

Part-Time Job

Manufacturing ultrasound-sensitive drug carriers for targeted neuronal circuit manipulation in the Neurotechnology group

Project

The Neurotechnology lab focuses on several promising technologies aimed towards understanding brain function and developing therapies for brain diseases, including: development of next-generation flexible electrodes, high-resolution neuronal circuit connectivity mapping, and ultrasound-based target drug delivery. We are seeking the help of a talented and motivated young scientist to aide in these projects, particularly the production of critical ultrasound-sensitive drug carriers that are currently being used for circuit-specific manipulation of pathological brain circuits involved in brain disorders.

Work Description

We are seeking a student at **bachelor's or master's level** for manufacturing novel ultrasound-based drug carriers. If the student has additional time, she/he may also aide in the fabrication of flexible electrodes, processing of neuronal tissue, and help with general tasks in the lab. The student should be motivated and curious about these topics, as his/her contributions will be critical to several projects. Intellectual contributions towards advancing these projects are welcomed.

Requirements

- Background in molecular biology/neuroscience OR chemistry/chemical engineering, is strongly preferred;
- Previous lab work, particularly wet lab skills, is preferable.
- Meticulous and reliable working habit.

Percentage, hours and Duration

Up to 35% / 15hrs per week employment (hourly rates) for at least 6 months with option for up to 1 year. Working hours are flexible but depending on experimental demand and timing.

Optional

LTK-1 animal training course or a FELASA-accredited equivalent. It would also allow the student to learn basic in vivo rodent surgery skills for stereotaxic injections and/or conducting behavioral experiments. If the student works with us longer (i.e. up to 1 year), we can also discuss for the student to take the LTK course.

Neurotechnology Group

Prof. Mehmet Fatih Yanik

Contact Person: Paul Johnson

(If interested, please send me an email with your CV and/or a short description of your background and we can arrange a time to meet.)

Irchel Campus Y17-L68
Winterthurerstrasse 190
8057 Zurich

Email: johnsopa@ethz.ch