



Great Lakes Bioenergy Research Center



Postdoctoral Training Opportunities Creating the 21st-Century Bioeconomy

The Great Lakes Bioenergy Research Center is pioneering the next generation of biotechnology—converting plant materials into fuels, chemicals, and everyday products. Created in 2007 by the U.S. Department of Energy, we are a cross-disciplinary research center led by the University of Wisconsin–Madison. With Michigan State University and other collaborators, our scientists, engineers, students, and staff are building the scientific foundation for a new bioeconomy that creates value from agricultural waste and dedicated energy crops grown on non-food lands.

Three Research Pillars

- **Sustainable Bioenergy Cropping Systems:** We engineer resilient energy crops that thrive on non-food lands while maximizing their conversion potential into valuable products.
- **Sustainable Biomass Conversion:** Our teams design microorganisms that efficiently convert plant materials into biofuels, chemicals, and specialty products.
- **Sustainable Field-to-Product Optimization:** We use machine learning to optimize the entire pipeline from field to final product, ensuring economic viability.



Real-World Research Impact

Our research drives real-world innovation across multiple sectors. GLBRC discoveries span from novel plant engineering approaches to advanced microbial conversion methods, with applications in chemicals, materials, pharmaceuticals, and energy. Our comprehensive research portfolio consistently generates high-impact publications, patents, and commercial opportunities that translate scientific breakthroughs into tangible benefits for society.

World-Class Resources

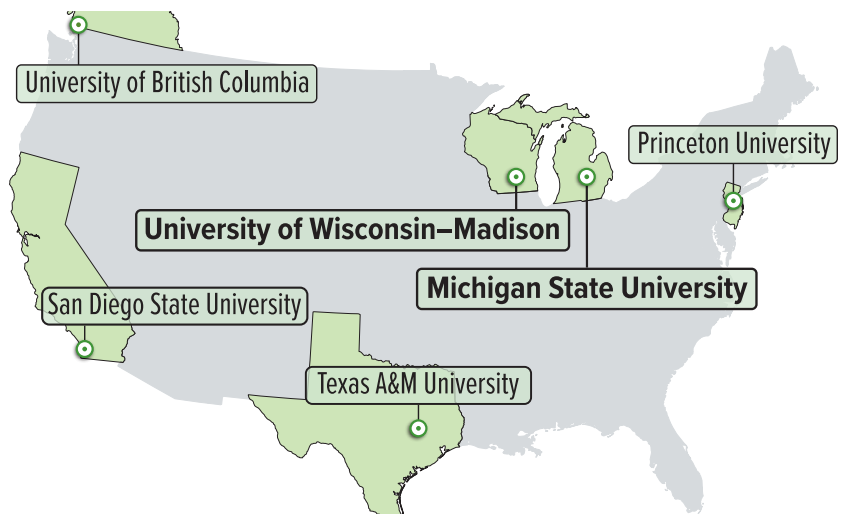
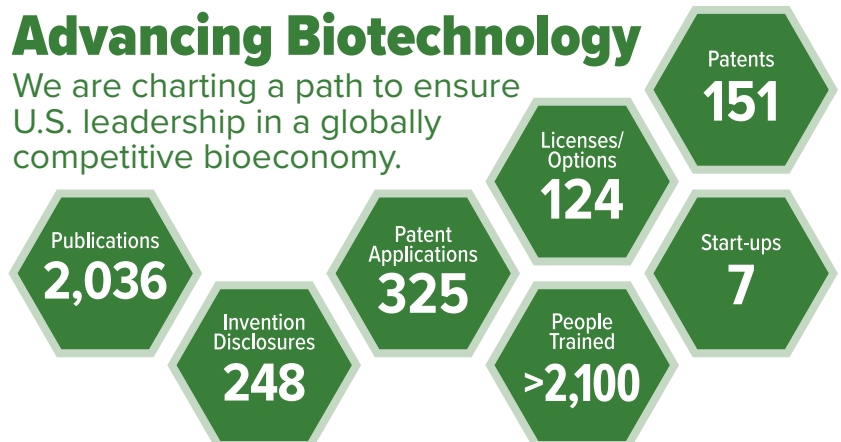
Based at UW–Madison and MSU, GLBRC provides access to state-of-the-art facilities, >\$2.9 billion in combined research infrastructure, and partnerships with national laboratories. Our technology transfer program has generated millions in revenue and launched successful startups.

