



PhD Student Position (f/m/d)



Düsseldorf, the capital of NRW, is located in the core of Europe, at the border with Belgium, the Nederland and France; it hosts a vibrant international community and a big airport connected daily to all EU and non-EU countries. HHU offers excellent research environment and infrastructure, such as the Biological Medical Research Centre, the Centre for Advanced Imaging, and the Centre for Structural Studies as well as long established research links to the University Clinics and the Leibniz Research Institutes (i.e. IUF, DDZ). Close vicinity with the University of Cologne also provides plenty of opportunities for scientific exchanges.

Mitochondria are vital organelles. In our lab we primarily exploit the roundworm *Caenorhabditis elegans* as a model organism to investigate the role of mitochondrial stress responses (MSR) in neurodegenerative processes associated with diseases and ageing (Schiavi *et al.*, *Curr Biol*, 2015; Maglioni *et al.* *BBA Bioenergetics*, 2015; Torgovnick *et al.*, *EMBO Reports*, 2018). We specifically aim at identifying interventions modulating MSR to fight mitochondriopathies and age-associated pathologies. More info about the lab can be found here: [VENTURA LAB](#). In this project you will gain insight into mechanistic aspects of a promising natural compound recently identified in the lab.

YOUR TASKS

- Combine genetic, neurobehavioral and imaging techniques to investigate the role of selected molecular signaling (suggested by multi-OMICS analyses) as mediators of compound' beneficial effects
- Utilize state-of-the-art genetic and biochemical assays to identify the intracellular target of the identified compound
- Use functional and structural neuronal assays to address the protective effect of additional natural compounds during *C. elegans* aging and in mitochondriopathies models

YOUR PROFILE

- Master of Science (e.g. Biology)
- Interested in mitochondria-regulated disease and aging
- Enthusiastic and highly motivated
- Excellent communication skills in English (knowledge of German is a plus)
- Eagerness for independent and team work
- Previous experience with *C. elegans* and/or cell biochemistry techniques

WE OFFER YOU

- A 3-years DFG funded position (salary and social benefits based on TV-L 13 65%)
- An international, diverse and fair working environment
- Support in reconciling work and family life
- Flexible working time models
- Extensive advanced training opportunities

The position has to be filled by March 1st 2022. The HHU is committed to equal opportunities and diversity. Women are especially encouraged to apply. We also expressly welcome applications from people with disabilities/ special needs.

Applications should include a statement of research interest, a curriculum vitae with the names and e-mail addresses of two referees, and proof of the required qualifications with grades and should be sent (**one pdf only**) to nataschia.ventura@uni-duesseldorf.de