

# BIOENG 1002: Intramural Internship

## 2018 Spring Technical Symposium

Number of presentations = 37

### **Amy Hill**

Mentor: Dr. Jonathan Vande Geest

*Testing the Mechanical Integrity of a Decellularized Porcine Lamina Cribrosa*

### **Hannah Geisler**

Mentor: Dr. Bryan Brown

*Comparing Angiogenesis in Polypropylene Mesh Implants*

### **Shushma Gudla**

Mentor: Dr. Marina Kameneva

*Effects of Drag Reducing Polymers on Margination of Rigid Red Blood Cells*

### **Lacey Kostishack**

Mentor: Dr. Yungjae Chun

*Ventriculoamniotic Shunt for Fetal Aqueductal Stenosis*

### **Emily Trea**

Mentor: Dr. Alexandre Dombrowski

*Decision Making & Suicide in Older Adults*

### **Henry Phalen**

Mentor: Dr. Ervin Sejdic

*Network Activation Differences in Schizophrenia Revealed through MEG Analysis*

### **Pegah Zarandi**

Mentor: Dr. William Federspiel

*Characterization of Washout Hole Design for an Integrated Blood Pump-Oxygenator*

### **Kiara Lee**

Mentor: Dr. Lawrence Vernetti

*CRISPR-Cas9 Mediated Knock Out of SIRT1 in a Liver Cell-Line, LX2*

### **Sheldon Lin**

Mentor: Dr. Aaron Batista

*Spike Sorting Stability*

### **Akhil Aniff**

Mentor: Dr. Aaron Batista

*Using Eye Behavior as a Metric of Task Learning*

**Jing Bian**

Mentor: Dr. Irina Tourkova  
*CLC3N Chloride Antiporter Effect on Osteogenesis*

**Henry Isaac**

Mentor: Dr. Lance Davidson  
*Role of Mechanosensing in Gastrulation*

**Tvisha Josyula**

Mentor: Dr. Kacey Marra  
*Dexamethasone for Adipose Tissue Retention*

**Dominic Dawes**

Mentor: Dr. Kacey Marra  
*Qualitative Examination of Adipose-Derived ECM Implant Integration in Rat Models*

**Matthew Astbury**

Mentor: Dr. Amit Sethi  
*Automating Occupational Therapy: The IHITS System*

**Tyler Martin**

Mentor: Dr. Ian Sigal  
*Visualization of Non-Human Primate ONH Vasculature*

**Minseok Koo**

Mentor: Dr. Ibrahim Tamer  
*Advances in Radio Frequency (RF) Coil Design for Ultra- High Field MRI Applications*

**Justin Ke**

Mentor: Dr. Michael MODO  
*DTI Analysis and Tractography of Epilepsy in Human Hippocampi*

**Sean Klevens**

Mentor: Dr. Steven Abramowitch  
*Tissue Bath System Restoration to Aid in the Study of Vaginal Mesh Complications*

**Daniel Jacobs**

Mentor: Dr. Antonio D'Amore  
*Automated ECM Quantification*

**Kedar Madi**

Mentor: Dr. Sanjeev Shroff  
*Post-Translational Regulation of Cardiac Muscle Contraction*

**Sarah Tolaymat**

Mentor: Dr. Marina Kameneva

*Identifying an Effective Storage Method for Drag Reducing Polymers***Jonathan Scott**

Mentor: Dr. Matthew Smith

*Interactions between Waveform Shape and the Visuomotor Response in Prefrontal Cortex***Andrew Becker**

Mentor: Dr. Christi Kolarcik

*Mapping the Central Nervous System of Transgenic (ALS) Mice***Michelle Riffitts**

Mentor: Dr. Kevin Bell

*Validation of Wireless IMU Joint Monitoring System for the Cervical Spine***Shumeng Yang**

Mentor: Dr. William Anderst

*Evaluating Skin Strain in Socket Prostheses***Andja Potkonjak**

Mentor: Dr. Ana Mora

*Pink1 Increases Age Related Susceptibility to Pulmonary Hypertension***Graeme Meyer**

Mentor: Dr. Monica Perez

*Time-Dependent Adaptations during Bilateral Arm Movements after Tetraplegia***Ding Shen**

Mentor: Dr. Carolyn Anderson

*<sup>177</sup>Lu-Labeled Phosphoramidate-Based PSMA Inhibitors***Aiden Reuter**

Mentor: Dr. Kurt Beschorner

*Vinyl Tile Surrogate for Mechanical Slip Testing***Chisom Eni-Kalu**

Mentor: Dr. Lance Davidson

*Identification of Mechanosensor Genes for Gastrulation of *Xenopus Laevis****Azante Griffith**

Mentor: Dr. Tracy Cui

*In Vivo Stability of Soft Implantable Electrodes for Intramuscular Stimulation*

**Edward Pacey**

Mentor: Dr. Richard Gottardi

*Cartilage Hormonal Response: A Method to Prevent Tissue*

**Lauren Williams**

Mentor: Dr. Marc Simon

*Feasibility of Calculating Composite Pulmonary Vascular Impedance and Its Use as a Predictor of Right Ventricular Failure post-LVAD implantation*

**Courtney Vu**

Mentor: Dr. Marc Simon

*Changes in Right Ventricular Hemodynamics Prior to LVAD Implantation and the Association with RV Failure*

**Xinyu Li**

Mentor: Dr. Rocky Tuan

*Effect of ECM on Muscle Regeneration*

**Max Baxter**

Mentor: Dr. William Federspiel

*In Vivo Hemolysis and Blood Chemistry in a Wearable Artificial Lung*