Science 20XX

2018

Number of presentations = 30
Boldfaced names represent Bioengineering undergraduate students

Issam Abushaban, Megan Routzong, Steven D. Abramowitch
Reevaluating The Calculation of Fetal Head Molding in Finite Element Models of The Second Stage of Labor

Siddharth Balakrishnan, David Langerman, Evan Gretok, Alan D. George
Deep Learning for Hyperspectral Image (Hsi) Classification on Embedded Platforms

Gordon Bryson, Youngjae Chun, Philip Carullo
Evaluating Occlusion Success of Esophocclude Prototypes in Comparison to Diameter and Radial Force

Kristen Byrd, Benjamin Schilling, Jocelyn Baker, Malik Snowden, Kacey Marra
Optimization Of Decellularization of Skeletal Muscle Via Infusion for Muscle Retention Following Peripheral Nerve Injury

Janet Canady, Shantanu Sapute, George Stetten, Roberta Klatzky
Validating Fingersight with A 3D Infrared Tracking System

Teressa Chambers, David Swigon, Gilles Clermont
Early-Stage Sepsis in Pigs as a Basis for Mathematical Modeling

Aidan Dadey, Dave Gau, Partha Roy
Pharmacological Inhibition of Myocardin-Related Transcription Factor as a Novel Strategy to Inhibit Growth and Migration of Triple-Negative Breast Cancer Cells

Danielle Danucalov, Ricardo Londono, Megan Hudnall, and Thomas Lozito
Lizard Versus Mouse Proliferation of Neural Stem Cells in The Secondary Neural Tube

Christian DeMoya, Ricardo Londono, Megan Hudnall, Thomas Lozito
Biochemical Inhibition Leads to Defective Tail Regeneration in Lizards

Katherine Dunkelberger, Liza Bruk, Morgan V. Fedorchak
Controlled Release Optimization of Ceftriaxone And N-Acetyl Cysteine for Transtympanic Delivery

Zachary Fritts, Sarit Sivan, Marcela V. Karpuj
A Qpcr Based Assay for Detecting Mycoplasma Contamination in Cell Lines
Nicholas Gabriel, Rahul Ramanathan, Kevin Bell, Nam Vo, Gwendolyn Sowa
Development Of a High Throughput Bioreactor Compression Chamber for Rodent Mechanobiology

Hannah Geisler, Alexis Nolfi, Aimon Iftikhar, Bryan Brown
Angiogenic Response to Il-4 Eluting Coatings in Mesh Tissue Explants

Lauren Grice, Harman Ghuman, Franziska Nitzsche, Madeline Gerwig, Jeffrey Moorhead, Nikhita Perry, Alex Poplawsky, Brendon Wahlberg, Fabrisia Ambrosio, and Michel Modo
Diffusion Tensor Image Analysis Reveals Improved Microstructural Integrity in Stroke Damaged Brains Treated with Either Neural Stem Cell or Physical Therapy

Jack Hastings, Neil Gildener-Leapman, and Youngjae Chun
In Vitro Viability Testing of Ph Sensor Incorporation in Tongue Prosthetic Assist Device for Treating Dysphagia

Amy Hill
Investigation Of Multiple Strategies in Modeling an Expandable Stent by Finite Element Method

Three Layer Biomimetic Small Diameter Tissue Engineered Vascular Graft

Claire Kraft, Michael R. Behrens, Warren C. Ruder
A Mechatronic System for The Magnetic Manipulation of Biomedical Specimens

Conrad Li, Mobarakol Islam, Hongliang Ren, Nicolas Kon Kam King
3D Convolutional Neural Networks for Glioma Prognosis

Ashley Martier, Tom Lozito, Ricardo Londono, Sean Tighe, Danielle Danucalov
Why Can’t Mice Regenerate Like Lizards?

Jacob Meadows, Elisabeth Salisbury, Mark Gartner
System To Record Therapeutic Delivery Window of Stochastic Vibrotactile Stimulations in Infants with Neonatal Abstinence Syndrome

Oreoluwa Odeniyi, Jonathan Vande Geest
Accuracy Of Two-Photon Polymerization with Varying Objectives and Power

Nikhita Perry, Harman Ghuman, Franziska Nitzsche, Madeline Gerwig, Jeffrey Moorhead, Lauren Grice, Alex Poplawsky, Brendon Wahlberg, Fabrisia Ambrosio, Michel Modo
Combined Neural Stem Cells and Physical Therapy Improve Somatosensory Cortex Activity After Stroke

Mateus Pinho, Alessandro Pirosa, Rocky S. Tuan, Peter G. Alexander
Human in Vitro Organotypic Culture Model (Ocm) Of Limb Chondrogenesis for Predictive Toxicology

Rahul Ramanathan, Nam Vo, Gwendolyn Sowa
Metformin Suppresses Pro-Inflammatory and Catabolic Gene Expression in Rat Annulus Fibrosus

Sreyas Ravi, He Shen, Xinyu Li, Hang Lin
Reversal Of Chondrocyte Aging to Augment Cartilage Regeneration in The Body

Sean Tighe, Ricardo Londono, Thomas Lozito
Comparison Of Phagocytic Capability of Macrophages Derived from A. Carolinensis And Super-Healing Mice

Kelsey Toplak, Kimberly Kubistek, Kelly Fill, Sheryl Rosen, Mark Gartner
Infant Feed Thickening Characterization at Children’S Hospital of Pittsburgh

Claire Tushak, Danial Sharifi Kia, Evan Benza, Kang Kim, Marc Simon
Analyzing Right Ventricular Response to Sacubitril/Valsartan in Pulmonary Hypertension

Timothy Wroge, Mobarakol Islam, Xiao Xiao, Hongliang Ren
Reinforcement Learning Motion Control Paradigm for Minimally Invasive Robotic Surgery