

# BIOENG 1002: Intramural Internship

## 2018 Fall Technical Symposium

Number of presentations = 28

### **Rajat Lahiri**

Mentor: Dr. Jana Iverson

*Motor Planning of Reaching Behavior in Toddlers with Risk for Autism*

### **Eleni Parke**

Mentor: Dr. Eric Lagasse

*Immunologic Effects of Syngeneic Thymus Transplantation to the Mesenteric Lymph Node*

### **Brian Coyne**

Mentor: Dr. Richard Debski

*Development of a Device for Applying Tension to Ligaments*

### **Claire Kraft**

Mentor: Dr. Warren Ruder

*A Mechatronic System for the Magnetic Manipulation of Biomedical Specimens*

### **Paul Movizzo**

Mentor: Dr. Warren Ruder

*A 3D-Printed Device for Deployment of Living Biosensors of Diseases*

### **Rahul Ramanathan**

Mentor: Dr. Gwendolyn Sowa

*Metformin Suppresses Pro-Inflammatory and Catabolic Expression in Rat Annulus Fibrosus*

### **David Sapirstein**

Mentor: Dr. Joseph Berry

*Micro-Particle Quantification via Micro-Flow Image Analysis*

### **Katherine Rohde**

Mentor: Dr. Christi Kolarick

*Hindlimb Neural Circuitry in the Mouse*

### **Anna Dzuricky**

Mentor: Dr. Bing Wang

*Improving Muscle Physiological Function in Duchenne Muscular Dystrophy*

### **Nithya Narayanan**

Mentor: Dr. Shilpa Sant

*Kinetics of Malignant and Benign Mineral Deposition in Collagen-mimetic Hydrogel Matrices*

**Shivani Tuli**

Mentor: Dr. Yang Liu  
*Tyramide Staining of Cells*

**Kaylene Stocking**

Mentor: Dr. Takashi Kozai  
*Intracortical Neural Stimulation with Ultra Small Carbon Fiber Electrodes*

**Arvind Venkatraman**

Mentor: Dr. Bryan Brown  
*Ovarian-Derived Hydrogels for Biomedical and Biotechnology Applications*

**Kyungchul Yoon**

Mentor: Dr. Aaron Batista  
*Spike Sorting to Facilitate Neural Data Analysis*

**Lauren Grice**

Mentor: Dr. Michel Modo  
*Diffusion Tensor Image Analysis of Stroke Damaged Brains Treated with Combined Neural Stem Cell and Physical Therapy*

**Hannah Fisher**

Mentor: Dr. Kurt Beschorner  
*Coefficient of Friction in Slip-Resistant vs Not Slip- Resistant Shoes*

**Sneha Jeevan**

Mentor: Dr. Xinyan Cui  
*PMA Stimulation of Glial Cells via tNP Surface Modifications*

**Daniel Sokolowski**

Mentor: Dr. Bryan Brown  
*Improving PNS Nerve Repair via PNM Injection*

**Angela Cinaglia**

Mentor: Dr. David Vorp  
*A Machine Learning Tool for Predicting Abdominal Aortic Aneurysm Risk*

**Gordon Bryson**

Mentor: Dr. Youngjai Chun  
*Optimization of Esophocclude Device for Prevention of Pulmonary Aspiration*

**Nikita Patel**

Mentor: Dr. Xinyan Cui  
*Direct Detection of Resting Dopamine Using PEDOT/fCNT Coated Microelectrodes*

**Samuel Phillips**

Mentor: Dr. Ana Mora

*Mitochondrial Dysfunction in the Pathogenesis of Pulmonary Hypertension***Vivian Hu**

Mentor: Dr. Alex Deiters

*Chronological Recording of Stimuli Using CRISPR/Cas9 Mediated Base Editing***Jordan Sturm**

Mentor: Dr. Partha Roy

*Screen for Novel Anti-Angiogenic Agent via Inhibition of Actin:Profilin 1 Interaction***Sara Kenes**

Mentor: Dr. Thomas Lozito

*Mammalian Cells Injected into Lizard Tails Survive and Reconstitute Regenerated Tissue***Danielle Danucalov**

Mentor: Dr. Thomas Lozito

*Neural Stem Cell Proliferation in the Secondary Neural Tube for Lizards Versus Mice***Hannah Schmidt**

Mentor: Dr. Jonathan Vande Geest

*Monitoring the In-Vitro Extracellular Matrix Remodeling of Tissue Engineered Vascular Grafts***Catherine Hobayan**

Mentor: Dr. Kurt Beschorner

*Development of a Biomechanical Shoe Wear Apparatus for the Analysis of Foot Angle During Gait*