

**7<sup>th</sup> Annual Meeting of the Michigan Physiological Society  
The Michigan Chapter of the American Physiological Society  
Friday, June 26, 2020**

**9:00 am – 9:55 am      ORAL SESSION #1: CARDIOVASCULAR PHYSIOLOGY & NEUROPHYSIOLOGY**

9:00 am                    **Introduction & Instructions**

9:05 am                    **Hunter Dlugas**, Wayne State University  
“An Algorithm for Classifying ECG Waveforms and Detecting Atrial Fibrillation Using Persistent Homology”

9:15 am                    **Navjit Girgla**, University of Michigan  
“Differentiation of Cortical Neurons Based on the Role of Autism Spectrum Disorder Gene ASXL3”

9:25 am                    **Sarah Haidar**, Wayne State University  
“Expression of the Pro-form of Brain-Derived Neurotrophic Factor and the P75 Receptor in the Rostral Ventrolateral Medulla of the Physically Active Versus Sedentary Rats”

9:35 am                    **Edith Jones**, University of Michigan  
“Phenotyping Pathophysiology of Heart Failure with Preserved Ejection Fraction (HFpEF) Using Model-Based Analysis of Patient Record Data”

9:45 am                    **Cindy Shkempi**, Wayne State University  
“Sex-Related Differences in Neural Control of Blood Pressure via the Rostral Ventrolateral Medulla”

**10:05 am – 11:00 am      ORAL SESSION #2: PUBLIC HEALTH & EDUCATION**

10:05 am                    **Introduction & Instructions**

10:10 am                    **Thomas Basala**, Michigan Technological University  
“Applied Human Physiology Fitness Trail Project: Benefits for Local Residents and Undergraduate Students”

10:20 am                    **Grace George**, Wayne State University  
“Developing Predictive Models of Voluntary Physical Activity in Male and Female Active Rats”

10:30 am                    **Rasha Jawad**, Central Michigan University  
“Re-Inventing How We Teach Venous Return”

10:40 am                    **Aditi Vyas**, Michigan Technological University  
“Effects of 8-Week Active Mindfulness and Stress Management on Anxiety and Mental Health During the Covid-19 Pandemic”

10:50 am **Isaac Wedig**, Michigan Technological University  
“Exercise is Medicine: Staying Active During the Covid-19 Pandemic”

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11:00 am - 11:15 am **LUNCH BREAK**

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**11:15 am – 12:10 pm ORAL SESSION #3: GI PHYSIOLOGY, METABOLISM & DIET**

11:15 am **Introduction & Instructions**

11:20 am **Nupur Das**, University of Michigan  
“Microbial Metabolite Signaling is Required for Systemic Iron Homeostasis”

11:30 am **Taania Girgla**, University of Michigan  
“The Association Between Pre-Diabetes and Sepsis Mortality”

11:40 am **Sujuan Wang**, University of Michigan  
“The Role of SUMOylation of Hepatic E4BP4 in Nonalcoholic Fatty Liver Disease”

11:50 am **Meichan Yang**, University of Michigan  
“ER Stress-Induced Hepatic E4BP4 Promotes Liver Steatosis by Suppressing AMPK Signaling”

12:00 pm **Zifeng Zhou**, University of Michigan  
“E4BP4 is a Novel Regulator of Stellate Cell Activation”

**12:20 pm – 1:15 pm ORAL SESSION #4: CANCER & PULMONARY DISEASE**

12:20 **Introduction & Instructions**

12:25 pm **Elissa Hult**, University of Michigan  
“Secreted Factors from M2-Like Macrophages are Responsible for Profibrotic Changes in Fibroblasts and Alveolar Epithelial Cells in In Vitro Models”

12:35 pm **Srinivas Kannan**, Michigan Technological University  
“Impact of Serum Concentration and GLUT5 Specific Fructose Mimics on Viability of Breast Cancer Cells”

12:45 pm **Samerender Nagam Hanumantharao**, Michigan Technological University  
“The Effect of Scaffold Morphology on Cell-Matrix Interactions of Renal, Lung and Bladder Cancer Cells”

12:55 pm **Rashi Singhai**, University of Michigan  
“HIF-2a Mediates Vulnerability to Oxidative Cell Death in Colon Cancer”

1:05 pm **Sumeet Solanki**, University of Michigan  
“Amino Acid Sensing is an Essential Mechanism of MTORC1 Activation in Colorectal Tumorigenesis”