

Katherine Haight

kathaigh@tamu.edu | (830) 992-7087 | linkedin.com/in/katherinechaight

EDUCATION

Texas A&M University <i>Master of Business Administration</i> <i>Master of Engineering in Biomedical Engineering</i>	College Station, Texas August 2025 August 2026
Texas A&M University <i>Bachelor of Science in Biomedical Engineering</i> <i>Focus in Regenerative Medicine</i>	College Station, Texas May 2024

EXPERIENCE

Texas A&M School of Medicine Trache Lab <i>Undergraduate Research Assistant</i>	College Station, Texas January 2024 – June 2024
- Co-authored publications on the effects of cellular adaption to mechano-chemical stresses, impacting research concentrated in the effect of exercising on the aging of cells - Analyzed fluorescent images of 600 animal cell samples over the course of 5 months, observed cellular responses to mechanical forces for further cell analysis by PhD candidate - Procured sample measurements of cell surface area and intensities for gamma-actin and beta-1 integrin, quantifying the effects of mechanical forces on cells of various ages in relation to amount applied and time exposed	
Texas A&M University Advanced Spectroscopy Lab <i>Undergraduate Research Assistant</i>	College Station, Texas November 2023 – May 2024
- Cultivated 20 fruit fly colonies each week for experimentation on flies of various ages and separated the flies based on gender and stage of life - Induced traumatic brain injury to flies and evaluated the extent of damage with respect to recovery time - Co-authored publications on the effects of traumatic brain injury in fruit flies, advancing research pertaining to the effects of increased occurrences of physical therapy on traumatic brain injury recovery	

RELEVANT PROJECT WORK

Senior Design Capstone <i>Fetal Stabilization Device for Birth Defect Treatment in Fetoscopic Surgery</i>	College Station, Texas August 2023 – May 2024
- Collaborated with Texas Children's Hospital to create a device to aid in fetal stabilization in fetoscopic surgery, revolutionizing methods of treating fetal birth defects in utero - Chosen by biomedical engineering department staff to receive the Jim Machek Memorial Senior Capstone Design Award, recognizing our medical device prototype as best overall design, and awarded second place in major by Texas A&M University Engineering Project Showcase	

LEADERSHIP & INVOLVEMENT

BMES Coulter College – Medtronic Competition <i>Competitor</i>	Minneapolis, Minnesota August 2023
- Selected by a committee of biomedical engineering professors to represent Texas A&M University at a national competition hosted by Coulter College at Medtronic PRL headquarters - Competed against various colleges and worked with specialists in pharmaceutical, medical device, and marketing industries to develop a medical device prototyped for clinical use to aid patients afflicted by chronic hypertension	

SKILLS & INTERESTS

Technical Skills: Proficient in Python, LabView, AutoCAD, Solidworks, and Slidebook 6 softwares
Certifications & Training: Knowledgeable in biomaterial testing devices and imaging techniques
Interests: Medical device design and development, orthopedic implant manufacturing, medical imaging, tissue and stem cell engineering, biomedical signal processing