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 Shkembi, 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"

11:00 am - 11:15 am  LUNCH BREAK

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"