

# Jessica dos Santos Pizzo, Ph.D.

*Postdoctoral Fellow*

Department of Horticulture | Auburn University

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## EDUCATION

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### Ph.D. in Chemistry

03/2019 - 09/2022

*State University of Maringa, Maringa, PR, Brazil*

Dissertation: Direct determination of the lipid profile of vegetable oils and body oils by Atmospheric Solids Analysis Probe Mass Spectrometry (ASAP-MS)

### M.S. in Chemistry

03/2017 - 02/2019

*State University of Maringa, Maringa, PR, Brazil*

Thesis: Assessment of adulteration of cosmetics based on vegetable oils by GC-FID and direct infusion by ESI-MS.

### B.S. in Chemistry

02/2011 – 01/2015

*State University of Maringa, Maringa, PR, Brazil*

## PROFESSIONAL EXPERIENCE

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### Postdoctoral Fellow

09/2024 – Present

*Department of Horticulture, Auburn University | Auburn, AL*

- Evaluate the effects of chemical components on *Salmonella enterica* growth, survival, and inactivation on food surfaces.
- Analyze experimental data and contribute to the writing of research grant proposals.
- Lead both applied and basic research projects, manage laboratory activities, and coordinate team efforts.
- Conduct interdisciplinary research integrating food safety, analytical chemistry, and food systems.
- Contribute to Extension by co-developing resources for Extension Agents, such as a practical guide on pH measurement.
- Author or co-author of six peer-reviewed manuscripts currently under review or in preparation.
- Mentor four graduate students in experimental design, data analysis, and scientific writing.
- Collaborate with faculty from Horticulture, Chemistry, Geosciences, and Food Science, as well as external research partners.

### Postdoctoral Fellow

11/2023 – 09/2024

*Department of Chemistry and Biochemistry, Auburn University | Auburn, AL*

- Developed and optimized an LC-IM-MS/MS method to identify lipid and peptide biomarkers for efficient discrimination of foodborne pathogens.
- Optimized a solid-phase extraction method for bacterial lipid recovery and a peptide digestion protocol.
- Contributed to the writing and preparation of a research grant proposal.
- Analyzed scientific data and authored or co-authored two published peer-reviewed manuscripts, with one additional manuscript currently in preparation.
- Presented research findings at one conference and one symposium.
- Mentored two Ph.D. students in research design, experimental procedures, and data analysis.

### Visiting Research Scholar

03/2022 – 10/2023

*Department of Horticulture, Auburn University | Auburn, AL*

- Evaluated the use of essential oil emulsions as natural sanitizers against *Escherichia coli* in postharvest washing of three lettuce varieties.

- Optimized and validated a GC-MS method to quantify terpenes in tomato leaf trichomes using a leaf dip extraction method.
- Authored or co-authored three published peer-reviewed manuscripts.
- Mentored one M.S. student and one Ph.D. student in research design, experimental procedures, and data analysis.
- Collaborated with multidisciplinary research teams on studies related to food safety and quality.

### **Graduate Research Assistant**

**03/2017 - 09/2022**

*Department of Chemistry, State University of Maringa | Maringa, PR, Brazil*

- Optimized and applied ASAP-MS to determine triacylglycerol profiles in vegetable oils, body oils, and eggs from different housing systems.
- Determined lipid profiles and fatty acid compositions in human milk, vegetable oils, omega-3 supplements, dog food, body oils, oral/enteral nutrition supplements, and fish using GC-FID and ESI-MS.
- Developed and applied GC-FID and ESI-MS methods to detect adulteration in vegetable oils, body oils and dietary supplements.
- Developed and validated UHPLC-MS/MS methods for quantifying L-ascorbic acid in vitamin C serums and phenolic compounds in hibiscus extracts.
- Applied lipid extraction methods, including Bligh and Dyer, pressure-based extraction, Folch, and ISO 5509:1978, across different matrices.
- Conducted independent research and collaborated with interdisciplinary teams in analytical chemistry, food science, and nutrition.
- Authored or co-authored 30 peer-reviewed publications and one book chapter.
- Mentored one undergraduate and two M.S. students in experimental research design and data analysis.
- Presented research findings at two conferences.

