

Postdoctoral fellow in fluorescence imaging (f/m)

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 Institute of Biological and Medical Imaging (IBMI) at the Helmholtz Zentrum München (HMGU) and its integrated Chair of Biological Imaging (CBI) at the Technical University of Munich (TUM), 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.

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, chemistry, engineering, and biomedicine 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 **postdoctoral fellow (f/m) in fluorescence imaging** to drive the clinical translation of novel fluorescence molecular imaging systems.

The Mission:

We work at the interface of technology and medicine, innovating imaging technologies based on optical and acoustic contrast that can be applied in basic biology research and implemented in the clinic to support non-invasive diagnostics, treatment and management of disease. Our portfolio includes a broad range of techniques, including fluorescence molecular imaging and tomography, optical microscopy, optoacoustic microscopy and tomography, which can generate structural and functional information about healthy and diseased tissue at unprecedented depths inside organisms. Building upon our extensive expertise in developing methods and systems, we are now focusing on the clinical translation of our techniques.

Therefore, if you have expertise in signal and image processing and fluorescence imaging, join our team and help us gain as many biomedical relevant insights as possible from our imaging studies. Our goal is to optimize existing and develop new imaging platforms to conduct clinical studies, as well as to explore new clinical applications that could benefit from our imaging technologies. This is your opportunity to contribute to a medical imaging revolution!

The successful candidate will lead advances within an innovative research program that will shift the paradigm in cancer early detection by enhancing current endoscopic performance with highly sensitive and quantitative fluorescence molecular imaging in real time. Methodologies for the analysis of fluorescence and color images will be developed by the successful candidate to enable the delivery of comprehensive information inside the optical theater.

Qualifications

The successful applicant must have the following:

- An Ph.D. in Electrical Engineering, Computer Engineering, Biomedical Engineering, Physics or related discipline.
- Excellent academic records.
- Strong motivation, scientific curiosity and commitment to scientific excellence.
- High knowledge of image and signal processing, pattern recognition, and data visualization.
- Experience with machine learning techniques and statistics is highly appreciated.
- In-depth programming skills in MATLAB for data analysis. LabVIEW programming, C++ skills, robotics and/or other relevant experimental skills are an advantage.
- 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 2-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 Federal Republic of Germany (TV-L E 13). 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. Please indicate "Postdoctoral fellow (f/m) in fluorescence imaging" in the subject line.

For any question please contact:

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