



## Postdoctoral Positions Available

### Lucks Laboratory, Center for Synthetic Biology, Northwestern University

We are seeking a creative and enthusiastic postdoctoral researcher to lead a new project on AI-directed engineering of cell-free biosensors using automated wet-lab approaches as part of the [AI-Driven, Rapid, Experimental Automation Machine \(DREAM\) Cloud Lab](#) for Protein Engineering at Northwestern University. Our laboratory has pioneered the development of [cell-free biosensor technologies](#) that can detect compounds in applications including environmental contaminant detection, food quality measurement, agricultural compound detection and human health diagnostics. In this project we are taking the next step to develop high-throughput protein biosensor engineering to identify biosensors for an expanded range of applications, and optimize them for field use.

**What we are looking for:** We seek highly motivated individuals that can lead the development of an AI-directed design-build-test-learn workflow to design and optimize protein transcription factors using cell-free systems. The post-doc will work in the Lucks Lab and as part of a larger team in the Center for Synthetic Biology including group members from the Tullman-Ercek, Karim, Leonard, and Rocklin labs, as well as AI methods developers. The post-doc will also work closely with DREAM wet-lab and data scientists based in the [Center for Synthetic Biology Foundry](#). Candidates that have experience in cell-free systems, biosensors, AI/ML engineering approaches, and high-throughput liquid handling assay development and automation are particularly sought after.

**Who we are:** The Lucks Lab is a world leader in cell-free synthetic biology and biosensor engineering. It is an integral part of Northwestern University, one of the world's premier research universities, and the Center for Synthetic Biology, one of the largest concentrations of synthetic biology research in the world. Northwestern University is located along the southwestern shore of Lake Michigan in Evanston, IL, and provides researchers exceptional opportunities for intellectual, personal, and professional growth in a setting enhanced by the richness of Chicago. The Lucks Lab emphasizes strong mentoring and leadership training, and many members have gone on to launch independent academic careers and careers in the biotech industry.

**To Apply:** Interested applicants should send a cover letter detailing their career ambitions and goals for a successful postdoc, along with their complete CV and the names of three references to [csb@northwestern.edu](mailto:csb@northwestern.edu) with the subject heading "Lucks Lab Post-Doctoral Application: AI Biosensors". Please note that letters of reference are not required at this time, and we will seek your permission before contacting your references.

**Start Date:** September 2026.

**For more information:**  
[syntheticbiology.northwestern.edu/](http://syntheticbiology.northwestern.edu/)

Please visit <http://luckslab.org> , <https://dREAMbio.ai> and [dREAMbio.ai](https://dREAMbio.ai)

