Overview:
A nine-week summer research program for undergraduates that integrates fundamental biological processes in health, injury, and disease as well as fluid-based biological transport in the environment – from combined engineering and biological perspectives.

Example Objectives:
• Examine how multiscale biomechanical research can translate into novel devices for the prevention, diagnosis, and treatment of human injury and disease
• Investigate interdisciplinary research in transport from an engineering perspective applied to fluid-based environmental and physiological problems
• Explore how biomechanics is a current multidisciplinary research theme which crosses many spatial scales, including intracellular and extracellular matrices, as well as tissue, organ, and multiscale organ systems

Features:
• Eight positions available
• Hands-on lab research
• Close collaboration with graduate students
• Training in research ethics, professional presence, and writing abstracts
• Visits to related labs and organizations
• Presentation of project at campus-wide summer undergraduate research symposium

Program Provides:
• A $5,000 stipend
• Full room and board on the Virginia Tech campus
• Funding for travel to and from campus

Application Requirements:
• Must be a U.S. citizen or permanent resident of the United States
• Must be and remain an undergraduate in good standing
• Must plan to complete a degree program
• Students will devote full time to research efforts and must not accept additional employment

The Research Experience for Undergraduates (REU) program is for undergraduates interested in exploring research in biomechanics and biological transport. Students will be fully integrated into participating research groups and will experience hands-on lab research, group meetings, and close collaboration with other members of related research groups. Students have the opportunity to perform basic research in multiple areas, including human health, injury, and disease; animal locomotion; plant diseases; biological transport in the environment; and bio-inspired technologies. In addition, career development components will contribute to improving written and oral presentation skills.

PROGRAM DIRECTORS
Shane Ross, Ph.D.
David Schmale, Ph.D.
Vincent Wang, Ph.D.

PROGRAM CONTACT
Amanda Covey
325 Kelly Hall
325 Stanger Street (MC 0298)
Blacksburg, VA 24061
Phone: 540-231-8789
amturna3@vt.edu

More: www.beam.vt.edu/REU