Postdoctoral Positions Available for Reimagining Protein Manufacturing

A collaboration between Michael Jewett at Northwestern University and Jim Swartz at Stanford University

Multiple postdoctoral fellowships are available with competitive salary and travel support in the Jewett and Swartz laboratories at Northwestern University and Stanford University. This is an opportunity to learn and create groundbreaking technologies with the potential to reshape the global biotechnology industry.

Proteins provide important diagnostics and treatments for a broad range of diseases. However, the long timeline for centralized manufacturing (and the expense of such facilities) limits development and deployment of biotherapies and other biotechnologies. Cell-free protein synthesis (CFPS) systems—protein production using cell extracts derived from living cells—offer a compelling solution to these problems, but several barriers have prevented wide adoption of CFPS. In this well-funded program, we seek to industrialize CFPS systems toward unprecedented productivities and low cost. For example, extracts will be dried for long-term, non-refrigerated storage and transportation so they can be re-activated at the point-of-use simply by adding water. This will open an entirely new era of distributed manufacturing.

We seek highly motivated individuals who will enjoy a powerful, interdisciplinary, and creative team environment. Due to the interdisciplinary nature of this research, a solid experimental background in biochemistry, synthetic biology, metabolic engineering, protein expression, and/or molecular biology is required. Successful candidates should have at least two publications (or pre-prints), be able to communicate and work with collaborators (students, postdocs, and faculty), and be able to carry out research and develop ideas independently.

Interested applicants should send a cover letter stating their career objectives, research interests, and ideal scenario for a postdoc, together with CV, including names and contact details of three references to Prof. Jewett (mjewett@northwestern.edu) and Prof. Swartz (jswartz@stanford.edu).