

BIOENG 1002: Intramural Internship

2020 Fall Technical Symposium

Number of presentations = 22

Seth Queen

Mentor: Dr. Jonathan Vande Geest

Increasing the Alignment of Electrospun Biopolymer Hybrid Materials for Tissue Engineering Applications

Kayla Swaltek

Mentor: Dr. Bryan Brown

Simplified Quantitative Method for Peripheral Nerve Matrix (PNM) Mechanical Strength Testing

Hilda Jafarah

Mentor: Dr. Bryan Brown

Polyelectrolyte Coated Mesh: Man vs Machine

Arijit Dutta

Mentor: Dr. Bryan Brown

Aging Study

Valeria Tupac Yupandqui

Mentor: Dr. Bryan Brown

Muscle Function as an Index to Measure Peripheral Nerve Regeneration Induced by an Extracellular Matrix Based Hydrogel

Eileen Li

Mentor: Dr. Hang Lin

Biomaterials for Bone Grafts

Joseph Madill

Mentor: Dr. Fabrisia Ambrosio

Resilience Code for the MyEntropy Biological Age Model

Alyssa Zehner

Mentor: Dr. Tracy Cui

Analyzing the Stability of Microstimulation on the Electrode Tissue Interface

Christopher Snodgrass

Mentor: Dr. Katherine Hornbostel

Removing CO₂ from the Ocean

Victoria Martin

Mentor: Dr. Steve Abramowitch

*Observing Variability of Vaginal Anatomy via 3D Statistical Shape Modeling***Noah Ziemba**

Mentor: Dr. Sparacino-Watkins

*Mitochondrial Amidoxime Reducing Component (mARC) Expression in Human Tissue***Kevin Pietz**

Mentor: Dr. Ipsita Banerjee

*Islet-on-a-Chip Computational Model***Andres Quinones**

Mentor: Dr. Warren Ruder

*Synthetic Gene Networks Encoding Epigenetic and Genetic Memory***Celia Davis**

Mentor: Dr. James Menegazzi

*A Guided Tracheostomy Device***Samil Paul**

Mentor: Dr. Steve Abramowitch

*Teaching Students about STEM and Design***Oreoluwa Odeniyi**

Mentor: Dr. Steve Abramowitch

*Levator Ani Muscle Dimension Change with Age***Minna Kuriakose**

Mentor: Dr. Douglas Weber

*Injectrode Project***Amaan Kazi**

Mentor: Dr. Sanjeev Shroff

*Effects of Myofilament Acetylation and Phosphorylation on the Regulation of Cardiac Muscle Contraction***David Chan**

Mentor: Dr. Marina V. Kameneva

*Intracellular Hemoglobin Exchange for the Potential Treatment of Sickle Cell Disease***Elizabeth Mountz**

Mentor: Dr. Howard Aizenstein

Association between Functional Dedifferentiation and Amyloid in Pre-Clinical Alzheimer's Disease

Patrick Tatlonghari

Mentor: Dr. Anne Robertson

Calcification in Cerebral Arteries and its Relevance to Aneurysms

Neha Chodapaneedi

Mentor: Dr. Elisa Castagnola

Melatonin Sensing In Vivo Using Bare Carbon Fiber Electrodes