### **Professional Development**

1. Home Food Preservation, Train-the-Trainer, University of Georgia, Trainer: Dr. Carla Schwan, February 25 – 27, 2026.
2. Gradescope Workshop Participation, Auburn, AL, August 21, 2025.
3. Verma Graduate Leadership workshop, Auburn, AL, July 29 – 30, 2025.
4. 2026 AFVGA Conference and Trade Show, Gulf Shores, AL, February 4-6, 2026.
5. 1st annual Auburn Artificial Intelligence Summit, Auburn, AL, April 22, 2025.
6. Harnessing Data Science and AI for Collaborative Advances in Production Agriculture (Forum), Auburn AL, April 21, 2025.
7. 4th annual AU Climate Symposium, Auburn, AL, March 25, 2025.
8. Whitefly Biology, Ecology and Management Update Meeting (Workshop), Auburn, AL, January 7, 2025.
9. ASMS Annual Conference, Anaheim, CA, June 2 – 6, 2024.
10. Auburn University Research Symposium, Auburn, AL, March 26, 2024.
11. International Association for Food Protection Annual Meeting, Pittsburgh, PA, July 31 – August 3, 2022.
12. XI EPCC: Encontro Internacional de Produção Científica UniCesumar, Maringá, PR, Brasil, 2019.
13. II-Mostra Ciência na Praça. Mostra de atividades da Pós-graduação da UEM, Maringá, PR, Brasil, 2019.
14. XXII Semana de química: 'a identidade química'. 2018.
15. 24º Encontro Anual de Iniciação Científica e 4º Encontro Anual de Iniciação Científica Júnior, Maringá, PR, Brasil, 2015.
16. Ação Universitária Empreendedora- AUEMP, Maringá, PR, Brasil, 2014.
17. XXIII Encontro Anual de Iniciação Científica - XXIII EAIC, 2014, Londrina.
18. XXI SBQsul, 2014, Maringá. Química sem fronteiras: Internacionalização e difusão do conhecimento, 2014
19. XVIII Encontro Nacional dos Grupos PET, Recife, PE, Brasil, 2013.
20. 36ª Reunião Anual da Sociedade Brasileira de Química, Águas de Lindóia, Brasil, 2013.
21. XIX Encontro de Química da Região Sul, Tubarão, SC, Brasil, 2012.
22. XV Encontro dos Grupos PET da Região Sul- SULPET, Maringá, PR, Brasil, 2012.

## A: RESEARCH AND SCHOLARLY ACTIVITIES

**Peer-Review Publications** – Dr. Pizzo has authored or co-authored 38 peer-reviewed journal articles in her career.

<sup>#</sup> equal contribution

1. Rodrigues, Camila; **Pizzo, Jessica S.**; Woods, Kristin; Dunn, Laurel L. Growers' Awareness of On-Farm Conservation and Food-Safety Co-Management Practices in the Southeastern United States. *FOOD PROTECTION TRENDS*, v.45, p. 306 – 317.
2. Mickos, V. P.; Blanchard, C.; **Pizzo, J. S.**; Kitchens, S.; Price, S.; Wells, D.; Rodrigues, C. Controlling *Salmonella enterica* in Water-recirculating Systems for Lettuce Production Using a Bacteriophage Cocktail. *HORTSCIENCE*, v.60, p. 1319 - 1325.
3. Kartowikromo, Kimberly Y. <sup>#</sup>; **Pizzo, Jessica S.** <sup>#</sup>; Jerin, Iffat; Hamid, Ahmed M. Advancements in Ion Mobility-Based Diagnostics for Infectious Diseases. *PROTEOMICS*, v.25, p.e13976, 2025.
4. Kartowikromo, Kimberly Y.; **Pizzo, Jessica S.**; Rutz, Thiago; Love, Zachary E.; Simmons, Alvin M.; Ojeda, Ann S.; Da Silva, Andre L. B. R.; Rodrigues, Camila; Hamid, Ahmed M. Identification and Structural Elucidation of Acylsugars in Tomato Leaves Using Liquid Chromatography–Ion Mobility–Tandem Mass Spectrometry (LC-IM-MS/MS). *JOURNAL OF THE AMERICAN SOCIETY FOR MASS SPECTROMETRY*, v.36, 135 – 145, 2025.
