



PhD Position in ‘Neuroscience of Body Representation and Motivation in Neurorehabilitation’

Vitznau - 100% - 3 years – Summer 2026 (or upon mutual agreement)

The Neuroscience of Cognition and Motivation in Rehabilitation Lab (NeuroCoRe) of Prof. A. Luft at the Lake Lucerne Institute (LLUI) is dedicated to translating motivational and cognitive neuroscience into innovative approaches for neurorehabilitation. Our core research interest is to understand the neuronal and behavioral correlates of motivation.

The MySpace Lab at the University of Lausanne of Prof. A. Serino investigates how the human brain builds a representation of the body in space, which is important for action and perception. To this aim, we use different techniques from cognitive neuroscience, including psychophysics, fMRI, intracranial EEG recording, neuropsychology, and neural network modeling, to study the multisensory mechanisms underlying the representation of Peripersonal Space (PPS).

For a collaborative project between NeuroCoRe and MySpace Labs, we are looking for a motivated PhD student with a background in cognitive or computational neuroscience.

Background

We seek to elucidate deficits in body representation in neurological disorders. Furthermore, we investigate the influence of body representation schemata on motivation for effort, including physiological and cognitive exercise, in neurotypical and neurological populations. To this end, we will implement behavioural assessments of body representation and assess the neuronal correlates influencing body representation and motivation for effort using high-density EEG.

Your Role

The successful candidate will carry out experiments with neurotypical participants and neurological patients. The PhD project includes:

Your responsibilities will include:

- Implementation of behavioural paradigms assessing body representation and motivation.
- Hands-on data acquisition using high-density EEG.
- Development of new study designs and participant recruitment.
- Advanced signal processing.
- Dissemination of research findings through scientific publications and presentations.

Your Profile

We are looking for a motivated and committed candidate who brings:

- A Master's degree, or near completion, in neuroscience, psychology, neurophysiology, biomedical engineering, medicine, health sciences and technology, or a related field.
- Strong interest in technical skills, particularly programming, for example Matlab or Python, and data analysis.
- Experience with EEG is desirable.
- Strong communication skills, scientific and creative reasoning, and a very collaborative spirit.
- A structured, reliable, proactive, and well-organized personality.
- Strong interest in and aptitude for working with vulnerable populations.
- Native or excellent C1 German and English skills.
- Flexibility to travel to Lausanne and abroad for conferences.
- A valid Swiss work permit, or eligibility to obtain one.

Workplace

The main workplace is LLUI in Vitznau. Research at LLUI is translational, bridging fundamental research with clinical applications in neurorehabilitation.

What We Offer

We offer a PhD position of 3 years in a great scientific, social, and geographical environment. The affiliation with the MySpace Lab at the University of Lausanne and the Lake Lucerne Institute (LLUI) spans a network of exceptional research and clinical institutions across Switzerland, allowing the PhD student to be integrated into a multidisciplinary research group.

This PhD project is a great opportunity to work with neurotypical populations as well as neurological patients, building a diverse and implementation-focused behavioural and neuroimaging portfolio in translational research.

We are committed to equality

LLUI is committed to equality in general and gender equality in particular. Our commitments are set out in our [Gender Equality Plan](#).

Application

We look forward to receiving your application by email by 15 June 2026, including the following documents:

- Curriculum Vitae, including educational history, full list of publications, awards, etc.
- Research motivation statement of max. two A4 pages covering your interests, goals, experiences, and how they would relate to and fit in with the proposed research domain and activities.
- Diplomas.
- Names, e-mail addresses, and phone numbers of at least two references, mentioning for each of them the professional relationship you have with them.

Application documents should be sent to lore.legrand@llui.org. Incomplete applications or applications that do not correspond to the published profile will not be considered.

For further information about the MySpace Lab and the Neuroscience of Cognition and Motivation in Rehabilitation Lab (NeuroCoRe), please visit the respective websites (<https://wp.unil.ch/myspacelab/>; <https://www.stroke-neurocore.uzh.ch/en.html>). Questions regarding the position should be directed to lore.legrand@llui.org.