Post Doc in Adaptive Laboratory Evolution, Omics Data Generation and Systems Biology for Bioproduction

The Systems Biology Research Group at the University of California San Diego is seeking a Post-Doctoral Fellow to join the Adaptive Laboratory Evolution and Omics Analysis teams at UCSD for work on the overall aims of the Joint BioEnergy Institute (JBEI) (Project Description). The project will involve (1) utilizing adaptive laboratory evolution for strain optimization and construction for various engineered and wild type cells to meet bioproduction goals, and (2) generating omics data on engineered and evolved strains to uncover the Transcriptional Regulatory Network (TRN) and responses to engineering perturbations in conjunction with our modeling team.

Qualifications

Candidates should be trained in microbiology techniques for culturing bacteria, performing phenotypic assays, and in genetic manipulation. Candidates should also be trained in omics data generation techniques, including DNA and RNA sequencing, and have skills associated with bioinformatics analysis. Ideal candidates should also ideally have experience with fermentation and process control systems.

The preferred candidate has experience in:

- Strain or Metabolic Engineering
- Performing phenotypic assays
- Genome editing techniques
- Generation and analysis of omics data including DNAseq and RNAseq
- Running microbial fermentations, and if not, demonstrate the ability to acquire such skill within a reasonably short period of appointment.
- Control system interfaces and data analysis / export
- Preparing microbiological media, buffers and other solutions

Additionally the candidate must be:

- Having advanced computer skills and comfortable working with Matlab and Microsoft Office programs (Word, Excel and Outlook)
- Able to efficiently communicate with other members of an international research team in English
- Interested in learning new laboratory techniques
- Flexible in availability outside normal working hours including frequent weekend tasks

If you are interested please contact Adam Feist (afeist@ucsd.edu), directly with your CV.