BIOENGINEERING, BIOTECHNOLOGY AND INNOVATION AREA OF CONCENTRATION

The University of Pittsburgh School of Medicine has a wealth of resources for investigation and innovation across virtually every area of biomedicine. Students have successfully completed project work and in-depth study throughout the school. Many students pursue scholarly opportunities and mentorship in new and integrative disciplines, including some that reach beyond the medical school. The BBI AOC will support students who work in areas such as bioengineering, biomedical informatics, tissue engineering, and similar fields.

A significant portion of the medical student body has relevant premedical experience in these subject areas, as a result of their premedical studies and prior work experience. This Area of Concentration broadly encompasses these innovative fields and provides additional support for all of these students. It can shed light on new opportunities for the entire student body.

AOC TOPICS AND STRUCTURE

The BBI AOC offers students support as they pursue scholarly work across a spectrum of subject areas:

Devices
Imaging
Diagnostics
Drug Delivery Systems
Genetic Engineering
Innovation and Technology Transfer
Biomaterials
Bioengineering
Tissue Engineering
Telemedicine
Biomedical Informatics and Big Data

CORE PARTNER DISCIPLINES AND CENTERS

Units throughout the medical school and beyond have committed support for and to faculty participation in the BBI AOC:

Department of Bioengineering
Department of Biomedical Informatics
Department of Plastic Surgery
McGowan Institute
Center for Medical Innovation
Innovation Institute

CORE ACTIVITIES

Core conference series with faculty presentations and journal clubs
Summer research and longitudinal scholarly research in one of the AOC disciplines
Summer clinical innovation shadowing program with weekly seminar series
Innovation competition experience
Faculty mentoring
Senior elective course – *Idea to Impact*
Student reflection portfolio

OPTIONAL ACTIVITES

Innovation Externship with industry partner company – 1 to 3 months
Courses at ICRE, and in Bioengineering, Biomedical Informatics, Law and Bioethics
Innovation Institute programs – First Gear, Benchtop to Bedside, Concept to Commercialization
Workshops at Department of Biomedical Informatics
BBI mini-electives in years 1 and 2

AOC DIRECTORS

John Maier, MD, PhD, Director
Co-Directors:
Vanathi Gopalakrishnan, PhD, Biomedical Informatics
Neeraj Gandhi, PhD, Bioengineering