2019 BMEP 6600 Seminar Series

DATE	PRESENTER	SEMINAR TITLE
1/4/2019	April McPherson / Matt Brown	Psychological readiness and ACL injury; Time-restricted feeding reverses circadian disruption-induced glucose intolerance and Beta-cell dysfunction in mice
1/11/2019	James Pipe	Designing a Better MRI Scanner
1/18/2019	Matthew Urban	Measuring arterial stiffness with ultrasound-based methods
2/1/2019	Art Beyder	Unraveling the gut mechanosensitivity mechanisms
2/15/2019	Manuela Lopera / Soudabeh Kargar	Xenogenic vein ECM scaffolds for use in coronary artery bypass and other vascular applications; High through-plane resolution for multislice T2SE MRI: application in prostate imaging
2/22/2019	Dushyant Mehra / Christina Webber	Nucleic acid tracking; Kinematics during activities of daily living in adults with traumatic brachial plexus injuries
3/1/2019	Mike McShane	Biomaterials-based optical metabolite sensing for in vitro and in vivo disease models
3/8/2019	Tracey Weissgerber	The science of science: How meta-research strengthens initiatives to transform scientific practice
3/15/2019	Eyal Dassau	New frontiers in diabetes management: Decision support and automated glucose control for improved clinical care
3/22/2019	John Huston	MR elastography: Palpating the Brain
3/29/2019	Aleksey Matveyenko	Timing is everything: Circadian control of glucose metabolism
4/5/2019	Jonathan Scott	Artificial neural networks for magnetic resonance elastography stiffness estimation in inhomogeneous materials
4/12/2019	Jody Rosenblatt	Epithelial extrusion and its misregulation in disease
4/26/2019	Timothy Kline	Ratiological imaging of polycystic kidney disease - from automation to classification
5/3/2019	Chris Colwell	Leveraging our understanding of circadian rhythms to treat an incurable genetic disorder
5/10/2019	Haitao Wang	Fibrodysplasia ossificans progressiva (FOP)
5/17/2019	Carrie Hruska	Molecular breast imaging: A rebel technology in clinical practice
5/24/2019	Carmen Vivar / Liliana Quintanar	Exercise and the brain; The biological chemistry of copper in degenerative disease: From the brain to the human lens
5/31/2019	Yujiro Hayashi / Chris Gillen	Gastric stem cell aging/Cation-chloride cotransporters with unexpected properties
6/7/2019	BMEP leadership / Alex Weston	*BMEP* Graduate Program Information / Whole abdomen segmentation: annotation of 33 abdominal organs using deep learning
6/14/2019	Troy Cross / Brianna Goodwin	A shallow dive into breath-holding physiology / Assessing the Arm Movement of Individuals with Spinal Cord Injuries Outside of the Lab
6/21/2019	Constanza Alcaino Ayala / Sabhya Rana	Exploring the Roles of Voltage-gated Calcium Channels in Enteroendocrine Cell Mechanotransduction / Phrenic Motor Neuron Size Dependent Pre- and Post-Synaptic Mechanisms of Neuroplasticity
6/28/2019	Evan Nicolai / Christopher Noble	Development of a Swine Model for the Evaluation of Vagus Nerve Stimulation Techniques / Cardiovascular Continuum Mechanics for Medical Device Research
7/12/2019	Rena Hale / John Strikwerda	The efficacy of simultaneously training two motion targets during a squat using auditory feedback / A conserved stabilizer of ionic current in pentameric ligand-gated ion channels
7/19/2019	Rebekah Samsonraj / Simone Mazzarazonne	Investigating mesenchymal stromal cell senescence / Nicotinic acetylcholine receptors and epilepsy: how patient mutations alter singel channgel function and trigger disease
7/26/2019	Daniel Gomes Cardona / Naureen Javeed	Imaging performance assessment in X-Ray Angiography including anatomical background and moving test objects / FED-Exsomes: A novel means of beta cell communication that delivers
9/6/2019	Shengzhen Tao / Jacinta Browne	Multi-Energy Imaging with Dual-Source Photon-Counting Detector CT / Impact of a CT detector electronic noise on low-dose CT across multi-vendors and impact of acquisition parameters on quantification accuracy of CT brain perfusion
9/13/2019	Jonathan Calvert/Manuela Lopera	Non-Invasive Transcutaneous Spinal Stimulation to Enable Motor Function Following Spinal Cord Injury/ Xenogeneic vein extracellular matrix scaffolds for use in chronic venous insufficiency
9/20/2019	Mickael Tanter	Ultrafast Imaging in Biomedical Ultrasound
9/27/2019	Mark Wehde, et al	CAD Modeling, Computational Analysis, and Additive Manufacturing Enables Rapid Innovation in Orthopedic Implants
10/4/2019	John Sedivy	Retrotransposon Activation as a Mechanism of Age-associated Sterile Inflammation: Repurposing HIV Drugs to Treat Chronic Diseases of Aging
10/11/2019	Dora Hermes Miller	fMRI and Field Potential Signals in the Human Brain: All Measures Have a Blind Spot
10/18/2019	Nathan Schilaty	Neuromechanics of Anterior Cruciate Ligament Injury and Rehabilitation
11/1/2019	April McPherson / Gabriel Martinez	Arthrogenic Muscle Inhibition after ACL Reconstruction / The Gradient Boosting Machine
12/6/2019	Luis Lujan	Neuro Surgery Research
12/13/2019	Richard Hinds	The History of Pulmonary Gas Exchange: Understanding the Interaction Between Lung Physiology and the Technological Imperative in Medicine
12/20/2019	Gerald Zwettler	Pre- and Post-processing Strategies for Domain-Specific, Slice-wise Segmentation of Tomographic 3D Datasets Utilizing U-Net Deep Learning Models