The University of Texas at Austin
Electrical and Computer Engineering
Cockrell School of Engineering

The University of Texas at Austin
Electrical and Computer Engineering
2501 Speedway, C0803
Austin, TX 78712

The Soloveichik group is seeking a Postdoctoral Fellow to work on the design principles of synthetic and natural DNA(RNA) networks, and the experimental construction of such networks in the wet lab. The field of Molecular Programming works with information-bearing molecules like DNA and RNA to create artificial biomolecular programs, and wet-lab experiments are combined with new mathematical abstractions that help guide programming of molecular function.

Our group consists of interdisciplinary researchers interested in unconventional computation broadly defined (such as chemical, analog, and quantum). Our research combines theory such as defining models of computation and proving theorems, with laboratory experiments such as making DNA-only systems that compute. Successful applicants should have multi-disciplinary interests in addition to proficiency in biochemical laboratory experiments. The researcher will work closely with the PI and other members of the research group but is expected to be highly self-motivated.

You are encouraged to look at some of our publications to see examples of the work we do and our approach; please explain why you think you would be a good match in your Cover Letter / Letter of Interest.

This is a temporary training position that can be renewed annually, for a maximum of five years, based upon performance review, progress towards research goals, and continuation of funding.

Responsibilities

- Work under the guidance of the PI to design and implement experimental studies, develop the relevant theory, write and edit manuscripts, and give presentations. (60%)
- Maintenance of lab equipment, purchasing of supplies, ensuring adherence to safety regulations. (20%)
- Mentor trainees and junior lab members. (20%)

Required Qualifications

- Prior experience in general wet-lab experimental techniques (e.g., PCR, electrophoresis, etc)
- Demonstrated record of peer-reviewed publications
- Ability to work and communicate effectively in a diverse team environment; excellent communication skills in both written and spoken English

Salary Range

$60,000 + depending on qualifications

Sincerely,
David Soloveichik, PhD
Associate Professor, Electrical and Computer Engineering
The University of Texas at Austin
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