Post-doc position in "Microvascular dysfunction in Diabetes"



The Cardiovascular Research Institute of Maastricht (<u>CARIM</u>) is seeking a highly motivated post-doctoral researcher with interest in vascular biology and diabetes to join a trans-disciplinary team led by Prof Casper Schalkwijk to study the physiological impact of (dietary) methylglyoxal, a precursor of advanced glycation endproducts, on micro- and macro-vascular function.

The main purpose of our research is to study the effects of methylglyoxal on insulin resistance and on the structure and function of small and large vessels, including small brain vessels and functional impact on cognition. The project involves a broad spectrum of methodologies including the functional study of vessels ex vivo (myograph, arteriograph), glucose metabolism tests, molecular and biochemical assays, animal behavioral testing, imaging, immunohistochemistry and vessel morphometry analysis.

Tasks and responsibilities

- Design and rigorous execution of experimental work, data analys is and dissemination of results;
- Co-supervise research interns and provide support to PhD students;
- Contribute to teaching activities carried by the research group;
- Creative and independent thinker who can deepen a research question;]
- Submission of individual research grants and contribution to the writing of grant applications with the group;
- Excellent communicator (oral and written) and team worker.

Requirements

- a PhD degree* in vascular biology/pathology or a related biomedical field;
- a strong academic track-record with first-author publications in international peer-review journals;
- animal certification (Dutch art 9 or FELASA C) with track record in animal experimentation;
- knowledge and experience with diabetic animal models is desirable;
- knowledge and experience with common laboratory assays, biochemistry and molecular biology is required;
- knowledge and experience with vessels myograph/arteriograph or analytical techniques (e.g. UPLC-MS/MS), imaging or animal behavior will be a major advantage;
- excellent written and oral communication skills in English.
- *N.B.: if the date of PhD graduation is not known at the time of application, a confirmation from the PhD promotors that the defense will be held before July 2020 is mandatory.

We encourage you to apply when you feel prepared to take on challenging aims. This project is highly collaborative within an interdisciplinary team with collaborations with researchers from Dresden and Lyon. and will suit an ambitious researcher who thrives in a fast-paced environment.

The selected applicant will work under the supervision of Prof Casper Schalkwijk and Dr Sébastien Foulquier. The candidate will be affiliated at the Department of Internal Medicine (Interne Geneeskunde) at Maastricht University. The candidate is expected to collaborate with other PhD students and postdoctoral fellows in the participating research groups.

What do we offer?

- An international professional training program to promote your professional development;
- Friendly and multi-disciplinary environment;
- State-of-the-art facilities and cutting-edge research project;
- Fixed-term contract of 1 + 2 years (evaluation after first year), 0.8 fte or full-time position. The salary will be set according to the salary scale of the Collective Labor Agreement of the Dutch Universities (CAO-NU).

Interested?

Deadline for submitting your application is January 6 2020. Please send your CV with names of two referees and a cover letter to: c.schalkwijk@maastrichtuniversity.nl and s.foulquier@maastrichtuniversity.nl Starting date will be April 1st 2020.