

# Post-doctoral researcher (f/m/d)

CRC 1218 | Institute for Genetics

The University of Cologne is one of the largest and most research-intensive universities in Germany, offering a wide range of subjects. With its six faculties and its interfaculty centres, it offers a broad spectrum of scientific disciplines and internationally outstanding profile areas, supported by the administration with its services.

Within the framework of the CRC1218 on "Plasticity of the mitochondrial contact site and cristae organising complex" ([www.sfb1218.uni-koeln.de](http://www.sfb1218.uni-koeln.de)), our project aims at understanding the tissue specific composition, architecture and structure of the contact site and cristae organising (MICOS) complex and the related mitochondrial intermembrane space bridging (MIB) complex. These multiprotein assemblies are critical to organize the cristae junctions, where the inner boundary membrane bends towards the mitochondrial matrix, and are thus major players in controlling mitochondrial morphology often affected in mitochondrial pathologies. Research of the Brandt lab is centered around the structural and functional analysis of mitochondrial multiprotein complexes in health and disease applying a wide range of methodologies (e.g. Zickermann et al. Science 2015; Guerrero-Castillo et al. Cell Metabolism, 2017; Cabrera-Orefice et al, Nature Communications, 2018; Researcher ID C-4406-2008)

## YOUR TASKS

- » The postdoctoral researcher will perform a comprehensive structural analysis of the MICOS/MIB complexes in different tissues, applying our recently developed Complexome Profiling approach. Implications of variations on cristae morphology and mitochondrial function will be studied CRISPR/Cas knock-out and mutant cell lines. We further aim at obtaining high-resolution by single particle cryo-electron microscopy. The project will be performed in close collaboration with other researchers of the CRC1218 and the Brandt group at the Radboud Institute for Molecular Life Sciences in Nijmegen, Netherlands.

## YOUR PROFILE

- » The subject of the doctorate should have been obtained in the field of „Biochemistry“ or „Molecular Life Sciences“
- » Solid background in molecular biology and experience in cell biology, genetics, or biochemistry
- » Candidates should have demonstrated outstanding performance through their graduate studies
- » Besides creativity, a strong ability for problem solving through analytical thinking combined with an enthusiasm for scientific research is highly desirable
- » Additionally, we expect good communication skills, fluent English, a high level of independence and the ability for teamwork

## WE OFFER YOU

- » a multidisciplinary and international environment
- » a diverse and fair working environment
- » support in reconciling work and family life
- » extensive advanced training opportunities
- » occupational health management offers
- » local transport ticket at a discount for UoC employees

The position is available from the 01.11.2020 on a full time basis. It is limited to 30.06.2024. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on remuneration group 13 TV-L of the pay scale for the German public sector.

The University of Cologne promotes equal opportunities and diversity in its employment relations. Women are strongly encouraged to apply and given priority in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We strongly welcome applications from individuals with severe disabilities or people of equivalent status. Severely disabled applicants of equal merit and qualifications will be given priority.

Please apply online at: <https://jobportal.uni-koeln.de> with proof of the sought qualifications. Your application should include a cover letter outlining your motivation and qualifications for the project, CV, copies of certificates, and letter(s) of reference. The reference number is Wiss2009-05.

The application deadline is 22.09.2020.