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| --- | --- | --- | --- | --- | --- | --- | --- |
| **EDUCATION** | | | | | | | |
| 08/2021 – 05/2024 | | | **Ph.D.Food Science -** 4.00 GPA  University of Arkansas, Fayetteville, AR: Dissertation: *Determination of Factors Influencing Microbial Food Safety Risks of Additive Manufacturing and 3D Printing of Food.* Dissertation Chair: Kristen E. Gibson | | | | |
| 08/2015 – 05/2019 | | | **B.S. Chemistry (Minor in Biology) -** 3.97 GPA  Indiana University, Bloomington, IN | | | | |
| RELEVANT LINKS | | | | | | |
| [LinkedIn](https://www.linkedin.com/in/allyson-hamilton/) | | | | | | |
| [Github](https://github.com/allyson10500) | | | | | | |
| [ORCiD](https://orcid.org/0000-0003-1160-2325) | | | | | | |
| [Google Scholar](https://scholar.google.com/citations?user=6WW_5NwAAAAJ&hl=en) | | | | | | |
| **AREAS OF PROFESSIONAL SPECIALIZATION** | | | | | | |
| My interests focus on data analysis, programming, data visualization, biostatistics, food microbiology, the safety of novel food technologies, and the intersection of horticultural practices and food safety. Research and publications have addressed 3D food printer machine hygiene, pathogen transferability in food inks, food ink and 3D printed food storage risks, φ6 bacteriophage transferability and surrogacy for COVID-19, CEA and non-CEA produce grower practices and perceptions, and testing the efficacy of different sanitization methods. | | | | | | |
| **PROFESSIONAL EXPERIENCES** | | | | | | |
| 08/2021 – present | | **Graduate Research Assistant**  University of Arkansas, Department of Food Science, Fayetteville, AR   * Leveraged expertise in R, Python, SQL, Tableau, Julia, and PowerBI, developed through 400+ hours of training, to pioneer over 30 innovative solutions in food safety and horticulture. Achievements include significant advancements in the safety of 3D food printing technologies and controlled environment agriculture, culminating in 13 peer-reviewed publications. * Utilized advanced statistical methods and data analysis in R for groundbreaking research in 3D food printer hygiene, identifying routes to mitigate pathogen transfer into food inks. This work enhanced sanitization processes, led to safer food printing technologies, and established new recommended industry safety and hygiene standards. * In collaboration with industry leaders, advanced microbiological techniques and data analytics were leveraged to tackle food safety and quality challenges. This partnership resulted in the development of innovative protocols that enhanced food safety, quality, and sustainability, directly benefiting public health, and setting new industry standards. * Developed proficiency in advanced microbiological techniques (e.g., cell culture, ddPCR, food sampling) and protocol development for food safety research. | | | | |
| 03/2020 – 08/2021 | | **Lab Director and Chemical Hygiene Officer**  University of Saint Francis, Fort Wayne, IN   * Directed and supervised a team of work-study undergraduates, optimizing task allocation and tracking progress through data-driven methodologies. * Managed chemical inventory using data analytics for efficient organization, storage, safe disposal, and preparation of lab materials, ensuring compliance and reducing waste. * Established and upheld stringent safety protocols by analyzing safety data trends, including the correct use of Personal Protective Equipment (PPE), safe handling of hazardous substances, and application of cleaning chemicals, to maintain a secure working environment. | | | | |
| 01/2020 – present | | **English Instructor**  VIPKID, remote   * Independently contracted as an online English teacher for Chinese students via the VIPkid platform, covering ages 3+. * Utilized OBS and a green screen to enhance virtual lessons with engaging props and interactive Google Slides. * Implemented Total Physical Response (TPR) and modeling techniques to improve lesson effectiveness and student comprehension. * Taught a wide range of subjects, including science, grammar, math, vocabulary, pronunciation, writing, presentation skills, history, culture, music, and art. | | | | |
