DOCTORAL PROGRAM

BIOMEDICAL ENGINEERING

DEPARTMENT OF BIOMEDICAL ENGINEERING

RESEARCH AREAS

RESEARCH LABORATORIES

LABORATORY	PROFESSOR		RESEARCH	AI and deep learning	Biomechanics	Control systems	Device development	Engineering physiology	Imaging	Drug development/delivery	Tissue engineering	Neural engineering
Gan Laboratory	Dr. Yu Gan		Machine and deep learning for biomedical image analysis	■					■			
Laboratory of Opthalmic Research Development (LORD)	Dr. Jennifer Kang-Mieler		Imaging, hemodynamics, electrophysiology and drug delivery for retinal diseases	■				■	■	■	■	■
Translational Lung Bioengineering Laboratory	Dr. Jinho Kim		Tissue engineering for repairing diseased or damaged lung tissue		■		■		■		■	
Laboratory for NeuroInnovation	Dr. George C. McConnell		Deep brain stimulation for neural and psychiatric disease			■	■	■				■
MOvement COntrol REhabilitation Laboratory (MOCORE)	Dr. Raviraj Nataraj		Control systems for user integration with rehabilitative movement devices		■	■	■		■			■
Lung Microscopic Mechanics Laboratory	Dr. Carrie E. Perlman		Surface-tension-reducing therapeutic for ventilation injury in acute lung disease		■			■	■	■		
Biomineralization and Biospectroscopy Lab	Dr. William Querido		Infrared spectral imaging for elucidating bone health		■				■		■	
InBrain Electonics Laboratory	Dr. Ilke Uguz		Neural implants for brain-machine interfaces and neurodegenerative diseases				■	■		■		■
Tissue Reconstruction Laboratory	Dr. Hongjun Wang		Tissue engineering, including 3D printing of bioscaffolds, and regenerative medicine							■	■	
Wang Laboratory	Dr. Shang Wang		Optical bioimaging for understanding mammalian reproduction and development	■		■	■	■				
Yu Laboratory	Dr. Xiaojun Yu		Polymeric biomaterials for tissue engineering and drug delivery							■	■	■
Musculoskeletal Control and Dynamics Laboratory	Dr. Antonia Zaferiou		Biomechanics of mobility and agility for design of human-centered movement training		■	■	■					