

TUESDAY, MAY 23

8:00 – 8:45 am	Light snacks & coffee in Atrium	
8:45 am	Opening Remarks, Room 208	
9:00 – 10:00 am	Plenary: Facundo Fernández, Georgia Institute of Technology Next Gen Technologies in Metabolomics: AI/ML, Triboelectric Nanogenerators, Ion Mobility and Imaging	
10:00 – 10:30 am	Break & Snacks in Atrium	
10:30 – 10:35 am	Micro- and Nanoscale CE & LC II Room 103 Chair: Christopher Harrison Opening Remarks	Sensors and Biomarker Analysis Room 214 Chair: Robert Lazenby Opening Remarks
10:35 – 11:05 am	Keynote: Jana Lavicka , Institute of Analytical Chemistry of the Czech Academy of Sciences Development of Novel Fluorescent Tags for Glycosylation Analysis by CE/LIF and CE-MS” Christopher Baker and Claire Smith	Keynote: Jill Venton , University of Virginia Multiplexed Electrochemical and Fluorescent Measurements of Neurotransmitters He Yan, Yunjie Wen, Zimu Tian, Nathan Hart, Song Han, Steven Hughes and Yong Zeng
11:05 – 11:25 am	Development of an Epifluorescence Detection System with Cylindrical Optics to Enable Fourier Transform Capillary Electrophoresis	One-Pot Endonucleolytically Exponentiated Rolling Circle Amplification by CRISPR-Cas12a Affords Sensitive, Expedited Isothermal Detection of MicroRNAs
11:25 – 11:45 am	Shulin Bu and Alexandra Ros Towards an Understanding of AC-electrokinetic Effects in the Separation of Nanoplastics	Hoai Nguyen and Mark Hayes Differentiation of Bacteria Isolates as Determined by Insulator-Based Dielectrophoresis
11:45 – 12:05 pm	Laura Casto-Boggess and Lisa Holland High Throughput Quantitative Analysis of Enzyme Inhibitor Performance Using a Multi-capillary Array with Thermally Tunable Phospholipid Gel for In-line Nano-volume Reaction Zones and Capillary Electrophoresis	Elain Fu, Khadijeh Khederlou, Noel Lefevre, Lael Wentland, Jacob M. Cook, Matthew L. Johnston and Stephen A. Ramsey Signal-to-noise Enhancement for Carbamazepine Detection in Saliva: Progress in the Development of a Field-use Device for the Monitoring of Epilepsy Therapy Drugs
12:05 – 1:15 pm	<p>MSB Inclusion Lunch, Room 108 Navigating Diverse Personal and Professional Lives</p> <p><i>This session invites conference participants to join for a discussion about actions we can take as students, faculty, and researchers to promote diversity, equity, and inclusion in our scientific communities. The session will be modelled after a GRC Power Hour and is designed to be engaging and stimulating of further conversation throughout the remainder of the meeting.</i></p> <p>sponsored by Society for Microscale Separations and Bioanalysis</p>	
		

1:30 – 1:35 pm	Microfluidics and Lab-on-Chip II Room 103 Chair: Michelle Kovarik Opening Remarks	Advances Instrumentation / Detection Room 214 Chair: Christopher Easley Opening Remarks
1:35 – 2:05 pm	Keynote: Jose L. Garcia-Cordero , Roche Institute of Human Biology Practical Platforms for Covid-19 Point-of-care Diagnostics	Keynote: Rawi Ramautar , Leiden University CE-MS-based Metabolomics Methodologies for Volume-Restricted Biomedical Studies
2:05 – 2:25 pm	Cecilia C. Douma and Michael T. Bowser Surface Adsorption and Micro Free-flow Electrophoresis Assay Development in Cyclic Olefin Copolymer Devices	Debashis Sen and Robert A. Lazenby Localized Detection of Analyte Concentration Using a Microelectrode Aptamer-based Sensor
2:25 – 2:45 pm	Yunjie Wen, Vikalp Vishwakarma, Andrew K. Godwin and Yong Zeng Topographic Modulation of Enzymatic Reaction Affords Ultrasensitive Compartment-Free Digital Phenotyping of Tumor-derived Exosomes	Lisa Holland, Makenzie T. Witzel, Yousef S. Elshamy and Laura Casto-Boggess Capillary Nanogel Electrophoresis for Analyses of Proteins and Protein Activity under Native Conditions
2:45 – 3:05 pm	Md Mohibullah, Chris Easley and Yen Ru Joanne Seow 3D-printed Pneumatic Logic Computations for Droplet-based Sampling Automation	Yue Xin and Robert Kennedy High-Throughput LC System Achieving 5s Cycle Time of Separation for Nanoscale Samples
3:05 – 3:25 pm	Dana Spence From Microfluidic Systems to Small-scale Clinical Trials at Academic Institutions: C-peptide as an Auxiliary Therapeutic for Type 1 Diabetes	M Selim Ünlü and Mete Aslan Pixel-diversity Interferometric Imaging: A New Paradigm in Digital Biosensing
3:25 – 4:20 pm	Posters & Snacks, Atrium	
4:25 – 5:40 pm	3-min Research Showcase, Room 208 <i>Join the trainees and early career scientists to cheer them on as they summarize their research program in just three short minutes and compete for cash prizes!</i>	
6:00 – 9:00 pm	Conference Dinner, FSU Alumni Center Ballroom <i>Ticket included with your registration. Tickets required for guests.</i> Buses depart the Conference Center every 15 min beginning at 6:00 pm. Last bus departs Conference Center at 6:45 pm. Buses depart from the Alumni Center back to the Conference Center every 20 min beginning at 8 pm. Last bus departs Alumni Center at 9:00 pm.	