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Call for applications (Neo-PRISM-C)

Neo-PRISM-C project
NEurodevelopmental **O**ptimal-**P**redictors, **R**isk factors, and **I**ntervention from a **S**ystems approach to **M**aladjustment in **C**hildren

Vacancy for PhD student / Early Stage Researcher (ESR) position

RID (Regionaal Instituut voor Dyslexie) and the University of Amsterdam are offering **one (1) position** for an **Early Stage Researcher** (ESR; doctoral student) in *Neo-PRISM-C*, a project aiming to study neurodevelopmental disorders (NDD).

The purpose of the Neo-PRISM-C ETN is three-fold. First, it seeks to train Early Stage Researchers (ESRs) in applying the Research Domain Criteria, a novel framework for understanding psychopathology, to the study of the mechanisms and treatments of NDD. Second, it aims to train ESRs from multiple disciplines (psychology, neuroscience, data science) in state-of-the-art and transferable skills for innovating the study of brain-behavior relationships in NDD, in the context of a systems-based, trans-diagnostic theoretical frame. Finally, this ETN will also support training in designing evidence-based, individualized treatments of learning, behavioral, and social maladjustment, bridging across diagnostic categories. Towards these goals, we have assembled a trans-sectoral European network with expertise in cognitive, social, educational, clinical, and emotion research to provide training ESRs. The *Neo-Prism-C* project is funded by the European Union under the Horizon 2020 Marie Skłodowska-Curie Innovative Training Network (ITN) actions (See: http://www.neoprismc. org/).

Applicants from all relevant academic disciplines are encouraged to apply, including Psychology, (Cognitive) Neuroscience, Cognitive Science, and related disciplines. The selected doctoral student will be enrolled in the doctoral school of the Department of Psychology of the University of Amsterdam and work towards a **Ph.D. in Psychology**.

POSITION DETAILS

Fellow: *ESR13*
Project Title: Individualised, game-based training for reading and math disabilities
Host Institution: RID, Amsterdam
Supervisors: dr. Jurgen Tijms (RID, University of Amsterdam), prof. Reinout Wiers (University of Amsterdam), dr. Minna Torppa (University of Jyväskylä)

We are looking for an ESR who has affinity with neurodevelopmental disorders in children, and who will work on relating and translating an understanding of neurocognitive profiles of children with specific learning disabilities to personalized intervention. Specific learning disabilities (dyslexia, dyscalculia) show high rates of overlap with other neurodevelopmental disorders, such as ADHD. At the same time research shows heterogeneity in the neurocognitive profiles of children with dyslexia. In this project we aim to provide a window on the individual differences in neurocognitive network profiles of children with dyslexia/dyscalculia, and translate these insights into personalized intervention modules.

Specific Requirements:
1. To investigate intervention dynamics and intervention outcomes as a function of individual differences in the neurocognitive network profiles of reading and math disabled learners.
2. To develop and evaluate game-based intervention mechanisms to obtain tailor-made interventions for reading (RD) and/or math disabilities (MD).

Expected outcomes:
1. To gain new knowledge on how intervention dynamics and responsiveness act as a function of individual differences in the underlying neurocognitive network profile of children with reading disorder and/or math disorder.
2. To gain knowledge on how interventions induce changes in the symptom network related to RD and MD, and how these changes are paralleled by behavioural changes in reading or math proficiencies.
3. To gain skills in and produce knowledge of developing (game-based) intervention components that optimize individualized interventions for RD and MD.

Host Institution: RID (Regionaal Instituut voor Dyslexie B.V.)

RID (www.rid.nl) is Dutch-based company that provides research-based clinical care to children with learning disabilities, and has a dedicated research and innovation department. It operates nationwide, and over 2000 children with severe reading or arithmetic problems are treated yearly. RID's research and innovation, including this project, is carried out at the Rudolf Berlin Center in Amsterdam, a research center on learning disabilities that is a partnership of RID and the University of Amsterdam. The Rudolf Berlin Center (https://rudolfberlin.org/) focuses on understanding the neurocognitive underpinnings of reading and math disorders as well as on intervention research. The center has three pillars, i.e., conducting scientific research, providing specialized clinical and educational care, and educating master and doctoral students in the area of learning difficulties. The Rudolf Berlin Center collaborates in several projects with different national (e.g., Maastricht University, Delft Technical University) and European (e.g., University of London, KU Leuven, Bangor University, University of Jyväskylä) partners. The ESR will be hosted at the Rudolf Berlin Center at

the premises of the Psychology Department of the University of Amsterdam in Amsterdam, The Netherlands.

