

The Health, Medical and Neuropsychology unit of The Institute of Psychology of The Faculty of Social and Behavioral Sciences has an opening for a

**PhD Candidate “Role of nocebo mechanisms in the sensitization and desensitization of somatic symptoms in healthy subjects” (1.0 fte)**

**Vacancy number 3184**

**Project description**

NWO Vici project “The power of expectancies: Unraveling the role of nocebo effects in the sensitization of somatic symptoms”

**Project 1** “Role of nocebo mechanisms in the sensitization and desensitization of somatic symptoms in healthy subjects”

The NWO-Vici project focuses on unraveling the role of placebo and nocebo mechanisms and expectations (e.g. conditioning) for the sensitization of unexplained symptoms in healthy subjects and patients. Placebo and nocebo effects (i.e. positive and negative outcome expectations that result in positive or negative outcomes, respectively) explain 25-50% of outcomes in various health problems, including somatic symptoms. While far more attention has been directed to the role of placebo effects, studies suggest that nocebo effects contribute even more to somatic symptoms. However, there is not yet an integrated approach that studies psychoneurobiological nocebo mechanisms for the sensitization and desensitization of somatic symptoms. In the NWO-Vici project, a comprehensive psychoneurobiological approach is tested to 1) study the causal role of nocebo mechanisms in the sensitization and desensitization of somatic symptoms; 2) identify patients at risk for sensitization; and 3) develop innovative treatments for desensitization of somatic symptoms. For this purpose, a unique set of combined psychoneurobiological methods, particularly psychological conditioning with pharmacological modulations, is applied in experimental, prospective, and treatment studies both in healthy participants and in patients with insufficiently explained somatic symptoms. This interdisciplinary, translational project progresses key theoretical knowledge of the main psychoneurobiological nocebo mechanisms of various somatic symptoms. Findings open up new horizons for prevention and treatment, by identifying patients at risk for symptom sensitization and generating targeted treatments for symptom desensitization and recovery.

Project 1 of the NWO Vici project focuses on the causal role of nocebo mechanisms in the sensitization and desensitization of somatic symptoms. For this purpose, combined psychoneurobiological methods, particularly psychological conditioning with pharmacological modulations, will be applied in experimental and fMRI studies in healthy subjects.

You will be responsible for conducting different clinical-experimental studies in Project 1. You will write scientific, peer-reviewed publications, resulting in a PhD thesis.

In this NWO-Vici of prof. dr. Andrea Evers (project leader), a number of PhD students and senior researchers are involved, conducting both experiments and clinical-experimental research in healthy subjects and patient populations. There will be close collaborations with different disciplines within Leiden University, the Leiden University Medical Center, and other centers. The PhD projects will be imbedded in the national research school Experimental Psychopathology (EPP) and Leiden Institute of Brain and Cognition (LIBC). In addition, we offer several other relevant possibilities for education and training, including courses on data management and academic skills, as well as participation in relevant international conferences.

## **Selection criteria**

- A Master or equivalent degree in a relevant field (completion of the MA thesis before the PhD project starts), including (health, medical or biological) psychology, health sciences, or biomedical sciences;
- High affinity with experimental psychoneurobiological research (e.g. Quantitative Sensory Testing, pharmacological inductions, fMRI, psychophysiological reactivity measures) in healthy subjects and patients groups;
- Substantial knowledge of statistical methods and high analytical skills;
- Ambition as high-potential researcher aimed at excellent scientific research;
- Ability to work independently in a multidisciplinary setting;
- Social and organizational competencies;
- Proficiency in Dutch and English (or the intention to reach it within a short period of time).

## **Our faculty/institute**

The Faculty of Social and Behavioural Sciences comprises four institutes: Education and Child Studies, Political Science, Psychology, and Cultural Anthropology & Development Sociology. The Faculty also includes the Centre for Science and Technology Studies. The Faculty is home to 5,000 students and 600 members of staff. Our teaching and research programmes cover diverse topics varying from adoption to political behaviour. For more information, see <http://www.fsw.leidenuniv.nl>.

For further information about our unit and its teaching and research activities, please visit our website (<http://www.socialsciences.leiden.edu/psychology/organisation/hmn/>).

## **Terms and conditions**

Appointment will be according to the terms of the Collective Labour Agreement of Dutch Universities (cao Nederlandse Universiteiten), for a period of one year with an extension of three years after positive evaluation of capabilities and compatibility. The appointment must lead to the completion of a PhD thesis. The gross monthly salary is set on € 2,222.- in the first year, increasing to € 2,840.- gross per month in the final year.

Leiden University offers an attractive benefits package with additional holiday (8%) and end-of-year bonuses (8.3 %), training and career development and sabbatical leave. Our individual choices model gives you some freedom to assemble your own set of terms and conditions. Candidates from outside the Netherlands may be eligible for a substantial tax break. More at <http://www.workingat.leiden.edu/>.

## **Diversity**

Leiden University is strongly committed to diversity within its community and especially welcomes applications from members of underrepresented groups.

## **Information**

Inquiries may be addressed to prof. dr. Andrea Evers, Ph.D., principal investigator and head of Health, Medical and Neuropsychology Unit, or researcher drs. Kaya Peerdeman, telephone +31 71 527 63627, email [abreugem@fsw.leidenuniv.nl](mailto:abreugem@fsw.leidenuniv.nl).

## **Applications**

Please submit online your application no later than 4 July 2017 via the blue button of our application system.

Candidates should submit a letter of application stating the motivation for the position, accompanied by:

- a cv;
- the names and contact information for two references (no letters);
- as well as copies of your academic transcripts (or Dutch cijferlijst).