

## CALL FOR CANDIDATES

### 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 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 developing novel wide field and endoscopic fluorescence & endogenous imaging for the clinic using innovative techniques such as Spatial Frequency Domain Imaging. Applicants will be part of an ERC & ANR funded team to develop novel instrumentation that permits real-time quantitative imaging during surgery as well as applying the findings in pre-clinical models towards solving clinically-relevant problems. 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 M.S. or an Engineering diploma in Biomedical, Electrical, Optical Engineering, or Applied Physics. Experience in optics, 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: [sqjoux@unistra.fr](mailto:sqjoux@unistra.fr)

#### **Keywords:**

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