Biomedical Engineering

Phone: 314-935-7208
Website: https://bme.wustl.edu/academics/undergraduate-programs/index.html

Faculty

Chair
Lori A. Setton (https://engineering.wustl.edu/Profiles/Pages/Lori-Setton.aspx)
Lucy and Stanley Lopata Distinguished Professor of Biomedical Engineering
PhD, Columbia University
Biomaterials for local drug delivery; tissue regenerations specific to the knee joints and spine

Endowed Professor
Rohit V. Pappu (https://engineering.wustl.edu/faculty/Rohit-Pappu.html)
Gene K. Beare Distinguished Professor of Biomedical Engineering
PhD, Tufts University
Macromolecular self assembly and function; computational biophysics

Professors
Dennis L. Barbour (https://engineering.wustl.edu/faculty/Dennis-Barbour.html)
MD, PhD, Johns Hopkins University
Application of novel machine learning tools to diagnose and treat disorders of perception and cognition

Jianmin Cui (https://engineering.wustl.edu/faculty/Jianmin-Cui.html)
PhD, State University of New York–Stony Brook
Ion channels; channel structure-function relationship; biophysics

PhD, Arizona State University
Motor control; neural engineering; neuroprosthetics; movement biomechanics

Baranidharan Raman (https://engineering.wustl.edu/faculty/Barani-Raman.html)
PhD, Texas A&M University
Computational and systems neuroscience; neuromorphic engineering; pattern recognition; sensor-based machine olfaction

PhD, Duke University
Cell mechanics; receptor and ligand interactions; molecular biomechanics

Dennis & Barbara Kessler Career Development Associate Professor
PhD, Washington University
Ion channel biophysics

Chao Zhou (https://engineering.wustl.edu/faculty/Chao-Zhou.html)
PhD, University of Pennsylvania
Optical coherence tomography

Quing Zhu (https://engineering.wustl.edu/faculty/Quing-Zhu.html)
Edwin H. Murty Professor of Engineering
PhD, University of Pennsylvania
Biophotonics and multimodality ultrasound and optical imaging

Associate Professors
Hong Chen (https://engineering.wustl.edu/faculty/Hong-Chen.html)
PhD, University of Washington
Physical acoustics; therapeutic ultrasound and ultrasound imaging

Song Hu (https://engineering.wustl.edu/faculty/Song-Hu.html)
PhD, Washington University in St. Louis
Optical and photoacoustic technologies for high-resolution structural, functional, metabolic and molecular imaging in vivo

Michelle Oyen (https://engineering.wustl.edu/faculty/Michelle-Oyen.html)
PhD, University of Minnesota
Bioengineering approaches to the study of pregnancy and childbirth; mechanical properties of hydrogel and hydrogel composite materials; biomimetic materials referencing both hard and soft natural tissues

Jai S. Rudra (https://engineering.wustl.edu/faculty/Jai-Rudra.html)
PhD, Louisiana Tech University
Peptide-based biomaterials; immunoeengineering; immunology of nanoscale aggregates; development of vaccines and immunotherapies

Kurt A. Thoroughman (https://engineering.wustl.edu/faculty/Kurt-Thoroughman.html)
PhD, Johns Hopkins University
Human motor control and motor learning; neural computation

Assistant Professors
Nate Huebsch (https://engineering.wustl.edu/faculty/Nathaniel-Huebsch.html)
PhD, Harvard University
Cell-material interactions, IPSC-based tissue modeling to study cardiac development and disease
Abhinav Kumar Jha (https://engineering.wustl.edu/faculty/Abhinav-Jha.html)
PhD, University of Arizona
Development of computational-imaging solutions for diagnosing and treating diseases

Christine M. O’Brien (https://engineering.wustl.edu/faculty/Christine-OBrien.html)
PhD, Vanderbilt University
Developing optical spectroscopy and imaging tools to solve global problems in maternal-fetal health and reproductive diseases

Alexandra Rutz (https://engineering.wustl.edu/faculty/Alexandra-Rutz.html)
PhD, Northwestern University
Engineering of electronic tissues using materials design and fabrication-based approaches

Ismael Seánez (https://engineering.wustl.edu/faculty/Ismael-Seanez.html)
PhD, California Institute of Technology
Neuro-rehabilitation tools and programs that promote active use of residual mobility and maximize recovery through the use of body-machine interfaces

Michael D. Vahey (https://engineering.wustl.edu/faculty/Michael-Vahey.html)
PhD, Massachusetts Institute of Technology
Biophysical mechanisms of infectious disease; fluorescence microscopy; microfluidics

Principal Lecturer

Patricia Widder (https://engineering.wustl.edu/faculty/Patricia-Widder.html)
MS, Washington University

Lecturer

Katherine Schreiber (https://engineering.wustl.edu/faculty/Katherine-Schreiber.html)
PhD, Saint Louis University

Senior Professor

Larry Taber
PhD, Stanford University
Mechanics of growth and development; cardiac mechanics

Senior Emeritus Professors

Yoram Rudy
Fred Saigh Distinguished Professor of Engineering
PhD, Case Western Reserve University
Cardiac electrophysiology; modeling of the cardiac system

Frank Yin
MD, PhD, University of California, San Diego