

The UIC logo is a red circle containing the letters "UIC" in white, bold, sans-serif font. It is positioned in the top right corner of the page.

UIC

The background of the entire page is a dark gray color with a faint, large-scale molecular structure. This structure consists of several black circles of varying sizes connected by black lines, resembling a network or a chemical molecule. The circles are distributed across the page, with some being significantly larger than others.

**CHICAGO
MASS SPEC
DAY 2018**

July 20th

**University of
Illinois at Chicago**

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Agenda

Friday, July 20 2018

8:00 - 8:30 AM Registration, and Poster Setup, COP Lobby

Morning Session

Session for students, postdocs, trainees, and early career scientists only

Discussion Leaders: Emily Tollefson & Oded Yogev

Room 134-2

8:30 - 8:40 AM Welcome/Introduction to Chicago Mass Spec Day by
Melissa Galey

8:40 - 9:05 AM Jonathon Hopwood (Loyola University)
"Analyzing Diels-Alder Reactions of Acene Films and Single Crystals
via Mass Spectrometry"

9:05 - 9:30 AM Sugasini Dhavamani (University of Illinois at Chicago)
"Separation and Quantification of Acyl Migration of 2-acyl-LPC and
1-acyl LPC by LC/MS/MS"

9:30 - 9:50 AM Coffee Break

9:50 - 10:15 AM Breanna Zerfas (Purdue University)
"Discovery of a Small Peptide Prodrug to Selectively Label
Immunoproteasome Expressing Cells"

10:15 - 10:40 AM Joseph McKillip (University of Minnesota)
"Impact of Histidine Kinase Inhibitors on Secondary Metabolite
Production of *Streptomyces*"

10:40 - 11:05 AM Brian David (University of Illinois at Chicago)
"Label-Free Visualization of Peptides and Small Molecules in Tumor
Explants Using Mass Spectrometry Imaging"

Agenda

Friday, July 20 2018

Afternoon Session

Open for all attendees

10:30 - 11:00 AM Registration for Faculty and Senior Scientists, COP Lobby

11:05 - 11:30 AM Lunch, 2N, 2nd floor

11:30 - 1:00 PM MS Primers/Facility Tours

- MS Basics: 212/216
- Experimental Design: 134-2
- Career Panel: 134-3
 - Moderator: Melissa Pergande
- RRC Tour: Meet in COP Lobby

Discussion Leaders: Alanna Condren & Matthew Waas

1:00 - 2:00 PM Theresa Evans-Nguyen (University of South Florida)

Targeting the Next Generation of Mass Spectrometry Instrumentation Development

Room 134-1

POSTER SESSION, COP Lobby

2:00 - 3:00 PM Even numbers

3:00 - 4:00 PM Odd Numbers

4:00 - 5:00 PM **Networking Reception, Atkins Medicinal Garden**

Keynote Speaker

Targeting the Next Generation of Mass Spectrometry Instrumentation Development



Theresa Evans-Nguyen, Ph.D.

Assistant Professor, Department of Chemistry, University of South Florida

The Evans-Nguyen lab is focused on the development of mass spectrometry instrumentation for the space, defense, and biomedical sectors.

Education

- 2005-2009 Johns Hopkins University; Postdoctoral Researcher
- 2000-2005 The University of North Carolina at Chapel Hill; Ph.D. in Chemistry (Analytical Chemistry)
- 1996-2000 The College of William & Mary; B.S. in Chemistry

Professional Experience

- 2009-2015 Senior Staff Scientist, Draper Laboratory
- 2015-Present Assistant Professor, The University of South Florida

Recent Publications

- Rapid pre-filtering of amphetamine and derivatives by direct analysis in real time (DART)-differential mobility spectrometry (DMS). *Analytical Methods*. **2017**, 9 (13), 5044-5051.
- Differential Mobility Spectrometry for Inorganic Filtration in Nuclear Forensics. *Anal. Chem.* **2016**, 88 (23), 11399-11405.

