The University of Tennessee (UT) has launched a new institute to research solutions to medical problems such as:

- Devices for improved delivery of medications and monitoring of patients
- Improved imaging technology
- Regenerative models to help the body heal itself
- Optimized efficiency in the healthcare setting

The solutions to these and many other healthcare issues are now possible through a unique collaboration with the new Institute of Biomedical Engineering (iBME). This new institute connects not only engineering and medicine but also multiple diverse UT campuses in a collaboration that is unique in the country; innovative for UT faculty, physicians, and students; and beneficial to people everywhere.

The UT College of Engineering (COE) and the Office of Research & Engagement, in collaboration with the UT Graduate School of Medicine (GSM) and UT College of Veterinary Medicine (CVM), established the multidisciplinary Institute of Biomedical Engineering. Although the institute is operationally based in the College of Engineering, it is intended to be an intellectual bridge to a number of disciplines including engineering, medicine, veterinary medicine, arts & sciences, nursing, agriculture, and others.

A required component of this team will be biomedical engineering, reflected by the expected growth rate in biomedical engineering jobs of 62% between 2010 and 2020, as compared to the average occupation growth rate of 14.2%.


The Institute of Biomedical Engineering (iBME) provides a unique opportunity for UT to respond to the growing demand for education and research opportunities in the rapidly expanding field of biomedical engineering. Researchers from the participating institutions work collaboratively with scientists, physicians, faculty, and students from many UT disciplines to research today's medical problems, resulting in better healthcare for the state and beyond.

In a 2013 examination of the American Health-Wealth paradox, Harvey V. Fineberg, President, Institute of Medicine; and Robert M. Hauser, Executive Director, Division of Behavioral and Social Sciences and Education, National Research Council, addressed the challenging state of the American population's health in comparison to other wealthy countries. Although the United States spends much more money on health care than any other country, its residents die sooner and experience more illness than residents in many other countries. The two healthcare leaders stated that the nation will need to focus on the development of cross-disciplinary biomedical teams to address this paradox.

iBME will also feature masters and PhD programs in biomedical engineering that include specialization tracks in the three research focus areas.

Research focus areas include:

- Molecular, cellular, and tissue engineering
- Healthcare engineering and environmental health
- Imaging, biomechanics, and sensors

The goals of iBME include:

- Generate cross-disciplinary teams to develop healthcare innovations and discover new research funding
- Offer a multidisciplinary curriculum and real-world medical experiences to engineering students
- Provide a regional resource to improve the general public's understanding of biomedical engineering
- Establish outreach to area educators and students to develop interest in and knowledge of the field
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Fact Sheet

Institute of Biomedical Engineering

Founding Colleges

College of Engineering
The University of Tennessee College of Engineering, located in Knoxville, Tennessee, provides superior education in the engineering disciplines through academic, professional, and extracurricular programs. As the college works toward becoming a Top 25 engineering college, its high standards of excellence in teaching and research have earned international recognition for the institution.

Graduate School of Medicine
The University of Tennessee Graduate School of Medicine in Knoxville is part of the University of Tennessee Health Science Center, the flagship statewide academic health system. The mission of the UT Health Science Center is to bring the benefits of the health sciences to the achievement and maintenance of human health, with a focus on the citizens of Tennessee and the region, by pursuing an integrated program of education, research, clinical care and public service.

College of Veterinary Medicine
The College of Veterinary Medicine was established by an act of the Tennessee Legislature in 1974. The College is one of four units within the University of Tennessee Institute of Agriculture and is located on the agricultural campus in Knoxville.

Partner institutions include:
- College of Arts and Sciences
- College of Pharmacy-UT Health Science Center
- Oak Ridge National Laboratory
- Tennessee Teaching and Learning Center
- Anderson Center for Entrepreneurship and Innovation
- College of Nursing
- College of Education, Health, and Human Science
- College of Communication and Information
- Biomedical Industry

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