

*The Netherlands Institute for Neuroscience is an institute of the Royal Netherlands Academy of Arts and Sciences (KNAW) carrying out fundamental and strategic research in the neurosciences*

The Vision & cognition group ([Roelfsema lab](#)) has an exciting opportunity for a

### **PhD student position**

to investigate circuit mechanisms of brain stimulation and its perception

#### **Project description**

##### **Circuit mechanisms of brain stimulation and its perception**

The rapidly emerging field of neurotechnology is bringing a surge of new technological possibilities for transferring information to the brain for patients with neurological disabilities. To successfully apply these technological advances to clinical applications, a deep understanding of stimulation-based information transfer and its processing at the level of neurons and neuronal circuits is essential. In this project, we will combine novel intracortical neural interfaces devices with electrical microstimulation, optical stimulation, 2-photon calcium imaging, electrophysiology, and behavior to investigate this in the mouse visual cortex. Ultimately, we aim to develop next-generation intracortical stimulation strategies for high-fidelity information transfer into the visual cortex for a visual prosthesis.

#### **We expect from you:**

You are a highly motivated, self-driven candidate. You have an MSc degree (or equivalent) in neuroscience or a related discipline; or an MSc degree in a quantitative discipline (e.g. physics/biophysics, mathematics, engineering) with strong interest and experience in neuroscience. A high level of written and spoken English and good programming skills are essential. An ideal candidate would additionally possess practical experience in collecting and analyzing neurophysiological data from awake, behaving animals.

#### **You should expect from us:**

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

#### **Environment**

The Netherlands Institute for Neuroscience ([www.nin.nl](http://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.

#### **Appointment**

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.

### Salary

The salary will be commensurate with experience and institutional guidelines based on the Collective Labour Agreement for Dutch Universities; CAO NU). Full-time monthly salary for a PhD student is € 2.395,- in the 1<sup>st</sup> year to € 3.061,- in the 4<sup>th</sup> year before taxes. 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 an accommodation.

### Starting date

The position is available from September 2020, but the starting date can be later.

### To apply

Please send your application to [s.wolff@nin.knaw.nl](mailto:s.wolff@nin.knaw.nl) 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. We aim to fill the position in the autumn of 2020.

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

Any acquisition further to this advertisement will not be appreciated.