

The University Hospital Bonn is a maximum care facility with a regular capacity of 1.300 beds. Our current staff of more than 8.000 performs assigned duties in research, teaching and medical treatment, including the use of advanced medical technologies, and public health care services at the highest possible level. Interested applicants will be offered a wide range of employment opportunities in a variety of fields.

At the **Institute of Biochemistry and Molecular Biology, University of Bonn Medical School, Germany** is available a

## **PhD position (m/f/d) (65 %)**

Mitochondria fulfil various essential functions for the survival of eukaryotic cells. Their biogenesis and functions depend on the import of more than 1000 different proteins that are produced as precursors on cytosolic ribosomes. The translocase of the outer mitochondrial membrane (TOM complex) forms the entry gate for precursor proteins, which are subsequently sorted via dedicated protein machineries into the different mitochondrial subcompartments. Mitochondrial protein import is an essential process for cell survival and defects cause severe neurodegenerative diseases and cardiomyopathy. We identified a new pathway that clears clogged precursor proteins from the TOM channel to maintain full protein import capacity (Mårtensson et al., 2019 Nature). In this project, we will investigate molecular mechanisms that deliver translocation-stalled precursor proteins for proteasomal degradation.

We use highly innovative techniques in biochemistry, molecular and cell biology such as protein-protein-interaction studies, activity assays, blue native electrophoresis, cell-free protein synthesis and protein stability assays. We offer a well-equipped workspace in an active international team. The University of Bonn provides an excellent scientific research environment.

The position starts as soon as possible and is for a period of three years, with the possibility of an extension.

The ideal candidate will be a highly motivated, team-oriented graduate with a strong interest in protein biochemistry, molecular and cell biology. Experience with biochemical, cell and molecular biology techniques is advantageous. Candidates should hold a diploma or a master's degree in Biology, Biochemistry, Molecular Medicine, Chemistry or a related subject.

The PhD position will be integrated into the SFB1218 on Mitochondrial regulation of cellular function. We offer supportive mentoring and a well-equipped laboratory. Successful candidates will be awarded a PhD.

### **We offer:**

- The salary will be according to the German salary scale TV-L (EG 13)
- A "Jobticket" (subsidized public transport) is available
- There is also a possibility to use the day care center
- Supplementary benefits in the public sector (pension plan according to VBL)

The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university. It aims to increase the proportion of women in areas where women are under-represented and to promote their careers in particular. It therefore urges women with relevant qualifications to apply. Applications will be handled in accordance with the Landesgleichstellungsgesetz (State Equality Act). Applications from suitable individuals with a certified serious disability and those of equal status are particularly welcome.

Questions concerning the project can be addressed to Prof. Dr. Thomas Becker. Applications by email only can be sent to [thbecker@ukbonn.de](mailto:thbecker@ukbonn.de). Please refer to the application number 476\_2020.

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