Join Our Research Community

Join a vibrant community of postdocs, graduate students, staff, and leading faculty working at the intersection of biology, engineering, and computation. You'll contribute to research that creates new industries, supports rural communities, and establishes America as a leader in biotechnology innovation.

Advancing Biotechnology

We are charting a path to ensure U.S. leadership in a globally competitive bioeconomy.



GLBRC is based at the University of Wisconsin–Madison but benefits from active research partnerships with universities across North America.

Accelerating Your Career in Science

When you join GLBRC, you gain access to a support system designed to build not just your scientific expertise, but your leadership, communication, and management skills. We have successfully trained over 350 postdoctoral scientists, transitioning them into high-impact careers across government, startups, industry, and top-tier universities.

Interdisciplinary Science & Resources

Break out of the traditional lab model. At GLBRC, you will collaborate across nine research teams spanning six institutions, working at the intersection of biology, engineering, chemistry, computation, and artificial intelligence.

- **World-Class Investigators:** Receive guidance from our network of 300+ faculty and scientists who are leaders in their fields.
- **Unrivaled Access:** Utilize nine dedicated GLBRC core facilities, plus access to over 150 cores at the University of Wisconsin–Madison, 50 at Michigan State University, and dedicated access to National Lab facilities.
- **Communities of Practice:** Join specialized research communities focused on bacterial engineering, bioinformatics, lignin, crop engineering, yeast, and plant/microbial interactions.
- **Keegstra Bioenergy Research Fellowship Program:** Undertake pioneering interdisciplinary postdoctoral research with two dedicated mentors and a generous stipend.

Professional Development

GLBRC and its home institutions provide a structured approach to your professional growth, ensuring you are ready for the job market.

- **Personalized Coaching:** Benefit from 1:1 career coaching, goal setting, and individual development plans tailored to your trajectory.
- **Comprehensive Skill Building:** Go beyond the bench with dedicated training in grant writing, teaching, mentoring, public speaking, and science communication.
- **Mentoring Program:** Participate in the GLBRC Mentorship Program to expand your network, explore potential career paths, and receive guidance outside your immediate PI.

Leadership & Innovation

We empower postdocs to lead initiatives and translate research into reality.

- **Entrepreneurship:** We support your transition from lab to market with entrepreneurship training, competition support, and direct interaction with technology transfer and accelerator programs.
- **Leadership Opportunities:** Gain experience by leading Communities of Practice, serving as a recruitment ambassador, or organizing center-wide events.
- **Effective Communication:** Refine your ability to communicate complex science to all audiences through posters and talks at high profile scientific conferences and outreach activities in our many established community programs.

Our Primary Research Disciplines

We recruit experts from diverse backgrounds to solve complex bioenergy challenges:

- Agronomy
- Artificial Intelligence/Machine Learning
- Bacteriology
- Biochemistry
- Bioinformatics
- Biological Engineering
- Cell Biology
- Chemistry & Chemical Engineering
- Crop Sciences
- Ecology
- Environmental Sciences
- Genetics
- Genomics
- Life Cycle Assessment
- Metabolomics
- Microbiology
- Microbiome
- Molecular Biology
- Plant Biology
- Resilient Agriculture
- Soil Sciences
- Synthetic Biology
- Technoeconomic Analysis

A Supportive Community

Your wellbeing is a priority. To ensure you thrive personally and professionally, we have internal GLBRC Human Resources professionals and our home institutions provide Ombuds Offices, disability support, Offices of Postdoctoral Affairs and more.

Ready to Make an Impact?

If you want to learn more and explore open opportunities, contact us at workforce@energy.wisc.edu.

