

## **Opportunity # GN000008**

Postdoctoral position in Neuroscience at: Netherlands Institute for Neuroscience, Synapse and Network Development Department, Amsterdam, Netherlands.

## Deadline: 29 April 2022

If you're interested in how synaptic plasticity helps wire the developing brain and want to use cuttingedge optical techniques for live cell imaging, including high-speed confocal and in vivo 2-photon microscopy. Would you enjoy working in an international environment where you follow up on your ideas with the support of experts around you? Then this job is suitable for you.

Applications are invited to join our multidisciplinary and highly collaborative research team as postdoctoral fellow.

## **Description:**

The Synapse and Network Development group is providing an exciting opportunity for a **PhD student** 

to identify the role of mitochondria in synapse development. The position is available immediately.

The Netherlands Institute for Neuroscience (www.nin.nl) is the country's leading fundamental neuroscience research institute in the international and progressive city of Amsterdam. It provides a critical mass of scientists (spanning more than 27 nationalities) and neuroscience facilities, in a highly interactive, dynamic, multi-cultural environment, with English as the working language.

The developing mouse visual cortex is wiring up during the week before eye opening and neurons establish most of their synapses during that time. Synaptic transmission is very energy demanding and developing neurons need to provide sufficient energy to fuel transmission at emerging synapses. We showed recently that mitochondria, which provide the bulk of adenosine-triphosphate (ATP) in neurons, are transported to synapses (Silva et al. 2021, eLife), but how mitochondria contribute to the development and plasticity of synapses in intact brain circuits is unknown.

You will be able to take advantage of the latest *in vitro* and *in vivo* microscopy approaches to investigate how developing synapses capture mitochondria and how mitochondria contribute to the healthy development of synapses. Since these processes underlie proper wiring of the brain, it is not surprising that errors in mitochondrial targeting and function are associated with developmental disorders and therefore your project may not only help better understand brain wiring, but also shed light on the underlying causes of developmental cognitive disorders.

You should be a highly motivated, self-driven scientist with a degree in neuroscience, (neuro)psychology, biomedical sciences or natural sciences. The ideal candidate will have experience with neurophysiological and/or live cell imaging techniques and a solid background in neuroscience. Programming skills – in particular with Python for data analysis – will be very useful for your project. You are a team player and comfortable communicating, presenting and writing in English.



We will be ready to help you in:

- Mentoring, supervision and training
- Access to state-of-the art equipment
- A stimulating international research environment

We offer an exciting job at a dynamic research institute and an attractive package of fringe benefits. The position is for a period of 4 years in total for a PhD student. The first appointment is for one year with the option for an extension for the remaining period pending on an evaluation.

The salary will be commensurate with institutional guidelines based on the Collective Labor Agreement for Dutch Universities: CAO NU. The salary for a PhD student is  $\notin 2.443$ ,- per month, before taxes in the first year and  $\notin 3.122$ ,- in the last year.

In addition, an 8% holiday allowance and an 8.3% year-end bonus are provided. We offer travel expenses, paid parental leave, flexible working hours, 30 days paid leave per year and assistance in finding accommodation when coming from abroad.

For applying, please submit your application at <u>https://vacatures.knaw.nl/job/Amsterdam-SND-PhD-student/845601055</u>, before April 29th 2022, including:

- 1. A Curriculum Vitae
- 2. An application letter
- 3. Two reference letters

Evaluation of candidates will begin immediately, and continue until the position is filled.

For additional information please contact Dr. Christian Lohmann (c.lohmann@nin.knaw.nl).

All qualified applicants will receive consideration for employment without regard to race, religion, sexual orientation, nationality, disability, etc.

## **Contact Details**

Name: Christian Lohmann

Email: c.lohmann@nin.knaw.nl

URL: <u>https://nin.nl/</u>