



PhD in Biomedical Sciences

Department Biomedical Sciences of Cells & Systems (BSCS)

Work location Groningen

Apply no later than 28 October 2019

Working environment

[The Department of Biomedical Sciences of Cells and Systems](#) at the [University Medical Center Groningen \(UMCG\)](#) focusses on post-transcriptional responses to cellular and metabolic stress centered around the themes cellular fitness and human health.

Job description

Background

Type 1 diabetes (T1D) is a consequence of loss of the insulin-producing beta cells in the islets of Langerhans, located in the pancreas, which are destroyed by an auto-immune attack. Insulin injection is the standard therapy for 100 years. Preventive strategies for T1D are absent because the trigger is still not known, though many (environmental) stressors have been named. Recent surprising results studying animal models as well as donors with T1D suggest that exocrine/endocrine interactions may be involved in triggering T1D. This raises the intriguing question whether the exocrine pancreas might play a pivotal role in the long sought trigger leading to T1D. Most of the novel insights above have been obtained using human donor material from nPOD (network of pancreatic organ donors with diabetes). The disadvantage of studies on mammalian Islets is that the cells are difficult to manipulate and typically only one endpoint can be analyzed. To discover the long-sought trigger of T1D we need to be able to monitor the beta cell in a dynamic way.

Aim: Address in living cells whether exocrine malfunction may lead to beta cell stress preceding T1D.

Approach: Create endocrine and exocrine cell lines using iPS technology to determine the real-time dynamic interaction between pancreatic exocrine and endocrine cells that will be manipulated with cellular precision followed by read-out of cell physiology in living cells.

Significance: Our project will answer whether exocrine cell stress can lead to beta cell stress.

The project is a collaboration between the van IJzendoorn lab, with a strong focus and research interest in metabolic diseases, cell biology and iPS technology, and the Giepmans lab, with a strong focus on Islets of Langerhans in T1D and developing and applying new microscopic tools for cell biology. The project is part of the larger PROMINENT project focusing on personalized medicine in diabetic chronic disease management. The PROMINENT training program (project number 754425) has received funding from the Marie Skłodowska-Curie COFUND instrument as part of the European Horizon 2020 programme. PROMINENT is focused at setting up a dedicated doctoral training program for 16 Early Stage Researchers (ESRs; PhD students) at the UMCG and the University of Groningen (RUG). PROMINENT aims to select the best students to become excellently trained researchers, who can perform high quality research, and who subsequently have a major impact on scientific breakthroughs that foster the European society and economy in this field.

What do we need

The PhD-student we are looking for:

- Is highly motivated to continue a scientific career with a proven track record of published research
- Has affinity in or prior skills with cell culture, molecular biology tools
- Flexible and demonstrated ability to function in a team, as well as in between teams (indicated above) and hook up with European initiatives.
- A track record in organisation and communication of multi-centre scientific collaborations
- Communicates easily in speech and writing (English)
- Is proactive, outreaching, binding

Who can apply?

- Candidates need to have completed a European master's degree or equivalent prior to the application deadline. Candidates have to be in their first four years of their research career and not yet be awarded with a doctoral degree. Specific expertise can be a plus, but methods can always be learned and the project can be tailored to the specific skills and at the time of recruitment.
- Excellent proficiency in English language.
- Open for all nationalities. In compliance with the EU mobility rule, at the time of application deadline (October 15, 2019), candidates shall not have resided or carried out their main activity (work, studies) in the Netherlands for more than 12 months in the 3 years prior to the application deadline.
- Only applications that are complete, in English and submitted before the deadline will be considered eligible.

The UMCG has a preventive Hepatitis B policy. The UMCG can provide you with the vaccination, should it be required for your position.

In case of specific professions a 'Certificate of Good Conduct' is required.

What do we offer

Your salary is € 2.422,- gross per month in the first year up to a maximum of €3.103,- gross per month in the last year (scale PhD). In addition, the UMCG will offer you 8% holiday pay and 8.3% end-of-year bonus. The conditions of employment comply with the Collective Labour Agreement for Medical Centres (CAO-UMC).

English: <http://www.nfu.nl/english/about-the-nfu/>

Employment basis: temporary for specified period. The duration of the initial contract will be one years with the possibility of extension for an additional three years.

More information:

For applications or more information see <http://bscs.umcg.nl> or contact team leaders Department of Biosciences of Cells & Systems:

Ben Giepmans, e-mail: b.n.g.giepmans@umcg.nl or

Sven van IJzendoorn, e-mail: s.c.d.van.ijzendoorn@umcg.nl (please, do not use e-mailaddresses for applying)

Links for more information:

bscs.umcg.nl/en/research/molecular-cellbiology/

www.nanotomy.org

How to apply?

Applicationns should comprise:

Document 1: Curriculum Vitae containing:

- Curriculum Vitae (including your personal details like name, address etc)
- Copy of your Master certificate
- Copy/transcript(s) of your grades (please include Bachelor and Master grades)
- Motivation letter, specifying your interest and suitability for both the PhD position and the PROMINENT joint research program as well as your career ambitions.

- Summary of your research experience including details of the master research project, educational and employment history and a list of publications (if applicable) (max. 1 A4).
- Proficiency in English: Copy/transcript of your TOEFL, IELTS, Cambridge test score

Please merge all documents into a single PDF file.

Document 2: A completed form containing information required during the recruitment procedure ([please download this form here](#))

Please use the the digital application form at the bottom of this page - only these will be processed.

You can apply until **28 October 2019**.

Within half an hour after sending the digital application form you will receive an email- confirmation with further information.

[Application form >>>>](#)