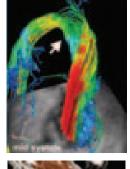
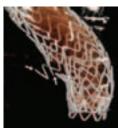
POSTDOCTORAL RESEARCH FELLOWSHIP

A NIH/NIBIB Training Program

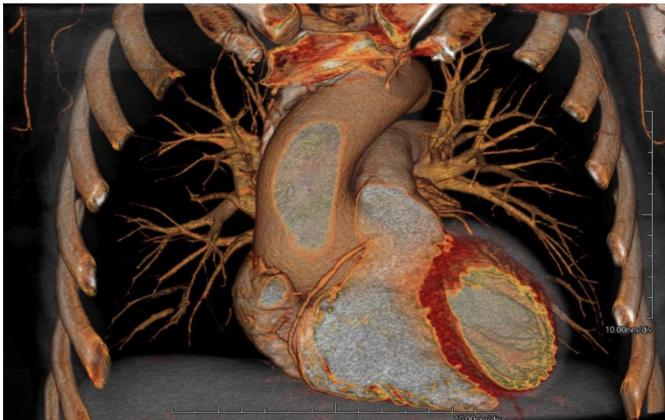


Cardiovascular Imaging Research Program at Stanford









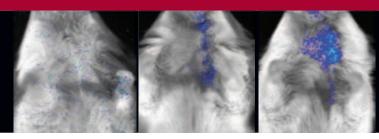
Joseph C. Wu, MD PhD | Program Director

John M. Pauly, PhD | Co-Director





STANFORD UNIVERSITY





Multi-Disciplinary Training Program in Cardiovascular Imaging at Stanford

An NIH/NIBIB Training Program
Joseph C. Wu, MD, PhD, and John Pauly, PhD, Program Directors

Program Overview

The Multi-Disciplinary Training Program in Cardiovascular Imaging at Stanford is funded by the National Institute of Biomedical Imaging and Bioengineering of the National Institutes of Health to bring together postdoctoral fellows and faculty from three complementary areas - clinical, engineering, and molecular imaging - to train the next generation of CV imaging investigators for successful careers. With the impact of cardiovascular disease on US and world health and the rapid advances imaging technologies cardiovascular biology, it is critical that fellows be provided a broad, multi-disciplinary, and collaborative training program to foster their ability to translate CV imaging research clinical application.

MD and PhD backgrounds encouraged to apply for this two-year fellowship, combining CV imaging research. There are over 15 faculty mentors from the Schools of Medicine and Engineering, including Cardiovascular Medicine, Radiology, Molecular Imaging, Electrical Engineering, and Bioengineering.

Program Design & Requirements

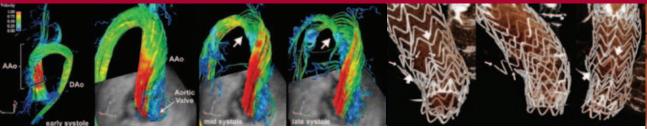
Fellows will pursue research over a twoyear period with the goals of a research publication and a grant submission. Fellows will have a primary research mentor. Some may also select a secondary mentor from a complementary area (e.g., a clinical secondary mentor to complement a bioengineering primary mentor). There will be broad exposure for all fellows to clinical imaging modalities and facilities within the Stanford University Medical Center. Fellows with clinical training are welcome to maintain some clinical activities, however as an NIH research training program this will be limited to 10% effort.

The educational program emphasizes collaborative interaction in 4 major areas

- 1. Multi-modality CV Imaging
- 2. Multi-disciplinary Innovation
- 3. CV Imaging Discovery
- 4. Research Career Development

These include courses in Biodesign (optional) and Molecular Imaging. Fellows have the opportunity to attend weekly seminars hosted by the Stanford Cardiovascular Institute and the Center for Biological **Imaging** Stanford. at workshop on study design and grant/ manuscript writing will be supported. Finally, fellows will have access to a wide range of courses and seminars to enhance their primary fields of research throughout Stanford University and the Schools of Medicine and Engineering.

