

PhD student in fluorescence imaging system development and signal analysis (f/m/d)

Are you passionate about science, full of ideas and innovative potential and eager to develop emerging technologies for biology and healthcare? Then, the Chair of Biological Imaging (CBI) at Technical University of Munich (TUM) and the Institute of Biological and Medical Imaging (IBMI) at Helmholtz Zentrum München (HMGU) is the ideal environment for you! Headed by Prof. Vasilis Ntziachristos, CBI scientists develop next-generation imaging and sensing methods to measure previously inaccessible properties of living systems, catalyzing breakthroughs in biology and medicine. 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. Comprising 11 interdisciplinary laboratories and scientists from more than 25 countries, CBI offers state-of-the-art infrastructure for innovative research and the perfect environment to accelerate your career. Our research aims at propelling solutions for the major health challenges of our time and at accelerating their clinical translation.

As part of CBI, the Fluorescence Imaging Group is now recruiting highly qualified and motivated PhD students (in fluorescence imaging system development and signal analysis f/m/d)

The mission:

We offer you the unique chance to make a difference in future healthcare. As part of CBI, we strongly believe in scientific excellence and innovation and our research is steering the developments in the field of fluorescence imaging while we continuously boost the clinical translation of novel technologies and methods. With several exciting EU and nationally funded projects targeting for example early detection of esophageal cancer or tumor delineation in breast cancer, we now have openings for PhD students in the fields of i) system development for optical imaging and tomography, and ii) advanced methods of image and signal analysis. This is your opportunity to advance your career and team up with a world-leading research group, where bioengineering meets biology and medicine to develop groundbreaking solutions for the pressing medical and biological questions of our time.

The successful applicants must have the following:

- MSc in Electrical Engineering, Computer Engineering, Biomedical Engineering, Physics or related discipline.
- Excellent study records.
- Strong motivation, scientific curiosity and commitment to scientific excellence.
- Strong expertise in optics, lasers, and sensors OR image and signal processing (i.e. fluorescence, reflectance, Raman), pattern recognition, statistics, and data visualization.
- Advanced programming skills in MATLAB for data analysis and in LabVIEW for hardware control. C++ skills, robotics and/or other relevant experimental skills are a plus.
- Team player skills and enthusiasm to work in a multi-disciplinary, collaborative environment.
- Excellent command of the English language.

Our offer:

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. TUM offers a wide variety of inspiring and challenging PhD programs, which will supplement your research training with outstanding opportunities for 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 E 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. Please indicate "PhD student in fluorescence imaging system development and signal analysis (f/m/d)" in the subject line.

For any question please contact:

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www.translatum.tum.de

www.pioneercampus.de

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