

PhD position in Neurobiology of Glucose Metabolism

The **LA FLEUR LAB** at the Department of Endocrinology and Metabolism, Amsterdam UMC, has an opportunity for a PhD candidate to study how the brain's reward centre senses changes in blood glucose and controls peripheral glucose metabolism.

What are you going to do:

The brain consumes more glucose than all other human organs, accounting for 60% of total body glucose utilization in the resting state. The brain, however, has limited storage capacity and to facilitate adequate glucose availability, the brain senses glucose, initiates feeding behaviour, and controls glucose production by the liver. Over the day different glucose challenges (eating, exercise, stress) ask for an adequate response to maintain glucose homeostasis. Given the brain's limited storage capacity, it is not surprising that the brain plays an important role in maintaining glucose homeostasis and that brain dysfunction, such as happens with obesity, may complicate the treatment of diseases characterized by obesity and aberrant glucose control, such as type 2 diabetes mellitus.

The PhD student will study, in animal models, the role of the brain in the control of glucose metabolism and how this control is changed in the prediabetic state induced by high caloric diets. Neural circuitry involved in glucose homeostasis will be visualized with viral tracing techniques. Mechanistic studies will be performed in transgenic rat models using pharmacology and/or chemo/optogenetics to manipulate neural circuitry and state of the art canulation and isotope techniques to measure glucose production and insulin sensitivity.

As poor glucose control in T2DM patients leads to life threatening complications, this study will help to gain better understanding how the brain responds to every day glucose challenges and maintains homeostasis.

What we expect from you

We are looking for an enthusiastic PhD candidate with the following characteristics:

- Academic training (MSc) in biomedical sciences or neuroscience;
- Experience with working with animal models (mice or rats) (article 9 is a plus)
- Experience with working with bright-field or fluorescent microscopy;
- Good writing and presentation skills in English;
- An eye for detail and being able to work accurately;
- Good communication skills;

What we offer you

We offer you ample opportunity for development, deepening and broadening, additional training and a place to grow! Working at AMR means working in an inspiring and professional environment where development is encouraged in every respect.

- A PhD Student is placed in scale 21, with a fulltime gross salary that ranges from € 2.495,- in the first year to € 3.196,- in the fourth year (The contract hours will be 36 hours per week (1fte)).
- The base salary does not include holiday pay (8%) and a year-end bonus (8.3%).
- We offer a contract for 1 year, with the prospect of extending the contract for another 3 years to a full PhD project upon good performance.
- In addition to excellent accessibility by public transport, AMC also has a sufficient number of parking spaces for employees.
- Pension is accrued at Be Frank.

For an overview of all our other terms of employment, see

<https://werkenbijamc.nl/arbeidsvoorwaarden-amr/>

Amsterdam UMC has an open culture. Together we continuously build an environment where everyone feels welcome. To achieve that, we strive to provide equal opportunities for everyone. We therefore cordially invite all interested parties to respond to this vacancy.

Where you will work:

The Amsterdam UMC is one of the foremost research institutions in the Netherlands, providing integrated patient care, fundamental and clinical scientific research, and teaching. In the Department of Endocrinology and Metabolism at location AMC at the Meibergdreef in Amsterdam, different PI groups are closely working together on one of the key research topics which is the control of the central nervous system over energy metabolism. Our department forms a diverse and international team harbouring clinicians and basic scientists with expertise ranging from endocrinology to diabetes and neuroscience. We also are closely collaborating with the Netherlands Institute for Neuroscience (NIN) which is a leading fundamental neuroscience institute providing many shared facilities enabling us to pursue frontier neuroscience research with several top research groups working in a highly collaborative environment. The PhD student will work at both location AMC and NIN.

If you would like more information, please feel free to contact Prof dr Susanne la Fleur (Principal Investigator), s.e.lafleur@amsterdamumc.nl

If you like to apply, please provide a motivation letter, a CV and two reference letters to s.e.lafleur@amsterdamumc.nl before MAY 30th, 2021.