BIOMEDICAL ENGINEERING

17 Hillhouse Avenue, 203.432.4220
M.S., M.Phil., Ph.D.

Chair
Jay Humphrey

Director of Graduate Studies
Richard Carson (richard.carson@yale.edu)

Professors Helene Benveniste,* Joerg Bewersdorf,* Richard Carson,† Nicholas Christakis,* Todd Constable,* Robin de Graaf,* James Duncan,† Jay Humphrey, Fahmeed Hyder,† Francis Lee,* Andre Levchenko, Graeme Mason,* Evan Morris,† Laura Niklason,* Xenophon Papademetris,* Douglas Rothman,† W. Mark Saltzman, Martin Schwartz,* Fred Sigworth,* Albert Sinusas,* Brian Smith,* Lawrence Staib,† Hemant Tagare,* Paul Van Tassel,* Steven Zucker†

Associate Professors Stuart Campbell, Tarek Fahmy, Rong Fan, Gigi Galiana,* Anjelica Gonzalez, Michelle Hampson,* Henry Hsia,* Farren Issacs,* Themis Kyriakides,† Chi Liu,* Kathryn Miller-Jensen, Michael Murrell, Dana Peters,* Jiangbing Zhou*

Assistant Professors Nicha Dvornek,* Ansel Hillmer,* Michael Mak, Dustin Scheinost,* Gregory Tietjen*

* A secondary appointment with primary affiliation in another department or school.
† A joint appointment with another department.

FIELDS OF STUDY

Biological and medical devices, biological signals and sensors, biomaterials, biophotonics, cellular biomechanics, computational biomechanics, computational medicine, computer vision, digital image analysis and processing, drug delivery, energy metabolism, experimental biomechanics, gene delivery, gene therapy, image analysis, Magnetic Resonance Imaging (MRI), Magnetic Resonance Spectroscopy (MRS), modeling in mechanobiology, molecular biomechanics, nanomedicine, network analysis, neuroreceptors, physics of image formation (MRI, optics, ultrasound, nuclear medicine, and X-ray), physiology and human factors engineering, Positron Emission Tomography (PET), regenerative medicine, signaling pathways, Single Photon Emission Computed Tomography (SPECT), systems biology, systems medicine, tissue engineering, tracer kinetic modeling, and vascular biology.

For degree requirements—including the joint M.D./Ph.D. in Biomedical Engineering—and courses, see Engineering & Applied Science.