Post-doctoral Positions Available

Research Fellow
Neuro-photonics and Cardio-photonics: Optical imaging of living tissue.
Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA

We are developing high-resolution optical imaging technologies to image the brain and other intact living tissues. These new technologies include 3D imaging to examine the superficial structure of tissues to depths of a few millimeters, with resolution of <100 microns. So far this has been achieved via Laminar Optical Tomography (LOT), a hybrid technique which uses an instrument similar to a confocal microscope, but which exploits photon migration-based image reconstruction techniques to resolve 3D absorbing or fluorescent structures far deeper than the scattering limit of tissue. These technologies have wide applications in medical imaging.

We are seeking motivated researchers with good optical and general engineering skills and preferably some Matlab and programming experience. A working knowledge of biomedical optics and/or photon migration techniques and/or microscopy would be highly advantageous. A good general understanding of cerebral or cardiovascular physiology would also be very valuable. Successful candidates will help to develop the next generation of high-resolution optical imaging instruments, applying these new technologies to existing and new applications in medical imaging.

For further information, please send a CV and a brief description of your research interests to Dr Elizabeth Hillman, ehillman@nmr.mgh.harvard.edu, Tel: 001 617 726 9338.