

5 Postdoctoral Positions in Synthetic Biology & Metabolic Engineering Available Immediately

(Blenner Group – University of Delaware)

Up to five postdoctoral positions are available immediately in Dr. Mark Blenner's group. The Blenner Research Group is moving to the Department of Chemical & Biomolecular Engineering (CBE) at the University of Delaware (UD) and will be located in the new Ammon Pinizzotto Biopharmaceutical Innovation Center at the STAR Campus.

The first position involves a holistic view of **protein expression problems** to overcome limitations in making **natural products** in yeast. Postdoctoral researchers will have the opportunity to do yeast fermentation, synthetic biology, metabolic engineering, transcriptomics, bioinformatics, natural products analytical chemistry, and working on a team with at least two PhD students. This position is funded by the NIH and has a term of two to three years.

The second position involves metabolic engineering of **oleaginous yeast** to make **oleochemicals and materials from waste**-derived substrates. Postdoctoral researchers will have the opportunity to do yeast fermentation, synthetic biology, metabolic engineering, transcriptomics, bioinformatics, oleochemical and materials analytical chemistry. This position is funded by NASA and has a term of two to three years.

The third position involves **engineering yeast to use plastic waste-derived substrates** and produce useful products. Postdoctoral researchers will have the opportunity to do yeast fermentation, synthetic biology, metabolic engineering, and nutritional analytical chemistry. This position works collaboratively with another postdoc in the lab, and team members at Iowa State and Sandia National Lab. This position is funded by DARPA and has a term of two to three years.

The fourth position involves **understanding effect of metabolic stress on genetic drift** and its impact on **strain stability throughout scaleup**. Postdoctoral researchers will have the opportunity to do yeast fermentation, synthetic biology, functional genomics, proteomics, transcriptomics and will collaborate with Washington University at St. Louis and multiple Dept. of Energy Labs including Lawrence Berkeley National Lab, Pacific Northwest National Lab, the Joint Genome Institute and the Agile Biofoundry. This position has a term of two years.

The fifth position involves **engineering the indoor microbiome to detect and respond to airborne threats**. Postdoctoral researchers will have the opportunity to do synthetic biology, microbial ecology, functional genomics, transcriptomics and bioinformatics. This position is funded by DARPA and has a term of two to three years.

If interested, please email blenner@udel.edu with a CV and the names of two potential references.

While specific skills relevant to the projects are beneficial, a passion for engineering biological systems is more important. Postdoctoral fellows with diverse career aspirations are encouraged to apply. The Blenner Research Group fosters a supportive and inclusive environment where differences are celebrated.

The CBE department at UD is perennially ranked in the top 10. It is home to world-class research institutes, such as the National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL), the Delaware Biotechnology Institute (DBI), and the Data Science Institute (DSI). UD has positioned itself at the forefront of biomanufacturing and synthetic biology. Located in Newark, Delaware, UD is just outside of Philadelphia, and centrally located two hours from Washington DC and New York City.

