Applications are invited for **two Postdoc positions available 02/2020** in the Computational Pharmaceutical Chemistry & Molecular Bioinformatics group (Prof. Dr. Holger Gohlke; http://cpclab.uni-duesseldorf.de) at the Heinrich-Heine-University, Düsseldorf, Germany.

Topic: Robust and selective lipolytic biocatalysts for industrial applications (LipoBiocat)

The BMBF-funded project aims at I) Identification, isolation, biochemical and structural characterization of new robust and selective biocatalysts from the class of lipolytic enzymes as well as their integration into new industrial processes for the synthesis and hydrolysis of chemicals and polymers and II) development of a new strategy for the fast and efficient identification and optimization of natural and rationally generated enzyme diversity.

The project will be performed in close collaboration with scientists from University of Hamburg, RWTH Aachen, Research Center Jülich, Bayer AG, and Covestro Deutschland AG.

The candidates will develop and validate a structural bioinformatics pipeline to identify polymer-active enzymes in sequence data sets and thereby exploit the natural enzyme diversity. They will furthermore structurally characterize lipolytic enzymes and predict optimal variants for the target reactions based on promiscuous and robust enzyme frameworks, which makes an important contribution to the development of rationally generated enzyme varieties.

Requirements: Ideal candidates will have a record of excellence and a strong background in computational (bio)chemistry, molecular informatics, and computational structural biology as well as a high interest in working in an interdisciplinary research field, and profound knowledge in state-of-the-art computational enzymology/biotechnology and programming.

How to apply: Applicants should submit applications (a one-page letter of motivation *why* they are interested in the respective project and *how* they can contribute to the project's success, a current CV, and contact data of three references) by email to gohlke@uni-duesseldorf.de . **Please provide all documents as one PDF file and specify for which position you are applying.**

Detailed **information about living and studying in Düsseldorf** is provided here: http://www.uni-duesseldorf.de/home/leben-in-duesseldorf.html