The NIH Center for Molecular Studies in Digestive and Liver Diseases The Penn/CHOP Center for Digestive, Liver & Pancreatic Medicine Abramason Cancer Center Tumor Biology Program NCI P01 Mechanisms of Esophageal Carcinogenesis **Division of Gastroenterology** 19<sup>th</sup> Annual NIH Center for Molecular Studies in Digestive and Liver Diseases "Technological Advances in the Use of Human Digestive Tissues for Basic Science Research" **National Constitution Center** INE MORIBU Monday, April 15, 2019 Independence Mall, 525 Arch Street Philadelphia, Pennsylvania 19106 8:00 am - 8:30 am **REGISTRATION and BREAKFAST** 8:30 am - 8:40 am Opening Remarks: Klaus Kaestner, PhD and Gary Wu, MD 8:40 am SESSION I: The use of high dimensional profiling technologies in the characterization of the digestive tissues 8:40 am - 9:00 am Vesselin Tomov, MD, PhD Assistant Profess or Medicine, University of Pennsylvania "Mass Cytometry of isolated lamina propria mononuclear cells" 9:00 am - 9:20 am Klaus Kaestner, PhD Thomas And Evelyn Suor Butterworth Professor In Genetics, University of Pennsylvania "Imaging mass cytometry of pancreas and intestine – a new tool in the arsenal of GI researchers" Kyong-Mi Chang, MD, 9:20 am - 9:40 am Associate Dean for Research at the Crescenz VA & Professor of Medicine, University of Pennsylvania "High dimensional view of live in health and disease with image mass cytometry" 9:40 am - 10:00 am BREAK SESSION 2: Perpetuating the cellular phenotypes of human digestive tissues in culture 10:00 am 10:00 am - 10:40 am KETNOTE SPEAKER: Stephen A. Duncan, DPhil Smartstate Chair in Regenerative Medicine, Medical University of South Carolina "A screen Using iPSC-Derived Hepatocytes Reveals NAD+ as a Potential Treatment for mtDNA Depletion Syndrome" Edward E. Morrisey, PhD 10:40 am - 11:00 am Robinette Foundation Professor of Cardiovascular Medicine, University of Pennsylvania "Cell culture and the iPS Core (CCiC)" 11:00 am - 11:20 am Hiroshi Nakagawa, MD, PhD Research Associate Professor of Medicine, University of Pennsylvania "3D organoids – approaches to esophageal diseases" 11:20 am - 11:40 am Tatiana Karakasheva, PhD Postdoctoral Researcher, University of Pennsylvania "3D organoids and personalized medicine" 11:40 am - 1:00 pm LUNCH and POSTER SESSION 1:00 pm SESSION 3: The human out microbiota in health and disease 1:00 pm - 1:40 pm KETNOTE SPEAKER: Jonathan U. Peled, MD, PhD Assistant Attending, Memorial Sloan Kettering Cancer Center "Gut microbiota injury in allogeneic haematopoietic stem cell transplantation" Kyle Bittinger, PhD 1:40 pm – 2:00 pm Assistant Professor of Pediatrics, Children's Hospital of Philadelphia "Integrative multi-omic analysis of infants first microbiota" 2:00 pm **SESSION 4: Opportunities for human biospecimen collection at Penn** 2:00 pm - 2:20 pm Meenakshi Bewtra, MD, MPH Assistant Professor of Medicine, University of Pennsylvania "The IBD Immunology Initiative (I3)" Gary D. Wu, MD 2:20 pm – 2:40 pm Ferdinand G. Weisbrod Professor in Gastroenterology, University of Pennsylvania "The Penn Center for Nutritional Science and Medicine" 2:40 pm - 3:00 pm Maayan Levy, PhD Assistant Professor of Microbiology, University of Pennsylvania "Mouse colonoscopy' James L. Lewis, MD, MSCE 3:00 pm - 3:20 pm Professor of Medicine and Epidemiology, University of Pennsylvania "The PennCHOP Microbiome Program" 3:20 pm - 3:30 pm Closing Remarks and Poster Awards: Klaus Kaestner, PhD and Gary Wu, MD

Register online at: https://somapps.med.upenn.edu/forms/molecular/view.php?id=14028