Study Institution: The University of Amsterdam – Department of Psychology

With over 5,000 employees, 30,000 students and a budget of more than 600 million euros, the University of Amsterdam (UvA, www.uva.nl) is an intellectual hub within the Netherlands. Teaching and research at the UvA are conducted within seven faculties: Humanities, Social and Behavioural Sciences, Economics and Business, Law, Science, Medicine and Dentistry. Housed on four city campuses in or near the heart of Amsterdam, where disciplines come together and interact, the faculties have close links with thousands of researchers and hundreds of institutions at home and abroad. The psychology department of the University of Amsterdam consistently receives a top 20 ranking in the yearly QS World University Ranking by subject. The department holds the Rudolf Berlin Center, a university center in the field of learning disabilities.

The UvA's students and employees are independent thinkers, competent rebels who dare to question dogmas and aren't satisfied with easy answers and standard solutions. To work at the UvA is to work in an independent, creative, innovative and international climate characterised by an open atmosphere and a genuine engagement with the city of Amsterdam and society.

ELIGIBILITY CRITERIA

Successful applicants should:

(a) must **not** have resided or carried out their main activity (work, studies, etc.) in the country of their host organisation **for more than 12 months** in the 3 years immediately prior to the contract commencement date; and

(b) have a proven knowledge of **at least one of the three themes** of the *Neo-PRISM-C* (as described in the first paragraph of this announcement) network, as judged based on outstanding results within a diversified career path, publication activity, and teaching, supervision, teamwork, knowledge transfer, and management.

(c) For entry into the Ph.D. program, a Master's degree **from an accredited University is required**.

Women and men from all countries are encouraged to apply.

Other Qualifications

1. A Master's degree in Psychology, (Behavioural or Cognitive) Neuroscience, Cognitive Science, or related discipline.
2. Excellent written and spoken English skills (applicants are required to provide relevant proof).
3. A keen interest in Developmental Cognitive Neuroscience and specifically in neurodevelopmental disorders.
4. Knowledge on computer proficiency in standard softwares of Social Sciences and mathematics (e.g., JASP, SPSS, R, MATLAB) is highly desirable.

5. Knowledge about research methods and experience with experimental research.
6. Strong organization and administrative skills.
7. Excellent interpersonal skills with an ability to communicate effectively orally and in writing to scientists as well as lay-persons and children.
8. Ability and interest to work with international research teams.
9. Relevant knowledge of clinical or educational science, and a keen interest to do research in a clinical environment.
10. Knowledge and prior involvement in studies (data collection, analysis, interpretation) using brain imaging methods (e.g., EEG, fMRI) is considered to be an advantage.
11. Proficiency in spoken Dutch will also be considered as an advantage.
12. Proven knowledge of the themes and/or skills examined in the ESR project will be considered as an advantage. Knowledge can be documented e.g. by master's studies, thesis work, publications, teamwork, or other experience.

Additional information

Overall, *Neo-PRISM-C* will offer the ESR:

- Project-specific research in neurodevelopmental disorders
- Full-time employment for 3 years with a competitive salary and additional resources to take part in international conferences and collaborations
- A PhD-title after 3 years of research (requirement: PhD thesis with 3 research articles and the required doctoral courses)
- Secondments to partner organizations
- Participation in workshops and courses /training on scientific and entrepreneurial skills, as well as excellent supervision
- Competitive salaries and additional resources to take part in international conferences and collaborations
- Membership of world-renowned labs, as part of a motivated interdisciplinary team

Benefits

Post Financial Terms

The *Neo-PRISM-C* consortium comprises eight teams from several European countries and N. America partners and has a total budget of €4 million. The post for the ESR is **a full-time** and fixed term for three years (with a trial period of 6 months), with an expected start date **September, 2019**.

Salary will be approx. €3500,- per month and will include health insurance and social security plans. Salary will be supplemented with Mobility Allowance (€600 per month). Qualified applicants based on family status may receive an additional Family Allowance of €500 per month.

How to apply

Candidates are asked to submit the required documents in **a single pdf-file** via email, with 'neo-prism-c application' written in the e-mail subject field, to Dr. Jurgen Tijms at j.tijms@rid.nl **until April 7, 2019**, 18.00 CET:

- Letter of motivation (research interests, research career goals, skills, experience,
- reasons for applying to the program and the specific host organization)
- A full updated CV (including among other information, personal details with
- complete contact data, work, and education history, etc.)
- Certified copies of relevant degrees and English Language proof of proficiency
- The names and e-mail addresses of two referees
- After the deadline the applicants will be asked to participate face to face (if possible) or online interviews.