

A postdoctoral research associate position is available to work with the Great Lakes Bioenergy Research Center (GLBRC; <https://www.glbrc.org/>) collaborators Daniel Noguera ([https://directory.engr.wisc.edu/cee/Faculty/Noguera\\_Daniel/](https://directory.engr.wisc.edu/cee/Faculty/Noguera_Daniel/)) and Tim Donohue ([https://bact.wisc.edu/people\\_profile.php?t=rf&p=tdonohue](https://bact.wisc.edu/people_profile.php?t=rf&p=tdonohue)). The GLBRC is one of four national bioenergy research centers, funded by the U.S. Department of Energy. The position provides multiple opportunities for interdisciplinary collaborations with GLBRC scientists at the University of Wisconsin-Madison, Michigan State University and other partners.

The research focuses on understanding microbial pathways involved in production of novel lipids and other chemicals from fermentation residue. We seek to mine bacterial genomes to analyze, decipher and assemble bacterial hosts or microbiome communities capable of converting the organics that remain in fermentation residue into valuable chemicals that are currently derived from petroleum. The research includes the combined use of genomics, systems, synthetic and computational biology, along with metabolism, enzymology and genetics to assemble novel microbial chassis organisms that industry could use to generate valuable chemicals by single species, natural or synthetic microbiomes from fermentation waste. Publications linked to the above faculty websites can be reviewed to illustrate the projects available in this position.

The successful candidate will have a **Ph. D. in relevant biological, computational sciences, or engineering field**, and will work effectively in a team research setting. The position will include some combination of computational and experimental work along with the analysis of genomic data from in vitro assays, batch cultures or steady state fermentation reactors. **Required expertise** includes ability to combine analytic, chemical, computational and biochemical methods to the production of valuable chemicals from lignin-derived aromatics. Experience in quantitative methods, programming or modeling of microbial activities is desirable. Strong candidates will also have a track record of publication in quality peer-review journals, creativity, independence, and excellent communication skills, both written and oral.

The position is renewable annually, contingent upon funding and/or job performance. Opportunities for the candidate include mentoring by dedicated faculty and staff in the center along with the ability for the candidate to mentor junior scientists, give oral presentations and work as part of cross-disciplinary teams. A start date in Spring to Summer 2018 is preferred, but alternative timelines will be considered and should be noted in the cover letter. All questions about the position and application materials should be submitted to Tim Donohue ([tdonohue@bact.wisc.edu](mailto:tdonohue@bact.wisc.edu)) or Dan Noguera ([noguera@engr.wisc.edu](mailto:noguera@engr.wisc.edu)). Applicants should expect to be interviewed electronically and possibly in in person. Applications will be considered until this training position is filled.

Applications should consist of a single pdf file that includes:

- a brief cover letter (no more than 2 pages) that highlights past research accomplishments, how your previous experience will benefit this project and how this project aligns with your future research goals;
- a curriculum vitae;
- names and contact information for three references.
- review of application materials will begin immediately.

UW-Madison is an affirmative action/equal opportunity employer.