

Postdoctoral fellow in fluorescence molecular endoscopy (f/m/d)

The Chair of Biological Imaging (CBI) at the Technical University of Munich (TUM) and the Institute of Biological and Medical Imaging (IBMI) at Helmholtz Munich are an integrated, multi-disciplinary research structure and form the cornerstone of a rapidly expanding bioengineering ecosystem in Munich, Germany; 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, medicine and the environment. 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.

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 attract significant investment from national and international sources. Our scientists serve in international societies and conferences and are recipients of a multitude of top international and German awards, including the prestigious Gottfried Wilhelm Leibniz prize and 11 ERC awards. In addition to scientific excellence, CBI promotes entrepreneurship, company spin-off activities, and collaborations with other top academic institutions and leading corporations in the photonics, pharmaceuticals and healthcare sectors.

We now seek a highly qualified and motivated **postdoctoral fellow (f/m/d)** to drive the development of a novel fluorescence molecular endoscope.

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, that 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 optics, imaging sensors, and sensor evaluation boards join our team and help us gain as many biomedical relevant insights as possible from our imaging studies. Our goal is to develop a unique endoscope for near infrared fluorescence molecular imaging, as well as to explore new clinical applications that could benefit from such a technology. This is your opportunity to contribute to a medical imaging revolution!

Your profile:

The successful applicant must have the following:

- An Ph.D. in Engineering, Physics, Optics or related discipline.
- Excellent track record of research achievement and publications in top-ranked journals.
- Strong motivation, scientific curiosity, and commitment to scientific excellence.
- Experience with miniaturized sensors, hardware control, and programming.
- Expertise in electronics, imaging, and embedded systems.
- Programming skills in C++ / Labview are an advantage.
- Excellent writing skills and motivation to publish.
- Team player skills and enthusiasm to work in a multi-disciplinary, collaborative environment.
- Excellent command of the English language.

Our offer:

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, medicine and environmental health to develop the solutions of tomorrow. CBI provides a highly international, multi-disciplinary environment offering excellent opportunities for professional growth and everything you need to achieve outstanding research findings leading to high-impact publications. We support career development, continuing education and teaching and training opportunities.

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. Salary will commensurate with work experience and seniority (TV – L E13). 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. Qualified applicants with physical disabilities will be given preference.

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 "Postdoc in fluorescence molecular endoscopy" in the subject line.

For any question, please contact:

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