

GENETIC RISK AND AUTISM

Vrije Universiteit Amsterdam is a leading, innovative and growing university that is at the heart of society and actively contributes to new developments in teaching and research. Our university has ten faculties which span a wide range of disciplines, as well as several institutes, foundations, research centres, and support services. Its campus is located in the fastest-growing economic region in the Netherlands (the Zuidas district of Amsterdam), and provides work for over 4,500 staff and scientific education for more than 23,000 students.

Location: AMSTERDAM

FTE: 0.8 - 1

Job description

Autism Spectrum Disorder (ASD) is a heterogeneous neurodevelopmental condition, characterized by impaired social skills and inflexibility and high rates of co-occurring disorders. There is no cure for ASD, but adequate care can improve functioning, enhance quality of life and reduce societal costs. Mechanisms that influence the course of ASD are poorly understood. Longitudinal research is crucial to link these mechanisms to development and intervention outcomes. The Netherlands Autism Register (NAR), is a unique and diverse clinical longitudinal cohort, including >3300 autistic individuals (aged 2 to 84 years) and over 700 controls. Since 2013, the NAR included yearly measurements (see <https://www.netherlandsautismregister.nl/onderzoek/onderzoek/>). In our project, we aim to 1) enlarge and enrich the NAR with genetic and environmental data and innovative online assessments to map lifespan trajectories of individuals with and without ASD and assess their ability to predict diagnostic status and quality of life 2) embed digital interventions in the NAR aimed at the core ASD symptoms and the most prevalent and disabling co-occurring mental health conditions to optimize personalized care, and 3) implement the findings and make online screening and digital interventions available. The NAR is well-known for its close collaboration with and dissemination to individuals with ASD.

For the whole project we seek three excellent PhD candidates. The project for which we now aim to hire applicants is the second project. With this project, we will enrich the NAR by collecting genetic and environmental (risk and protective) data. The aim of this project is to study the genetic and environmental factors that are associated with the course of ASD symptoms, associated outcomes (e.g., comorbidity, wellbeing), and treatment response in adults with ASD.

Your duties

The PhD student will collect genetic data in ~1000 adult NAR participants by means of self-collected buccal swaps, sent by mail. After isolation of DNA and genotyping (performed externally), the genetic database will be used to calculate polygenic risk scores (PRS) for ASD and related traits. You will have access to control participants from the Netherlands Twin Register. Objective environmental factors, such as the availability of medical care nearby, urbanization, and traffic noise, will be collected based on postal codes. The PRS and environmental factors will be tested as mediating factor in analyses that aim to examine the course of ASD, associated outcomes, and treatment response. ASD is highly heritable, and NAR participants have indicated they would appreciate the accessible sharing of knowledge on this matter. Therefore, in this project we also aim to develop a tool that provides accessible information on the role of genetic factors in ASD for NAR participants, and the broader autism community in The Netherlands.

Knowledge, Skills, Qualifications & Experience

We are looking for Dutch speaking candidates that hold, or will soon hold, a Research Master degree in (biological) Psychology, (behavior) Genetics, Neuroscience or related fields, with a strong interest and preferably experience in ASD research, advanced skills in statistical analyses and big (genetic) data, and a strong motivation to pursue a career in science. In addition, excellent social, communication and organizational skills are required.

Requirements

- Dutch speaking
- Research Master degree
- Interest in ASD research

Job area:
PhD

Educational Level:
MSc

VU unit:
Faculty of Behavioural
and Movement
Sciences

Contract type:
Temporary

Minimum FTE:
0.8

Minimum salary scale:
€2,770 (PhD)

Maximum salary scale:
€3,539 (PhD)

- Advanced statistical skills
- Social, communication and organizational skills

What are we offering?

A challenging position in a socially involved organization. The salary will be in accordance with university regulations for academic personnel and amounts €2,656 (scale 8) per month during the first year and increases to €4,012 (scale 9) per month during the fourth year, based on a full-time employment. The job profile: is based on the university job ranking system and is vacant for at least 0.8 FTE.

The appointment will initially be for 1 year. After a satisfactory evaluation of the initial appointment, the contract will be extended for a duration of 4 years.

Additionally, Vrije Universiteit Amsterdam offers excellent fringe benefits and various schemes and regulations to promote a good work/life balance, such as:

- 8% holiday allowance and 8.3% end-of-year bonus
- optional model for designing a personalized benefits package
- good growth opportunities
- a wide range of sports facilities which staff may use at a modest charge
- discounts on collective insurances (healthcare- and car insurance)

About Vrije Universiteit Amsterdam

The ambition of Vrije Universiteit Amsterdam is clear: to contribute to a better world through outstanding education and ground-breaking research. We strive to be a university where personal development and commitment to society play a leading role. A university where people from different disciplines and backgrounds collaborate to achieve innovations and to generate new knowledge. Our teaching and research encompass the entire spectrum of academic endeavour – from the humanities, the social sciences and the natural sciences through to the life sciences and the medical sciences.

Vrije Universiteit Amsterdam is home to more than 26,000 students. We employ over 4,600 individuals. The VU campus is easily accessible and located in the heart of Amsterdam's Zuidas district, a truly inspiring environment for teaching and research.

Diversity

We are an inclusive university community. Diversity is one of our most important values. We believe that engaging in international activities and welcoming students and staff from a wide variety of backgrounds enhances the quality of our education and research. We are always looking for people who can enrich our world with their own unique perspectives and experiences.

Faculty of Behavioural and Movement Sciences

The Faculty of Behavioural and Movement Sciences focuses on the broad domain of behaviour and health. Our teaching and research programmes are devoted to current developments in society, from healthy aging to e-health, from juvenile crime to dealing with depression, from training for top athletes to social media as a teaching tool. We are unique in that we combine three academic disciplines: psychology, movement sciences and education.

The Faculty of Behavioural and Movement Sciences (FBM) at VU University Amsterdam is unique in the wide field of behavioural and health sciences for combining the disciplines of psychology, education theory and human movement sciences. The faculty contributes to a better understanding of the way behaviour and movement are caused and can be influenced so as to promote physical and mental health and improve performance. Within the Faculty, the Department of Clinical, Neuro- and Developmental Psychology focuses on examining the onset and diagnosis of mental disorders and the subsequent treatment and prevention.

Working at Behavioural and Movement Sciences means working in an ambitious organization that is characterized by an informal atmosphere and short lines of communication. Our faculty offers tremendous scope for personal development. We employ more than 600 staff members, and we are home to around 3,400 students.

Application

Are you interested in this position? Please apply via the application button and upload your curriculum vitae and cover letter until **December 31, 2020**. The job interviews are planned for mid-January 2021, when possible please take this into account when

applying for the position.

Applications received by e-mail will not be processed.

Vacancy questions

If you have any questions regarding this vacancy, you may contact:

Name: Tinca Polderman

Position: Associate professor

E-mail: tinca.polderman@amsterdamumc.nl

No agencies