

JOB DESCRIPTION

Job Title : Advanced optical methods for real-time quantitative surgical guidance

Job Summary :

The “Instrumentation for Health” group led by Dr. Gioux at the ICube laboratory in Strasbourg, France, develops novel technologies for healthcare based on the first principles of optics. Particularly, the group has been making important developments over the years in the field of image-guided surgery, to help surgeons “see” diseases in real-time during surgical procedures.

The group is currently seeking for a post-doctoral fellow with background on diffuse optics & device development to advance novel methods recently developed in the laboratory towards preclinical validation and clinical translation. The scope of the work will involve developing novel acquisition and processing methods for real-time quantitative imaging of biological samples as well as device design, fabrication and validation in direct collaboration with surgeons at a state-of-the-art translational facility in Strasbourg, France.

Job Description :

The “Instrumentation for Health” group led by Dr. Gioux at the ICube laboratory in Strasbourg, France, is currently seeking for a highly motivated post-doctoral fellow with a background on diffuse optics, device development, and with great interpersonal skills.

The scope of the work will mainly focus on devices & methods development for real-time quantitative imaging in the context of image-guided surgery, with a strong emphasis on translation to pre-clinical experiments and clinical trials. These developments are following our recent work using Single Snapshot of Optical Properties, an acquisition method working in the Spatial Frequency Domain. The work will involve developing novel acquisition and processing methods for real-time diffuse optical imaging of biological samples as well as device design, fabrication and validation. The work will be performed at the ICube Laboratory (<https://icube.unistra.fr/en/>) at the University Hospital of Strasbourg, France, in direct contact with surgeons, healthcare professionals and regulatory specialists. 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/>).

The position is available immediately for 1.5 years with the possibility of renewal contingent on performance.

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: sgioux@unistra.fr

Main research field :

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

JOB DETAIL

Type of contract : Temporary

Status : Full-time

Company / Institute : Université de Strasbourg
Country : France
City : Strasbourg
Postal Code : 67000
Street : 4 rue Blaise Pascal

APPLICATION DETAILS (mandatory)

Envisaged job starting date : 01/07/2016
Application deadline : 01/06/2016
Application e-mail : sgioux@unistra.fr