

Biomedical Engineering Society (BMES)

2019

Number of presentations = 48

Boldfaced names represent Bioengineering undergraduate students

Designing a 3D Printed Tissue Engineering Device for Automated ECM Production

Baker JS, Schilling BK, Lamberti KK, Snowden MJ, Byrd K, Komatsu C, Solari MG, Marra KG

Evaluating Nanoparticle Penetration in Tumor Spheroids

Bandyopadhyay R, Widman J, Suggs L

Tumor-Derived Exosomes from HCT116 Human Colorectal Cells Contain SQSTM-1 And Promote a Tolerogenic Response in Co-Cultured Dendritic Cells

Bharthi R, Gorgulho CM, Ludwig N, Whiteside TL, Lotze MT

An Automated Method for Defining Anatomic Coordinate Systems in The Ankle

Brown JA, Gale TH, Anderst WJ

Proliferative Ability of Isolated Dog Hepatocytes is Retained in Short-Term UW Solution Preservation

Casey M, Han B, Lagasse E

Melatonin Sensing In-Vivo Using Bare Carbon Fiber Electrodes

Chodapaneedi N

Neural Network Prediction of Nonhuman Primate Behavioral Response During Continuous Sensory-Guided Movements

Clancy M, Sehkar S, Batista A, Loughlin P

Correlations Between Clinical Markers and Biomechanical Wall Stress of Human Ascending Aorta

Constantinescu J, Gleason T, Maiti S

Feature Validation and Online Visualization of Forearm HDEMGM in Subjects with Neuromuscular Deficits

Correa JSC, Ting JT, Sarma DS, Weber DJW

Characterization of Novel Rare-Earth Doped Nanoparticles in Stem Cell Therapy for Ischemic Stroke

Dadi S, Sicke M, Jun Y, Thakor N

Inhibition of Na⁺/H⁺ Exchanger Modulates Microglia Activation Following Microelectrode Implantation

Dubaniewicz MT, Eles JR, Wellman SM, Cambi F, Sun D, Kozai TK

Modeling Wall Stress in Abdominal Aortic Aneurysms Using Machine Learning

Fordyce LN, Chung TK, Vorp DA

StabilEyes – New Assistive Technology for Nystagmus to Produce a Stable Real-Time Video Image

Foust J, Wang L, Stants H, Smith W, Klatzky R, Stetten G

Effect of Metformin Administration on Tendon Wound Healing

Hobayan CGP, McDowell AR, Zhang J, Wang JHC

Glioma Segmentation Using 3D Reversible U-Net and Concurrent Spatial and Channel Squeeze and Excitation Blocks

Hu V, Islam M, and Ren H

Mechanical Characterization of Silk Derived Vascular Grafts for Human Arterial Implantation

Iyasele P, Cunnane E, Lorentz K, Weinbaum J, Vorp D

Development of Selective Neural Electrode for Closed Loop Neuromodulation of Neurogenic Bladder

Jeevan S, Thakor N

Polymeric Scaffold Topology Modification to Engineer the Tunica Intima

Kelly A, Adamo A, Hashim H, Haghkar M, D'Amore A

Electrochemical Release of Melatonin for Chronic Neural Interfaces

Krahe D, Woepfel K, Cui X

MLB Physical Therapy Phase 4 XProject

Kron SE

A Novel Role for Processing Bodies in Age-Related Impairment of Muscle Stem Cell Self-Renewal

Lasak J, Cheikhi A, Sahu A, Ambrosio F

Hip And Knee Kinematics Correlate to Trunk Lateral Bending During Gait In Transfemoral Amputees

Levy J, Gale T, McGough R, Anderst W

Robust Osteogenesis of Mesenchymal Stem Cells in 3D Scaffolds Comprised of Graphene Nanomaterial Derivatives

Li E, Li Z, Del Duke C, Lin H

Finite Element Evaluation of Various Stent Mechanical Properties in a Knee Bending Mechanical Environment

Li J

Manufacturing a Polyelectrolyte Coating on Contact Lenses Using Automated vs. Manual Techniques for the Treatment of Dry Eye Disease

