Developing clinically translatable solutions for human health by training the next generation of biomedical engineers, cultivating leaders, and nurturing the integration of engineering and medicine in a discovery-centered environment.

Biomedical engineers design diagnostic devices and equipment to detect diseases. They use their mathematical and computational skills to analyze actions in the body, such as blood flow, in order to create ventricular assist devices, stents, or artificial organs. Biomedical engineers use advanced computer modeling to develop new drugs used to treat diseases like cancer, cardiovascular disease, diabetes, osteoporosis, and many others.

**RESEARCH CENTERS AND INSTITUTES**

- The **Center for Cardiovascular Simulation**, directed by Dr. Michael Sacks, provides cardiovascular scientists and clinicians with advanced simulations for the rational development of treatments for cardiovascular disease. ccs.ices.utexas.edu
- The **Center for Emerging Imaging Technologies**, led by Dr. Andrew Dunn, fosters collaborative research on the development and applications of new imaging technologies for biomedical research and clinical medicine. www.ceit.utexas.edu
- The **Institute for Biomaterials, Drug Delivery, and Regenerative Medicine**, led by Dr. Nicholas Peppas, provides a focal point for impactful activities in research, education, and service in biomaterials, drug delivery, and regenerative medicine—key areas in transforming health care.

**RESEARCH AREAS**

- Cellular and Biomolecular Engineering
- Biomedical Imaging and Instrumentation
- Computational Biomedical Engineering and Bioinformatics
- Biomechanics

The Biomedical Engineering Department offers the most competitive engineering program at The University of Texas at Austin. Admitted students to our undergraduate program consistently graduate at the top of their high school classes, with an average class rank of 3 percent.

**2015–2016 Snapshot**

**UNDERGRADUATE STUDENTS**

- 463 Enrolled
- 53% Male
- 47% Female
- 9% Minorities
- 71 Valedictorians & Salutatorians
- 1449 Average SAT score

**GRADUATE STUDENTS**

- 86 Enrolled
- 55% Male
- 45% Female
- 9% Minorities
- 27% International
- 27% Major Fellowship Recipients

**DEGREES AWARDED 2014–2015**

- 86 Bachelor’s degrees
- 8 Master’s degrees
- 9 Doctoral degrees

**After Graduation**

**AVERAGE STARTING SALARY**

- $66,732

- 30% of our graduates work in the biomedical/biotech industry often with medical device and pharmaceutical companies.
- 30% attend medical school, and
- 40% pursue graduate school.

**UPDATED SEPTEMBER 10, 2015**
NEW RESEARCH DEVELOPMENTS

Faculty and students conduct research that transforms health care. Recent advancements include:

- The development of an innovative super-resolution microscope from the labs of Dr. Tim Yeh and Dr. Andrew Dunn. This **ADVANCED 3D SINGLE-MOLECULE TRACKING MICROSCOPE** could help researchers better understand cancer by detecting movement of receptors that prompt cancer growth.

- Dr. Janet Zoldan’s research for minimally invasive revascularization, using **PATIENT-SPECIFIC INDUCED PLURIPOTENT STEM CELLS WITH INJECTABLE BIOMATERIALS TAILORED TO PROMOTE VASCULAR FORMATION** that integrates with host tissue to better treat peripheral artery disease.

- Dr. Pengyu Ren’s NIH-funded research to build a computational modeling and **SOFTWARE TOOL THAT ACCELERATES DRUG DISCOVERY** by helping researchers better understand and predict protein ion interaction.

- Dr. Jeanne Stachowiak’s **DISCOVERY OF A PREVIOUSLY UNRECOGNIZED MECHANISM FOR HOW CELLS REGULATE THE SHAPE AND CONTENT OF THEIR MEMBRANES**, ultimately improving our understanding of cellular biology and treatment of disease.

- Dr. Andrew Dunn’s **MULTI-EXPOSURE SPECKLE IMAGING TECHNIQUE TO MEASURE BLOOD FLOW IN PATIENTS UNDERGOING NEUROSURGERY** providing neurosurgeons with accurate information in real-time, with no disruption to the surgical process.

FACULTY AWARDS

11. AIMBE Fellows
2. National Academy of Engineering Members
2. Institute of Medicine Members
3. AAAS Fellows
1. Member of National Academy of Inventors

RECENT ACCOLADES

- Dr. George Georgiou was elected to the **American Academy of Arts and Sciences**.

- Dr. James Tunnell received the **SXSW Interactive Innovation Award** for his 3-in-1 noninvasive skin cancer detection device that could save billions in health care costs.

- Drs. Andrew Dunn, Pengyu Ren, Laura Suggs, and James Tunnell were elected to the **American Institute for Medical and Biological Engineering’s College of Fellows**.

- Dr. Nicholas Peppas was inducted into the **National Academy of Inventors**.