

The group of **Prof. Dr. Andrea Vortkamp** at the **Centre for Medical Biotechnology (ZMB)**, University Duisburg-Essen, Campus Essen, is inviting applications for

1 Ph.D. position
(Salary according to 13 TV-L;65%)

Our group investigates the molecular mechanisms regulating development and degeneration of the articular cartilage. In this project we aim to investigate the role of heparan sulfate (HS) in the development and progression of osteoarthritis, one of the most prevalent degenerating diseases of the skeleton. Based on previous experiments demonstrating that specific alterations in the HS structure have a protective effect on the progression of OA, we now plan to evaluate if HS antagonists can act as potential therapeutic agents. The project includes the investigation of HS antagonists in a murine OA model, comparative expression studies using RNA-Seq, cell and organ cultures, high resolution microscopy, and the biochemical investigation of HS-protein interactions. The project is part of the DFG research group ExCarBon and an intensive interaction with other groups in this consortium is expected.

The Center for Medical Biotechnology provides an excellent scientific environment and ideal working conditions. In addition, the group of Andrea Vortkamp co-operates with national and international (France, Sweden, USA) experts in different disciplines giving the opportunity to learn new methods in their laboratories.

We are seeking candidates with high motivation to address biological questions in a multidisciplinary approach. Experiences in molecular and cell biology, biochemistry and genetics are of advantage for a favorable application. The successful candidate should be an excellent team player with the ability to work independently in an interdisciplinary environment.

In keeping with the University Duisburg-Essen's policy regarding gender equality, female applicants are particularly encouraged. Disabled people with identical qualifications will be favored.

The deadline for the application: **6.11. 2019**

Applications containing a CV, a list of publications and names of at least two referees should be addressed to:

Prof. Dr. Andrea Vortkamp,
University Duisburg-Essen
Department of Developmental Biology
ZMB
45117 Essen
E-Mail: zmbentwicklungsbiologie@uni-due.de

Further information about the University Duisburg-Essen can be found at
<http://www.uni-due.de/zmb/>

