

# LiU hereby advertises a Postdoctoral Scholarship in Neurophysiology

#### Research environment

You will take part in research activities at the Center for Social and Affective Neuroscience (CSAN). The <u>Håkan Olausson</u> research group focuses on a mechanistic understanding of diseases that cause disturbances of the somatosensory system, based on studies of healthy humans and patients with well-defined diseases of the touch and pain systems.

#### Research project

You will be part of a project investigating the effects of intravenous oxytocin in contrast to placebo on cutaneous mechanoreceptors and its interplay with acute inflammation, cognitive performances, and other subjective measures. The peripheral and central effects of oxytocin will be measured in healthy participants on microneurography measures of somatosensation/pain, on cognitive-behavioral measures (e.g., cognitive performances) and psychophysical quantifications (e.g., inflammation and touch pleasantness). The outcomes of that project will advance understanding and clinical application of oxytocin's role in somatosensation following acute pain sensitization by exploring the peripheral effect of oxytocin on fast conducting, high-threshold, and low-threshold mechanoreceptors. Secondary outcome measures include somatosensation as measured by inflammation-induced perceptual changes in mechanical and thermal stimulation measured with psychophysics, psychophysical measurements of hedonic aspect of tactile stimulation, and cognitive function as measured by various cognitive performance tests.

## **Qualifications and requirements**

Scholarships can only be awarded to foreign citizens with a doctoral degree or equivalent obtained in a country other than Sweden. The date of the doctoral degree must be no more than four years before the application deadline. The applicant must not have been employed by Linköping University previously.

Scholarship may not consist solely of research collaboration with a mutual exchange of methodological and technical expertise but must also contain a well-defined training element and a qualification plan must be established for the scholarship period.

The applicant must have or be about to receive a doctoral degree in a subject relevant to the research project. The applicant must also have demonstrable skills in the communication of scientific findings, as evidenced by first-authored publications in international peer-reviewed journals. The applicant should also possess experience in clinical studies, experience in somatosensation measurements, designing and conducting experiments involving

neuropsychological tasks and psychophysical measures. Specific experience in clinical trials and pharmacological studies, psychophysical measures, working memory measures and analysis using R programming are requirements. A specific interest in human touch and pain techniques, exposure to microneurography technique, mentorship experience, and experience as clinical trial lead or clinical research coordinator are desirable.

#### Starting date

April 1st, 2025

#### **Appointment and Conditions**

Appointment is for one year with the potential to extend. The total time for receiving a scholarship from Linköping University can never exceed two years.

The scholarship amounts to SEK 28,500:-/month (tax-free) (~€ 2,650/month). Travel costs to/from Sweden for a scholarship holder will be covered up to a maximum amount. Funding can be available to participate in conferences.

Essential information about healthcare, insurances etc. can be found <u>here</u>. Questions are welcome to <u>lisa.dobrosch@liu.se</u>

### **Application procedure**

The following documents (in pdf-format) must be submitted when applying for a scholarship

- 1. Cover letter, max 1 page, describing your background, research interests and what makes you interested in the fellowship.
- 2. Qualification plan, max 1 page, describing clearly what qualifications you want to obtain during the scholarship period.
- 3. CV, max 4 pages, including contact details to three reference persons.
- 4. Full publication list.
- 5. Copy of passport, PhD diploma, and MSc transcripts with grades.

The application should be sent electronically to <u>lisa.dobrosch@liu.se</u>. Mark the email with Dnr. BKV-2025-00158 on subject line.

## **Applications deadline**

March 28th, 2025