Position: NIH funded postdoctoral position in the area of finite element modeling and signal processing
Organization: Massachusetts General Hospital, Cardiovascular Research Center
Location: Boston, MA
Deadline: 06/01/10

Description:
The mission of the laboratory is to develop advanced experimental and computational approaches to study the mechanisms of cardiac arrhythmias from the myocyte to the whole organ level. The specific project will involve exploring and understanding the evolution of ventricular arrhythmias around scar tissue using boundary element based models. We further intend to develop novel algorithms to localize the origin of an arrhythmia in the heart using both intracardiac and body surface signals. The interested individual will function as part of a multi-disciplinary team of life scientists, engineers and clinicians.

Environment:
The 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:
Qualifications include PhD in biomedical engineering or other relevant areas of biomedical sciences. The ideal candidate should possess excellent written and verbal communication skills, be independent, self-motivated, and should have solid knowledge of signal processing and MATLAB. LabView knowledge would be highly desired but not required.

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