

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 Faló

*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