Research Technician (Translational Optical Imaging)

Division of Pulmonary and Critical Care Medicine/Department of Pathology
Employer: Massachusetts General Hospital

The Pulmonary Optical Imaging Laboratory is a multidisciplinary research group at Massachusetts General Hospital. The focus of the laboratory is on the design, development and clinical translation of optical coherence tomography (OCT) for the detection, diagnosis and assessment of pulmonary diseases, including lung cancer, asthma, and lung fibrosis.

A highly motivated, independent and organized individual with an interest in optical imaging and medicine is sought for a Research Technician position. The primary role of the successful candidate will be to assist in research projects that seek to translate optical imaging devices for the detection, diagnosis, and assessment of pulmonary disease, such as lung fibrosis and lung cancer. Studies will range from device development to pilot clinical studies and multicenter studies. These responsibilities may be expanded based on the interests and career goals of the candidate. This is an ideal position for individuals looking to gain research experience prior to applying to graduate or medical school.

Duties and responsibilities include, but are not limited to:
- Manage clinical research protocols/studies including obtaining and maintaining regulatory approvals, coordinating study subject visits and the collection of data, obtaining study consent, completion of case report forms, and all other study related materials and correspondence.
- Assist with multiple research projects including the development of optical imaging devices, conducting preclinical and clinical studies, ex vivo tissue imaging experiments, processing, analyzing and storing data.
- Assist with other laboratory activities, such as maintaining a computer server and ordering supplies and devices.

Requirements:
- Self-motivated candidates with excellent communication and organizational skills.
- Ability to prioritize and organize workload.
- Ability to work well in a multidisciplinary collaborative hospital research environment, including post-doctoral researchers, physicians, engineers, scientists, etc.
- A Bachelor of Science (Biomedical Engineering, or related discipline, preferred but not required).
- Minimum commitment of 2 years.
- A strong interest in medical research.
- Basic computing skills.
- Prior laboratory experience (preferred but not required).

All interested candidates are encouraged to submit their detailed CV accompanied by a cover letter addressed to Dr. Lida Hariri at mghpulmonaryopticalimaging@gmail.com. Please reference the position you are applying for in the subject line.
Research Technician/Engineer/Scientist (Catheter development & Image Processing)

Department: Medicine, Division of Pulmonary and Critical Care
Employer: Massachusetts General Hospital

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We are seeking a highly motivated candidate with a strong interest in optical imaging and medicine. The successful candidate must be capable of working both independently and closely with other postdoctoral fellows and faculty. The primary role of the successful candidate will be the design, fabrication and testing of OCT imaging catheters and for processing, analyzing and interpreting collected data. These responsibilities may be expanded based on the interests and career goals of the candidate.

Position duties and responsibilities
- Design, fabricate, and test optical imaging catheters.
- Conduct experiments to validate devices.
- Document all design, assembly and testing of catheters.
- Independently operate complex optical imaging system.
- Process, analyze and interpret optical imaging data.
- Assist with multiple research projects including ex vivo tissue, preclinical, and clinical imaging studies.

Requirements
- Self-motivated and highly organized candidates with excellent verbal and written communication skills.
- M.Sc. or B.Sc with research experience in electrical engineering, physics, biomedical optics, biomedical engineering, mechanical engineering, or related fields.
- Minimum commitment of 2 years.
- Proficiency in Matlab required, knowledge of computer programming in LabView/SolidWorks/C/C++ or other relevant language is a plus.
- Knowledge of image/data processing is desirable.
- Ability to prioritize and organize workload.
- Ability to work independently as well as with others in a multidisciplinary collaborative hospital research environment, including physicians, engineers, and scientists.

All interested candidates are encouraged to submit their detailed CV accompanied by a cover letter addressed to Dr. Melissa Suter at mghpulmonaryopticalimaging@gmail.com. Please reference the position you are applying for in the subject line.
Post-Doctoral Fellow (Translational Biomedical Optics)

Division of Pulmonary and Critical Care Medicine/Department of Pathology
Employer: Massachusetts General Hospital

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A highly motivated, independent, innovative and organized individual with an interest in optical imaging and medicine is sought for a Post-Doctoral Research Fellow position. The appropriate candidate will work in a highly collaborative research environment that aims to translate optical imaging devices for the detection, diagnosis, and assessment of pulmonary disease, such as fibrotic lung disease and lung cancer. The position will involve planning and conducting ex vivo/preclinical validation studies, pilot clinical studies, and device development using polarization-sensitive optical coherence tomography for diagnosis and longitudinal assessment of lung fibrosis.

Requirements:
- A doctoral degree in Biomedical Engineering, Bio-Optics, Biophysics, Biology, or related fields
- Experience with optical imaging and/or similar imaging modalities
- Experience with image processing is desired, but not required
- Experience with Matlab and Image J is desired, but not required
- Applicant should be self-motivated, independent, organized, and able to work well in a multidisciplinary collaborative hospital research environment.

All interested candidates are encouraged to submit their detailed CV accompanied by a cover letter addressed to Dr. Lida Hariri at mghpulmonaryopticalimaging@gmail.com. Please reference the position you are applying for in the subject line.