Gabe Nagy, Ph.D.
University of Utah, Department of Chemistry
315 S 1400 E RM 2020, Salt Lake City, UT 84112
Phone: 785-410-3646 (mobile); 801-581-4746 (office)
Email: gabe.nagy@utah.edu

Education and Positions

University of Utah, Salt Lake City, UT USA
Associate Professor of Chemistry
July 2026 – Present

University of Utah, Salt Lake City, UT USA
Assistant Professor of Chemistry
July 2020 – June 2026

Pacific Northwest National Laboratory, Richland, WA USA
Postdoctoral Research Associate, Richard D. Smith Group
August 2017 – June 2020

Indiana University, Ph.D., Bloomington, IN USA
Analytical Chemistry, Nicola L. B. Pohl Group
August 2012 – July 2017

Creighton University, B.S., Omaha, NE USA
Major in Chemistry with Minor in Mathematics
August 2008 – May 2012

Awards

American Chemical Society Arthur F. Findeis Award for Achievements by a Young Analytical Scientist, 2026

Journal of the American Society for Mass Spectrometry Outstanding Reviewer, 2025

NSF CAREER Award, 2025

Rising Star in Measurement Science, 2025

American Society for Mass Spectrometry Research Award, 2024.

Emerging Investigator, American Society for Mass Spectrometry, 2024.

Pacific Northwest National Laboratory, Postdoctoral Recognition Award, 2019.

Indiana University, Department of Chemistry, Marvin Carmack Fellowship, Fall 2016.

Indiana University, Department of Chemistry, Associate Instructor Teaching Award, 2014.

Publications

University of Utah (independent research; #denotes undergraduate student):

61) Roberts, N. D.; Nagy, G. “Chiral carbohydrate adducts are effective for enantiomeric ion mobility separations.” *Journal of the American Society for Mass Spectrometry,* 2026, 37, 2228–2237.

60) Nagy, G. “Neutrons Matter: Isotopic Shifts in Ion Mobility Separations.” Young Scientist Features, *International Journal of Mass Spectrometry,* 2026, 526, 117639.

59) Roberts, N. D.; #Ramos, K.; Jijieshvili, G.; Perez, E. H.; Armentrout, P. B.; Nagy. G. “High-Resolution Ion Mobility-Based Isotopic Shifts of Dimethylated Peptide Isomers.” *Analytical Chemistry*, 2026, 98, 16449–16459.

58) Robinson, P. E.; Roberts, N. D.; Nagy, G. “Spatial Ion Compression without Loss of Resolution on a Cyclic Ion Mobility Spectrometry-Mass Spectrometry Platform.” *Analytical Chemistry*, 2026, 98, 739–746.

57) Rooney, M. R.; Nagy, G. “Improving Peak Capacity in Glycan Ion Mobility Separations through Traveling Wave-Based Ion Heating.” *Journal of the American Society for Mass Spectrometry*, 2026, 37, 270–278.

56) Habibi, S. C.; #Baird, S. C.; Bowser, S.; Nagy, G. “Integrating High-Resolution Cyclic Ion Mobility Separations with Tandem Mass Spectrometry and Collision Cross Section Measurements for Human Milk Oligosaccharide Sequencing.” Special Issue on 2025 Rising Stars, *ACS Measurement Science Au,* 2025, 5, 751–759.

55) Roberts, N. D.; Nagy, G. “Developing Reduced Mass-Only Ion Mobility Separations to Unravel Mass Distribution-Based Isotopic Shifts.” Special Issue on New Frontiers in Ion Mobility-Mass Spectrometry from Applications to Instrumentation, *Journal of the American Society for Mass Spectrometry,* 2025, 36, 1737–1743.

54) Naylor, C. N.; Nagy, G. “Determining β-Monosaccharide Head Group Composition with High-Resolution Cyclic Ion Mobility Separations Coupled to Tandem Mass Spectrometry as a First Step for Unknown Cerebroside Analysis.” Special Issue honoring Jennifer Brodbelt, *International Journal of Mass Spectrometry*, 2025, 514, 117459.

53) Roberts, N. D.; #Sprague, G.; Nagy, G. “Two-Dimensional Isotopic Shifts for Steroid Isomer Delineation with High-Resolution Cyclic Ion Mobility Separations.” Paper in forefront authored by rising stars and top experts, *Analytical Bioanalytical Chemistry*, 2025, 417, 2207–2216.

52) Naylor, C. N.; Nagy, G. “Recent Advances in High-Resolution Traveling Wave-Based Ion Mobility Separations Coupled to Mass Spectrometry.” *Mass Spectrometry Reviews*, 2025, 44, 581–598.

51) Roberts, N. D.; Williamson, D. L.; Nagy, G. “Assessing the Additivity of Mass Distribution-Based Isotopic Shifts in High-Resolution Cyclic Ion Mobility Separations.” Special Issue honoring Mary Rodgers, *International Journal of Mass Spectrometry*, 2024, 505, 117328.

50) Williamson, D. L.; Naylor, C. N.; Nagy, G. “Sequencing Sialic Acid Positioning in Gangliosides by High-Resolution Cyclic Ion Mobility Separations Coupled with Multiple Collision-Induced Dissociation-Based Tandem Mass Spectrometry Strategies.” *Analytical Chemistry*, 2024, 96, 14068–14073.

49) Habibi, S. C.; #Bradford, V. R.; #Baird, S. C.; Lucas, S. W.; Chouinard, C. D.; Nagy, G. “Development of a Cyclic Ion Mobility Spectrometry-Mass Spectrometry-Based Collision Cross Section Database of Permethylated Human Milk Oligosaccharides.” Special Issue on Biological Ion Mobility/Mass Spectrometry, *Journal of Mass Spectrometry*, 2024, 59, e5076.

48) Williamson, D. L.; #Windsor, H. M.; Nagy, G. “Isolating the Contributions from Moments of Inertia in Isotopic Shifts Measured by High-Resolution Cyclic Ion Mobility Separations.” Special Issue on 2024 Emerging Investigators, *Journal of the American Society for Mass Spectrometry*, 2024, 35, 2579–2585.

47) Nagy, G. “High-Resolution Ion Mobility Separations Coupled to Mass Spectrometry: What’s Next?” Invited Perspective in *Journal of Mass Spectrometry*, 2024, 59, e5014.

