We are one of the youngest universities in Germany and think in terms of possibilities, not limitations. In the heart of the Ruhr region, we develop ideas of the future at our 11 faculties. We are strong in research and teaching, live diversity, support potential and are highly committed to an educational equality that has earned this name.

The University Duisburg-Essen (Campus Essen), offers a position at the Faculty of Biology, Mechanistic Cell Biology as:

**PhD-student**

(Doktorandenstelle, f/m/d), (part-time 65%, salary equivalent TV-L 13)

in the group of **Doris Hellerschmied**

**Description of the PhD project**

Cells rely on protein homeostasis mechanisms to survive under stress. Consequences of defective protein homeostasis range from the formation of toxic protein aggregates to cell death in neurodegenerative diseases. Eukaryotic cells have evolved to use distinct cellular compartments known as organelles. Each of these organelles has evolved homeostatic mechanisms to ensure its own functionality and overall cellular homeostasis. The Golgi apparatus is an essential organelle at the heart of the secretory pathway and as such it plays a key role in protein modification and sorting.

Research in the Hellerschmied group integrates chemical biology, biochemistry and cell biology to identify the fundamental molecular mechanisms of protein quality control and stress response in the Golgi apparatus. To enable studies of the cellular response to Golgi stress, we developed a chemical biology-based stress model that is non-cytotoxic and specific to the Golgi apparatus (Serebrenik et al., MBoC 2018, Hellerschmied et al., MBoC 2019). The ability to induce Golgi-specific stress provides a unique starting point to identify molecular players of cellular Golgi stress pathways and signaling cascades.

This PhD project aims at determining the molecular role of select candidate genes in restoring and maintaining Golgi homeostasis. Specifically, the molecular function of Golgi stress genes will be studied using a combination of cell biological, biochemical, imaging and chemical biology techniques. Together with complementary projects in the group, these efforts will allow us to identify and engage essential cellular processes that support cellular homeostasis under normal conditions and in disease.

**Your profile**

- master degree or diploma in biology, medical biology, cell biology or a related field
- strong interest in cell and chemical biology
- practical experience in cell culture and molecular biology techniques, hands-on experience in CRISPR-based tagging technologies is a big plus
- excellent communication and presentation skills
- ability to work in a collaborative team

**We offer**

The successful candidate will be part of our new and highly interactive research group funded by a Sofja Kovalevskaja Award from the Alexander von Humboldt Foundation (http://lude.de/mcb, @GolgiLabEssen). Our group is part of the Center of Medical Biotechnology ZMB (https://www.uni-due.de/zmb/), which provides an international and interdisciplinary research environment with access to excellent facilities.

**Start of position:** as soon as possible

**Contract period:** 3 years

**Working time:** 65 percent

**Application deadline:** April 1, 2020

The University Duisburg-Essen aims at promoting the diversity of its members (s. http://www.uni-due.de/diversity).
The University Duisburg-Essen has been awarded for its effort to promote gender equality with the "Total-E-Quality-Award". It aims at increasing the share of women in the scientific personnel and therefore explicitly encourages women to apply. Women will be preferentially considered when equally qualified according to the state equality law.

Applications from disabled or equivalents according to § 2 (3) SGB IX are encouraged.

Applications (including a letter of motivation and a CV with contact information of two references) and inquiries with reference code 159-20 should be addressed by e-mail to: Dr. Doris Hellerschmied, Universität Duisburg-Essen, Mechanistische Zellbiologie, 45117 Essen, Phone 0201 183-3120, E-Mail Doris.Hellerschmied@uni-due.de

You can find information about the Faculty and the contracting authority under:

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