

Postdoctoral Researcher – Non-Invasive Deep Brain Stimulation (nDBS) for Stroke Recovery

The **Laboratory of Clinical Neuroengineering** (Prof. Friedhelm Hummel, [EPFL](https://www.epfl.ch/labs/hummel-lab)) is seeking an outstanding **Postdoctoral Researcher** to join our pioneering work on **non-invasive deep brain stimulation (nDBS)** for stroke recovery.

Project description:

Stroke remains a leading cause of disability, and current neurorehabilitation approaches are often insufficient. Deep brain structures such as the striatum are key to recovery but remain untargeted by existing interventions. We have developed a novel non-invasive approach—transcranial temporal interference stimulation (tTIS)—to target the striatum and are now launching a multicenter clinical trial (*Non-Invasive neuroModulation of deep brain Brain structures for Upper limb recovery after Stroke by transcranial temporal interference electric stimulation (NIMBUS)*) to evaluate its potential to transform stroke rehabilitation.

Post-doc researcher position:

To address these aspects, the ideal candidate should have a PhD (or equivalent degree) in neuroscience, medicine or psychology, computer science, engineering or a MD degree, with a (1) **strong neuromodulation background**, especially non-invasive brain stimulation and/or (2) strong background in **behavioral evaluation** and in **human electrophysiology** (TMS-EEG), (3) excellent **communication** and **collaboration** skills, (4) previous **experience** in **human experimental translational neuroscience** is a strong asset, (5) fluency in French is a plus.

We offer:

- A dynamic, international, and interdisciplinary research team.
- A stimulating environment at **EPFL's Campus Biotech (Geneva)** and our **clinical hub in Sion (Valais)**, surrounded by Lake Geneva and the Swiss Alps.
- Access to cutting-edge neurotechnology and state-of-the-art facilities.
- The opportunity to contribute to a **disruptive, personalized treatment strategy** with direct impact on patient care.
- A fully funded position for up to 3 years, starting **January 2026**.

Start of position:

From January 2026

How to apply:

Please send your CV, motivation letter, and contact details of two referees to Caroline Magnin (caroline.magnin@epfl.ch)