Overview
Silklab is an interdisciplinary research lab that investigates materials at the interface between technology and life sciences. The laboratory’s goal is to provide innovation and solutions of global societal impact through advances in naturally derived, abundant, sustainable materials. The core research is based on advanced material processing, prototyping, and manufacturing based on structural proteins, with specific focus on silk and other biomaterials. Over the past decade, the laboratory has pioneered biomaterials-based applications in edible and implantable electronics, food preservation, energy harvesting, wearable sensors, compostable technology, distributed environmental sensing, medical devices and therapeutics, biospecimen stabilization, advanced medical diagnostics, and structural components.

Silklab is seeking candidates for a Postdoctoral Scholar position focused on the development of silk-based sensing platforms. The opportunity involves a collaboration project with an industrial partner involved with global consumer electronics and technology. Candidates will be part of an interdisciplinary team with expertise in technological applications of biomaterials and with opportunity for professional development and growth.

What you’ll do
This is a grant funded position and is not eligible for severance pay.

Principal duties and essential functions:
- Works towards the development of silk-based colorimetric biosensors and writes corresponding scientific papers and reports as needed.
- Assists in the setup of new procedures, modification of existing procedures for the fabrication of a broad library of sensors.
- Oversees the research efforts of graduate and undergraduate students to facilitate their research.
- Maintains collaborative team relationships with peers and colleagues to effectively contribute to the working group’s achievement of goals, and helps fostering a positive work environment.
- Performs other similar and related duties as required or directed.

What we are looking for
Basic Requirements:
- PhD degree in chemistry, biomedical engineering, chemical engineering, materials engineering, electrical engineering or related field.
- Experience in analytical chemistry, microfluidics, developing and prototyping sensing devices.
- Must be able to work accurately, effectively, within a team and independently under pressure and to meet deadlines. Ability to manage work with minimal supervision.
- Excellent verbal and written communication skills; highly self-motivated.
- Ability to multi-task and work on multiple projects simultaneously.
- Demonstrated organizational skills and ability to pay close attention to detail.
- Motivation to learn and grow in scientific expertise.
- Ability to trouble-shoot technical issues.
- Ability to plan and prioritize work while responding flexibly to rapidly changing priorities.

Preferred Qualifications:
- Experience in colorimetric sensors, enzymatic sensors, electrochemistry.
- Experience in bio-silk and biomaterials.

How to apply:
Please send a single PDF to Stacie Simon at stacie.simon@tufts.edu with:
- A cover letter stating your scientific background, interest, and career goals (1.5 pages maximum)
- CV including publications
- Contact details and/or reference letters from three referees

An employee in this position must complete all appropriate background checks at the time of hire, promotion, or transfer. Equal Opportunity Employer - minority/females/veterans/disability/sexual orientation/gender identity.