



# **Postdoctoral Scientist (1.0 FTE)**

Faculty of Science Radboud University and Donders Institute Nijmegen, The Netherlands Application deadline: 30.11.2022

Are you a scientist with a PhD degree or close to obtaining a PhD degree in neurobiology or a related field, and interested in a scientific career? Are you passionate about science and a critical and creative thinker? Are you interested in exploring the molecular mechanisms underlying motor neurodegenerative disease and perform cutting-edge biomedical research? Then you have a part to play as a postdoc!

We are recruiting an ERC-funded postdoctoral researcher who will work independently on Drosophila genetics projects. Your main project will exploit reverse genetic approaches to model familial forms of motor neurodegenerative and neuromuscular diseases in Drosophila. You will evaluate the disease-relevance of the obtained knock-in Drosophila models by behavioral analysis, immunohistochemistry (IHC), confocal imaging and in vivo noncanonical amino acid tagging (NCAT) approaches. Finally, for valid disease models you will dissect the underlying molecular mechanisms of disease using Drosophila genetic approaches complemented with behavioral analysis, IHC, FISH, imaging, molecular biology, biochemistry, and next-generation sequencing. In addition, you will have the opportunity to contribute to other ongoing projects in the lab, e.g. studying the molecular pathogenesis of CMT peripheral neuropathy associated with mutations in tRNA synthetases, following up on our recently published work (Zuko, Mallik et al, Science, 2021), or characterizing genes identified in a forward genetic screen for genes required for maintenance of peripheral motor and sensory axons (unpublished). You will have the opportunity to collaborate with and supervise Master's students, and in the longer run also PhD students. You will get some exposure to teaching in Master's courses. Eventually, the development of an independent research project that can be transferred to a future position is possible and highly encouraged.

### Profile

You are a highly motivated, passionate, critical, and creative individual with a strong publication record. You are team-oriented, open to provide and receive feedback to/from lab mates, and keen to engage in scientific discussions. You hold a PhD in neurobiology or a related field and are interested in a scientific career. Previous experience with Drosophila genetics and molecular biology is expected. We are a dynamic international lab, so a good command of English is essential.

### Work environment

Within the Department of Molecular Neurobiology, the Storkebaum lab combines Drosophila and mouse genetics to unravel molecular mechanisms underlying motor neurodegenerative and neuromuscular disorders. Our current focus is on Charcot-Marie-Tooth (CMT) peripheral neuropathy associated with mutations in tRNA synthetases and on amyotrophic lateral sclerosis (ALS) associated with mutations in FUS. More broadly, we are interested in the molecular mechanisms underlying axonal degeneration, with a focus on the role of mRNA translation defects. We use a broad spectrum of methods and techniques including a recently developed method for cell-type-specific in vivo labeling of newly synthesized proteins (NCAT), several high-end imaging techniques (confocal and super-resolution microscopy), single-molecule FISH, (single-cell/single-nucleus) transcriptomics, whole genome sequencing, mouse and Drosophila behavioural analysis, electromyography, histology, immunohistochemistry, molecular biology and biochemistry.

Our dynamic and international team currently consists of two postdocs, four PhD candidates and a technical assistant. In addition, we have strong international collaborations with scientists working on RNA biology and genetics. We attracted substantial external funding, including an ERC consolidator grant, two JPND grants, and grants from the Radala Foundation for ALS Research, the Muscular Dystrophy Association (MDA), AFM, ARSLA, the Dutch ALS Association, 'Prinses Beatrix Spierfonds' and the Dutch Research Council NWO. We have several recent papers published in high-impact journals, including Science, Nature Neuroscience, Journal of Cell Biology, Nature Communications, Acta Neuropathologica, EMBO Journal and Plos Genetics.

# We offer

- employment: 1.0 FTE;
- in addition to the salary: an 8% holiday allowance and an 8.3% end-of-year bonus;
- an initial contract for two years, with the intention to extend by another two years.
- excellent personal development opportunities in both scientific and academic career skills;
- You will be able to use our Dual Career and Family Care Services. Our Dual Career and Family Care Officer can assist you with family-related support, help your partner or spouse prepare for the local labour market, provide customized support in their search for employment and help your family settle in Nijmegen.
- The vibrant international environment of the Donders Institute, which has a long tradition in neuroscience and offers a personal career development plan along with lecture series featuring top-notch speakers as well as several internal seminar series.
- You will be able to attend a Dutch language course free of charge.

Are you interested in our excellent employment conditions?

# **Other Information**

The Faculty of Science at Radboud University is an equal opportunity employer, committed to building a culturally diverse intellectual community, and as such encourages applications from women and minorities.

### Would you like to know more?

Further information on: Donders Institute for Brain, Cognition and Behaviour

For more information about this vacancy, please contact: Prof. Dr. Erik Storkebaum, PI and head, Department of Molecular Neurobiology E-mail: <u>erik.storkebaum@donders.ru.nl</u>

# Are you interested?

Please email your application to Erik Storkebaum (<u>erik.storkebaum@donders.ru.nl</u>). Your application should include (and be limited to) the following attachment(s):

- Motivation letter (maximum one page)
- CV
- Contact details of at least two references

Written applications will be evaluated, and video interviews will be conducted with selected applicants. Finally, a further selection of applicants will be invited for a visit, which will include an introduction to all lab members, one-to-one meetings with lab members, a visit of the laboratory facilities, an interview and a scientific presentation.