PhD student in Biomedical Optics

Profile:
A Master degree in physics with good knowledge in optical spectroscopy and biomedical optics is required. The candidate must also have a minimal background in signal analysis as well as in the experimental methods used in tissue optical spectroscopy, ideally for the measurement of the optical properties of biological tissues. In addition, good knowledge of the theoretical concepts related to these fields, including numerical simulations methods, are necessary. We are seeking a highly motivated, open-minded candidate, with creative ideas, with good communication skills, an affinity for practical work with biological sample and who would enjoy working in a multidisciplinary research team involving an industrial partner. A working knowledge in English is required. French is an asset.

Description:
Our group (Swiss Federal Institute of Technology in Lausanne (EPFL), Switzerland. https://lifmet.epfl.ch/wagnieres/) undertakes research on the development, optimization, preclinical and clinical assessment of diagnostic and therapeutic applications of light. One particular aspect consists of developing novel approaches to treat various diseases by photobiomodulation therapy. The main goals of the activity of the successful candidate will be to optimize the radiometric and spectral protocols of this approach, to model the propagation of light in biological tissues, as well as to calculate the light dosimetry in vitro and in vivo. This activity will be performed in close collaboration with industrial and clinical partners. The position is supported by the Swiss National Science Foundation.

Start of the work:
September 1st.

Application procedure:
Applicants should send their curriculum vitae and motivation letter by e-mail before the end of July for the attention of:

MER Dr. G. Wagnières, LIFMET/BMO, Ecole Polytechnique Fédérale de Lausanne, CH H5 595 (Bâtiment de chimie), Station 6, 1015 Lausanne, Switzerland. Tél: 021 693 31 20, Fax: 021 693 36 26. E-mail: georges.wagnieres@epfl.ch