

2022 BMES Annual Meeting Platform Sessions and Posters

Thursday, October 13 Platform Sessions

Platform Sessions 8:00 - 9:30 AM

"Isolation of Hematopoietic Stem Cells Using a Novel Planer Gradient Magnetic System"

Speaker: Heather Blackwell

Session Title: Micro/Nano Technologies in Medicine and Biology

Location: 214A Convention Center

Special Session 8:00 - 9:30 AM

"Optogenetic Interfaces in the Spinal Cord and Periphery"

Speaker: Dr. Aaron Mickle

Location: 214C Convention Center

Thursday, October 13 Posters

Poster Session A 9:30 - 10:30 AM

"Investigating Extracellular Matrix Influence on Cancer Cell Interactions in an Engineered Hydrogel System"

Presenter: Benjamin Kaufman

"Development of a Multi-Structured Scaffold for Regeneration of the Myotendinous Junction"

Presenter: Kariman Shama

"Engineering Controlled Multi-Therapeutic Release from 3D-Printed PDMS-based Scaffolds"

Presenter: Taylor Lansberry

"Functional Tunability of a Hyaluronan-Protein Bioconjugate for Peripheral Nerve Applications"

Presenter: Bassam Smadi

"Incorporation of Tumor Spheroids into an ex-vivo Tissue Culture Model for Investigating Cancer Cell-Microvascular Interactions"

Presenter: Arinola Lampejo

"Technical Considerations and Recommendations for Assessment of Decellularized Tissues"

Presenter: Allison Campbell

"Temperature Drives Non-Fibrillar Assembly Conformations of Co-Assembling Synthetic Peptides"

Presenter: Ryan Clark

Poster Session B 2:30 - 3:30 PM

"Modulation and Characterization of 3D-Printed Scaffold Geometry for Islet Transplantation"

Presenter: Justin Walsh

"Characterization of PD-L1 Conjugated Liposomes for Modulation of Effector T Cells in Type 1 Diabetes"

Presenter: Maryum Salim

"Investigating the Effects of Hyaluronic Acid on 3D Migration and Function of Natural Killer Cells"

Presenter: Suzanne Lightsey

"Sexually Dimorphic Response of Vascular Endothelial Cells to Complex Environmental Stimuli"

Presenter: Dr. Josephine Allen

"The UF-MSK Library of Pediatric Computational Phantoms for Radiation Dosimetry"

Presenter: Laura Dinwiddie

"Ethnicity-linked Error in Machine Learning Methods to Predict BV Status"

Presenter: Dion Ming

2022 BMES Annual Meeting Platform Sessions and Posters

Friday, October 14 Platform Sessions

Platform Sessions 8:00 - 9:30 AM

"The UF/MSK Computational Phantom Library for Biomedical Engineering: Adult Males and Females"

Speaker: Yitian Wang

Session Title: Deep Learning and Artificial Intelligence in Microstructural Imaging

Location: 007A Convention Center

"ROS-Scavenging Manganese Dioxide Nanoparticles Mitigate Inflammatory Signaling by Macrophages"

Speaker: Tiffany Conklin

Session Title: Drug Delivering Biomaterials

Location: 5 Convention Center

"Comparing Kinematics of OpenSim Multi-Segment Foot Models During Low- and High-Demand Tasks"

Speaker: Karley Baringer

Session Title: Human Performance/Sports Biomechanics

Location: 207 Convention Center

Platform Sessions 3:30 - 5:00 PM

"Chronic Biomarker Identification of Tic Onset in Centromedian Thalamus for Closed Loop Deep Brain Stimulation in Tourette Syndrome"

Speaker: Julieth Gomez

Session Title: Neuromodulation: Brain and Spinal Cord Stimulation

Location: 214C Convention Center

"Gut Commensals Associated with IBD Degrade Components of Human Extracellular Matrix"

Speaker: Dr. Ana Maria Porras

Session Title: Cell - Materials Interactions

Location: 008A Convention Center

"Modularity of a Dual-Sized Microparticle System Tunes Efficacy in Mouse Model of Multiple Sclerosis"

Speaker: Dr. Alexander Kwiatkowski

Session Title: Biomaterials - 2

Location: 4 Convention Center

Friday, October 14 Posters

Poster Session C 9:30 - 10:30 AM

"Automating Endocrine Cell Quantification in Human Pancreata"

Presenter: Hunter Hakimian

"Computational Estimation of Segment-Specific Shear Stress Heterogeneity at the Capillary Level in Angiogenic Rat Mesenteric Microvascular Networks"

Presenter: Nien-Wen Hu

Platform Sessions 1:00 - 2:30 PM

"Uricase Functionalized Hydrogel for the Localized Treatment of Gout"

Speaker: Madeline Fuchs

Session Title: Drug Delivering Biomaterials - 3

Location: 5 Convention Center

Poster Session D 2:30 - 3:30 PM

"Co-assembled Peptide-Protein Granules for Intracellular Protein Delivery"

Presenter: Dr. Renjie Liu

"Conductive Hyaluronic Acid Biomaterial for Extrusion 3D Bioprinting"

Presenter: Dr. Eleana Manousiouthakis

"Lupus in a Dish: Investigating Ancestral Contribution to Monocyte Function"

Presenter: Holly Ryan

"Short-Term Changes in Interlukin-6 Expression Following Repetitive Mild TBI"

Presenter: Jasmine Smith

"Synthesis and Characterization of Polyester-Polyamide Thin Film Composites for Water Purification"

Presenter: Mariah Turner

2022 BMES Annual Meeting Platform Sessions and Posters

Saturday, October 15 Platform Sessions

Platform Sessions 1:00 - 2:30 PM

"PEGylation of Indoleamine 2,3-Dioxygenase for Systemic Immune Regulation"

Speaker: Jennifer Simonovich

Session Title: Molecular and Cellular Immunoengineering II

Location: 007B Convention Center

"Studying the Interactions of Cryptococcus Neoformans with Innate Immune Cells"

Speaker: Dr. Jamal Lewis

Session Title: Biomaterials for Immunoengineering I

Location: 5 Convention Center

"Biofunctional Biomaterial Design to Promote Vessel Formation and Reduce Macrophage Activation"

Speaker: Aakanksha Jha

Session Title: Biomaterials for Immunoengineering - 2

Location: 005 Convention Center

Saturday, October 15 Posters

Poster Session E 9:30 - 10:30 AM

"Ex Vivo Phantom Studies to Guide DC Tracking Using Magnetic Particle Imaging"

Presenter: Alexander Armstrong

"Altered Expression of HIV Linked Proteins in BCG-Infected Macrophages"

Presenter: Cameron Celeste

"In Situ Visualization of Organoid-Derived Chemokine Gradients within a 3-Dimensional Extracellular Matrix Hydrogel"

Presenter: Magdalena Samojlik

"Mechanisms of PARP Inhibitor Resistance in Ovarian Cancer"

Presenter: Adriana Del Pino Herrera