46) Thurman, H. A.; Wijegunawardena, G.; Bertias, F.; Williamson, D. L.; Wu, H.; Nagy, G.; Jensen, O. N.; Shvartsbrug, A. A. “Multiplatform High-Definition Ion Mobility Separations of the Largest Epimeric Peptides.” *Analytical Chemistry,* 2024, 96, 2318–2326.

45) Digal, L.; Samson, S. C.; Stevens, M. A.; Ghorai, A.; Kim, H.; Mifflin, M. C.; Carney, K. R.; Williamson, D. L.; Um, S.; Nagy, G.; Oh, D.; Mendoza, M. C.; Roberts, A. G. “Non-Threaded Isomers of Sungsanpin and Ulleungdin Lasso Peptides Inhibit H1299 Cancer Cell Migration.” *ACS Chemical Biology,* 2024, 19, 81–88.

44) Rāciņš, O.; Nagy, G. “Implementation of Charged Microdroplet-Based Derivatization of Bile Acids on a Cyclic Ion Mobility Spectrometry-Mass Spectrometry Platform.” *Analytical Methods,* 2023, 15, 5577–5581.

43) Williamson, D. L.; Nagy, G. “Coupling Isotopic Shifts with Collision Cross-Section Measurements for Carbohydrate Characterization in High-Resolution Ion Mobility Separations.” *Analytical Chemistry,* 2023, 95, 13992–14000.

42) Naylor, C. N.; Nagy, G. “Permethylation and Metal Adduction: A Toolbox for the Improved Characterization of Glycolipids with Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” *Analytical Chemistry,* 2023, 95, 13725–13732.

41) Habibi, S. C.; Nagy, G. “General Method to Obtain Collision Cross Section Values in Multipass High-Resolution Cyclic Ion Mobility Separations.” *Analytical Chemistry*, 2023, 95, 8028–8035.

40) Williamson, D. L.; #Trimble, T. K.; Nagy, G. “Hydrogen Deuterium Exchange-Based Mass Distribution Shifts in High-Resolution Cyclic Ion Mobility Separations.” *Journal of the American Society for Mass Spectrometry*, 2023, 34, 1024–1034.

39) Habibi, S. C.; Nagy, G. “Assessing the Use of Host-Guest Chemistry in Conjunction with Cyclic Ion Mobility Separations for the Linkage-Specific Characterization of Human Milk Oligosaccharides.” *International Journal of Mass Spectrometry*, 2023, 483, 1–10.

38) Williamson, D. L.; Nagy, G. “Isomer and Conformer-Specific Mass Distribution-Based Isotopic Shifts in High-Resolution Cyclic Ion Mobility Separations.” *Analytical Chemistry*, 2022, *94*, 12890–12898.

37) Williamson, D. L.; Nagy, G. “Evaluating the Utility of Temporal Compression in High-Resolution Traveling Wave-Based Cyclic Ion Mobility Separations.” *ACS Measurement Science Au,* 2022, *2*, 361–369.

36) Williamson, D. L.; #Bergman, A. E.; Heider, E. C.; Nagy, G. “Experimental Measurements of Relative Mobility Shifts Resulting from Isotopic Substitutions with High-Resolution Cyclic Ion Mobility Separations.” *Analytical Chemistry*, 2022, *94*, 2988–2995.

35) Peterson, T. L.; Nagy, G. “Rapid Cyclic Ion Mobility Separations of Monosaccharide Building Blocks as a First Step toward a High-Throughput Reaction Screening Platform for Carbohydrate Syntheses.” *RSC Advances,* 2021, *11*, 39742–39747.

34) Williamson, D. L.; #Bergman, A. E.; Nagy, G. “Investigating the Structure of α/β Carbohydrate Linkage Isomers as a Function of Group I Metal Adduction and Degree of Polymerization as Revealed by Cyclic Ion Mobility Separations.” *Journal of the American Society for Mass Spectrometry*, 2021, *32*, 2573–2582.

33) Peterson, T. L.; Nagy, G. “Toward Sequencing the Human Milk Glycome: High-Resolution Cyclic Ion Mobility Separations of Core Human Milk Oligosaccharide Building Blocks.” *Analytical Chemistry*, 2021, *93*, 9397–9407.

Graduate and postdoctoral (mentored research):

32) Hollerbach, A. L.; Conant, C. R.; Nagy, G.; Ibrahim, Y.M. “Implementation of Ion Mobility Spectrometry-Based Separations in Structures for Lossless Ion Manipulations (SLIM).” In *Biomedical Engineering Technologies. Methods in Molecular Biology*, ed. Rasooly, A.; Baker, H., 2022, Vol. 2394. pp. 453–469.

31) Harrilal, C. P.; Gandhi, V. D.; Nagy, G.; Chen, X.; Buchanan, M. G.; Wojcik, R.; Conant, C. R.; Donor, M. T.; Ibrahim, Y. M.; Garimella, S. V. B.; Smith, R. D.; Larriba-Andaluz, C. “Measurement and Theory of Gas Phase Ion Mobility Shifts Resulting from Isotopomer Mass Distribution Changes.” *Analytical Chemistry*, 2021, *93*, 14966–14975.

30) Hollerbach, A. L.; Conant, C. R.; Nagy, G.; Monroe, M. E.; Gupta, K.; Donor, M.; Giberson, C. M.; Garimella, S. V. B.; Smith, R. D.; Ibrahim, Y. M. “Dynamic Time-Warping Correction for Shifts in Ultrahigh Resolving Power Ion Mobility Spectrometry and Structures for Lossless Ion Manipulations.” *Journal of the American Society for Mass Spectrometry*, 2021, *32*, 996–1007.

29) Conant, C. R.; Attah, I. K.; Garimella, S. V. B.; Nagy, G.; Bilbao, A.; Smith, R. D.; Ibrahim, Y. M. “Evaluation of Waveform Profiles for Traveling Wave Ion Mobility Separations in Structures for Lossless Ion Manipulations.” *Journal of the American Society for Mass Spectrometry*, 2020, *32*, 225–236.

28) Li, A.; Conant, C. R.; Zheng, X.; Bloodsworth, K. J.; Orton, D. J.; Garimella, S. V. B.; Attah, I. K.; Nagy, G.; Smith, R. D.; Ibrahim, Y. M. “Assessing Collision Cross Section Calibration Strategies for Traveling Wave-Based Ion Mobility Separations in Structures for Lossless Ion Manipulations.” *Analytical Chemistry*, 2020, *92*, 14976–14982.

