

Research Associate (Postdoc) – Metabolic Engineering, Microbial Genetics

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

Expected start date – As soon as possible (negotiable).

Application deadline – June 15, 2023 for full consideration. Applications will be considered on a rolling basis.

Job description

Within GLBRC, our groups aim at optimizing microbial conversion of lignocellulosic sugars to specialty biofuels. We seek a motivated candidate to apply metabolic engineering, multi-omics, and synthetic biology approaches to improve cellulosic biofuel production in yeast.

The candidate, co-mentored by GLBRC researchers [Prof. Chris Todd Hittinger](#) and [Dr. Trey Sato](#), will be responsible for independent and collaborative research projects to increase the conversion of glucose and xylose, the two most prevalent sugars in plant biomass, into isobutanol in *Saccharomyces cerevisiae*. The candidate will have access to equipment and resources within our Center for adaptive laboratory evolution, genome sequencing, CRISPR/Cas9 engineering, strain libraries, industrially relevant lignocellulosic hydrolysates, and metabolomic tools.

Required degree

Ph.D. with strong background in molecular genetics, microbiology, metabolic engineering, and/or synthetic biology. Candidate must be **within 2 years of PhD graduation** and Ph.D. must be granted by the start date.

Minimum requirements

- Strong written and oral communication skills to collaborate and communicate effectively with a team of researchers from diverse scientific backgrounds.

Desired qualifications

- Experience in analyzing Illumina sequencing data, bioinformatics, machine learning, and CRISPR/Cas9 genome engineering.

Required application materials

Send a CV, any manuscript p/reprints, and the name and contact information of three professional references to Chris Hittinger (chittinger@wisc.edu) and Trey Sato (thsato@glbrc.wisc.edu). Specifically mention in your email the reasons you are interested in this position.

Applicants will be interviewed electronically and possibly in person. Applications will be reviewed immediately and be considered until the position is filled.

Additional information

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 [NIH 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 ([internal](#) and [external](#)).
- Take part in Outreach and Community Engagement opportunities.

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.