BIOMEDICAL ENGINEERING

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

Chair
James Duncan

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,† Rong Fan, Anjelica Gonzalez, Michelle Hampson,* Henry Hsia,* Jay Humphrey, Fahmeed Hyder,† Farren Issacs,* Themis Kyriakides,† Francis Lee,* Andre Levchenko, Chi Liu, Graeme Mason,* Evan Morris,* Xenophon Papademetris,* Douglas Rothman,‡ W. Mark Saltzman, Martin Schwartz,* Fred Sigworth,* Albert Sinusas,* Brian Smith,* Lawrence Staib,‡ Hemant Tagare,* John Tsang,* Paul Van Tassel,* Jiangbing Zhou*, Steven Zucker†

Associate Professors  Fadi Akar,* Stuart Campbell, Julius Chapiro, Tarek Fahmy, Gigi Galiana,* Michael Higley,* Ansel Hillmer,* Chenxiang Lin,* Kathryn Miller-Jensen, Michael Murrell, Dana Peters,* Yibing Qyang*

Assistant Professors  Sanjay Aneja,* Daniel Coman,* Purushottam Dixit,* Nicha Dvornek,* Evelyn Lake, Michael Mak, John Onofrey, Cristina Rodriguez, Shreya Saxena, Dustin Scheinost*

* 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, neuromodulators, 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.