



Research Associate (Postdoc) positions - Bacterial Systems, Synthetic Biology

Location - University of Wisconsin-Madison, U.S.A.

Expected start date – Summer/Fall 2023.

Application deadline – Positions open until filled.

Departmental Statement

The Great Lakes Bioenergy Research Center (GLBRC, www.glbrc.org) is a cross-disciplinary and integrated research center funded by the U.S. Department of Energy (DOE) and led by the University of Wisconsin–Madison. With Michigan State University and other collaborators, GLBRC draws on the expertise of over 400 scientists to address today's greatest challenges to produce transportation fuels and high-value chemicals while reducing greenhouse gas emissions.

Within the DOE-funded Bioenergy Research Centers (BRCs) program, GLBRC collaborates with three other BRCs, each led by a DOE National Laboratory or a top university. Interactions between the centers help forge strong partnerships within the bioenergy research community in the U.S. and abroad, as well as with industry and government partners.

GLBRC is committed to fostering a diverse, equitable, and inclusive environment that welcomes and supports everyone. We believe that a diverse research community is a prerequisite to conducting the foundational innovation necessary to achieve our mission. We strongly encourage applications from candidates who foster and promote these values.

Job description

Several Postdoctoral Research Associate positions in bacterial systems/synthetic biology are available to work with Professor Patricia Kiley (Dept. of Biomolecular Chemistry), Professor Daniel Noguera (Dept. of Civil and Environmental Engineering), or Professor Tim Donohue (Dept. of Bacteriology), with opportunity for joint mentoring by other faculty members.

Within GLBRC, our groups study and engineer metabolic and regulatory pathways of industrial microbes that can convert major energy crop residues into fuels and chemicals.

We seek motivated candidates to deploy state of the art functional genomic approaches to improve metabolic engineering of bacterial hosts to convert biomass-derived components into substitutes for fuels and chemicals that are currently derived from petroleum. The candidates will be responsible for the design and assembly of microbial chassis to generate economically valuable products by combining various experimental approaches such as genomics, systems, synthetic, and computational biology, metabolism, enzymology, and genetics.

Initial appointment is available for one year with strong potential for continuation depending upon funding and performance. Salary is commensurate with experience, in accordance with the NRSA Stipend Level for Postdoctoral Trainees.





At GLBRC, we strive to provide a holistic and well-rounded experience to our postdoctoral trainees, and we recognize the importance of supporting their professional development needs to ensure their successful transition to the career of their choosing. To complement the scientific training received in their lab, postdocs at GLBRC can:

- Attend and present at scientific research symposiums and/or conferences.
- Access cross-discipline research environments and training opportunities within GLBRC and cross-BRCs.
- Benefit from integrated career and professional development support (<u>internal</u> and <u>external</u>).
- Take part in Outreach and Community Engagement opportunities.

Required degree

Ph.D. in relevant biological, computational sciences, or engineering fields.

Minimum requirements

- Strong written and oral communication skills to collaborate and communicate effectively with a team of researchers from diverse scientific backgrounds.
- Ability or interest to combine analytic, chemical, computational, molecular biology, genomic, and biochemical methods to understand and develop new microbial hosts.

Desired qualifications

- Track record of publishing research data in quality peer-review journals.
- Demonstrate creativity and independence.
- Enjoy working in a collaborative team setting.

Required application materials

Send a cover letter (up to 2 pages) describing your interest(s) in this position and relevant skills, a CV, and the name and contact information of three professional references. Applicants will be interviewed electronically and possibly in person. Applications will be reviewed immediately and be considered until these positions are filled.

Questions about the positions and application materials should be submitted to Patricia Kiley (pjkiley@wisc.edu), Dan Noguera (noguera@engr.wisc.edu), or Tim Donohue (tdonohue@bact.wisc.edu).