

## 2018 BMEP 6600 Seminar Series

DATE	PRESENTER	SEMINAR TITLE
1/5/2018	Alex Weston, Caitlin Fermoye	Fermoye: Lung diffusion at rest and during exercise using the single breath DLCO/DLNO technique; Weston: Segmenting abdominal CT for body composition using deep learning
1/12/2018	Yoed Robin, PhD, Carnegie Mellon	Engineering Aspects in Cryomedicine
1/19/2018	Dakota Jones, Jonathan Calvert	Jones: Restoration of anti-fibrotic gene programs by HDAC inhibition attenuates myofibroblast activation; Calvert: Evoking Motor Potentials via Epidural Electrical Stimulation in Humans After Complete Paraplegia
2/2/2018	Meenakshi Rao, PhD, Columbia University	Enteric Glia in Gastrointestinal Homeostasis
2/16/2018	Michael Larson, Mayo Clinic Ventures	Innovation, Inventing, and Commercializing Discoveries at Mayo Clinic
2/23/2018	Joe Mazingo, Obaid Khurram	Functional Impairment of Phrenic Motoneuron Loss (Khurram)
3/2/2018	Pengfei Song, PhD, Josh Trzasko, PhD	Making the Most of Your Data: Modern Strategies for Magnetic Resonance Image Reconstruction (Trzasko)
3/9/2018	Tony Hu, PhD, Arizona State University	Inside out- Nanotechnology-enable Biomarker Decoding
3/16/2018	Abhishek Chandra, Mayo Clinic	Radiotherapy-induced osteoporosis and related fractures: Potential mechanisms and therapeutics
3/23/2018	Tianhong Cui, PhD, University of Minnesota	Polymer-Based Graphene Biosensors for Biomedical Analysis
3/30/2018	Allison Fryer, PhD, Oregon Health and Science University	Eosinophils in the Lung: Dr. Jekyll and Mr. Hyde
4/6/2018	Philip Gottlieb, PhD, University of Buffalo	Using Precision Fluid Shear Stress Effects on PIEZO1 As A Model to Study Cell Mechanics
4/13/2018	Matthew Lowerison, PhD, Mayo Clinic	Faint hope for astronauts: in search of solutions to orthostatic intolerance
4/20/2018	Takashi Nagai, PhD, Mayo Clinic	Proprioception and Neuromuscular Control in Joint Stability
4/27/2018	Kristin Zhao, PhD, Mayo Clinic	4D CT Imaging for Improved Diagnosis and Treatment of Wrist Ligament Injuries
5/4/2018	Matthew Lowerison, Mayo Clinic	Using high-frequency ultrasound to monitor drug response in a chicken embryo tumor avatar model
5/11/2018	Missy Morrow, PhD, Mayo Clinic	User-Centered Design and Mixed Methods Approach in the Development of a Mobile Seating Pressure Remote Monitoring System
5/18/2018	Boris Hinz, PhD, University of Toronto	Myofibroblasts, Macrophages, and Mechanics: the 3M of fibrosis
5/25/2018	Giovanni Ligresti, PhD, Mayo Clinic	Epigenetic gene repression in pulmonary fibrosis
6/1/2018	James Trevathan/Carlos Mantilla and Armando Manduca	Miniature head-mounted microscopy of neural activity in behaving Parkinsonian mice undergoing deep brain stimulation/BMEP Program Overview and Updates
6/8/2018	Yujiro Hayashi/Ivan Nenadic	Epigenetic Regulation of Gastric Pacemaker Stem Cell Senescence (Hayashi); Ultrasound Measurements of Viscoelasticity of Post-Transplant Livers (Nenadic)
6/15/2018	Jarel Gandhi/Panagiotis Korfiatis	Degradable Fibrin Hydrogels for Induced Pluripotent Stem Cell-Derived Retinal Pigment Epithelium Transplantation; GPU: Glioma Processing Units
6/29/2018	Cuellar Ramos/Nathan Schilaty	Neuromodulation and Neuroregeneration of the Spinal Cord: Combining Approaches to Restore Motor Function After Injury (Ramos); A Biomechanical Investigation of McArdle's Sign for Multiple Sclerosis (Schilaty)
7/13/2018	Nate Bates/Constanza (Connie) Alcaino Ayala	In Vitro Modeling of ACL Injury Mechanism (Bates); The Touching Story of Gastrointestinal Mechanosensitivity (Ayala)
7/20/2018	Sarah Wicher/John Garich	Importance of IL-6 in Intracellular Calcium Regulation in Airway Smooth Muscle of Elderly Asthmatics (Wicher); High-density electrode arrays: A collaborative effort to aid in epilepsy & brain mapping studies (Garich)
7/27/2018	Andrew Haak/Dr. Suelen Lucio Boschen De Souza	Selective YAP/TAZ Inhibition in Fibroblasts via Dopamine Receptor D1 Agonism Reverses Fibrosis/Stimulation of the Subparafascicular Thalamic Nucleus Modulates Dopamine Efflux in the Inferior Colliculus of Rats
9/14/2018	Adrian Vella, Mayo Clinic	What can the genetics of Type 2 Diabetes teach us about pathophysiology?
9/21/2018	George Gilkey, Mayo Clinic	Why Do Bright People Make Mistakes- an introduction to cognitive errors
9/28/2018	Jeson Sangaralingham, Mayo Clinic	Innovative Therapeutics for Cardiovascular Disease: From Biology to Drug Discovery
10/5/2018	Christoph Buettner, Mt. Sinai School of Medicine	Why you need brains for metabolic health: Impaired CNS control as a primum movens of metabolic disease and inflammation
10/19/2018	Eugenia (Janja) Trushina, Mayo Clinic	Modulation of Mitochondrial Complex I as a Therapeutic Strategy for Multiple Human Conditions
10/26/2018	Virginia Miller, Mayo Clinic	Sex as a Biological Variable
11/2/2018	Justin Koepsel, Mayo Clinic Ventures	Career Development – Always a Work in Progress
11/9/2018	Jay Mandrekar, Mayo Clinic	Collaborating with Biostatistician: Brief Overview
11/16/2018	Guang-Hong Chen, University of Wisconsin	Artificial Intelligence (AI) in medical imaging: Opportunities and Challenges
11/30/2018	Tamas Ordog, Mayo Clinic	Interrogating and manipulating lineage-critical enhancers for therapeutic benefit
12/7/2018	Chad Vezina, University of Wisconsin	Using the mouse as a preclinical model for Urology: mechanisms of prostate- and lower urinary tract symptoms (LUTS)
12/14/2018	David Fuller, University of Florida	Translational studies in Pompe disease