

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 Dombrovski

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
¹⁷⁷Lu-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