27) Li, A.; Nagy, G.; Conant, C. R.; Norheim, R. V.; Yong Lee, J.; Giberson, C.; Hollerbach, A. L.; Prabhakaran, V.; Attah, I. K.; Chouinard, C. D.; Prabhakaran, A.; Smith, R. D.; Ibrahim, Y. M.; Garimella, S. V. B. “Ion Mobility Spectrometry with High Ion Utilization Efficiency Using Traveling

Wave-Based Structures for Lossless Ion Manipulations." *Analytical Chemistry*, 2020, *92*, 14930–14928.

26) Hollerbach, A. L.; Li, A.; Prabhakaran, A.; Nagy, G.; Harrilal, C. P.; Conant, C. R.; Norheim, R. V.; Schimelfenig, C. E.; Anderson, G. A.; Garimella, S. V. B.; Smith, R. D.; Ibrahim, Y. M. "Ultra-High Resolution Ion Mobility Separations Over Extended Path Lengths and Mobility Ranges Achieved using a Multilevel Structures for Lossless Ion Manipulations (SLIM) Module." *Analytical Chemistry*, 2020, *92*, 7972–7979.

25) Nagy, G.; Attah, I. K.; Conant, C. R.; Liu, W.; Garimella, S. V. B.; Gunawardena, H. P.; Shaw, J. B.; Smith, R. D.; Ibrahim, Y. M. "Rapid and Simultaneous Characterization of Drug Conjugation in Heavy and Light Chains of a Monoclonal Antibody Revealed by High-Resolution Ion Mobility Separations in SLIM." *Analytical Chemistry*, 2020, *92*, 5004–5012.

24) *Wojcik, R.; *Nagy, G.; Attah, I. K.; Webb, I. K.; Garimella, S. V. B.; Weitz, K. K.; Hollerbach, A.; Monroe, M. E.; Ligare, M. R.; Nielson, F. F.; Norheim, R. V.; Renslow, R. S.; Metz, T. O.; Ibrahim, Y. M.; Smith, R. D. "SLIM Ultrahigh Resolution Ion Mobility Spectrometry Separations of Isotopologues and Isotopomers Reveal Mobility Shifts due to Mass Distribution Changes." *Analytical Chemistry*, 2019, *91*, 11952–11962. (* Co-first author).

23) Attah, I. K.; Nagy, G.; Garimella, S. V. B.; Norheim, R. V.; Anderson, G. A.; Ibrahim, Y. M.; Smith, R. D. "Traveling wave-based electrodynamic switch for concurrent dual polarity ion manipulations in Structures for Lossless Ion Manipulations." *Analytical Chemistry*, 2019, *91*, 14712–14718.

22) *Garimella, S. V. B.; *Nagy, G.; Ibrahim, Y. I.; Smith, R. D. "Opening New Paths for Biological Applications of Ion Mobility-Mass Spectrometry using Structures for Lossless Ion Manipulations." *Trends in Analytical Chemistry,* 2019, *116,* 300–307. (*Co-first author).

21) Nagy, G.; Kedia, K.; Attah, I. K.; Garimella, S. V. B.; Ibrahim, Y. M.; Petyuk, V. A.; Smith, R. D. "Separation of b-Amyloid Tryptic Peptide Species with Isomerized and Racemized L-Aspartic Residues with Ion Mobility in Structures for Lossless Ion Manipulations." *Analytical Chemistry,* 2019, *91*, 4374–4380.

20) *Nagy, G.; *Veličković, D.; Chu, R. K.; Carrell, A. A.; Weston, D. J.; Ibrahim, Y. M.; Anderton, C. R.; Smith, R. D. "Towards Resolving the Spatial Metabolome with Unambiguous Molecular Annotations in Complex Biological Systems by Coupling Mass Spectrometry Imaging with Structures for Lossless Ion Manipulations." *Chemical Communications*, 2019, *55*, 306–309. (* Co-first author).

19) Attah, I. K.; Garimella, S. V. B.; Webb, I. K.; Nagy, G.; Norheim, R. V.; Schimelfenig, C. E.; Ibrahim, Y. M.; Smith, R. D. "Dual Polarity Ion Confinement and Mobility Separations." *Journal of the American Society for Mass Spectrometry*, 2019, *30*, 967–976.

18) Wooke, Z.; Nagy, G.; Barnes, L. F.; Pohl, N. L. B. "Development of a Post-Column Liquid Chromatographic Chiral Addition Method for the Separation and Resolution of Common Mammalian Monosaccharides." *Journal of the American Society for Mass Spectrometry*, 2019, *30*, 419–425.

17) Chouinard, C. D.; Nagy, G.; Smith, R. D.; Baker, E. S. "Ion Mobility-Mass Spectrometry in Metabolomic, Lipidomic, and Proteomic Analyses." in *Comprehensive Analytical Chemistry:*

Advances in Ion Mobility-Mass Spectrometry: Fundamentals, Instrumentation and Applications, ed. Barcelo, D., 2019, Vol. 83, pp. 123–159.

16) Couvillion, S. P.; Zhu, Y.; Nagy, G.; Adkins, J. A.; Ansong, C.; Renslow, R. S.; Piehowski, P. D.; Ibrahim, Y. M.; Kelly, R. T.; Metz, T. O. "New Mass Spectrometry Technologies Contributing Towards Comprehensive and High Throughput Omics Analyses of Single Cells." *Analyst*, 2019, *144*, 794–807.

15) Garcellano, R. C.; Moinuddin, S. G. A.; Young, R. P.; Zhou, M.; Bowder, M. E.; Renslow, R. S.; Yesiltepe, Y.; Thomas, D. G.; Colby, S. M.; Chouinard, C. D.; Nagy, G.; Attah, I. K.; Ibrahim, Y. M.; Ma, R.; Franzblau, S. G.; Lewis, N. G.; Aguinaldo, A. M.; Cort, J. R. "Isolation of Tryptanthrin and Reassessment of Evidence for Its Isobaric Isotere Wrightiadione in Plants of the *Wrightia* Genus." *Journal of Natural Products*, 2019, *82*, 440–448.

14) Dou, M.; Chouinard, C. D.; Zhu, Y.; Nagy, G.; Liyu, A. V.; Ibrahim, Y. M.; Smith, R. D.; Kelly, R. T. "Nanowell-Mediated Multidimensional Separations Combining NanoLC with SLIM IM-MS for Rapid, High-Peak Capacity Proteomic Analyses." *Analytical and Bioanalytical Chemistry*, 2019, *411*, 5363–5372.

