and members of under-represented groups are encouraged to apply.

Publications:


