

Jana Maure Carpenter

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EDUCATION

University of Georgia- *Cumulative GPA:3.68* **Athens, Georgia**
Degree Objective: Ph.D., Analytical Chemistry
Advisor: Dr. Kelly Hines **Expected Graduation:** May 2025

Honors/Awards: Blue Key Honor Society (2023-present); ARCS Fellowship (2022-2025); NIH Glycoscience Training Program (2022-present); NSF-IRES: Metabolomics of Microbial Populations During Cacao Fermentation (2022)

Young Harris College- *Cumulative GPA: 3.34* **Young Harris, Georgia**
Major: Bachelor of Science in Chemistry **Graduation:** December 2017
Minor: Biology

EXPERIENCE

University of Georgia **Athens, Georgia**
Graduate Research Assistant *Spring 2021-Present*

- Development of a novel and pioneer high throughput method for multi-omics analysis in *S. aureus*, *E. faecium*, *P. aeruginosa*, and *A. baumannii*
- Untargeted lipidomics approach for the study of extra-cellular vesicles formation in microglia
- Untargeted lipidomics approach for the study of lipid peroxidization in mammalian cancer cells
- Untargeted metabolomics approach for Acyl-CoA profiling for the determination of branched-chain fatty acid formation in antibiotic-resistant strains of *S. aureus*
- Actively mentor and oversees research for undergraduate students

University of Georgia **Athens, Georgia**
Graduate Teaching Assistant *Fall 2020*

- Led and assisted in teaching and demonstration of general chemistry lab
- Oversaw 6 sections of general chemistry labs

University of Georgia **Athens, Georgia**
Graduate Instructor of Record *Fall 2021-Fall 2022*

- Led and assisted in the instruction and grading of General Chemistry lecture

Center for Applied Isotope Studies, University of Georgia **Athens, Georgia**
Research/Lab Technician *March 2018-July 2020*

- Development of pretreatment protocols for radiocarbon dating
- Method optimization for elemental analysis of radiocarbon dating samples

LEADERSHIP & PROFESSIONAL DEVELOPMENT

Chemistry Graduate Student Organization (CGSO) **Athens, Georgia**
President/Networking Chair/Secretary *August 2022-Present*

- Oversee a team of 9 board members in finding opportunities within Athens and liaison with external departments
- Increased membership participation by 75% within a few months
- Spearheaded the inaugural career fair event that had over 100 students and speakers from top industry companies

University of Georgia Diversity Advisory Council **Athens, Georgia**
Board member *Spring 2022-Fall 2024*

- Implement discussion groups for students, faculty, and staff members for reflection on diversity, equity, and inclusion efforts on campus

- Create forums for students, faculty, and staff to be sent to the office of the Vice President and Provost for consideration

Black Science Coalition and Institute, 501(c)(3)

Board of Directors

Philadelphia, Pennsylvania

Fall 2018 – Present

- Facilitate the social, academic, and personal development of under-represented communities in STEM spaces
- Create forums for under-represented communities through activity-based community events both in-person and virtual
- Implement undergraduate chapters at a national scale
- Host informational podcasts and videos surrounding topics in science in an accessible format for viewers

SELECTED PUBLICATIONS | INVITED PRESENTATIONS

- **Jana Carpenter**, Kinglsey Bimpeh, Hannah Hynds, Kelly Hines. 71th ASMS Conference on Mass Spectrometry and Allied Topics. Development of A Multi-Omic Approach for Microorganism Identifications. Oral Talk. June 4-8 (**2023**).
- **Jana Carpenter**, Kelly Hines. 70th ASMS Conference on Mass Spectrometry and Allied Topics. Identifying Pathways for Growth and Survival in Antibiotic Resistant Strains of Staphylococcus aureus. Poster. June 6-10 (**2022**).
- **Jana Carpenter**, Kelly Hines. 69th ASMS Conference on Mass Spectrometry and Allied Topics. Developing a Robust Metabolomics Method for Staphylococcus aureus. Poster. October 31-November 5 (**2021**).
- Christian Freeman, **Jana Carpenter**, Keerthi Appala, Kelly M. Hines. 3rd Annual Metabolomics Association of North America (MANA) Conference. Assessing Membrane Fluidity of Antibiotic-Resistant Staphylococcus aureus Using an RPLC-IM-MS method for Isomeric Phospholipid Separations. Poster. October 19 (**2021**).
- Freeman, C.; Hynds, H. M.; **Carpenter, J. M.**; Appala, K.; Bimpeh, K.; Barbarek, S.; Gatto, C.; Wilkinson, B. J.; Hines, K. M., Revealing Fatty Acid Heterogeneity in Staphylococcal Lipids with Isotope Labeling and RPLC-IM-MS. Journal of the American Society for Mass Spectrometry **2021**, 32 (9), 2376-2385.
- Live Podcast by Jordan Chapman and **Jana Carpenter**. Gender, the Body, and Fieldwork Symposium 2020. B-Scientists: Gender, Body, and the Field. Oral Talk. October 15-17 (**2020**).
- Carla S. Hadden, Hong Sheng, **Jana M. Carpenter**. 9th International Symposium on Radiocarbon and Archaeology. Technical Aspects of Shell Conchiolin Dating via Wet Oxidation. Poster. May 20-24 (**2019**).

OTHER SKILLS & INTERESTS

- Proficient in sample preparation and chromatographic separations using RP and HILIC methods
- Expertise in MS/MS analyses using Q-TOF and TWIMS systems
- Experienced in ion-mobility separations and optimization
- Skilled and proficient in performing biochemical and biological techniques like colony forming assays, SDS page, agarose gel electrophoresis, and bacteria inoculation
- Proficient in elemental analysis, processing lines, micro-analytical balance, pretreatment of archaeological, geological, and anthropological samples
- Strong background in analytical chemistry and biology
- Capable of working independently and in a team
- Computer software: ChemDraw, SciFinder, Skyline, Waters-Mass Lynx, Driftscope, Progenesis QI, GraphPad Prism, MATLAB, GNPS, MS-Dial, R Studio, and Microsoft Office