

## **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 CO<sub>2</sub> 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*