Liang Z, Nolfi A, Murthy M, Brown B

Characterization of Protein Release by Artificial MSC's

Lickert E, Lorentz K, Rodriguez B, Gupta P, Cunnane E, Shehabeldin M, Fedorchak M, Weinbaum J, Little S, Sfier C, Mandal B, Vorp D

The Con-Tactor: A Novel Tactile Stimulator that Makes and Breaks Contact with the Skin

Lohss M, Klatzky R, Stetten G

Impact of Pregnancy on the Maternal Combined Sacrum/Coccyx Shape

Martin L, Routzong M, Abramowitch S

Biological Material Induces Macrophage Response More Favorable for Angiogenesis

Murthy M, Liang Z, Canlla R, Kulkarni M, Brown B

Concomitant Limb Cryocompression and Scalp Cooling to Reduce Paclitaxel-Induced Neuropathy

Patel N, Bandla A, Thakor NV

Role of Epigenetic Reprogramming on Human Endogenous Retrovirus Type E (HERV-E) Expression in Clear Cell Renal Cell Carcinoma (ccRCC)

Perry N, Cherkasova E, Barisic S, Reger R, Childs R

Vascularization of iPSC-derived islet cells in a microfluidics device

Pietz K, Wiegand C, Ravikumar K, Strobel H, Hoying J, Banerjee

Increasing the Alignment of Electrospun Biopolymer Hybrid Materials for Tissue Engineering Applications

Queen S, Behkam R, Li J, Vande Geest J

Structure of a Fusiform Intracranial Aneurysm with Vasa Vasorum – A Case Study

Rane A, Ollikainen E, Gade PS, Robertson AM

Biomechanical Assessment of Bicuspid & Tricuspid Aortic Valve Phenotype in Dissection Risk

Ravi R, Vorp D, Maiti S

Genetically Engineering Ocular Commensal Bacteria to Manipulate Ocular Immunity and Disease

Rigas Y, Treat B, St. Leger A

Construction and testing of the 4-channel microstrip Tic-Tac-Toe RF coil design for 7T MRI

Saich M, Santini T, Vinjamuri N, Martins T, Fritts Z, Koo M, Alkhateeb S, Farhat N, Ibrahim TS

Validity Of Existing Energy Expenditure Prediction Algorithms Using Wearable Devices For Wheelchair Users

Shwetar Y, Veerubhotla A, Ding D

Implicit Emotion Regulation: Understanding Learning and Implementation using a Hierarchical Drift Diffusion Model (HDDM)

Skoff TR, Mizuno A, Karim HT, Ly M, **Muppidi N**, Khan F, Kovacs M, Aizenstein H

Controlling Perfusion of Engineered Tissue Environments with a Programmable 3D-Printed Plate Rocker

Swist ER, Fuller HF, Ruder WC

Calcification in Cerebral Arteries and its Relevance to Aneurysms

Tatlonghari P, Sang C, Gade P, Robertson AM

Utilization of DTI Analysis for Sickle Cell Disease Related Cerebral Infarction.

Thirukumar DT, Santini TS, Wood SW, Farhat NF, Alkhateeb SA, Martins TM, Aizenstein HA, Novelli EN, Ibrahim TI

Muscle Function as an Index to Measure Peripheral Nerve Regeneration Induced By an Extracellular Matrix Based Hydrogel

Tupac-Yupanqui V, Meder T, Marchal L, Prest T, Skillen C, Brown B

Effect of Shoe Tread Elastomer Hardness on Abrasion Wear

Tushak CM, Walter PJ, Hemler SL, Beschorner KE

Electromyography of the External Urethral Sphincter During Stimulation of the Pelvic Nerve in a Rat Spinal Cord Injury Model

Wong BM, Raczowska MN, Miller JD, Thakor NV

A Cost-Effective Solution for Tracking Manatees in the Wild

Xu K, Snyder O, Gaspard J, Gartner M

Impact of Polypropylene Incontinence Slings on Collagen in the Vagina

Zhao M, Liang R

3D-Printed Models of Porous Tubular Tissue Engineering Scaffold for Optimization of Cell Seeding

Zheng JL, Chung T, Vorp DA