novo nordisk fonden



Postdoctoral Researchers in Protease Degradomics

DTU Bioengineering

The section of Protein Science and Signalling Biology at the <u>Department of Biotechnology and Biomedicine</u> has openings for two positions as postdoctoral researchers. The positions will be available from September 2017 or soon thereafter.

Successful applicants will work within the newly established research group 'Protease Degradomics' headed by Professor Ulrich auf dem Keller and funded by a <u>Novo Nordisk Foundation (NNF) Young Investigator Award</u>.

In our research group, we apply and develop advanced positional proteomics workflows to identify proteases, elucidate their interactions and determine their substrates in inflammation, repair and regeneration. With a major focus on the skin, we aim at elucidating interdependent proteolytic pathways and their disturbance in disease to provide a basis for the development of novel strategies for diagnostics and therapeutic intervention.

Responsibilities and tasks

Within the NNF funded research program, each newly recruited postdoctoral researcher will lead one of the two lines of research:

1) Functional mapping of protease networks in normal and inflamed skin

This project will employ advanced positional proteomics to identify and characterize interconnected protease activities using *in vitro* assays, skin cell culture systems (2D and 3D) and genetically modified mouse models.

2) Global characterization of aberrant protease activities in healing impairments

In this project, we will identify and characterize proteolytic signatures as markers of wound progression by degradomics analyses of clinical wound exudates from patients with normal and impaired healing.

Qualifications

Applicants should hold a PhD in a life sciences discipline, have excellent communication skills and be extensively trained in protein biochemistry, cell culture systems, biological sample preparation and computational data analysis. Prior experience in mass spectrometry-based proteomics is not mandatory but would be highly advantageous, and knowledge of targeted proteomics workflows would be a strong asset. The ideal candidates would be also familiar with handling mice.

Salary and terms of employment

The appointment will be based on the collective agreement with the Confederation of Professional Associations. The allowance will be agreed with the relevant union.

The positions will be located at the DTU Lyngby campus in a newly established research building hosting ultra-modern laboratories for protein science and the DTU Proteomics Core with state-of-the-art mass spectrometers. Maximum period of employment is 4 years.

Further Information

Additional information may be obtained from Dr. Ulrich auf dem Keller.

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Application procedure

Please submit your online application no later than 4 June 2017 at

http://www.dtu.dk/english/career/job?id=92d563b3-dd71-4fc7-b7fb-d803151a331c