5. Souza, Patrícia; Santos, Patrícia; Ponhozi, Isadora; Cruz, Victor Hugo; **Pizzo, Jessica**; Alves, Eloize; Santos, Oscar; Visentainer, Jesuí. Direct Methylation Method for Quantification of Fatty Acids in Lyophilized Human Milk by Gas Chromatography with Flame Ionization Detector. *JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY*, v.36, e-20240077, 2025.
6. Rutz, Thiago; **Pizzo, Jessica S.**; Jacobson, Alana L.; Majundar, Ayanava; Sikora, Edward J.; Coolong, Timothy; Simmons, Alvin M.; Kartowikromo, Kimberly Y.; Hamid, Ahmed M.; Ojeda, Ann S.; Rodrigues, Camila; Da Silva, Andre Luiz Biscaia Ribeiro. Physical and chemical characterization of wild tomato *Solanum habrochaites* accessions for resistance to the sweetpotato whitefly. *SCIENTIA HORTICULTURAE*, v.338, p.113687, 2024.
7. **Pizzo, J. S.**; Rutz, T.; Ojeda, A. S.; Kartowikromo, K. Y.; Hamid, A. M.; Simmons, A.; da Silva, A. L. B. R.; Rodrigues, C. Quantifying terpenes in tomato leaf extracts from different species using gas chromatography-mass spectrometry (GC-MS). *ANALYTICAL BIOCHEMISTRY*, v. 689, 115503, 2024.
8. Paraíso, C. M.; **dos Santos Pizzo, J.**; Gibin, M. S.; Volnistem, E. A.; Visentainer, J. V.; Sato, F.; et al. Intensified ultrafiltration process for fouling mitigation during concentration of bioactive compounds from hibiscus (*Hibiscus sabdariffa* L.) extract: Innovation by using ultrasound and 3D turbulence promoters. *CHEMICAL ENGINEERING AND PROCESSING - PROCESS INTENSIFICATION*, v.195, 109612, 2024.
9. Santos, Patrícia D. S.; Silva, Geovane A. R.; Senes, Carlos E. R.; Cruz, Victor H. M.; **Pizzo, Jessica S.**; Visentainer, Jesuí V.; Santos, Oscar O. Evaluation of the Stability of Popular Oils for Fittura Through Analytical Techniques. *JOURNAL OF CULINARY SCIENCE & TECHNOLOGY*, v. 22, p. 1190 - 1212, 2024.
10. Figueiredo, A.; Silva, M.; **Pizzo, J.**; Santos, P.; Manin, L.; Leôncio, M.; Visentainer, J.; Santos, O. Evaluation of Lipid Composition and Nutritional Quality of Olive Oil Varieties Using ESI-MS, GC-FID and Chemometrics Techniques. *JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY*, v. 35, e- 20230158, 2024.
11. Cruz, V. H. M.; **Pizzo, J. S.**; Santos, P. D. S.; Silva, G. A. R.; Leoncio, M. S.; Santos, O. O.; Visentainer, J. V. Fast and reliable characterization of egg triacylglycerol profiles using atmospheric solids analysis probe tandem mass spectrometry (ASAP-MS/MS) combined with chemometric tools. *FOOD CHEMISTRY ADVANCES*, v. 3, 100508, 2023.
12. Batista, Andreia Farias Pereira; Rosa, Luana Carolina Martins; **Pizzo, Jessica Santos**; da Silva, Alex Fiori; Visentainer, Jesuí Vergílio; de Abreu Filho, Benício Alves; Kobayashi, Renata Katsuko Takayama; Nakazato, Gerson; Mikcha, Jane Martha Graton. Biogenic silver nanoparticles and cinnamaldehyde as an effective sanitizer for fresh sweet grape tomatoes. *JOURNAL OF FOOD SCIENCE AND TECHNOLOGY*, v. 60, p. 2477–2485, 2023.
13. **Pizzo, Jessica S.**; Cruz, Victor H. M.; Manin, Luciana P.; Santos, Patricia D. S.; Silva, Geovane R.; Souza, Patrícia M.; Figueiredo, Alisson L.; Santos, Oscar O.; Visentainer, Jesuí V. First report on quality and purity assessment of sweet almond oil in Brazilian body oils by gas chromatography and mass spectrometry. *JOURNAL OF MASS SPECTROMETRY*, v. 58, p. e4900, 2023.
14. Stella, Thainá Rodrigues; Paraíso, Carolina Moser; **dos Santos Pizzo, Jessica**; Visentainer, Jesuí Vergílio; dos Santos, Suelen Siqueira; Madrona, Grasielle Scaramal. Hibiscus (*Hibiscus Sabdariffa* L.) extracts freeze-dried

