

# GETTING TO THE HEART OF RESEARCH

## Cardiovascular Bioengineering Training Program (CBTP)

Since 2005, the Department of Bioengineering is the home for a distinctive doctoral training program that is supported by a highly competitive training grant from the National Institutes of Health (National Heart Lung and Blood Institute). Our Cardiovascular Bioengineering Training Program (CBTP) educates talented students from engineering and other quantitative sciences for careers in cardiovascular biomedical research. We are actively soliciting applicants interested in a career in the broad area of cardiovascular bioengineering to pursue a PhD degree in bioengineering at Pitt's Swanson School of Engineering.

### PROGRAM FOCUS

- Basic understanding and quantitative characterization of native (normal and pathological conditions) and perturbed (i.e., with deployment of man-made devices or constructs) cardiovascular function at various levels of organization (molecule, cell, tissue, whole organ).
- Imaging for functional assessment at various levels of organization.
- Design and optimization of artificial devices and constructs (mechanical, tissue-engineered, and hybrid).

### CLINICAL ROTATIONS

One novel aspect of the program is that students are required to formally participate in a clinical experience (Clinical Internship and Rotation). Examples of clinical areas for these internships include: Clinical Artificial Heart Program, Adult and Pediatric Cardiology, Critical Care Medicine, Pulmonary Medicine, Radiology, Vascular Surgery.

### STUDENT SUPPORT

Awardees will receive support in the form of monthly stipend, tuition scholarship, health insurance, childcare allowance, and travel budget.

### TO APPLY

For application information please visit the CBTP website at [engineering.pitt.edu/CBTP](http://engineering.pitt.edu/CBTP) or e-mail Dr. Sanjeev Shroff at [sshroff@pitt.edu](mailto:sshroff@pitt.edu). Must be a U.S. citizen or permanent resident to be eligible to apply.

### THE CAMPUS

Most importantly for our graduate students, Pitt is an urban campus in one of the most livable cities. Its world-class research institutions, corporate headquarters, public amenities, healthcare, low cost of living and relative safety have earned Pittsburgh accolades from *Forbes*, *Kiplingers*, *National Geographic*, *The Economist*, and *U.S. News & World Report*. Both the University and the City provide the perfect match for an outstanding graduate school environment.

### PROGRAM DIRECTOR

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### PROGRAM CO-DIRECTOR

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### PROGRAM FACULTY

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