| 05/2019 – 11/2019 | | **Predictive Safety Center Lab Technician**  Corteva Agriscience, Indianapolis, IN   * Conducted independent analysis and evaluation of new chemical compounds, assessing their impact on environmental, human, and aquatic safety using data-centric approaches in fate and metabolism, eco-toxicology (tests on honeybees, daphnids, rat hepatocytes, and algae), and extensive laboratory preparations. * Collaborated on the development of innovative automation protocols leveraging data analytics, which enhanced lab efficiency in soil assays, plasma analysis, and eco-toxicology testing, underscoring a dedication to improving scientific methods and operational efficiency. . | | | | |
| 08/2018 – 05/2019 | | **Departmental Chemistry Tutor**  Indiana University, Department of Chemistry, Bloomington, IN   * Conducted weekly tutoring sessions in Chemistry, Physics, and Math, enhancing students' understanding and mastery of complex subjects. * Acted as a peer mentor and advisor, providing guidance and support to underclassmen, fostering their academic and personal growth. * Designed original problem sets and delivered concise, impactful mini-lectures approximately 15 minutes long, effectively breaking down challenging concepts and engaging students in interactive learning. | | | | |
| 02/2017 – 05/2018 | | **Undergraduate Researcher**  Indiana University, Silas P. Cook Lab, Bloomington, IN   * Supported graduate students in preparing starting materials for organometallic syntheses in vacuo, ensuring precise and effective experimental setups. * Executed column chromatography and 1H quantitative NMR analysis, demonstrating proficiency in essential purification and characterization techniques. * Mastered a range of organic transformations, including Sonogashira, Appel, Heck, and Suzuki couplings, showcasing versatility in conducting complex chemical reactions. * Initiated the development of an innovative pathway for converting alkyl chlorides to alcohols, contributing to advancements in synthetic methodology. | | | | |
| 06/2017-08/2017 | | **Medical Research Scientist**  Student Research Fellowship Program, Indiana University School of Medicine   * Conducted comprehensive literature searches and extracted relevant data from patient charts to inform research studies. * Analyzed data and applied statistical tests to assess significance, ensuring robust and reliable research findings. * Contributed as a co-author to the paper "Developing a Tertiary Endoscopic Program for Colon Adenoma Resection in a Community Setting: Review of Outcomes, Pitfalls, and Pearls," highlighting key insights and contributions to the field. | | | | |
| **CERTIFICATIONS** | | | | | | |
| 2024 | | [**Data Analyst with R**](https://www.datacamp.com/statement-of-accomplishment/track/47399cc6f4541090784a6f626239f1ea256de060?raw=1) | | | | |
| 2024 | | [**SQL Fundamentals**](https://www.datacamp.com/statement-of-accomplishment/track/7d324e64f1255e3e8df91a8cfcaf9f94c394a86f?raw=1) | | | | |
| 2024 | | [**Tableau Fundamentals**](https://www.datacamp.com/statement-of-accomplishment/track/8a3880c31c249b3ca420ef53b13ef80a401b79e0?raw=1) | | | | |
| 2024 | | [**Python Fundamentals**](https://www.datacamp.com/statement-of-accomplishment/track/d0750c11cd6c2772ec75d00f2e73e0d59c2fa280?raw=1) | | | | |
| 2024 | | [**Machine Learning Fundamentals with Python**](https://www.datacamp.com/statement-of-accomplishment/track/74b73e9fab66e9880043c72ca294974ccc561811?raw=1) | | | | |
| 2024 | | [**Deep Learning in Python**](https://www.datacamp.com/statement-of-accomplishment/track/c9fbcdf2e104ae0eed4501246272c5500205cfc9?raw=1) | | | | |
| 2024 | | [**Supervised Machine Learning in R**](https://www.datacamp.com/statement-of-accomplishment/track/a6dc96f6b658c67c0dfa5e72a8c54b6137a23178?raw=1) | | | | |
| 2024 | | [**Julia Fundamentals**](https://www.datacamp.com/statement-of-accomplishment/track/d7a80ebe6d2ad92fc6306771a9dc8a27d3b80ec4?raw=1) | | | | |
| 2024 | | [**Power BI Fundamentals**](https://www.datacamp.com/statement-of-accomplishment/track/334c41a3173565e2b6768643c5e690d6277bc9f2?raw=1) | | | | |
| 2024 | | [**Financial Reporting in Power BI**](https://www.datacamp.com/statement-of-accomplishment/track/0aaff3702347d4f11ff506b195576af0bdf46301?raw=1) | | | | |
| 2024 | | [**AI Fundamentals**](https://www.datacamp.com/statement-of-accomplishment/track/6720a02f6dfdcea0cba315f9dbf8509793f5baf4?raw=1) | | | | |
| 2024 | | [**ChatGPT Fundamentals**](https://www.datacamp.com/statement-of-accomplishment/track/bbaa7cbf3f7f4021ad7af0f8ed04565faef0f971?raw=1) | | | | |
| 2024 | | [**Azure Fundamentals**](https://www.datacamp.com/statement-of-accomplishment/track/34048a827cbe2119d65c3d08c0f1dee45396357e?raw=1) | | | | |