Posters

Poster #	Presenter (Affiliation)	Poster Title
1	Randy Arnold (Sciex)	Differential Mobility Separation (DMS)-based Separation of Bile Acid Isomers
2	Dylan Tabang (University of Illinois at Chicago)	Mass Spectral Profiling to Identify Cerebrospinal Fluid Markers in Niemann-Pick Disease, type C1
3	Alanna Condren (University of Illinois at Chicago)	Bile acid exposure alters specialized metabolism leading to biofilm inhibition in <i>Pseudomonas aeruginosa</i>
4	Matthew Waas (Medical College of Wisconsin)	Surface Genie: Integrating Predictive and Experimental Data for Rational Marker Prioritization
5	Emily Tollefson (University of Minnesota)	Specific Binding Interactions of Cytochrome C and MPA-coated Gold Nanoparticles
6	Oded Yogev (University of Illinois at Chicago)	Identification of small molecule biomarkers in tears using mass spectrometry
7	Andrew Marshall (University of Minnesota)	Discovery of Novel Actinorhodin Analogs by Mass Spectrometry-Based Fragmentation Analysis in <i>Streptomyces coelicolor</i> M145
8	Gwendolyn Gallagher (University of Chicago)	Protein-Level Proteorhodopsin Expression Patterns in Aquatic Microbes
9	Amber Mosley (Indiana University School of Medicine)	Thermal profiling as a novel tool to analyze the impact of missense mutants on the proteome
10	Melissa Pergande (University of Illinois at Chicago)	Quantitative label-free mass spectrometry analysis in the symptomatic Niemann-Pick, type C1 mouse model
11	Chathurika Rathnayake (University of Illinois at Chicago)	Method development for the extraction and quantification of Brain derived neurotrophic factor in Niemann-Pick Disease, type C1
12	Chandimal Pathmasiri (University of Illinois at Chicago)	Development of a Mass Spectrometry Assay to Analyze Phosphoinositides
13	Rachel Jones Lipinski (Medical College of Wisconsin)	Automated Sample Preparation Enables Miniaturization of Cell Surface Capture to Map the Surfaceome of Primary Cardiomyocytes

Posters

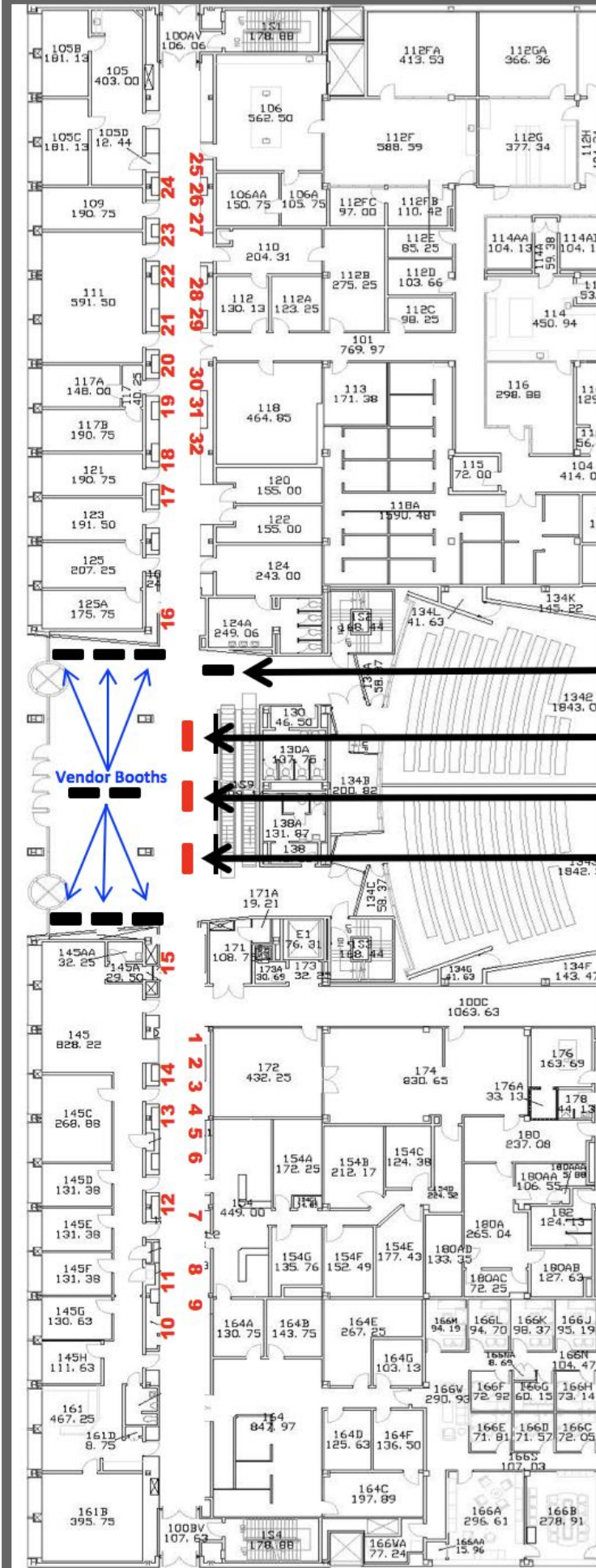
Poster #	Presenter (Affiliation)	Poster Title
14	Jason True (Indiana University School of Medicine)	Analysis of RNA Polymerase II protein-protein interactions as a consequence of FACT perturbation
15	Mi Nguyen (University of Illinois at Chicago)	Utilizing Mass Spectrometry to Study Phosphorylation Patterns in Ion Channels and Their Roles in Neurodegeneration and Neuroprotection
16	Theodore Keppel (Medical College of Wisconsin)	Relative quantitation of proteoforms released by mechanical stimulation of mouse skin using complementary top down mass spectrometry analysis workflows
17	Caitlin Keller (University of Wisconsin - Madison)	Comparison of Atmospheric Pressure and Vacuum MALDI Orbitrap Platforms for the Examination of Salt Stress in <i>Medicago truncatula</i> Root Nodules
18	Deepali Rathore (Medical College of Wisconsin)	Evaluation of SMOAC Enrichment for Phosphopeptide Analysis from Small Sample Sizes using ETD, HCD, and EThCD
19	Yeni Yung (University of Illinois at Chicago)	Planktonic and Biofilm <i>Pseudomonas aeruginosa</i> Metabolism Compared by Bottom-up Proteomics
20	Aruni Pulukody (University of Illinois at Chicago)	Millimeter Area Sampling of Intact Bacterial Biofilms for Proteomic Analyses
21	Raveendra Wickramasinghe (University of Illinois at Chicago)	Laser Desorption Postionization Mass Spectrometer with Flexible Laser Schemes
22	Slobdodan Milasinovic (Orochem Technologies)	Validation of dilute and shoot and evaluation of SPE method for barbiturates and THC carboxylic acid panel in urine
23	Xuejan Zang (Orochem Technologies)	Two efficient sample preparations for opiates testing in urine
24	Kevin Parker (Northern Illinois University)	Gas Phase Study of C-C Coupling Catalyzed by Nickel(II) Complexes
25	Kathryn Renyer (Loyola University Chicago)	Environmental Transformation of Triclosan Mediated by Plastic Debris in Freshwater Environments

