


# Potentiometric Probes



September 22, 2023

Potentiometric Probes is recruiting for the following position: Biomedical Engineer I

Exciting opportunity to work in a startup company at the UConn Health campus technology incubator (<https://innovation.uconn.edu/>) in Farmington, Connecticut. Potentiometric Probes, LLC develops fluorescent sensors of electrical activity in cells and tissues with applications in neuroscience and cardiac research, as well as drug discovery, and toxicology screening. The company was recently awarded a phase II SBIR grant from the National Institutes of Health (NIH) to advance their voltage sensor technologies. See <https://www.linkedin.com/company/potentiometricprobes/> for more information on this company and the technology.

In the role of Biomedical Engineer I, you will help design and carry out experiments using voltage-sensitive dye technology being developed at the company and supported by NIH grant funding. You will implement and optimize techniques for characterizing dyes including patch clamp electrophysiology and custom imaging hardware. You will be responsible for validating and formalizing assays including cardiac toxicity screening in mouse and human cell culture systems using optical voltage recordings.

#### Responsibilities:

- Cell culture including preparation of primary cardiomyocyte culture preparation
- Validation and development of protocols for end users and demonstration materials
- Electrophysiology using patch clamp technique for dye testing
- Fluorescence imaging with MATLAB control, Wavesurfer, ScanImage.
- Make recommendations for new research projects based on test results, write up the experimental findings for patent applications and journal publications

#### Skills and Experience:

- Ph.D., MS, or BS degree in Biomedical Engineering, Cell Biology, Neuroscience, etc. with relevant experience in fluorescence imaging and electrophysiology
- Understanding of electrical circuits and electrical signaling of excitable cells including neurons and cardiomyocytes
- Experience with cell culture with experience of primary cell culture, of neurons or cardiomyocytes preferred
- Experience with MATLAB along with data acquisition and control with National Instruments products preferred
- Experience with scientific cameras, as well as laser, and LED light sources, and applications in custom microscopy preferred

Salary: \$60,000 to \$100,000/year depending on experience.

Duration: two years, with possibility of extension.

Work Authorization: must be able to work legally in the US. Visa (TN, H1B) sponsoring possible.

Contact: Please send a CV to [info@potentiometricprobes.com](mailto:info@potentiometricprobes.com) if interested or contact us for more information.

Sincerely,

A handwritten signature in black ink, appearing to read "Corey Acker". The signature is written in a cursive, flowing style.

Corey Acker, CEO