13) Nagy, G.; Attah, I. K.; Garimella, S. V. B.; Tang, K.; Ibrahim, Y. M.; Baker, E. S.; Smith, R. D. "Unraveling the Isomeric Heterogeneity of Glycans: Ion Mobility Separations in Structures for Lossless Ion Manipulations." *Chemical Communications,* 2018, *54*, 11701–11704.

12) Nagy, G.; Chouinard, C. D.; Attah, I. K.; Webb, I. K.; Garimella, S. V. B.; Ibrahim, Y. M.; Baker, E. S.; Smith, R. D. "Distinguishing Enantiomeric Amino Acids with Chiral Cyclodextrin Adducts and Structures for Lossless Ion Manipulations." *Electrophoresis*, 2018, *39*, 3148–3155.

11) *Chouinard, C. D.; *Nagy, G.; Webb, I. K.; Garimella, S. V. B.; Baker, E. S.; Ibrahim, Y. M.; Smith, R. D. "Rapid Ion Mobility Separations of Bile Acid Isomers using Cyclodextrin Adducts and Structures for Lossless Ion Manipulations." *Analytical Chemistry*, 2018, *90* 11086–11091. (* Co-first author).

10) *Chouinard, C. D.; *Nagy, G.; Webb, I. K.; Shi, T.; Baker, E. S.; Prost, S. A.; Liu, T.; Ibrahim, Y. M.; Smith, R. D. "Improved Sensitivity and Separations for Phosphopeptides using Online LC Coupled with Structures for Lossless (SLIM) IM-MS." *Analytical Chemistry*, 2018, *90*, 10889–10896. (* Co-first author).

9) *Nagy, G.; *Peng, T.; Pohl, N. L. B. "Recent Liquid Chromatographic Approaches and Developments for the Separation and Purification of Carbohydrates." *Analytical Methods,* 2017, *9*, 3579–3593. (*Co-first author).

8) Gaunitz, S.; Nagy, G.; Pohl, N. L. B.; Novotny, M. V. "Recent Advances in the Analysis of Complex Glycoproteins." *Analytical Chemistry*, 2017, *89*, 389–413.

7) Peng, T.; Nagy, G.; Trinidad, J. C.; Jackson, J. M.; Pohl, N. L. B. "A High-Throughput Mass Spectrometry-Based Assay for Identifying the Biochemical Functions of Putative Glycosidases." *ChemBioChem*, 2017, *18*, 2306–2311.

6) Schenk, J.; Nagy, G.; Pohl, N. L. B.; Leghissa, A.; Smuts, J.; Schug, K. A."Identification and Deconvolution of Carbohydrates using Gas Chromatography-Vacuum Ultraviolet Spectroscopy." *Journal of Chromatography A,* 2017, *1513*, 210–221.

5) *Nagy, G.; [*]Peng, T.; Kabotso, D. E. K.; Novotny, M. V.; Pohl, N. L. B. “Protocol for the Purification of Protected Carbohydrates: Toward Coupling Automated Synthesis to Alternate-Pump Recycling High-Performance Liquid Chromatography.” *Chemical Communications,* 2016, *52*, 13253–13256. ([*] Co-first author).

4) *Nagy, G.; *Peng, T.; Pohl, N. L. B. “General Label-Free Mass Spectrometry-Based Assay to Identify Glycosidase Substrate Competence.” *Analytical Chemistry*, 2016, *88*, 7183–7190. ([*] Co-First Author).

3) Gaye, M. M.; Nagy, G.; Clemmer, D. E.; Pohl, N. L. B. “Multidimensional Analysis of 16 Glucose Isomers by Ion Mobility Spectrometry.” *Analytical Chemistry*, 2016, *88*, 2335–2344.

2) Nagy, G.; Pohl, N. L. B. “Monosaccharide Identification as a First Step Toward *de novo* Carbohydrate Sequencing: Mass Spectrometry Strategy for the Identification and Differentiation of Diastereomeric and Enantiomeric Pentose Isomers.” *Analytical Chemistry,* 2015, *87*, 4566–4571.

1) Nagy, G.; Pohl, N. L. B. “Complete Hexose Identification with Mass Spectrometry.” *Journal of the American Society for Mass Spectrometry,* 2015, *26,* 677–685.

Funding

Current Support:
Astra Zeneca Collaboration
Award Period: 1 September 2026 – 31 December 2026
Total Amount: $28,881

NSF CAREER: “Transforming Ion Mobility Spectrometry-Mass Spectrometry-Based Isotopic Shifts Across Molecular Classes for Isomer Identification”
Agency: NSF Division of Chemistry
Award Period: 15 March 2025 – 28 February 2030
Total Amount: $600,000

R35 MIRA: “A bioanalytical research program to unravel the human milk glycome”
Agency: NIH/NIGMS R35 MIRA
Award Period: 21 September 2022 – 31 August 2027
Total Amount: $1,855,743

American Society for Mass Spectrometry Research Award
Total Amount: $35,000

Past Support:
Subaward from Miklos Guttman: Hybrid structural mass spectrometry for rapid-site specific glycan structural elucidation (5R01GM127579-04)
Agency: NIH/NIGMS
Award Period: 1 July 2021 – 30 June 2022
Subaward Amount to My Lab: $28,919

Partnership for Clean Competition: “Rapid Analysis of 13C/12C Isotopologues for Improved Detection of Steroid Abuse using High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry”
Award Period: 1 April 2024 – 28 February 2025
Total Amount: $75,000

ACS PRF: “Unraveling how Changes in the Natural Isotopic Envelope Affect Mass Distribution-Based Shifts in the Gas-Phase Ion Mobility Separations of Quinoline Derivatives”
Award Period: 1 September 2023 – 31 August 2026 (1 year no cost extension)
Total Amount: $110,000

Invited Presentations

University of Utah (independent research):
46) “Ion Heating of Glycans: The Good, the Bad, and the Ugly.” Invited presentation at SciX Conference, Sparks, NV, 5 October 2026.

45) “Bioanalytical Applications and Fundamental Studies Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at Beyond ASMS - A Waters Innovation Roadshow, Salt Lake City, UT, 17 September 2026.

44) “Bioanalytical Applications and Fundamental Studies Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at Florida State University, Tallahassee, FL, 10 September 2026.

43) “Integrating Cyclic Ion Mobility Separations, Tandem Mass Spectrometry, and Collision Cross Section Measurements for Carbohydrate Sequencing.” Invited presentation at ACS Fall 2026 Analytical Chemistry Division Awards, Chicago, IL, 24 August 2026.