| 2023 | | **Preventive Controls Qualified Individual (PCQI) Certified** – Instructed by Dr. Jennifer Acuff, Dr. Lily Yang, and Dr. John Marcy | | | | |
| 2023 | | **Preparing for the Professoriate micro-certificate** – An interdisciplinary credential designed to help prepare graduate students for teaching, research, and service responsibilities in higher education environments. | | | | |
| 2021 – 2024 | | **CITI Training,** Responsible Conduct of Research | | | | |
| 2021 – 2024 | | **BioRAFT Training and Certification** in the areas of:   * Bloodborne Pathogens, Chemical Hygiene Plan Training, Hazardous Waste Training, and Fire Safety and Fire Extinguishers | | | | |
| 2020 | | **Chemical Hygiene Officer Certification** through the Laboratory Safety Institute | | | | |
| **PROGRAMMING COURSES** | | | | | | |
| **Data Camp:** | | | | | | |
| **R:** | | | | | | |
| Programming and Data Fundamentals: | | | | Data Manipulation and Visualization: | | |
| * Introduction to R | | | | * Exploratory Data Analysis in R | | |
| * Intermediate R | | | | * Data Manipulation with dplyr | | |
| * Introduction to Writing Functions in R | | | | * Introduction to Data Visualization with ggplot2 | | |
| * Writing Efficient R Code | | | | * Visualizing Big Data with Trelliscope in R | | |
| * Introduction to Data in R | | | | * Intermediate Data Visualization with ggplot2 | | |
| * Working with Dates and Times in R | | | | * Joining Data with dplyr | | |
| * Introduction to Importing Data in R | | | | * Introduction to the Tidyverse | | | |
| * Cleaning Data in R | | | | * Data Communication Concepts | | | |
| * Scalable Data Processing in R | | | |  | | | |
| * Introduction to Spark with sparklyr in R | | | |  | | | |
|  | | | |  | | | |
| Statistical Foundations: | | | | Machine Learning and Advanced Modeling: | | | |
| * Introduction to Statistics in R | | | | * Machine Learning with caret in R | | | |
| * Foundations of Inference in R | | | | * Support Vector Machines in R | | | |
| * Foundations of Probability in R | | | | * Hyperparameter Tuning in R | | | |
| * Sampling in R | | | | * Machine Learning in the Tidyverse | | | |
| * Introduction to Regression in R | | | | * Modeling with tidymodels in R | | | |
| * Intermediate Regression in R | | | | * Machine Learning with Tree-Based Models in R | | | |
| * Bayesian Regression Modeling with rstanarm * Bayesian Modeling with RJAGS | | | | * Supervised Learning in R: Classification * Supervised Learning in R: Regression | | | |
| * Fundamentals of Bayesian Data Analysis in R | | | | * Unsupervised Learning in R | | | |
| * Hypothesis Testing in R | | | |  | | | |
| * Experimental Design in R | | | |  | | | |
| **Python:** | | | | | | | |
| Programming and Data Fundamentals: | | | | | Machine Learning and Data Science | | |
| * Introduction to Python | | | | | * Unsupervised Learning in Python | | |
| * Intermediate Python | | | | | * Linear Classifiers in Python * Supervised Learning with scikit-learn | | |
| Data Manipulation and Visualization: | | | | | Deep Learning with PyTorch: | | |
| * Data Manipulation with pandas | | | | | * Introduction to Deep Learning with PyTorch | | |
| * Introduction to NumPy * Introduction to Statistics in Python | | | | | * Intermediate Deep Learning with PyTorch * Deep Learning for Images with PyTorch | | |
| * Python Data Science Toolbox (Part 1) | | | | | * Deep Learning for Text with PyTorch | | |
| * Python Data Science Toolbox (Part 2) | | | | |  | | |
| **SQL:** | | | | | | | |
| Querying Fundamentals:   * Introduction to SQL * Intermediate SQL * Joining Data in SQL * Data Manipulation in SQL | | | | | Advanced Querying:   * Database Design * PostgreSQL Summary Stats and Window Functions * Functions for Manipulating Data in PostgreSQL | | |
| **PowerBI:** | | | | | | | |
| Fundamental Skills:   * Introduction to PowerBI * Introduction to DAX in Power BI * Data Visualization in Power BI * Data Preparation in Power BI * Data Modeling in Power BI | | | | | Financial Analysis and Reporting:   * Introduction to Financial Statements in Power BI * Financial Analysis in Power BI * Time Series Analysis in Power BI * Financial Reporting in Power BI | | |
| **Theory:** | | | | | | | |
| Foundations of AI and Machine Learning:   * Understanding Data Science * Understanding Machine Learning * Understanding Artificial Intelligence * Understanding Prompt Engineering | | | | | Specialized Topics in AI:   * Introduction to ChatGPT * ChatGPT Fundamentals * Generative AI Concepts * Large Language Models (LLMs) Concepts * AI Ethics | | |