Posters

Poster #	Presenter (Affiliation)	Poster Title
26	Jose Victorino (Indiana University School of Medicine)	Crosslinking mass spectrometry reveals molecular architecture of the cleavage and polyadenylation factor complex
27	Chase Clark (University of Illinois at Chicago)	Using MALDI-TOF MS to Create Low-Redundancy Libraries from the Cultivable Freshwater Sponge Microbiome
28	Conor Mullens (Bruker Daltonics)	The PASEF method on a TIMS-QTOF mass spectrometer for High Sensitivity Phosphoproteomics
29	Ralph Tobias (University of Illinois at Chicago)	Multimodal Investigation for Novel Biomarkers in Niemann-Pick Disease, Type C1: A Spatial and Temporal Profiling Lipidomics Study
30	Emily Vice (University of Illinois at Chicago)	Differential protein expression in non-traditional model, African naked mole rat, as compared to mice
31	Ashley Ives (Northwestern University)	Proteoform complexes of triose phosphate isomerase: Native mass spectrometry as a tool for characterizing stoichiometry of protein complexes
32	George Chlipala (University of Illinois at Chicago)	Untargeted Metabolomics Service at UIC Research Resources Center

Poster Map

1st Floor Poster Locations: Posters 1-32



Coffee/Water Station

CMS Discussion Table

Literature Table

Registration Desk



Event Information

Chicago Mass Spec Day is an educational and networking event for mass spectrometry enthusiasts in the greater Chicagoland area.

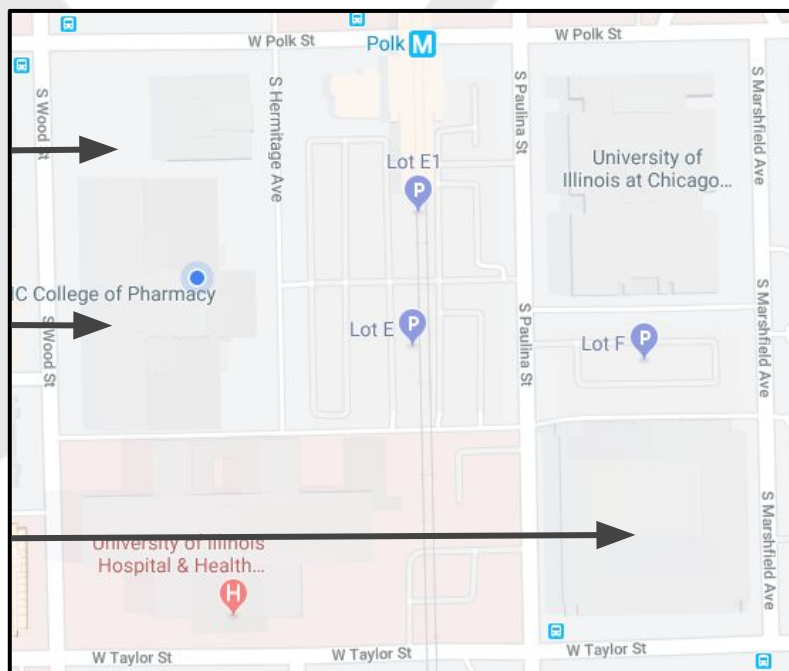
July 20th, 2018

University of Illinois at Chicago
College of Pharmacy
833 S. Wood St

Networking Reception

Building accessible
From S. Wood St

Paulina Parking
Garage



Chair

Melissa Galey

Faculty Advisors

Laura Sanchez and Stephanie Cologna

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