and encapsulated by ionic gelation: an approach for yogurt application. JOURNAL OF FOOD MEASUREMENT AND CHARACTERIZATION, v. 17, p. 2630- 2638, 2023.

15. **Pizzo, Jessica Santos**; Pelvine, Raira Andrade; da Silva, Andre Luiz Biscaia Ribeiro; Mikcha, Jane Martha Graton; Visentainer, Jesui Vergilio; Rodrigues, Camila. Use of Essential Oil Emulsions to Control *Escherichia coli* O157:H7 in the Postharvest Washing of Lettuce. FOODS, v. 12, p. 2571, 2023.
16. **Pizzo, Jessica S.**; Visentainer, Jesui V.; Da Silva, Andre L.B.R.; Rodrigues, Camila. Application of essential oils as sanitizer alternatives on the postharvest washing of fresh produce. FOOD CHEMISTRY, v. 407, p. 135101, 2022.
17. **Pizzo, Jessica Santos**; Cruz, Victor Hugo Maldonado; Rodrigues, Carina Alexandra; Manin, Luciana Pelissari; Visentainer, Lorena; Santos, Oscar Oliveira; Maldaner, Liane; Visentainer, Jesuí Vergilio. Rapid determination of L- ascorbic acid content in vitamin C serums by ultra-high-performance liquid chromatography-tandem mass spectrometry. INTERNATIONAL JOURNAL OF COSMETIC SCIENCE, v. 44, p. 131-141, 2022.
18. M. Souza, Patricia; B. Galuch, Marília; P. Lopes, Ana; **S. Pizzo, Jessica**; C. Castro, Matheus; H. M. Da Cruz, Victor; R. Souza, Paulo; F. Impossetto, Deiviti; M. Suzuki, Rubia; V. Visentainer, Jesuí. Assessment of *Moringa oleifera* Lam. Seeds Potential as an Adsorbent Material for Soybean Oil Bleaching. REVISTA VIRTUAL DE QUÍMICA, v. 14, p. 258-266, 2022.
19. **Pizzo, J. S.**; Silva, Juliane Martins; Santos, P. D. S.; Visentainer, J. V.; Santos, O. O. Fast and eco-friendly method using atmospheric solids analysis probe mass spectrometry to characterize orange varieties. JOURNAL OF MASS SPECTROMETRY, v. 57, p. e4828, 2022.
20. Manin, Luciana Pelissari; Rydlewski, Adriela Albino; **Pizzo, Jessica Santos**; Da Cruz, Victor Hugo Maldonado; Da Silva Alves, Eloize; Santos, Patrícia Daniele Silva; Mikcha, Jane Martha Graton; Cristianini, Marcelo; Santos, Oscar Oliveira; Visentainer, Jesui Vergilio. Effects of pasteurization and high-pressure processing on the fatty acids, triacylglycerol profile, Dornic acidity, and macronutrients in mature human milk. JOURNAL OF FOOD COMPOSITION AND ANALYSIS, v. 115, p. 104918, 2022.
21. **S. Pizzo, Jessica**; D. S. Santos, Patricia; R. Senes, Carlos; H. M. Cruz, Victor; M. Souza, Patrícia; C. De Castro, Matheus; O. Santos-Junior, Oscar; V. Visentainer, Jesui. A Chemical Approach on Drugs that are Under Evaluation as Potential COVID-19's Treatment. REVISTA VIRTUAL DE QUÍMICA, 2022.
22. Rydlewski, Adriela A.; Manin, Luciana P.; **Pizzo, Jéssica S.**; Silva, Patrícia D.; Da Silveira, Roberta; Tavares, Christyna B.G.; De Paula, Meliana; Pereira, Omar; Santos, Oscar O.; Visentaine, Jesuí V. Lipid profile by direct infusion ESI-MS and fatty acid composition by GC-FID in human milk: association with nutritional status of donors. JOURNAL OF FOOD COMPOSITION AND ANALYSIS, v. 100, p. 103797, 2021.
23. Cruz, Victor H.M.; **Pizzo, Jessica S.**; Manin, Luciana P.; Santos, Patrícia D.S.; Silva, Geovane A.R.; Santos, Oscar O.; Visentainer, Jesuí V. Rapid authenticity assessment of Brazilian palm kernel oils by mass spectrometry combined with chemometrics. LWT-FOOD SCIENCE AND TECHNOLOGY, v. 154, p. 112612-112612, 2021.
24. **Pizzo, Jessica S.**; Cruz, Victor H.M.; Santos, Patricia D.S.; Silva, Geovane R.; Souza, Patrícia; Manin, Luciana P.; Santos, Oscar O.; Visentainer, Jesuí V. Instantaneous characterization of crude vegetable oils via triacylglycerols fingerprint by atmospheric solids analysis probe tandem mass spectrometry with multiple neutral loss scans. FOOD CONTROL, v. 134, p. 108710, 2021.
25. A. R. Da Silva, Geovane; D. S. Dos Santos, Patrícia; **S. Pizzo, Jessica**; P. Manin, Luciana; E. R. Senes, Carlos; V. Visentainer, Jesuí; O. Santos, Oscar. The Impact on the Stability of Triacylglycerols in Fish with a High Percentage of Polyunsaturated Fatty Acids Stored in a Freezer. REVISTA VIRTUAL DE QUÍMICA, v. 13, p. 1384-1390, 2021.
26. Manin, Luciana; **Pizzo, Jessica**; Rydlewski, Adriela; Santos, Patrícia; Galuch, Marília; Zappiello, Caroline; Santos, Oscar; Visentainer, Jesuí. Evaluation of the Adulteration of Edible and Cosmetic Sunflower Oils by GC-FID and ESI-MS. JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY, p. 2086-2094, 2021.
27. Rydlewski, A. A.; **Pizzo, J. S.**; Manin, L. P.; Zappiello, C. D.; Galuch, M. B.; Santos, O. O.; Visentainer, J. V. Analytical Methods Used for the Determination of Lipids in Human Milk: A Review. REVISTA VIRTUAL DE QUÍMICA, v. 12, p. 155-172, 2020.
28. Da Silveira, Roberta; Dos Santos, Patrícia; **Pizzo, Jessica**; Mattos, Nayane; De Castro, Matheus; Santos, Oscar; Visentainer, Jesuí. Evaluation of Dog Food Authenticity through Lipid Profile Using GC-FID and ESI-MS. JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY, v. 31, p. 2511-2517, 2020.
29. Gonçalves, Renata Menoci; Petenuci, Maria Eugênia; Maistrovicz, Fabiana Carla; Galuch, Marília Bellanda; Montanher, Paula Fernandes; **Pizzo, Jessica Santos**; Gualda, Isabella Peres; Visentainer, Jesuí Vergilio. Lipid profile and fatty acid composition of marine fish species from Northeast coast of Brazil. JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-MYSORE, 2020.

