Position: Multiple Postdoctoral Fellowships in Cardiac Signal Processing and Instrumentation
Organization: Massachusetts General Hospital, Cardiovascular Research Center
Location: Boston, MA
Deadline: till the positions are filled

Description:
The projects involve the development of novel signal processing algorithms and hardware to improve health care delivery in:

(1) the Intensive Care Unit
(2) smart-phone based diagnostics
(3) preventing and treating life threatening ventricular arrhythmias

The interested individual(s) will function as part of a multi-disciplinary team of life scientists, engineers and clinicians.

Environment:
The mission of the laboratory is to develop advanced computational approaches to study the mechanisms of cardiac arrhythmias from the myocyte to the whole organ level. Massachusetts General Hospital (MGH) is a major research center, affiliated with Harvard Medical School and the Brigham and Women’s Hospital. Collectively, these institutions represent one of the largest aggregations of biomedical researchers in the world. Opportunities exist for scientific interaction and collaboration with an extensive program of seminars, symposia and other organized meetings focused on a large array of topics. These seminars are weekly and include local, national, and international speakers on topics of general relevance for cardiovascular science and medicine. The Cardiovascular Research Center (CVRC) has an internationally recognized research program in cardiovascular, vascular, and pulmonary disease and development. The CVRC is home to over 100 researchers, in two locations - the Charlestown Navy Yard and the new Richard B. Simches Research Building. The MGH Division of Cardiology and the CVRC have a proven track record in training leaders in the fields of applied cardiac electrophysiology, pulmonary and vascular biology.

Qualifications:
The ideal candidate should have a Ph.D. in biomedical engineering or other relevant areas of biomedical sciences. She/he should possess excellent written and verbal communication skills, be independent, self-motivated, and should have solid knowledge of signal processing, MATLAB and machine learning (only for the 1st project, above). LabView knowledge is highly desired but not required.

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