Postdoctoral Position
In Optical Technology for Biomedical Applications
University of California Davis

Posted: February, 2015

Description: A postdoctoral research position is open for applicants with experimental research experience in optical technologies using lasers, spectroscopic instruments, optical fibers, solid state detectors, laser-scanning optical microscopes, endoscopy, and micro-optics. Candidates will be considered for a broad range of projects including integration of optical technologies with da Vinci surgical robot for intra-operative delineation of surgical margins, development of intravascular catheter systems, and development of optical methods for non-destructive evaluation of engineered tissues. The successful candidates will work on National Institutes of Health (NIH) and California Institute of Regenerative Medicine (CIRM) funded multidisciplinary projects focused on research, development and clinical translation of fluorescence lifetime techniques for in-vivo diagnosis of human diseases. This is an opportunity to work in the Biophotonics Laboratory (http://bme.ucdavis.edu/marculab/) at the University of California Davis (Department of Biomedical Engineering) and in collaboration with clinical departments within the UC Davis School of Medicine and industry partners. The initial appointment is for two years with potential for extension depending upon performance.

Qualifications: Candidates must have a Ph.D. in Physics, Applied Physics, Electrical Engineering, Biomedical Engineering, or other closely related areas. In addition, they must have experience in optical instrumentation, programming (C/C++, MATLAB) and software control of instrumentation. Experience with short pulse lasers, time-resolved fluorescence spectroscopy, fast electronics optical imaging, LabView programming, catheter-based optical systems, fluorescence lifetime imaging microscopy, microfabrication, and pre-clinical and clinical translation of optical technologies is a plus. The candidate must have demonstrated the ability to build and maintain optical instrumentation, perform experimental work and theoretical analysis, publish papers, and to work independently and in an interdisciplinary team. Interested applicants should submit via e-mail a complete curriculum vitae, the contact information for three references, and a copy of one or two publication from previous research to:

Professor Laura Marcu
Department of Biomedical Engineering
University of California, Davis
E-mail: lmarcu@ucdavis.edu

About UC Davis: The Department of Biomedical Engineering at UC Davis has 32 faculty, and is a vibrant and multidisciplinary community of more than 120 researchers. The Department is internationally renowned for its research in biomedical imaging, enjoys strong institutional support, and is ranked #6 in the nation, and #1 in California, based on research expenditures by the National Science Foundation. UC Davis also has a School of Medicine (including an NCI-designated Comprehensive Cancer Center), a School of Veterinary Medicine, the California National Primate Research Center, and the Institute for Regenerative Cures offering unparalleled opportunities for collaborative and translational research. Davis is located within 1-2 hours of San Francisco, Napa Valley, Lake Tahoe and the Northern California coast offering access to a wide range of outdoor and cultural activities and an excellent quality of life.