30. Rydlewski, Adriela A.; **Pizzo, Jessica S.**; Manin, Luciana P.; Galuch, Marília B.; Santos, Patrícia D. S.; Zapiello, Caroline; Santos, Oscar O.; Visentainer, Jesuí V. Evaluation of possible fraud in avocado oil-based products from the composition of fatty acids by GC-FID and lipid profile by ESI-MS. *CHEMICAL PAPERS*, v. 74, p. 2799-2812, 2020.
31. Galuch, Marília Bellanda; Magon, Thiago Ferreira Santos; Silveira, Roberta; Nicácio, Antônio Eduardo; **Pizzo, Jessica Santos**; Bonafe, Elton Guntendorfer; Maldaner, Liane; Santos, Oscar Oliveira; Visentainer, Jesuí Vergílio. Determination of acrylamide in brewed coffee by dispersive liquid-liquid microextraction (DLLME) and ultra-performance liquid chromatography tandem mass spectrometry (UPLC-MS/MS). *FOOD CHEMISTRY*, v. 292, p. 120-127, 2019.
32. Manin, L. P.; Rydlewski, A. A.; Galuch, M. B.; **Pizzo, J. S.**; Zappiello, C. D.; Senes, C. E. R.; Santos, Oscar Oliveira; Visentainer, J. V. Evaluation of the Lipid Quality of Lyophilized Pasteurized Human Milk for Six Months by GC-FID and ESI-MS. *JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY*, p. 1579- 1586, 2019.
33. **Pizzo, Jessica Santos**; Galuch, Marília Bellanda; Manin, Luciana Pelissari; Santos, Patrícia Daniele Silva; Zappiello, Caroline Delivio; Santos Junior, Oscar; Visentainer, Jesuí Vergílio. Direct infusion electrospray ionisation mass spectrometry applied in the detection of adulteration of coconut oil with palm kernel oil. *FOOD ADDITIVES & CONTAMINANTS - PART A - CHEMISTRY, ANALYSIS*, v. 36, p. 1-8, 2019.
34. **Pizzo, Jessica**; Galuch, Marília; Santos, Patrícia; Manin, Luciana; Zappiello, Caroline; Silva, Orivaldo; Santos, Oscar; Visentainer, Jesuí. Determination of Coconut Oil Adulteration with Soybean Oil by Direct Infusion Electrospray Ionization Mass Spectrometry. *JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY*, v. 30, p. 1468-1474, 2019.
35. Neia, Vanessa Javera Castanheira; Da Silva Dos Santos, Patrícia Daniele; Galuch, Marília Bellanda; **Dos Santos Pizzo, Jessica**; Ito, Adriela Albino Rydlewski; Santos, Oscar Oliveira; Visentainer, Jeane Eliete Laguilá; Visentainer, Jesuí Vergílio. Fatty Acid Composition and Lipid Profile of Oral/Enteral Nutrition Supplements Available on the Brazilian Market. *EUROPEAN JOURNAL OF LIPID SCIENCE AND TECHNOLOGY (INTERNET)*, v. 121, p. 1800495, 2019. *Featured as the cover image (2019, v. 121, No. 6)*.
36. **Pizzo, J. S.**; Galuch, M. B.; Santos, P. D. S.; Santos, O. O.; Visentainer, L.; Eberlin, M. N.; Visentainer, J. V. Assessment of Adulteration of Cosmetics Based on Vegetable Oils by GC-FID and Lipid Profile Using Direct Infusion Electrospray Ionization Mass Spectrometry (ESI-MS). *JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY (ONLINE)*, v. 29, p. 2457-2465, 2018. *Featured as the cover image (October 2018, v. 29, No. 12)*.
37. **Pizzo, Jessica Dos Santos**; Camilo, Michael Douglas; Giandon, André Carneiro. Diagnóstico de Práticas do Gerenciamento de Projetos no Desenvolvimento de Produtos: Um Estudo de Caso em uma Empresa Fabricante de Produtos Odontológicos. *REVISTA INOVAÇÃO, PROJETOS E TECNOLOGIAS*, v. 6, p. 29-45, 2018.
38. Galuch, Marília; Carbonera, Fabiana; Magon, Thiago; Da Silveira, Roberta; Dos Santos, Patrícia; **Pizzo, Jessica**; Santos, Oscar; Visentainer, Jesuí. Quality Assessment of Omega-3 Supplements Available in the Brazilian Market. *JOURNAL OF THE BRAZILIAN CHEMICAL SOCIETY*, v. 29, p. 631-638, 2017.

## Book Chapter Published

1. Visentainer, J. V.; Santos, O. O.; Maldaner, L.; Zappiello, C. D.; Neia, V. B. M. J. C.; Visentainer, L.; Manin, L. P.; **Pizzo, J. S.**; Rydlewski, A. A.; Da Silveira, Roberta; Galuch, M. B.; Visentainer, J. L. Lipids and Fatty Acids in Human Milk: Benefits and Analysis. In: Viduranga Waisundara. (Org.). *Biochemistry and Health Benefits of Fatty Acids*. 1ed. London: IntechOpen, 2018, v. 1, p. 1-21.

**Abstracts and Presentations at Professional Conferences and Meetings** – Dr. Pizzo has authored or co-authored 11 abstracts/presentations in the last 5 years.

