

Postdoctoral Associate Position

Weiss and Lu Labs

MIT Synthetic Biology Center
Dept. of Biological Engineering
500 Technology Square
Cambridge, MA 02139 USA

Job Description:

POSTDOCTORAL ASSOCIATE, Biological Engineering - MIT Synthetic Biology Center, Ron Weiss and Tim Lu Labs, to join a team of researchers in a sponsored highly collaborative research program on new synthetic biology strategies for the assembly, transfer, and multiple site-specific integration of large heterologous DNA constructs into the genomes of mammalian cells used for producing monoclonal antibodies and other proteins at high expression levels. Constitutive, inducible, and dynamically self-regulatable embodiments will be constructed and tested that will enable programmable synthetic genetic circuits useful for optimizing therapeutic protein yield and quality. Will help design assays for genetic stability of cell clone lines and collect data using flow cytometry, RT-qPCR, inverse PCR, chromosomal karyotyping, next-generation DNA and RNA sequencing, ELISA, and other analytic technologies; communicate results verbally and in writing; draft IP disclosures; and present to sponsor and to the scientific community through talks and publications. Other responsibilities include molecular cloning, mammalian cell culture, transfection, flow cytometry, data analysis and presentation, and other tasks as needed.

Job Requirements:

REQUIRED: Ph.D. in biological sciences, computer science, engineering, physics, math, or related field; experience in more than one of the following: mammalian cell culture, large scale DNA assembly and characterization, eukaryotic genome-editing using ZFN, TALE and CRISPR/Cas9 technologies, next-generation sequencing and bioinformatics, computational methods and tools for analysis and statistics; biological training and experience in one or more of the following: synthetic biology circuit design, molecular biology, protein engineering, immunology, or cell biology; strong organizational, analytical, problem solving, interpersonal, and communication skills; and ability to work as part of a team and on individual projects. Seek a highly motivated entrepreneur with excellent documentation skills who is able to contribute in a multi-disciplinary team setting, prioritize and perform multiple tasks in a dynamic environment, and execute detailed technical protocols meticulously. Specific skills in molecular biology, genome editing and programming ideal.

This position is posted online at <http://jobs.mit.edu/> as Job ID: 10795 . Please apply online and send any questions to Nevin Summers, Executive Director, MIT Synthetic Biology Center, nsummers@mit.edu .

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