Title: Research Scientist – Neuronal microphysiological system development
Position: Full time
Posted on: 14th January 2022
Location: Wyss Center for Bio and Neuroengineering, Campus Biotech, Geneva Switzerland

About the Wyss Center for Bio and Neuroengineering
The Wyss Center is an independent, non-profit research and development organization that advances our understanding of the brain to realize therapies and improve lives. The Wyss Center staff, together with the Center’s academic, clinical and industrial collaborators, pursue innovations and new approaches in neurobiology, neuroimaging, and neurotechnology. The Wyss Center advances reveal unique insights into the mechanisms underlying the dynamics of the brain and the treatment of disease to accelerate the development of devices and therapies for unmet medical needs. The Center was established by a generous donation from the Swiss entrepreneur and philanthropist Hansjörg Wyss in 2014. Additional resources from funding agencies and other sources help the Wyss Center accelerate its mission.

Job description
The Research Scientist will contribute to the creation of new neuronal microphysiological systems that can recapitulate the complexities of cellular architectures found in mammalian brain circuits. Such systems will be investigated for both therapeutic applications, such as tissue engineering and cell therapies, as well as for novel models for human disease. The candidate is expected to take an interdisciplinary approach incorporating both stem cell engineering as well as biomaterials and/or device engineering. He/she will be part of a team of neurobiologists and brain imaging experts and will work in a brand-new laboratory equipped with state-of-the-art research tools.

Key responsibilities
The candidate is expected to perform several hands-on lines of research within the context of the research goal including:
- Developing new cell culture substrates to enable the growth of complex cell architectures
- Differentiating and isolating desired cell populations
- Interfacing cells with materials/devices to create novel microphysiological systems
- Assessing cell systems for application in implantable therapies and disease models

The candidate will contribute to patents and manuscripts for publication as well as present research findings at conferences and within the Wyss Center community. He/she will act as a mentor to more junior staff or staff from different disciplines, contributing to the collaborative culture of the Center.

This position reports directly to our Chief Scientific Officer.
Requirements

We are looking for an excellent candidate with expertise in neural stem cell engineering, tissue engineering, and/or microphysiological system development. A high level of motivation, independence, teamwork capacity and curiosity are required as well as fluency in English (oral and written).

- PhD degree in a relevant field such as Bioengineering, Biomedical Engineering, Developmental Biology, Biochemical Engineering, Neuroscience, etc.
- 5+ years of relevant research work
- Expertise in stem cell biology and cell engineering, specifically for cell types found in the human brain
- Expertise in the characterization of cells and cell populations using techniques such as RNAseq, FISH, and immunofluorescence
- Core competency with microscopy as a means to track and characterize cells
- Competency in hydrogel chemistry, bioconjugation chemistry, and the chemical modification of biomaterials substrates
- Aptitude for innovation, willingness and ability to drive change, passion for quality and continuous improvement
- Results oriented, proactive problem-solving attitude with strong sense of ownership, urgency, and drive
- Excellent documentation and communication skills, ability to interact at all levels of the business
- Work autonomously with good initiative

Preferred Qualifications

- Ability to create or synthesize novel biomaterials or devices for cell integration
- Familiarity with current microphysiological systems such as organoids, tissue chips, etc.
- Postdoc experience is a plus
- Fluent in French is a plus

This position is available immediately

To apply, please send your CV and covering letter describing your qualifications, background, and interest in this position to HR@wysscenter.ch no later than the 28th of February 2022.