Bioengineering Day

2019

Number of presentations = 19
Boldfaced names represent Bioengineering undergraduate students

*Impact of an Information Processing Task on Balance in Young Adults with Autism Spectrum Disorder, A Preliminary Study*
Anna Bailes, **Patrick Bohse**, Jana M. Iverson, Jenna Trout, Patrick J. Sparto, and Rakié Cham

*Differentiation of hPSCs into Islet-mimetic Cells: Encapsulation Versus Suspension Culturing*
**Kevin Pietz**, Connor Wiegand, and Ipsita Banerjee

*Development of Cost-Effective 3D Printed Patient-Specific Hip Models as Surgical Guides*
**Grace Hobayan**, April Krivoniak, and Anish Ghodadra

*Assessment of Ascending Aortic Wall Stresses for Non-Dissected Patients with Bicuspid Aortic Valve and Dissected Patients with Tricuspid Aortic Valve*
**Sreyas Ravi**, David A. Vorp, and Spandan Maiti

*Biocompatibility of Soft Implantable Electrodes for Intramuscular Stimulation*
**Azante Griffith**, X. Sally Zheng, and X. Tracy Cui

*Stochastic Optical Reconstruction Microscopy: Image Quality Optimization*
**Shivani Tuli**, Yang Liu, and Jianquan Xu

*Mapping Changes in Vasculature Structure after Microelectrode Implantation with Two-Photon Imaging*
**Kaylene Stocking**, Steven Wellman, and Takashi D.Y. Kozai

*One-Hand Zip Assist*
**Katherine Poduska**, Andrea Hartman, Caitlin Lucas, Daniel Fulmer, **Nicholas Anastasi**, and Kevin Markiewicz

*Nasal Cannula Securement Device*
**Nowa Bronner**, Edward-James Gardner, Daniel Jacobs, Rajat Lahiri, Ian Moran, Lauren Williams, Parker Landis, Madeline Reiche, and Sun Young Bang

*Expandable Cannula Sheath for Extracorporeal Membrane Oxygenation*
**Nicholas Gabriel**, Lea Wenger, Lacey Kostishack, Abigail Snyder, Courtney Vu, and Deepika Sarma

Bioengineering Day
Quantifying Postpartum Blood Volume Loss  
Ellen Martin, Amy Hill, Malik Snowden, Lisa He, and Samantha Espos

OxyDas: Alert System for Nasal Cannula Dislodgement  
Angela Cinaglia, Jake Donovan, Xinyu Li, Eleni Parke, Kaylene Stocking, Soumya Vhasure, Kaleigh Mellett, Ensar Tota, and Jennifer Kloes

IV Management System  
Eric Cecco, John Driggers, Alexandra Metelow, Benjamin Roadarmel, and David Saperstein

Patient Migration Prevention: Helping Nurses and Patients  
Danielle Charbonneau, Farah Khan, Max Baxter, Brian Coyne, and Anna Dzuricky

Security Sleeve: Modified ICU Mitt Restraints  
Tim Bowers, Aidan Dadey, Danielle Danucalov, Troy Eismann, Ethan Paules, and Daniel Sokolowski

Redesigning the Pelvic Exam Wedge  
Katie Bruce, Samantha Rowen, Jessica Sider, Victoria Smith, and Sarah Tolaymat

Design of an Automated Arterial Line Leveling System for ICU Settings  
Kalon Overholt, Shane McKeon, Anthony Pasnello, Minseok Koo, Sheldon Lin, and Aaron Salz

PMA Stimulation of Glial Cells via Thiol Nanoparticle Surface Modifications  
Sneha Jeevan, Kevin M. Woeppel, and X. Tracy Cui

Validity of Existing Energy Expenditure Prediction Algorithms using Wearable Devices for wheelchair user  
Yousif Shwetar, Akhila Veerubhotla, and Dan Ding