## **Student Research Opportunity**

A research opportunity exists for a medical student to participate in developing new ways of predicting cardiac electrophysiological (EP) tissue properties from non-invasive imaging studies prior to invasive radiofrequency ablation procedures to treat left ventricular tachycardia. The goal is to provide the electrophysiologist with new tools to improve the effectiveness of these procedures to treat heart disease. The student will participate in identifying and preparing cardiac EP voltage datasets and PET/SPECT image datasets for further analysis, will perform quantitative analyses of the PET/SPECT cardiac images using an existing software package, and will test prototype software for integrating EP and PET/SPECT cardiac data. The EP voltage and image data will be provided to researchers developing new methods to predict EP-derived tissue classifications from nuclear medicine cardiac images. The student will join an interdisciplinary team of scientists, physicians and engineers from the Department of Diagnostic Radiology and Nuclear Medicine, the Division of Cardiology of the Department of Medicine and the Department of Electrical and Computer Engineering at the University of Maryland, College Park. Good computer skills and in interest in cardiology are desirable. This opportunity is available immediately for part-time work and as part of the Summer Research Training Program.

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