

PhD student in Cell Engineering (f/m/d)

Are you passionate about science, full of ideas and innovative potential that drive change and enjoy working in an international, fast-paced environment? Are you motivated by the societal impact of research and seek an opportunity to play an instrumental part in the development of emerging technologies for biology and healthcare? Then the Chair of Biological Imaging (CBI) at the Technical University of Munich (TUM) and its integrated Institute of Biological and Medical Imaging (IBMI) at the Helmholtz Zentrum Muenchen (HMGU), Germany, is the ideal environment for you!

CBI is the cornerstone of a rapidly expanding bioengineering ecosystem in the Munich science area; including the Research Center TranslaTUM and the Helmholtz Pioneer Campus, which integrate bioengineering with oncology and metabolic disorders, respectively. CBI scientists develop next-generation imaging and sensing methods to measure previously inaccessible properties of living systems, hence, catalyzing breakthroughs in biology and medicine. Comprising 11 inter-disciplinary laboratories and scientists from more than 25 countries, CBI offers state-of-the-art infrastructure for innovative research and a perfect environment to accelerate your career. Our research aims to shift the paradigm of biological discovery and translation to address major health challenges of our time and develop the medical solutions of tomorrow.

The research group for Cellular Engineering is part of CBI and focuses on developing genetically encodable molecular labels and sensors for innovative imaging schemes, primarily fluorescence and optoacoustic imaging. We develop labels based on strategies of protein engineering but are also interested in reprogramming whole cells to that effect. The developed molecular tools are employed on the level of single mammalian cells as well as whole organisms.

Join our team and be part of our rich and dynamic research culture of enquiry and innovation. CBI researchers come from the top ranks of physics, engineering, chemistry, biology and medicine and our pipeline frequently yields high-impact papers, successful technology spin-offs and commercialization. Our research is regularly featured in major news channels and received broad recognition including several prestigious awards and considerable research funding from national and international sources.

We now seek a highly qualified and motivated PhD student fellow in cell engineering (f/m/d) to drive the development of imaging labels and sensors in the context of immune and tumor biology.

The mission:

The candidate will work on the development of new labels and sensors on the molecular level. Foremost, the candidate will be pivotal in strengthening our efforts to showcase cutting edge applications of developed labels primarily in the fields of immune and tumor biology. The candidate will establish functional labels in mammalian systems and optimize their use for specific research questions in above fields. Such work will be conducted in close collaboration with other laboratories

of TUM and HMGU that are leading in the respective research areas. Hence, the position is an exciting interface between development of molecular tools, imaging, as well as answering pressing biomedical questions. Accordingly, the ideal candidate should combine both, a strong interest in developing imaging tools on the molecular level and a motivation to enter diverse biomedical fields to a level that facilitates show-case applications of our labels in the respective fields.

Your profile:

The successful applicant must have the following:

- High motivation, curiosity, and commitment to scientific excellence
- A Master degree in cell- and molecular biology, biochemistry or similar field
- Background in cell biology and molecular biology
- Experience in mammalian cell culture
- Knowledge on cellular signaling cascades and regulation mechanisms, immunology or tumor biology is an advantage
- Interest in imaging and spectroscopy
- Team player skills and enthusiasm to work in a multi-disciplinary, collaborative environment
- Excellent command of the English language

Our offer:

We offer you the unique chance to make a difference in future healthcare. At CBI, we strongly believe in scientific excellence and innovation. This is your opportunity to be part of and to advance your career in a world-leading research institute, where bioengineering principles meet today's challenges in biology and medicine to develop the solutions of tomorrow. CBI provides a highly international, multi-disciplinary environment with excellent opportunities for professional growth. You will be part of a dynamic, professional and highly motivated team within a stimulating environment. We support career development, continued education and life-long learning.

Situated on the foothills of the Alps, Munich is consistently ranked as one of the most vibrant and enjoyable cities in the world, with an exceptionally quality of life. Greater Munich is also home to several world-class universities and research institutes, creating a truly inspiring intellectual atmosphere.

The successful applicant will initially have a 3-year contract, with the possibility of extension. We offer a competitive salary and benefits depending on work experience and seniority in accordance with the public service wage agreement of the Free State of Bavaria (TV-L 13 – 65%). As an equal opportunity and affirmative action employer, TUM explicitly encourages applications from women as well as from all others who would bring additional diversity dimensions to the university's research and teaching strategies. Preference will be given to disabled candidates with essentially the same qualifications.

Your application:

We are looking forward to receiving your comprehensive application including your letter of motivation, CV and academic transcripts of records preferably in English and in a single PDF file, via email to cbi.recruitment@tum.de until June 30, 2019. Please indicate "PhD student Cell Engineering (f/m/d)" in the subject line.

For any questions please contact:

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