1. da Silva, A.L.B.R.; **Pizzo, J. S.**; da Cruz, Victor; Cremonez, P.; Rodrigues, C.; Simmons, A. From trichomes to terpenes: Integrating wild tomato traits for whitefly-resistant cultivars. Hilton Head, SC. 2026 ESA Southeastern Branch Meeting, 2026.
2. **Pizzo, J. S.**; Rodrigues, C.; Cremonez, P.; da Silva, A.L.B.R. Future of plant resistance to whitefly: lessons learned and techniques. Statesboro, GA. 2026 Whitefly Research Roundtable, 2026.
3. Rodrigues, C.; Rutz, T.; **Pizzo, J. S.**; Cremonez, P.; Simmons, A.; da Silva, A.L.B.R. Role of secondary metabolites on tomato resistance against sweetpotato whitefly. Baton Rouge, LA. Southern Region Entomological Society of America, 2025.
4. Rodrigues, C.; Rutz, T.; **Pizzo, J. S.**; Cremonez, P.; Cruz, V.H.; da Silva, A.L.B.R. Role of secondary

- metabolites on tomato resistance against whitefly. Auburn, AL. Whitefly Biology, Ecology and Management Annual Update Meeting, 2025.
5. **Pizzo, J. S.**; Jerin, I.; Kartowikromo, K. Y.; Olajide, O. E.; Hamid, A. M. Lipidomic Analysis using Liquid Chromatography Ion Mobility Tandem Mass Spectrometry (LC-IM-MS/MS) for the Discrimination of Foodborne Pathogens, Atlanta, GA. 75th Southeastern Regional Meeting of American Chemical Society, 2024.
  6. **Pizzo, J. S.**; Hamid, A.; Olajide, O.; Kartowikromo, K.; Jerin, I.; Maaji, S. P. Discrimination of foodborne pathogens associated with outbreaks using Tandem Liquid Chromatography Ion Mobility Mass Spectrometry (LC-IM- MS/MS), Anaheim, CA. 72rd Conference on Mass Spectrometry and Allied Topics (ASMS), 2024.
  7. **Pizzo, J. S.**; Hamid, A.; Olajide, O.; Kartowikromo, K.; Jerin, I.; Maaji, S. P. Discrimination of foodborne pathogens associated with outbreaks using Tandem Liquid Chromatography Ion Mobility Mass Spectrometry (LC-IM- MS/MS), Auburn, AL. Auburn University Research Symposium, 2024.
  8. **Pizzo, J. S.**; da Silva, A.; Rodrigues, C. The use of essential oil emulsions as a postharvest sanitizer to control *Escherichia coli* O157:H7 on lettuce, Oklahoma City, OK. American Society for Horticultural Science Southern Region Annual Meeting (SR-ASHS), 2023.
  9. **Pizzo, J. S.**; da Silva, A.; Rodrigues, C. Evaluation of Chlorine and Peroxyacetic Acid Antimicrobial Activity to Control *Escherichia coli* O157:H7 in Three Different Types of Lettuces, Orlando, FL. American Society for Horticultural Science (ASHS) Annual Conference, 2023.
  10. **Pizzo, J. S.**; da Silva, A.; Rodrigues, C. Application of Winter Savory Oil Emulsion to Control *Escherichia coli* O157:H7 in Inoculated Romaine Lettuce, Toronto, Canada. International Association for Food Protection (IAFP) Annual Meeting, 2023.
  11. Figueiredo, Alisson L.; **Pizzo, Jessica Santos**; Boeing, J. S.; Maldaner, L.; Visentainer, Jesuí V.; Oliveira Santos, Oscar. Somatório de ácidos graxos no leite humano colostro cru e pasteurizado liofilizado por GC-DIC. In: V Simpósio Internacional Do Programa De Pós-Graduação Em Enfermagem, 2022, Maringá. Anais do V Simpósio Internacional do Programa de Pós-Graduação em Enfermagem: Saúde materno-infantil no contexto materno no contexto global: um olhar no ensino, na pesquisa e na extensão. Maringá: UEM/DEN/PSE, 2022.
  12. Manin, L. P.; Rydlewski, A. A.; **Pizzo, J. S.**; Quinalha, F. S. P.; Santos, O. O.; Visentainer, Jesuí V. Processamento Do Leite Humano E Sua Correlação Com A Composição Em Ácidos Graxos. In: XI EPCC: Encontro Internacional de Produção Científica UniCesumar, 2019, Maringá, PR.
  13. Manin, L. P.; **Pizzo, J. S.**; Rydlewski, A. A.; Galuch, M. B.; Santos, O. O.; Visentainer, J. V. Avaliação da adulteração de cosméticos à base de óleo de girassol por CG-DIC. In: XI EPCC: Encontro Internacional de Produção Científica UniCesumar, 2019, Maringá.
  14. **Pizzo, J. S.**; Manin, L. P.; Rydlewski, A. A.; Santos, P. D. S.; Santos, O. O.; Visentainer, J. V. Avaliação de adulterações de óleos corporais constituídos por óleo de semente de uva através de CG-DIC e ESI-MS. In: XI EPCC: Encontro Internacional de Produção Científica UniCesumar, 2019, Maringá.
  15. Silva, M.C. da; **Pizzo, J. S.**; Santos, P. D. S.; Santos, O. O.; Visentainer, J. V. Composição em ácidos graxos e quantificação de tocoferol e fitoesterol em azeitonas da variedade arbequina. In: XI EPCC: Encontro Internacional de Produção Científica UniCesumar, 2019, Maringá.
  16. Rydlewski, A. A.; **Pizzo, J. S.**; Manin, L. P.; Visentainer, L.; Visentainer, J. L.; Neia, V. B. M. J. C.; Visentainer, J. V. Importância do Sódio para o Recém- Nascido Prematuro. In: VIII Simpósio de Tecnologia e Engenharia de Alimentos, 2018, Campo Mourão. Anais do VIII SIMTEA, 2018.
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39. **Pizzo, J. S.**; Santana, A.P.R.; Piveta, N.M.; Jorge, H.B.; Souza, J.R.B. De; S.R., Rodrigues; Franciscato, D.S.; Almeida, D.D.; Jorge, E. B.; Silva, M.C. Da; Santos, P.; Silva, P.T.; Souza, V.R. De; Gimenez, T.D. Atividade de integração entre alunos ingressantes no curso de química no ano de 2012 e equipe atuante, professores e alunos, do departamento de química (DQI). In: XV Encontro dos Grupos PET da Região Sul- SULPET, 2012, Maringá. ANAIS DO XV SULPET, 2012, 2012. p. 38-42.

