

2021 BMEP 6600 Seminar Series

DATE	PRESENTER	SEMINAR TITLE
1/8/2021	Anna Greka	Membrane proteins and disrupted mechanisms of cellular homeostasis
1/15/2021	Art Beyder	Does the gut feel touch?
1/22/2021	Lin Tian	Imaging neurochemical signaling in vivo with genetically encoded indicators
2/5/2021	Yujiro Hayashi	Gastric neuronal nitric oxide synthase encodes a memory of early-life dietary restriction
2/19/2021	Matt O'Donnell	Light and Sound: Integrating Photonics with Ultrasonics
2/26/2021	Missy Morrow	Daily Arm Use and Shoulder Pathology Progression in Manual Wheelchair Users
03/05/2021	Missy Morrow	Advice for grad students
03/12/2021	Naureen Javeed	Role of Pro-inflammatory Beta Cell Small Extracellular Vesicles in the Pathogenesis of Diabetes
03/19/2021	Alexander Dunn	Tissue Construction, from Molecules Up
03/26/2021	Alyssa Brown Matt Fogarty	Quantifying Mitochondrial Function in Diaphragm Muscle Fibers A club of one: My investigations of pathognomonic changes in ALS
04/02/2021	Brandon Nelson Jonathan Scott	X-Ray Phase Contrast Imaging of the Lungs: Challenges and Opportunities A Machine Learning Inversion Framework for Brain Magnetic Resonance Elastography
4/9/2021	Yatrik Shah, PhD, University of Michigan	Iron and oxygen sensing in health and disease
4/16/2021	Sanjay Misra, MD	Hemodialysis arteriovenous fistula biology, treatment, and application of advanced imaging
4/23/2021	Christine Lee, MD, PhD	Who Wants To Be An Innovator?
4/30/2021	Hyunwoo Yuk, PhD, MIT	Soft Materials for Tough Problems: Hydrogel Technologies for Biomedical Applications
5/7/2021	Anders Asp	Deep Brain Stimulation Re-Imagined for Alcohol Use Disorder
5/7/2021	Dushyant Mehra	Characterizing Locus Specific Chromatin Structure and Dynamics in Living Cells using Correlative Imaging Techniques
5/14/2021	Ernest Wright, PhD UCLA	SGLT Inhibitors - Physiology and Pharmacology
5/21/2021	Tracey Weissgerber, PhD, Berlin Institute of Health	Creating clear and informative image-based figures for scientific publications
6/4/2021	Dr. Carlos Mantilla/Dr. Armando Manduca Kathiresan Natarajan, PhD	BMEP Track Overview Mechanism of calcium potentiation of the $\alpha 7$ nicotinic acetylcholine receptor
6/11/2021	Krystal Kirby, PhD U Wai Francisco (U-Wai) Lok, PhD	Evaluation of geometric distortion in 7T MRI for frameless surgical procedures 2D and 3D ultrasound micro-vessel imaging
6/18/2021	Nolan Meyer Matt Brown	Local low-rank denoising of dynamic image series for enhanced signal integrity in functional MRI You are when you eat: Time-restricted feeding prevents deleterious metabolic effects of circadian disruption through epigenetic control of pancreatic β -cell function
6/25/2021	Ping Gong, PhD Katherine Arnold	Novel Ultrasound Biomarkers and New Opportunities Offered by Ultrafast ultrasound imaging Tissue Quality in Existing and Emerging Treatments for Osteoarthritis
7/9/2021	Dahan Kim, PhD Liqiang Ren, PhD	Techniques to improve flow signal and velocity noise in non-contrast 4D-flow MRI Deep Convolutional-neural-network-based Metal Artifact Reduction for CT-guided Interventional Oncology Procedures (MARIO)
7/16/2021	Ziyang Yin, PhD Alan Gonzalez Suarez, PhD	MR Elastography: Applications in Brain Imaging Automated microfluidic platforms for cell culture and bioanalytical assays
7/23/2021	Satish Sen, PhD Anthony Umpierre, PhD	Circadian Control of Glucose-Stimulated Insulin Secretion in Transplanted Human Stem Cell Derived Pancreatic β cells The Role of Microglial Calcium Signaling
7/30/2021	Joseph Panos, Sisi Chen, MD	Immunomodulation to Improve the Clinical Performance of BMP2 Intrinsic Mechanosensing of The Gut
9/17/2021	Diana Jurk, PhD	Cellular senescence as a driver of cognitive decline
9/24/2021	Christopher Adams, MD, PhD	Investigating Mechanisms and Treatment of Skeletal Muscle Atrophy
10/1/2021	Yang Liu, PhD	Translating device innovations to the patient bedside: an example of the Vortex Catheter
10/8/2021	Slav Bagriantsev, PhD, Yale University	Cellular and molecular mechanisms of tactile specialization
10/15/2021	Marina Walther-Antonio, PhD	Microfluidics: Enabling the study of cells at their scale, instead of ours
10/22/2021	Douglas Brownfield, PhD	Uncovering Mechanisms of Fate Regulation in the Developing Alveolar Epithelium
10/29/2021	Philip Holmes Nathan Huber	Improving Ultrasonic Diagnosis of Osteochondritis Dissecans Generalizable Deep Learning Noise Reduction Framework for Computed Tomography
11/5/2021	Prashanthi Vemuri, PhD	Cognitive Aging and Resilience in the Population: An Imaging Perspective
11/12/2021	Shanshan Tang, PhD	Microbubbles and Focused Ultrasound induced blood-brain-barrier disruption
11/19/2021	Shuai Leng, PhD	Photon Counting Detector Computed Tomography (CT): Principles, Algorithms and Clinical Applications
12/3/2021	Ian Papautsky, PhD, University of Illinois	Whole blood microfluidics: from fractionation to liquid biopsy
12/10/2021	Zaki Ahmed, PhD Lomas Persad, PhD	Multi-echo functional MRI Modeling human muscle using intraoperative measurements
12/17/2021	Marissa Schafer, PhD	Rejuvenation of the aged inflammatory brain cell landscape through p16+ senescent cell clearance