PhD position in Cellular Protein Biochemistry

A PhD position is available in the laboratory for Cellular Protein Biochemistry at the Technical University of Munich (TUM) Department of Chemistry and Institute for Advanced Study.

Our laboratory aims at understanding how proteins fold, assemble and are scrutinized by the cellular quality control machinery. We are particularly interested in proteins of the secretory pathway - proteins that are ultimately secreted or localized on the cell surface and allow cells to interact with their environment. We use an interdisciplinary approach from protein biochemistry to cell biology to analyze the machinery and mechanisms that monitor cellular protein biogenesis.

THE PROJECT:

Membrane proteins make up one third of the human proteome. They are critical for any cellular function from movement to immune defense. Membrane proteins are major drug targets and their mutations cause numerous severe human diseases. Despite these key roles in biology and medicine, cellular mechanisms of membrane protein biogenesis remain ill-defined.

This project will investigate how molecular chaperones support and control membrane protein biogenesis. It will focus on novel endoplasmic reticulum chaperones we have identified in our lab with hitherto mostly unknown functions. The project thus has the potential to provide exciting insights in the molecular biology of cells. To achieve this, the project will use state-of-the-art cell biological approaches from microscopy *via* gene-knockouts to mass spectrometry.

YOUR PROFILE:

You should hold a Diploma/Master's degree (or equivalent) in Biochemistry, Cell Biology or related fields. Previous experience in mammalian cell culture and protein biochemistry is required. Experience in gene editing techniques, protein mass spectrometry and/or fluorescence microscopy is a benefit.

THE ENVIRONMENT AND THE POSITION:

The Technical University of Munich (TUM) is a leading research university in Europe. We are offering excellent working conditions, participation in a structured PhD program at the TUM graduate school and an international research environment. The salary is in accordance to the Public Sector Collective Agreement on Länder (TV-L E13/65%). The position is available from June 2022 on. Only applications received until April 15th 2022 will be considered.

The application should contain a CV, (degree) certificates, a letter of motivation and at least two possible references. Please send your application as **a single pdf-document** by email to: matthias.feige@tum.de

TUM is an equal opportunity employer. Qualified women are therefore particularly encouraged to apply. Applicants with disabilities are treated with preference given comparable qualification.

further information: www.cell.ch.tum.de