BIOENG 1002: Intramural Internship

2019 Spring Technical Symposium

Number of presentations = 39

Meara Sedlak
Mentor: Dr. David Vorp
Comparison of Cell Seeding Quality of Porous, Biomimetic, Tubular Scaffolds for Vascular Tissue Engineering Fabricated by Two Different Methods

Anthony Pasnello
Mentor: Dr. David Vorp
Evaluating Machine Learning Models for Abdominal Aortic Aneurysm Risk Prediction

Haarika Chalasani
Mentor: Dr. Jana Iverson
Analyzing Jerk of Reaching Motion in Infants at Low and High Risk of an Autism Diagnosis

Mazin Rahman
Mentor: Dr. Imad Al Ghouleh
Development of a Hyperbaric Cell Culture Chamber to Model Cardiac Hypertrophy

Jessica Sider
Mentor: Dr. Kurt Beschorner
Quantifying the Initial Rate of Tread Loss of a Shoe

Johanna Siegel
Mentor: Dr. Kurt Beschorner
Effectiveness of Low Cost Methods for Assessing Wear of Slip-Resistant Shoes

Farah Khan
Mentor: Dr. Katrina Knight
Development of Code to Determine the Host Response to Elastomeric Materials for Vaginal Mesh

Victoria Smith
Mentor: Dr. Raj Gandhi
Modeling the Superior Colliculus

Alyssa Jordan
Mentor: Dr. Steven Abramowitch
Development of Smoothing Protocol for 3D Pelvic Models
Aidan Dadey  
Mentor: Dr. Partha Roy  
*Myocardin-Related Transcription Factor’s Role in Cell Motility*

Ashlinn Sweeney  
Mentor: Dr. Jonathan Vande Geest  
*Immortalization of Human Lamina Cribrosa Cells*

Nathan Lingenfelter  
Mentor: Dr. Louis Falo  
*Microneedle Arrays for Engineering the Skin Microenvironment In Vivo*

Janet Canady  
Mentor: Dr. George Stetten  
*FingerSight: A Device for the Blind*

Madeline Hobbs  
Mentor: Dr. Gelsy Torres  
*Determining the Human Gait Symmetry Threshold Using a Split-Belt Treadmill*

Natasha Gilbert  
Mentor: Dr. Harvey Borovetz  
*Drawing Music*

Julie Constantinescu  
Mentor: Dr. Spandan Maiti  
*Ascending Thoracic Aortic Wall Stiffness as Indicator for Dissection*

Deepika Sarma  
Mentor: Dr. Parthasarathy Thirumala  
*SSEP Monitoring During Endoscopic Endonasal Approach to Skull Based Surgery*

Lisa He  
Mentor: Dr. Tamer Ibrahim  
*Quality Assurance Control of 7T Human MRI*

Graeme Meyer  
Mentor: Dr. Monica Perez  
*Time-Dependent Adaptations During Bilateral Arm Movements After Tetraplegia*

Aaron Salz  
Mentor: Dr. Doug Weber  
*Bioelectronics Education: Module Refinement*
Kyle Hardison  
Mentor: Dr. Edward Dixon  
*Developing Rodent Models to Further Traumatic Brain Injury Research*

Benjamin Rarrick  
Mentor: Dr. Rakié Cham  
*Estimating Abdominal Obesity in Adults*

Bridget Wagner  
Mentor: Dr. April Chambers  
*Effects of Anti-Fatigue Mats and Standing Strategy During Prolonged Standing*

Jessica Brown  
Mentor: Dr. William Anderst  
*Ankle Anatomical Coordinate System for Analyzing In-Vivo Kinematic Data*

Timothy Bowers  
Mentor: Dr. William Anderst  
*Healthy Ankles Helping the Injured*

Samantha Rowen  
Mentor: Dr. Richard Debski  
*Determining the Effects of Cutting Bone Tissue on Bone Deformation*

Benjamin Roadarmel  
Mentor: Dr. Richard Debski  
*Orientation of Non-Recoverable Strain in the Glenohumeral Capsule Following Multiple Anterior Dislocation*

Samantha Espos  
Mentor: Dr. Youngjae Chun  
*Evaluating Mechanical Properties of Endovascular Stent Grafts*

Jack Hastings  
Mentor: Dr. Youngjae Chun  
*In Vitro Testing of Valved Stent to Treat Tricuspid Valve Regurgitation*

Kristen Byrd  
Mentor: Dr. Kacey Marra  
*Optimization of Decellularization for Muscle Retention Following PNI Treatment*

Nicholas Gabriel  
Mentor: Dr. Kevin Bell  
*High Throughput Bioreactor for Rodent Mechanobiology*
Ashley Martier  
Mentor: Dr. Thomas Lozito  
*Epimorphic Regeneration in Super Healing Mice*

Christian DeMoya  
Mentor: Dr. Thomas Lozito  
*Inhibition of Biochemical Cues Affects Tail Regeneration in the Lizard Lepidodactylus Lugubris*

William Xie  
Mentor: Dr. Stephen Badylak  
*Tracheal Regeneration*

Nicholas Anastasi  
Mentor: Dr. Bryan Brown  
*Determining Pepsin Activity in Tissue Lysate*

Katherine Bruce  
Mentor: Dr. Hang Lin  
*μJoint Chip for Studying Disease Pathology*

Kanika Sarma  
Mentor: Dr. Sunder Sims-Lucas  
*The Effect of Maternal Diabetes on Offspring’s Nephron Morphology*

Conrad Li  
Mentor: Dr. James Ibinson  
*Deep Learning Assisted Glioma Resection*

Daniel Fulmer  
Mentor: Dr. Marina Kameneva  
*The Effect of RBC Hypotonicity on Mechanically Induced Hemolysis in Assisted Circulation*