POSTDOCTORAL RESEARCH FELLOWSHIP



Faculty- visit website for a complete list

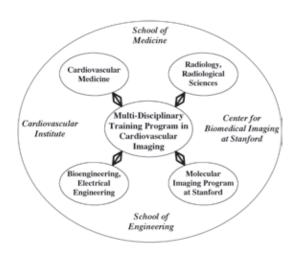
The faculty mentors are a critical component of the CVIS program, with a balance of MD and PhD mentors across the core collaborative departments. They are grant-funded faculty engaged in a broad range of cardiovascular imaging research with experience training successful young investigators.

Dominik Fleischmann, MD (Radiology)
Francis Blankenberg, MD (Radiology, MIPS, Pediatrics)
Kim Butts Pauly, PhD (Radiology, Bioengineering)
Christopher Contag, PhD (Pediatrics, Microbiology & Immunology, MIPS, Radiology)
Rebecca Fahrig, PhD (Radiology)
Sanjiv Sam Gambhir, MD, PhD (Radiology, MIPS, Bioengineering)
Robert Herfkens, MD (Radiology)
Pierre Khuri-Yakub, PhD (Electrical Engineering)
David Liang, MD, PhD (Cardiovascular Medicine, Electrical Engineering)

John Pauly, PhD (Electrical Engineering)
Dwight Nishimura, PhD (Electrical Engineering)
Norbert Pelc, PhD (Radiology, Bioengineering)
Charles Taylor, PhD (Bioengineering, Mechanical Engineering, Radiology)
Joseph Wu, MD, PhD (Cardiovascular Medicine, Radiology, MIPS)
Phillip Yang, MD (Cardiovascular Medicine)
Greg Zaharchuk, MD, PhD (Radiology)

Resources & Facilities

The research, clinical, and educational resources and activities of the departments and programs involved provide an extraordinary environment for multi-disciplinary training in CV imaging. A key asset of the CVIS program is the proximity of the departments and facilities on the Stanford University campus. The Falk Cardiovascular Research Center is adjacent to Stanford Hospital and houses Cardiovascular Medicine, Cardiothoracic Surgery, and the Cardiovascular Institute. In addition to cardiovascular biology labs, it has a full animal facility with surgical and cath lab facilities and the Falk Cardiovascular 3T MRI lab. The Richard M. Lucas Center for Imaging is near the School of Medicine and houses the Radiology Department and Radiologic Sciences Lab. It has one 1.5T, two 3T, and one 7T whole-body MRI systems, as well



as a cyclotron and radiochemistry facilities. The Stanford Hospital has numerous inpatient and outpatient state-of-the-art MRI, CT, SPECT, PET/CT, echo, and x-ray angio systems. The James H. Clark Center is between the School of Medicine and the Packard Electrical Engineering Building and houses Bioengineering and the Molecu-

The James H. Clark Center

POSTDOCTORAL RESEARCH FELLOWSHIP



lar Imaging Program at Stanford (MIPS). It has the Stanford Center for Innovation in In–Vivo Imaging (SCI³), which is a multimodality small animal imaging facility with bioluminescence, fluorescence, micro–PET, micro–SPECT, ultrasound, micro–CT, and 7T MRI. The Packard Building houses Electrical Engineering, which has a dedicated Magnetic Resonance Systems Research Lab nearby with a 1.5T research MRI.

Qualifications

The CVIS program seeks MD, PhD, or MD/PhD graduates. Applicants must be either a U.S. citizen or permanent resident to apply. Funding support includes postdoctoral salary, supplies, and travel to conferences for two years.

Links

Cardiovascular Institute:

http://cvi.stanford.edu

Cardiovascular Medicine:

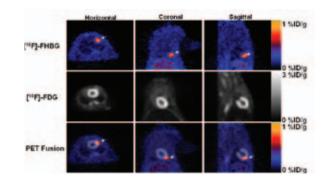
http://cvmedicine.stanford.edu

Molecular Imaging Program at Stanford:

http://mips.stanford.edu

Bioengineering:

http://bioengineering.stanford.edu



The following material should be submitted:

- Two letters of recommendation
- 1-page career goal statement
- 1-page written research proposal describing a project of interest in CV imaging

Upload Application:

http://med.stanford.edu/cvi/education/cvis-t32.html

Questions: Contact

David Preston, Program Manager

Stanford University School of Medicine 265 Campus Drive, G1120 Stanford, CA 94035-5101

Tel: (650) 725-7964

Email:preston@stanford.edu

For More Information

http://med.stanford.edu/cvi.html