42) “Cyclic IMS and Traveling Wave Conditions.” Invited presentation at the Ion Mobility Spectrometry Workshop at American Society for Mass Spectrometry Conference, San Diego, CA, 2 June 2026.

41) “Isotopic Shifts in High-Resolution Ion Mobility Separations.” Invited presentation at ACS Spring 2026 75 Years of Ion Mobility/Mass Spectrometry: From Carbon Clusters to Single-Cell Proteomics, Atlanta, GA, 23 March 2026.

40) “Bioanalytical Applications and Fundamental Studies Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited presentation at Bracing for Impact: High Resolution Mass Spectrometry for Metabolites, Mega Molecules and Beyond, Waters Corporation, Milford, MA, 26 February 2026.

39) “Isotopic Shifts in High-Resolution Ion Mobility Separations.” Invited presentation at ACS Rocky Mountain Regional Meeting, Albuquerque, NM, 24 October 2025.

38) “Isotopic Shifts in High-Resolution Ion Mobility Separations.” Invited presentation at SciX Conference, Cincinnati, OH, 6 October 2025.

37) “Bioanalytical Applications and Fundamental Studies Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at Stanford University Mass Spectrometry, Stanford, CA, 7 August 2025.

36) “Integrating Cyclic Ion Mobility Separations, Tandem Mass Spectrometry, and Collision Cross Section Measurements for Carbohydrate Sequencing.” Invited presentation at Advancing Mass Spectrometry for Biophysics and Structural Biology Conference, Atlanta, GA, 21 July 2025.

35) “Bioanalytical Applications and Fundamental Studies Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at University of North Carolina, Raleigh, NC, 14 April 2025.

34) “Bioanalytical Applications and Fundamental Studies Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at University of Washington, Seattle, WA, 7 April 2025.

33) “Bioanalytical Applications and Fundamental Studies Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at University of Georgia, Athens, GA, 19 March 2025.

32) “Bioanalytical Applications and Fundamental Studies Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at Purdue University, West Lafayette, IN, 11 March 2025.

31) “Bioanalytical Applications and Fundamental Studies Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at University of Michigan, Ann Arbor, MI, 20 February 2025.

30) “Bioanalytical and Fundamental Applications Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at Vanderbilt University, Nashville, TN, 11 November 2024.

29)” Bioanalytical and Fundamental Applications Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at Indiana University, Bloomington, IN, 29 October 2024.

28) “Developing a Bioanalytical Toolbox for Human Milk Oligosaccharide Characterization.” Invited presentation at SciX Conference, Raleigh, NC, 22 October 2024.

27) “Isotopic Shifts in High-Resolution Cyclic Ion Mobility Separations.” Invited presentation at ASMS Asilomar Conference on New Frontiers in Ion Mobility-Mass Spectrometry from Applications to Instrumentation, Pacific Grove, CA, 14 October 2024.

26) “Bioanalytical and Fundamental Applications Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at University of Nebraska at Lincoln, Lincoln, NE, 4 October 2024.

25) “Bioanalytical and Fundamental Applications Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at Baylor University, Waco, TX, 20 September 2024.

24) “Bioanalytical and Fundamental Applications Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at University of Texas at Austin, Austin, TX, 19 September 2024.

23) “Bioanalytical and Fundamental Applications Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited seminar presented at Texas A&M University, College Station, TX, 17 September 2024.

22) “Bioanalytical and Fundamental Applications Enabled by High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited presentation at Waters 2024 Post ASMS Meeting, Salt Lake City, UT, 8 August 2024.

21) “High-Resolution Cyclic Ion Mobility Spectrometry-Mass Spectrometry?” Invited oral presentation at Waters Breakfast Seminar at American Society for Mass Spectrometry Conference, Anaheim, CA, 4 June 2024.

20) “Developing a Bioanalytical Toolbox for Human Milk Oligosaccharide Characterization.” Invited seminar presented at Wichita State University, Wichita, KS, 1 May 2024.

19) “Developing a Bioanalytical Toolbox for Human Milk Oligosaccharide Characterization.” Invited presentation at Pittcon, San Diego, CA 27 February 2024.

18) “Toward Unraveling the Glycolipidome with High-Resolution Cyclic Ion Mobility Separations.” Invited presentation at Pittcon, San Diego, CA 26 February 2024.

17) “Developing a Bioanalytical Toolbox for Human Milk Oligosaccharide Characterization.” Invited presentation at Society for Glycobiology Conference, Kona, HI, 5 November 2023.

16) “Developing a Bioanalytical Toolbox for Human Milk Oligosaccharide Characterization.” Invited presentation at SciX Conference, Sparks, NV, 9 October 2023.

15) “What Can Ion Mobility Spectrometry Do For You.” Invited presentation at Waters Select Series On Tour, Salt Lake City, UT, 23 August 2023.

14) “A New Dimension in High-Resolution Ion Mobility Separations: Mass Distribution-Based Isotopic Shifts.” Invited presentation at Pittcon, Philadelphia, PA, 22 March 2023.

13) “High-Resolution Cyclic Ion Mobility Separations of Isotopologues and Isotopomers.” Invited presentation at Western Regional American Chemical Society Meeting, Las Vegas, NV, 22 October 2022.

12) “Structurally Specific Mass Distribution-Based Isotopic Shifts in High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Invited presentation at SciX Conference, Cincinnati, OH, 3 October 2022.

11) Invited keynote speaker at Waters Corporation’s Early Career Summit, Milford, MA, 19 July 2022.

10) “Mass Distribution-Based Isotopic Shifts in High-Resolution Cyclic Ion Mobility Separations.” Invited presentation at the Ion Mobility Spectrometry Workshop at American Society for Mass Spectrometry Conference, Minneapolis, MN, 8 June 2022.

9) “Pushing the Boundaries for Isomeric Separations with Cyclic Ion Mobility Spectrometry Coupled to Mass Spectrometry.” Invited seminar presented at Florida Institute of Technology (Virtual), 31 March 2022.

8) “High-Resolution Cyclic Ion Mobility Separations of Isotopologues and Isotopomers.” Invited presentation at Waters Cyclic IMS User Meeting (Virtual), 12 October 2021.

7) “Characterization of Human Milk Oligosaccharide Building Block Isomers with Cyclic Ion Mobility Separations and Mass Spectrometry.” Invited seminar presented at Brigham Young University, Provo, UT, 23 September 2021.