## Grants

1. **2025 – USDA/NIFA-AFRI:** Bacteriophage as a Strategy to Control *Salmonella enterica* in Hydroponic Production Systems - \$300,000 (Pending)
2. **2025 – AAES-PEER:** Evaluating Knowledge Gaps and Opportunities in Home Food Preservation Practices Across Alabama - \$10,000 (Not funded).
3. **2024 – NSF: CAREER:** Development of a Portable Ion Mobility Mass Spectrometer for Environmental Applications. (Not funded).

## B: INSTRUCTION AND SUPERVISION

### Graduate Teaching Assistant

1. **Pizzo, J. S.** 2020 – Introduction to proteins, peptides, and amino acids (DQI5002). Supervised teaching in the undergraduate level at the State University of Maringa, Maringa, Brazil. Supervisor: Dr. Oscar Oliveira dos Santos Junior.

### Invited Lecturer

1. **Pizzo, J. S.** 2023. International Connections: Study and Research in the USA. Department Food Science, State University of Maringa. Invited Lecturer (12 students).
2. **Pizzo, J. S.** 2020. Literature as a driver of personal and professional growth. Coca-Cola FEMSA, Maringa, Parana, Brazil.

### Graduate Committee Activities

Role	Student	Degree	Major	Complete Date
Member	Luciana Pelissari Manin	Ph.D.	Food Science (State University of Maringa)	2023

### Academic Advising and Supervision

1. 2025 - Co-Mentor, *Sara Paz* (M.S. student), Auburn University, USA.
2. 2025 - Co-Mentor, *Victor Hugo Maldonado da Cruz* (Visiting Research Scholar, Ph.D. student State University of Maringa, Brazil), Auburn University, USA.
3. 2025 - Co-Mentor, *Alex Lahue* (M.S. student), Auburn University, USA.
4. 2025 - Co-Mentor, *Luan Wesley Aparecido Pereira Alves* (M.S. student), Auburn University, USA.
5. 2025 - Co-Mentor, *Lucas Barion de Oliveira* (M.S. student), Auburn University, USA.
6. 2024 - Primary Mentor, *Sheba P. Maaji* (Ph.D. student), Auburn University, USA.
7. 2024 - Co-Mentor, *Iffat Jerin* (Ph.D. student), Auburn University, USA.
8. 2023 - Co-Mentor, *Thiago Rutz da Silva*, (Ph.D. student), Auburn University, USA.
9. 2022 - Co-Mentor, *Vania Paula Mickos*, (M.S. student), Auburn University, USA.
10. 2019 - 2021 – Co-Mentor, *Victor Hugo Maldonado da Cruz* (M.S. student), State University of Maringa, Brazil.
11. 2019 - Co-Mentor, *Orivaldo José da Silva Filho* (M.S. student), State University of Maringa, Brazil.
12. 2019 - Primary Mentor, *Alisson de Lima Figueiredo* (Undergraduate student), State University of Maringa, Brazil.

## C: PUBLIC SERVICE AND OUTREACH

**Extension Publications** – Dr. Pizzo has authored or co-authored 2 extension publications in her career.

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1. **Pizzo, J. S.**; Lahue, A.; Rodrigues, C.; da Silva, A.; Denderson, C. Public Opinions on Alabama-Grown Hop Varieties. October 2025. Available at <https://www.aces.edu/blog/topics/crop-production/public-opinions-on-alabama-grown-hop-varieties/>.
2. Alves, L. W. A. P.; **Pizzo, J. S.**; da Silva, A. Organic Transition of Specialty Crops in Alabama. November 2025. Available at <https://www.aces.edu/blog/topics/crop-production/organic-transition-of-specialty-crops-in-alabama/>.

