Biomechanics in Regenerative Medicine Training Program (BiRM)

"The next generation of biomechanical engineers need exposure to multi-scale biomechanics as a universal approach to solving mounting healthcare problems – to efficiently translate scientific discoveries in contemporary cells and molecular biology into safe and effective therapies."

Through the National Institute of Biomedical Imaging and Bioengineering (NIBIB), funding for PhD training in a cross-disciplinary Biomechanics in Regenerative Medicine program is now available through the University of Pittsburgh's Department of Bioengineering and Carnegie Mellon University's Department of Biomedical Engineering.

The goal of the Biomechanics in Regenerative Medicine (BiRM) training program is to provide a solid foundation upon which to build a productive and independent career in multi-scale biomechanics as applied to regenerative medicine. This is accomplished through a highly coordinated and mentored interdisciplinary training program with a combination of required and elective courses, research activities and specialized training opportunities.

PROGRAM OBJECTIVES

- To allow students immediate exposure to the research environment
- To provide students with diverse interdisciplinary coursework
- To encourage research collaboration by removing "roadblocks" of traditional programs
- To focus on biomechanics of tissue engineering and regenerative medicine as an important aspect in the research process through involvement with the McGowan Institute for Regenerative Medicine
- To encourage translational activities, innovation and entrepreneurship

TRAINING DETAILS

Trainees will have the opportunity to select a research area from a broad pool of faculty. Additionally, cross-institutional courses and research seminars are offered. The breadth of research areas that span various physiological systems allows for a unique opportunity for trainees to become highly skilled problem solvers while avoiding over specialization.

FINANCIAL SUPPORT

Financial support is provided for two years for qualified applicants and includes full tuition, monthly stipend, and health insurance.

PRINCIPAL INVESTIGATOR David A. Vorp, PhD John A. Swanson Professor

of Bioengineering Senior Associate Dean for Research and Facilities Swanson School of Engineering University of Pittsburgh

CO-PRINCIPAL INVESTIGATOR

Savio L-Y. Woo, PhD, DSc, DEng Distinguished University Professor Emeritus Department of Bioengineering University of Pittsburgh

CO-PRINCIPAL INVESTIGATOR Keith E. Cook, PhD

Professor and Department Head Biomedical Engineering Carnegie Mellon University

UNIVERSITY OF PITTSBURGH | SWANSON SCHOOL OF ENGINEERING | BIOENGINEERING



TO APPLY

Highly motivated second year PhD level graduate students with a minimum GPA of 3.25 who have passed the qualifying exam are encouraged to apply.

- · Research background and interest
- Reference letters
- GPA
- · Personal statement

Interested students should contact Mrs. Diann DeCenzo (ddecenzo@pitt.edu) for an application.

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 *US News & World Report*. Both the University and the City provide the perfect match for an outstanding graduate school environment.

To learn more please visit, engineering.pitt.edu/bioengineering.

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