6) Indiana University Career Development Symposium (Virtual), Invited seminar, 13 September 2021

Graduate and post-doctoral (mentored research):
5) “When Conventional Approaches Fall Short: Developing Analytical Strategies for Resolving Isomeric Biomolecules.” Faculty interview at Notre Dame University, South Bend, IN, 27 January 2020.

4) “When Conventional Approaches Fall Short: Developing Analytical Strategies for Resolving Isomeric Biomolecules.” Faculty interview at the University of Vermont, Burlington, VT, 12 December 2019.

3) “When Conventional Approaches Fall Short: Developing Analytical Strategies for Resolving Isomeric Biomolecules.” Faculty interview at the University of Utah, Salt Lake City, UT, 13 November 2019.

2) “Developing New Approaches for the Better Characterization of Isomeric Peptides: Ion Mobility Separations Enabled by Structures for Lossless Ion Manipulations.” Invited presentation at SciX Conference, Palm Springs, CA, 15 October 2019.

1) “Development of Analytical Techniques for Unraveling the Isomeric Heterogeneity of Glycans.” Invited seminar presented at Creighton University, Omaha, NE, 20 September 2018.

Contributed Presentations

University of Utah (independent research):
19) “Developing a Bioanalytical Toolbox for Human Milk Oligosaccharide Characterization.” Recruiting seminar presented at Boise State University, Boise, ID, 29 September 2023.

18) “Exploring the Utility of Temporal Peak Compression in Cyclic Ion Mobility Spectrometry-Mass Spectrometry-Based Separations.” Contributed oral presentation at American Society for Mass Spectrometry Conference, Minneapolis, MN, 9 June 2022.

17) “Cyclic Ion Mobility Separations of Isotopologues and Isotopomers.” Contributed oral presentation at the 2022 Lake Arrowhead Conference on Ion Chemistry and Mass Spectrometry, 15 January 2022.

16) “High-Resolution Cyclic Ion Mobility Separations of Core Human Milk Oligosaccharide Building Block Isomers.” Contributed oral presentation at American Society for Mass Spectrometry Conference, Philadelphia, PA, 1 November 2021.

15) “Towards *de novo* sequencing of the human milk glycome: High-resolution cyclic ion mobility separations.” Contributed oral presentation at Rocky Mountain Regional American Chemical Society Meeting (Virtual), 12 November 2020.

Graduate and post-doctoral (mentored research):
14) “Rapid Characterization of Drug Conjugation in a Monoclonal Antibody by High-Resolution Ion Mobility Separations in Structures for Lossless Ion Manipulations.” Contributed poster presentation at 68th American Society for Mass Spectrometry Conference (Virtual, Summer 2020).

13) “Addressing Challenging Biological Applications with Ultrahigh Resolution Ion Mobility Separations in Structures for Lossless Ion Manipulations.” Contributed poster presentation at Waters Corporation’s Young Investigator’s Summit, Beverly, MA, 6 August 2019.

12) “Resolving the Isomeric Heterogeneity of the Glycome: Ultrahigh-Resolution Ion Mobility Separations in Structures for Lossless Ion Manipulations.” Contributed poster presentation at American Society for Mass Spectrometry Conference, Atlanta, GA, 5 June 2019.

11) “High-Resolution SLIM IM-MS-Based Enantioseparations.” Contributed oral presentation at 2018 Post-Graduate Symposium, Pacific Northwest National Laboratory, Richland, WA, 21 June 2018.

10) “High-Resolution Enantiomeric Separations on a SLIM-IM MS Platform.” Contributed oral presentation at American Society for Mass Spectrometry Conference, San Diego, CA, 5 June 2018.

9) “From Computation to Mass Spectrometry: Relative Free Energy Differences amongst Anomeric Pairs of Carbohydrate Derivatives.” Contributed poster presentation at 65th American Society for Mass Spectrometry Conference, Indianapolis, IN, 6 June 2017.

8) Methodology towards the Purification and Analysis of Glycopolymers.” Contributed poster presentation at American Society for Biochemistry and Molecular Biology, Chicago, IL, 24 April 2017.

7) “Toward Carbohydrate Sequencing: Mass Spectrometry and Ion Mobility-Mass Spectrometry-Based Approaches.” Contributed oral presentation at Quantitative & Chemical Biology Graduate Training Program Evenings, Indiana University, 2 November 2016.

6) “Purification of Synthetic Protected Carbohydrates: An Alternate-Pump Recycling High-Performance Liquid Chromatography-Based Approach.” Contributed poster presentation at Turkey Run Analytical Conference, Marshall, IN, 28 October 2016.

5) “Mass Spectrometry-Based Glycosidase Assay: A General Label-Free Chiral Dopant Approach.” Contributed poster presentation at Turkey Run Analytical Conference, Marshall, IN, 2 October 2015.

4) “Towards *de novo* Oligosaccharide Sequencing.” Contributed poster presentation at 63rd American Society for Mass Spectrometry Conference, St. Louis, MO, 3 June 2015.

3) “Mass Spectrometry-Based Methodology for Complete Hexose Identification.” Contributed poster presentation at Turkey Run Analytical Conference, Marshall, IN, 14 November 2014.

2) “Use of Mass Spectrometry for Chiral Separation of Monosaccharides.” Contributed poster presentation at Turkey Run Analytical Conference, Marshall, IN, 27 September 2013.

1) “Study of Carbohydrate-Protein Interactions using New Cross-Linking Agents and Target Identification through Mass Spectrometry.” Contributed poster presentation at American Chemical Society Conference, Indianapolis, IN, 8 September 2013.

Co-Authored Research Group Presentations

34) “Direct Measurement of High-Field Effects in Traveling Wave Ion Mobility Separations Using Isotopologues and Comparison to Quantitative Simulations.” Poster presentation by Paige E. Robinson at American Society for Mass Spectrometry Conference, San Diego, CA, 1 June 2026.

33) “High-Field Traveling Wave Conditions Change Collision Cross Sections.” Poster presentation by Megan R. Rooney at American Society for Mass Spectrometry Conference, San Diego, CA, 1 June 2026.

32) “Why Neutrons Matter: Predicting the Effects of Isotopic Substitution in Ion Mobility Separations.” Poster presentation by Noah D. Roberts at American Society for Mass Spectrometry Conference, San Diego, CA, 1 June 2026.

31) “Spatial Ion Compression without Loss of Resolution on a Cyclic Ion Mobility Spectrometry-Mass Spectrometry Platform.” Poster presentation by Paige E. Robinson at ACS Spring 2026, Atlanta, GA, 24 March 2026.