### Radio and Internet Interviews

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1. Mcconnell, A.; Criado, M.; Rodrigues, C.; **Pizzo Jessica, S.**; Chevez, Z.; Hamid, A. M.; Olajide, O.; Kartowikromo, K.; Cheng, Z. Gather 'round the table: Auburn is keeping your meal safe this Thanksgiving. 2024. Available at [https://aub.ie/food\\_safety](https://aub.ie/food_safety).
2. **Pizzo, J. S.** Phone interview. Department of Chemistry at the State University of Maringa about my journey as an alumni student. November 2022.

### Extension and Outreach Activities

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1. 2026 – GAP Refresher Workshop (2 hours): AFVGA Conference and Trade Show, Gulf Shores, AL, USA.
2. 2025 – Technical visit (4 hours): Kontos Farms, LLC, Steele, AL, USA.
3. 2025 - Auburn Across Alabama: Experience the Blackbelt (14 hours): University of West Alabama, Fort Tombeche, Prysop Packing Products, Rural Studio, and Project Horseshoe Farms. Alabama, USA.
4. 2013 - Technical Visit (4 hours): Petróleo Brasileiro S.A. (PETROBRAS), Rio de Janeiro, Brazil.
5. 2013 - Technical Visit (4 hours): RACCO Cosméticos, Curitiba, Brazil.
6. 2013 - VI UNIPET Activity Cycle: Participated in the 6th edition of the UNIPET Cycle, engaging in academic and outreach activities organized by the university's Tutorial Education Program (PET), State University of Maringa, PR, Brazil.
7. 2012 - Technical Visit (8 hours): Rhodia Brasil S.A., Paulínia, SP, Brazil.
8. 2012 - V UNIPET Activity Cycle: Participated in the 5th edition of the UNIPET Cycle, engaging in academic and outreach activities organized by the university's Tutorial Education Program (PET), State University of Maringa, PR, Brazil.

### Extension Programs

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1. 2013 – Chemistry Show (PET QUIMICA)  
Delivered public demonstrations of chemical concepts to K–12 students in Maringa and surrounding areas. The initiative aimed to promote interest in science through engaging, hands-on presentations grounded in scientific principles.

## D: PROFESSIONAL SERVICE

### Professional Affiliations and Membership

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1. American Society for Mass Spectrometry (ASMS)
2. National Postdoctoral Association
3. TIGER Tech Leaders

### Reviewer for Scientific Journals

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1. Acta Scientiarum. Technology
2. Analytical Science Advances

3. Molecules
4. Antibiotics
5. Journal of Food Measurement and Characterization

### Meeting, Conference, and Symposia Service

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1. 2026 - Served as co-instructor for the hands-on session during the GAP Refresher Workshop at the AFVGA Conference and Trade Show in Gulf Shores, Alabama.
2. 2025 - Organized the Whitefly Meeting as part of USDA ARS collaborative research efforts, Auburn University, Auburn, AL, USA.
3. 2013 - Organized the XXIX Chemistry Week, Department of Chemistry, State University of Maringa, PR, Brazil.
4. 2012 - Organized the XXIII Chemistry Week, Department of Chemistry, State University of Maringa, PR, Brazil.
5. 2012 - Organized the Meeting of PET Groups in the Southern Region, State University of Maringa, PR, Brazil.

### University Service

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1. 2013 - Quicalourada: Participated in organizing an orientation and integration event for new Chemistry students, State University of Maringa, PR, Brazil.
2. 2013 – II Science Show fair: Contributed to a public exhibition showcasing graduate research projects from State University of Maringa, with the goal of promoting science communication and community engagement.
3. 2013 – XVI Career Exploration Day: Promoted the undergraduate Chemistry program during a university-wide outreach event, State University of Maringa, PR, Brazil.
4. 2012 – XV Career Exploration Day: Promoted the undergraduate Chemistry program during a university-wide outreach event, State University of Maringa, PR, Brazil.

### Honors and Awards

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1. 2019 - Research article selected as the cover image of the *European Journal of Lipid Science and Technology* (2019, v. 121, No. 6).
2. 2018 - Research article selected as the cover image of the *Journal of the Brazilian Chemical Society* (October 2018, v. 29, No. 12).
3. 2015 - Graduate in Chemistry with honors, State University of Maringa, Brazil.
4. 2015 - Outstanding Undergraduate Student Award, State University of Maringa, Brazil.
5. 2014 - Outstanding Undergraduate Student Award, State University of Maringa, Brazil.
6. 2013 - Outstanding Undergraduate Student Award, State University of Maringa, Brazil.
7. 2012 - Outstanding Undergraduate Student Award, State University of Maringa, Brazil.

### Volunteer Work

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1. 2024 – Poster Judge, COAG Graduate Research Poster Showcase, Auburn University, USA.
2. 2013 – Internship in the Quality Control laboratory, Gelita do Brasil, Maringa, PR, Brazil.