WEDNESDAY, MAY 24

8:00 – 8:45 am	Light snacks & coffee in Atrium	
8:45 am	Opening Remarks, Room 208	
9:00 – 10:00 am	**Plenary: Cherie Stabler, University of Florida** Engineering Organ-on-Chip Models and Additive Manufacturing for Type 1 Diabetes	
10:00 – 10:30 am	**Break, Snacks in Atrium**	
10:30 – 10:35 am	**Cellular Analysis II** Room 103 Chair: Rebecca Pompano Opening Remarks	**Pharma and Biopharma Applications** Room 214 Chair: Scott Martin Opening Remarks
10:35 – 11:05 am	**Keynote: Megan McCain**, University of Southern California Engineering Functional Microtissues to Model Cardiac, Skeletal, and Uterine Muscle Disorders	**Keynote: Amanda Hummon**, The Ohio State University Spatial SILAC – Developing Isotopic Zip Codes
11:05 – 11:25 am	Ashley E. Lenhart and Robert T. Kennedy Microfluidic Platform for Monitoring Hormone and Small Molecule Secretion Dynamics from Islets	Cecile Tardif, Emmanuel Jaccoulet, Myriam Taverna and Claire Smadja Imaged Capillary Isoelectric Focusing (icIEF) Combined with Principal Component Analysis: A Powerful Tool to Detect Degraded Therapeutic Monoclonal Antibodies
11:25 – 11:45 am	Claire D. Cook, Brittany Rupp, Emma Purcell, Nico Mesyngier, Ryan C. Bailey and Sunitha Nagrath CellMag-CARWash: A Droplet Microfluidic, Isolation Technique for Highly Pure, Single-cell Populations	Christoph Gstoettner IP-RP-LC as a New Tool for AAV Genome Integrity Assessment
11:45 – 12:05 pm	Michelle L. Kovarik, Tyler J. Allcroft and Per Sebastian Skardal Single-cell Analysis of Heterogeneous Oxidative Stress Response by Microfluidic Chemical Cytometry	Rebecca Whelan, Naviya Schuster-Little, Roberta Fritz-Klaus, Mark Etzel, Niharika Patankar, Saahil Javeri and Manish Patankar Reinventing the CA125 Blood Test for More Sensitive Detection of Recurrent Ovarian Cancer
12:05 – 1:15 pm	**Lunch, Room 108**	
1:30 – 1:35 pm	**Omics / Systems Biology II** Room 114 Chair: Autumn Qiu Opening Remarks	**3D Printing** Room 214 Chair: Dosil Pereira de Jesus Opening Remarks
1:35 – 2:05 pm	**Keynote: Emanuela Gionfriddo**, University of Toledo Microextraction: a versatile asset in the analytical toolbox for characterization of complex systems”	**Keynote: Scott Martin**, St. Louis University New Approaches for Using 3D Printed Devices for Cell Culture and Analysis”
2:05 – 2:25 pm	Cindy Nix, Federica Ciregia, Gael Cobraiville, Dominique de Seny and Marianne Fillet Microfluidic Liquid Chromatography Coupled to Drift-tube Ion Mobility and High-resolution Mass Spectrometry for the Analysis of Fibroblast-like Synoviocytes Stimulated with SAA Variants	Yen Ru Joanne Seow, Md Mohibullah and Chris Easley Plug-and-play 3D-printed Pneumatic Logic Gates and Oscillators Characterized by Smartphone Audio and Video Analysis

2:25 – 2:45 pm	André Luiz Melo Camelo, Hans Rolando Zamora Obando, Aline Cristina Dias, Thaís de Assis Lopes, Regina Vincenzi Oliveira, Marina Franco Maggi Tavares, André Matos de Oliveira, Alberto Azoubel Antunes and Ana Valéria Simionato Plasma Metabolomic Profiling of Patients with Benign Prostatic Hyperplasia by LC-HRMS	Michelle T. Tran and Vincent T. Remcho 3D-printed Microfluidic Interface for Hybrid Microchip Capillary Electrophoresis
2:45 – 3:05 pm	Alexandra Ros, Jorvani Cruz Villarreal, Ana Egatz-Gomez, Brian Pham, Keegan Kow, Todd Sandrin and Paul Coleman Amyloid-β Species Detection from Human Brain Sections Assessed with a Microfluidic Immunoassay in Tandem with MALDI-MS	Hannah Musgrove, Sophie R. Cook and Rebecca Pompano Evaluation of Parylene-C Coated, Resin 3D Printed Devices for Use with Primary Immune Cell Culture
3:15 – 4:00 pm	**Closing Remarks / MSB 2024 Announcement / Award Ceremony, Room 208**	
4:00 – 5:00 pm	**Closing Reception, Atrium**	