30) “Improving Peak Capacity through Traveling Wave-Based Annealing in Cyclic Ion Mobility Separations of Glycans.” Poster presentation by Megan R. Rooney at ACS Spring 2026, Atlanta, GA, 24 March 2026.

29) “Combining Experiment and Theory for Predicting Isotopic Shifts in High-Resolution Ion Mobility Separations.” Poster presentation by Noah D. Roberts at ACS Spring 2026, Atlanta, GA, 24 March 2026.

28) “Isotopic Dimethylation Coupled with High-Resolution Ion Mobility Separations Enables Site-Specific Isotopic Shifts in Peptide Isomers.” Oral presentation by Noah D. Roberts at 2026 Lake Arrowhead Conference on Mass Spectrometry, 17 January 2026.

27) “Spatial Ion Compression without Loss of Resolution on a Cyclic Ion Mobility Spectrometry-Mass Spectrometry Platform.” Poster presentation by Paige E. Robinson at 2026 Lake Arrowhead Conference on Mass Spectrometry, 16 January 2026.

26) “Improving Peak Capacity in Glycan Ion Mobility Separations through Traveling Wave-Based Ion Heating.” Poster presentation by Megan R. Rooney at 2026 Lake Arrowhead Conference on Mass Spectrometry, 16 January 2026.

25) "Isolating Reduced Mass Contributions in Isotopic Shifts with High-Resolution Cyclic Ion Mobility Separations." Poster presentation by Noah D. Roberts at American Society for Mass Spectrometry Conference, Baltimore, MD, 4 June 2024.

24) "Human Milk Oligosaccharide Sequencing by High-Resolution Cyclic Ion Mobility Separations Coupled with Tandem Mass Spectrometry." Poster presentation by Sanaz C. Habibi at American Society for Mass Spectrometry Conference, Baltimore, MD, 4 June 2024.

23) “Quantifying Reduced Mass Contributions from Mass Distribution-Based Ones in Ion Mobility Separations.” Oral presentation by Noah D. Roberts at 2025 Lake Arrowhead Conference on Mass Spectrometry, 18 January 2025.

22) “Human Milk Oligosaccharide Sequencing with Cyclic Ion Mobility Spectrometry- Tandem Mass Spectrometry.” Oral presentation by Sanaz C. Habibi at 2025 Lake Arrowhead Conference on Mass Spectrometry, 18 January 2025.

21) “Toward De Novo Human Milk Oligosaccharide Sequencing with Cyclic Ion Mobility Spectrometry-Tandem Mass Spectrometry.” Poster presentation by Sanaz C. Habibi at 38th ASMS Asilomar Conference on New Frontiers in Ion Mobility-Mass Spectrometry from Applications to Instrumentation, Pacific Grove, CA, 12 October 2024.

21) “Toward De Novo Glycosphingolipid Isomer Sequencing with Cyclic Ion Mobility Spectrometry-Tandem Mass Spectrometry.” Poster presentation by Cameron N. Naylor at ASMS Asilomar Conference on New Frontiers in Ion Mobility-Mass Spectrometry from Applications to Instrumentation, Pacific Grove, CA, 12 October 2024.

19) “Assessing the Additivity of Mass Distribution-Based Isotopic Shifts in High-Resolution Cyclic Ion Mobility Separations.” Oral presentation by Noah D. Roberts at 2024 International Conference on Ion Mobility Spectrometry, Miami, FL, 25 July 2024.

18) “Isolating the Contributions from Moments of Inertia in Mass Distribution-Based Isotopic Shifts with High-Resolution Cyclic Ion Mobility Separations.” Oral presentation by David L. Williamson at 2024 International Conference on Ion Mobility Spectrometry, Miami, FL, 25 July 2024.

17) “Determination of Sialic Acid Positioning in Ganglioside Isomers with Cyclic Ion Mobility Spectrometry and Tandem Mass Spectrometry.” Oral presentation by David L. Williamson at 2024 International Conference on Ion Mobility Spectrometry, Miami, FL, 22 July 2024.

16) “Development of a Cyclic Ion Mobility Spectrometry-Mass Spectrometry (cIMS-MS)-Based Collision Cross Section Database of Permethylated Human Milk Oligosaccharides.” Poster presentation by Sanaz C. Habibi at American Society for Mass Spectrometry Conference, Anaheim, CA, 4 June 2024.

15) Presentation by David L. Williamson at the Ion Mobility Spectrometry Workshop at American Society for Mass Spectrometry Conference, Anaheim, CA, 4 June 2024

14) “Assessing the Additivity of Mass-Distribution Based Shifts in High-Resolution Cyclic Ion Mobility Separations.” Poster presentation by Noah Roberts at American Society for Mass Spectrometry Conference, Anaheim, CA, 4 June 2024.

13) “Targeted Head Group Identification for Characterizing Glycolipid Isomers Using Cyclic Ion Mobility Separations.” Poster presentation by Cameron N. Naylor at American Society for Mass Spectrometry Conference, Anaheim, CA, 4 June 2024.

12) “Isolating the Effect of Moments of Inertia in High-Resolution Ion Mobility Spectrometry Mass Spectrometry.” Poster presentation by David L. Williamson at American Society for Mass Spectrometry Conference, Anaheim, CA, 4 June 2024.

11) “Deconvoluting Moment of Inertia Isotopic Shifts with High-Resolution Cyclic Ion Mobility Separations.” Poster presentation by Haisley M. Windsor at 2024 ACS Conference, 19 March 2024.

10) “Identifying Glycolipid Isomers with Cyclic Ion Mobility Separations.” Oral presentation by Cameron N. Naylor at 2024 Lake Arrowhead Conference on Mass Spectrometry, 13 January 2024.

9) “Isolating Contributions from Moments of Inertia in High- Resolution Ion Mobility Spectrometry-Based Isotopic Shifts.” Poster presentation by David L. Williamson at 2024 Lake Arrowhead Conference on Mass Spectrometry, 12 January 2024.

8) “Labeling Strategies for Inducing Mass Distribution Shifts in High-Resolution Cyclic Ion Mobility Separations Coupled to Mass Spectrometry.” Poster presentation by David L. Williamson at American Society for Mass Spectrometry Conference, Houston, TX, 5 June 2023.

