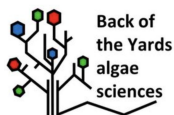


Poster Session

Poster Number - Presenter (Affiliation), Title

- 16 - Stephen Kurzyniec (Shimadzu)**, Comparative analysis of Transgenic Alzheimer's and Wild Type Mouse Models with High spatially resolved MALDI-MSI
- 17 - Leonard Lerer (BotY Algae)**, Incilius alvarius cell-based synthesis of 5-MeO-DMT
- 18 - Wenping Li (UIC)**, Progranulin as a biomarker for disease progression in the Niemann-Pick type C1 I1061T mouse model
- 19 - Xiaoxuan Lin (UC)**, Development of in vivo HDX-MS with applications to a TonB-dependent transporter and other proteins
- 20 - Taylor Lundgren (ND)**, A Fit-for-Purpose Approach to Detect Amino Acid Substitutions in Shotgun Proteomics
- 21 - Cydney Martell (NU)**, High-throughput discovery of the sequence and structure determinants for stress-induced aggregation of miniproteins
- 22 - Mi Nguyen (UIC)**, A NPC1 Protein-Protein Interaction Study in Mouse Cortical Tissues Reveals a Potential Role in Endocytosis
- 23 - Koralege Praneeth Pathmasiri (UIC)**, Mass spectrometry reveals brain myelin defects in Niemann-Pick disease, type C1 mice model
- 24 - Dominick Pierre-Jacques (UIC)**, Mass spectrometry imaging of lipids in Niemann-Pick disease, type C mice treated with experimental therapeutics
- 25 - Sadie Schultz (ND)**, Automating Proteomics Sample Preparation With Meso-Throughput Robotics
- 26 - Terilyn Stephen (UIC)**, The Role of Caveolin-1 in Adult Hippocampal Neurogenesis
- 27 - Dylan Tabang (UW-M)**, Multiomic Analyses of Pancreatic Islets via Laser Capture Microdissection-Mass Spectrometry and timsTOF fleX MALDI-2 Imaging
- 28 - Valeria Zerda Pinto (SIUE)**, Quantifying Insoluble Ferulic Acid and P-Coumaric Acid in Zea mays using LC-MS
- 29 - Ziwei Zhang (UIC)**, Quantitative proteomic analysis of exosomes in HR+/HER2- patients
- 30 - Guomao Zhao (UIC)**, 4-Hydroxy-2-nonenal modified albumin highlights oxidative stress in preeclampsia

Event Sponsored By:



UIC

CHICAGO MASS SPEC DAY 2022

July 15th

Chicago, Illinois



Chairs

Jane Thibeault
Trent Peters-Clarke

Faculty Advisor

Stephanie Cologne

chicagomassspecday@gmail.com
ChicagoMassSpecDay.weebly.com

Event Schedule

Designed for students, postdocs, trainees, and early career scientists

8:30 am Registration and Poster Setup, SCE 6th Floor

9:00 am Welcome to Chicago Mass Spec Day 2022, Jane Thibeault and Trent Peters-Clarke

Sponsor Introductions

9:15 am Trainee Oral Presentations

Kendra Selby (SIUE)

"The effect of environmentally relevant concentrations of atorvastatin, lovastatin, and simvastatin on Eisenia hortensis"

Soeun Kang (UIC)

"Quantitative analysis of metabolic reprogramming between the proliferative and the quiescent growth states by 13C-metabolic flux analysis"

Caitlin Kerr (ND)

"Robust Isoelectric-Mass Spectrometry Separations of Proteins"

10:15 am Coffee Break

Lightning Talks	Poster #
Bryon Drown (NU)	#06
Kim Greis (Yale)	#10
Daniel Hu (ND)	#11
Wenping Li (UIC)	#18
Taylor Lundgren (ND)	#20
Dominick Pierre-Jacques (UIC)	#24
Terilyn Stephen (UIC)	#26
Ziwei Zhang (UIC)	#29

11:15 am Sponsor Introductions

Event Schedule (Continued)

11:30 am Trainee Oral Presentations

Pei Su (NU)

"Highly multiplexed proteoform imaging of tissues using individual ion mass spectrometry"

Xinhao Shao (UIC)

"Protein structure validation by limited proteolysis"

Sugyan Dixit (NU)

"Analysis of high throughput hydrogen deuterium exchange mass spectrometry data to investigate protein energy landscapes"

12:30 pm Networking Lunch

1:30 pm Poster Session, rooms 603 & 613

2:30 pm Keynote Lecture
Stacy Malaker, Yale University
"Revealing the human musinome"

3:30pm Career Panel

4:00pm Closing Remarks, Jane Thibeault and Trent Peters-Clarke

4:05-5:00 pm Afternoon Social

UNIVERSITY ABBREVIATIONS

<u>ND</u> - University of Notre Dame	<u>UC</u> - University of Chicago
<u>NIU</u> - Northern Illinois University	<u>UIC</u> - University of Illinois at Chicago
<u>NU</u> - Northwestern University	<u>UW-M</u> - University of Wisconsin Madison
<u>SIUE</u> - Southern Illinois University Edwardsville	

Poster Session

Poster Number - Presenter (Affiliation), Title

1 - Lauren Adams (NU), Mapping the KRAS Proteoform Landscape in Colorectal Cancer by Top-Down Proteomics Identifies Novel Proteoforms

2 - Michael Baxa (UC), HDX-MS performed on BtuB in E. coli outer membranes delineates the luminal domain's allostery and unfolding upon B12 and TonB binding

3 - Sarah Bonitatibus (UIC), Development of a Feature Prioritization Strategy for Deorphanizing the Human Gut Metabolome in an Inflammatory Bowel Disease Model

4 - Prajka Chivte (NIU), An Explainable-AI Approach for Diagnosis of COVID-19 using MALDI-ToF Mass Spectrometry

5 - Adam Dill (Shimadzu), Analysis of T-Cell Media Using Triple Quadrupole Mass Spectrometry

6 - Bryon Drown (NU), Charge Detection Mass Spectrometry with ETD to Characterize Multiply Modified Proteins

7 - Anthony Fanizza (NIU), Catalytic Decarboxylation of Fatty Acids by Cationic Zinc Complexes Studied by Mass Spectrometry

8 - Állan Ferrari (NU), Uncovering the energy landscape of thousands of proteins with high throughput hydrogen deuterium exchange

9 - Samantha Fischer (UIC), Systematic Characterization of Protein Complex Stability

10 - Kim Greis (Yale), Isolating Elusive Carbocations at Cryogenic Temperatures in the Gas Phase for Vibrational Analysis

11 - Daniel Hu (ND), Proteo-Genetic Discovery of ESX-1-Associated Acetyltransferases in Pathogenic Mycobacteria

12 - Emily Hubecky (SIUE), Quantitation of Sazetidine-A for Tinnitus Management in Rat Blood after Oral, Intraperitoneal, and Subcutaneous Injections

13 - Hongwu Jing (UIC), Networks of protein-protein interactions (PPI) reveal molecular differences between HELLP syndrome and severe preeclampsia

14 - Sean Johnston (BotY Algae), Chromatography and the magic of mushrooms

15 - Robert King (NIU), Dehydrogenation of Model Liquid Organic Hydrogen Carriers by [CpM]⁺ (M = Ni, Co, Fe) in the Gas Phase