

CALL FOR CANDIDATES

Post-doctoral Fellowships in Biomedical Engineering / Biomedical Optics

Instrumentation for Health group
ICube Laboratory
Strasbourg, France

Job summary:

The “Instrumentation for Health” group at the ICube laboratory in Strasbourg, France, is seeking talented and motivated post-doctoral fellows with strong backgrounds in Biomedical Optics and Biomedical Engineering. Our mission is to solve important clinical problems by developing novel technology based on the first principles of physics and engineering.

To achieve this goal, we focus on the following two major goals:

- First, we develop novel imaging technology (such as fluorescence or oxygenation imaging) to improve disease detection where it is needed most.
- Second, we translate these developments from the bench, through pre-clinical validation to the clinic where we perform first-in-human trials for image guided surgery.

Job description:

Applicants will be responsible for advancing the field of quantitative diffuse optical imaging for the clinic using a novel method called Spatial Frequency Domain Imaging. The work will cover both aspects of theory and application, as well as hardware and software to develop and validate a novel concept of multispectral quantitative imaging in real-time. Applicants will be part of an ERC & ANR funded team to develop novel instrumentation that permits real-time quantitative imaging during surgery. Applicants will be trained in diffuse optical imaging, *in vivo* molecular imaging, biology and clinical translation as needed.

Working in the “Instrumentation for Health” group places you in the center of the University Hospital of Strasbourg in direct contact with surgeons, healthcare professionals and regulatory specialists, with access to superb human and technical resources (<https://icube.unistra.fr/en/>). This work will also be in direct collaboration with the University Hospital Institute of Strasbourg dedicated to Image-Guided Surgery, with state-of-the-art preclinical operating rooms and dedicated translational facilities (<http://www.ihu-strasbourg.eu/ihu/en/>).

Application process:

Applicants must have a Ph.D. in Biomedical, Electrical, Optical Engineering, or Applied Physics and high-quality, first author, peer-reviewed publications in the field. Experience in optics, diffuse optics theory, signal processing are preferred. Strong skills in instrumentation and a solid mathematical background are required.

To apply, please include a one page cover letter detailing the suitability and qualifications for the position, as well as a current curriculum vitae (including publication list and the contact information of three references). Applicants should send these 2 documents in pdf format to the following email: sgjoux@unistra.fr

Keywords:

Engineering / Medical sciences / Technology / Biomedical Optics / Clinical Translation