7) “Ion Mobility Separations of Largest Peptide Epimers and Intact Proteoforms with Variant PTM Localizations.” Poster presentation by Gayani Wijegunawardena (Wichita State University) at American Society for Mass Spectrometry Conference, Houston, TX, 5 June 2023.

6) “Hydrazide Derivatization in Conjunction with Cyclic Ion Mobility-Based Collision Cross Section Measurements for the Improved Characterization of Human Milk Oligosaccharides.” Oral presentation by Sanaz C. Habibi at American Society for Mass Spectrometry Conference, Houston, TX, 5 June 2023.

5) “Coupling Microdroplet-Based Derivatizations with Cyclic Ion Mobility Separations.” Oral presentation by Olavs Racin at University of Utah, Department of Chemistry, Graduate Research Symposium, 21 March 2023.

4) “Utilizing Hydrogen-Deuterium Exchange to Induce Mass Distribution Shifts in Cyclic Ion Mobility Spectrometry.” Oral presentation by David L. Williamson at 2023 Lake Arrowhead Conference on Ion Chemistry and Mass Spectrometry, 14 January 2022.

3) “Unraveling the Effect of Isotopic Substitutions on Relative Mobility Shifts as Revealed by High-Resolution Cyclic Ion Mobility Separations.” Oral presentation by David L. Williamson at American Society for Mass Spectrometry Conference, Minneapolis, MN 7 June 2022.

2) “Coupling Host-Guest Chemistry with Cyclic Ion Mobility Separations for Linkage-Specific Identification of Human Milk Oligosaccharides.” Poster presentation by Sanaz C. Habibi at American Society for Mass Spectrometry Conference, Minneapolis, MN, 7 June 2022.

1) “Unraveling the Effect of Isotopic Substitutions on Relative Mobility Shifts.” Oral presentation by David L. Williamson at University of Utah, Department of Chemistry, Graduate Research Symposium, 23 February 2022.

Teaching

CHEM 3000: Quantitative Analysis
Spring, 2026

CHEM 7725: Mass Spectrometry
Fall B, 2025

CHEM 3000: Quantitative Analysis
Spring, 2025

CHEM 7725: Mass Spectrometry
Fall B, 2024

CHEM 3000: Quantitative Analysis
Spring, 2024

CHEM 7725: Mass Spectrometry
Fall B, 2023

CHEM 3000: Quantitative Analysis
Spring, 2023

CHEM 7725: Mass Spectrometry
Fall B, 2022

CHEM 7720: Separations
Spring B, 2022

CHEM 5350: Research Ethics
Spring A, 2022

CHEM 7725: Mass Spectrometry
Fall B, 2021

CHEM 5350/7350: Research Ethics
Spring A, 2021

CHEM 7590: Advanced Topics in Analytical Chemistry (Mass Spectrometry)
Fall B, 2020

Service

University of Utah:
College of Science Council (2026–2027)

Department of Chemistry Graduate Education Committee (2026)

Department of Chemistry, Shops and Research Facilities Committee Co-Chair (2026)

Department of Chemistry Graduate Admissions Committee Chair (2026)

Department of Chemistry Undergraduate Curriculum Committee (2025)

Department of Chemistry Faculty Search Committee (Fall 2023)

Department of Chemistry Seminar and Colloquium Committee (2020–2025).

Department of Chemistry, Graduate Admissions Committee (2020–2025).

Technical Support Committee for Mass Spectrometry (2021–Present)

Facilitator for Bioscience Capstone Program (Spring 2022)

Professional and Community:
Session Chair at SciX 2026 Conference: “Method and Instrument Development in Mass Spectrometry and Associated Topics.”

Organizer of Mass Spectrometry Sessions at SciX 2026 Conference

Session Chair at SciX 2025 Conference: “Advances in Ion Mobility Spectrometry-Mass Spectrometry-Based Separations.”

Organizer of Mass Spectrometry Sessions at SciX 2025 Conference

Served on committee for selecting 2025 ASMS Graduate Student Travel Awards

Session Chair at SciX 2024 Conference: “Advances in Mass Spectrometry-Based Glycomics.”

Organizer of Mass Spectrometry Sessions at SciX 2024 Conference

Session Chair at 38th ASMS Asilomar Conference on New Frontiers in Ion Mobility-Mass Spectrometry from Applications to Instrumentation: “IMS Separation Selectivity & New Developments in IMS Instrumentation.”

Served on committee for selecting 2024 ASMS Graduate Student Travel Awards

Session Chair at SciX 2023 Conference: “Early Career Researchers in Mass Spectrometry.”

Organizer of Mass Spectrometry Sessions at SciX 2023 Conference

Session Chair at 71st American Society for Mass Spectrometry 2023 Conference: “Fundamentals Beyond Mass Analysis: Structural Characterization of Isomers.”

Organized Symposia at Pittcon 2023 Conference: “Tackling the Resolution of Biologically-Relevant Isomers: Advances in Ion Mobility Separations Coupled to Mass Spectrometry.”

Females in Mass Spectrometry (FeMS), a community-led initiative to create a network of support for women in the field of mass spectrometry (2020–2022).
Role: mentor

Journal reviewer for: Analytical Chemistry, Journal of the American Society for Mass Spectrometry, Journal of Separation Science, ACS Infectious Diseases, Electrophoresis, Journal of Physical Chemistry, Journal of Mass Spectrometry, Nature Communications, Scientific Reports

Grant reviewer for: National Science Foundation (ad hoc), Department of Energy (ad hoc), American Chemical Society Petroleum Research Fund

Lab Personnel

URL: https://www.nagylab.com

Current members:
Noah Roberts (graduate student)
Paige Robinson (graduate student)
Megan Rooney (graduate student)
Tyler Peterson (graduate student)

Previous members:
Sophie Baird (Undergraduate student)
Kitana Ramos (REU student, Summer 2025)
Sanaz Habibi (Ph.D., Fall 2025; now at Fisk University)
Cameron Naylor (Spring 2023 to Fall 2024; Postdoctoral researcher; now at Leidos)
David Williamson (Ph.D., Fall 2024; now at Merck)
Storm Bowser (MS., Fall 2024)
Gabriella Sprague (REU student, Summer 2024; now at NIH)
Olavs Racin (M.S., Fall 2023)
Haisley Windsor (REU student, Summer 2023; now at UC Berkeley)
Victoria Bradford (Undergraduate student)
Tyson Trimble (Undergraduate student)
Tyler Peterson (M.S., Fall 2021)
Addison Bergman (REU student, Summer 2021; now at University of Michigan)