| **Microsoft Azure:** | | | | | | | |
| * Understanding Cloud Computing * Introduction to Azure | | | | | * Azure Architecture and Services * Azure Management and Governance | | |
| **Tableau:** | | | | | | | |
| * Introduction to Tableau * Analyzing Data in Tableau | | | | | * Creating Dashboards in Tableau * Connecting Data in Tableau | | |
| **Julia:** | | | | | | | |
| * Introduction to Julia * Intermediate Julia | | | | | * Data Manipulation in Julia * Introduction to Data Visualization with Julia | | |
| **PROGRAMMING PROJECTS** | | | | | | |  | | |
| **Data Camp**: | | | | | | |  | | |
|  | **R:**   * [Dr. Semmelweis and the Importance of Handwashing](https://app.datacamp.com/learn/projects/1991) * [Exploring Airbnb Market Trends](https://app.datacamp.com/learn/projects/exploring-airbnb-market-trends) * [Modeling Car Insurance Claim Outcomes](https://app.datacamp.com/learn/projects/modeling_car_insurance_claim_outcomes/guided/R) * [Hypothesis Testing with Men’s and Women’s Soccer Matches](https://app.datacamp.com/learn/projects/hypothesis_testing_with_mens_and_womens_soccer_matches/guided/R)   **Python:**   * [Investigating Netflix Movies](https://app.datacamp.com/learn/projects/investigating_netflix/guided/Python) * [Predictive Modeling for Agriculture](https://app.datacamp.com/learn/projects/1772) * [Clustering Antarctic Penguin Species](https://app.datacamp.com/learn/projects/1809) * [Building an E-Commerce Clothing Classifier Model](https://app.datacamp.com/learn/projects/2059)   **SQL:**   * [Analyzing Students' Mental Health](https://app.datacamp.com/learn/projects/analyzing_students_mental_health/guided/SQL)   **Tableau:**   * [Case Study: Analyzing Customer Churn in Tableau](https://www.datacamp.com/completed/statement-of-accomplishment/course/0e442f0aebd7c38314fb1143fa06c2972960b4dc)   **PowerBI:**   * [Case Study: Analyzing Customer Churn in Power BI](https://app.datacamp.com/learn/courses/case-study-analyzing-customer-churn-in-power-bi) * [Case Study: Mortgage Trading Analysis in Power BI](https://app.datacamp.com/learn/courses/case-study-mortgage-trading-analysis-in-power-bi) | | | | | |  | | |
| **Dissertation:** | | | | | | |  | | |
|  | **Objective 1: 3D Food Printer Machine Hygiene**   * [Bacterial Machine Hygiene](https://github.com/allyson10500/Dissertation_Code/blob/main/Bacterial%20Machine%20Hygiene.Rmd) * [Viral Machine Hygiene](https://github.com/allyson10500/Dissertation_Code/blob/main/Tulane%20Virus%20Machine%20Hygiene.Rmd)   **Objective 2: Pathogen Transfer in 3D Printed Foods**   * [All Pathogen Transfer](https://github.com/allyson10500/Dissertation_Code/blob/main/All%20Transfer.Rmd)   **Objective 3: 3D Printed Food Storage**   * [Bacterial Food Storage](https://github.com/allyson10500/Dissertation_Code/blob/main/Storage%20Data%20-%20Bacteria.Rmd) * [Viral Food Storage](https://github.com/allyson10500/Dissertation_Code/blob/main/Storage%20Data%20-%20Virus.Rmd) | | | | | |  | | |
| **TEACHING EXPERIENCES** | | | | | | |  | | |
| 2023 | **University of Arkansas,** Fayetteville, AR   * Teaching Assistant for the graduate-level class “Foodborne Diseases” under the supervision of Dr. Kristen Gibson | | | | | |  | | |
| 2022 | **University of Arkansas,** Fayetteville, AR   * Teaching Assistant for the 125-person class “Uncorked: Vines to Wines” under the supervision of Dr. Renee Terrell Threlfall | | | | | |  | | |
| 2020 – 2021 | **VIPKID**, remote   * English as a second language instructor for children aged 2-18 | | | | | |  | | |
| 2020 – 2021 | **University of Saint Francis,** Fort Wayne, IN   * Guest Lecture on 10-02-2020: Advanced Organic Chemistry Techniques * Work Study Student Supervisor for 5 students. | | | | | |  | | |
| 2018 – 2019 | **Indiana University,** Bloomington, IN   * Tutor, Courses: Organic Chemistry I – III | | | | | |  | | |
| **PEER**–**REVIEWED ARTICLES** | | | | | | |  | | |
| 1. Baker CA, **Hamilton AN**, Chandran S, Poncet AM, Gibson KE. 2022. Transfer of Phi6 bacteriophage between human skin and surfaces common to consumer‐facing environments. *Journal of Applied Microbiology*. doi:10.1111/jam.15809 | | | | | | |  | | |
| 1. **Hamilton AN**, Gibson KE. 2022. Performance of Manufacturer Cleaning Recommendations Applied to 3D Food Ink Capsules for the Control of a Human Norovirus Surrogate. *Food and Environmental Virology*. doi: 10.21203/rs.3.rs-2070437/v1 | | | | | | |  | | |
| 1. **Hamilton AN**, Gibson KE. 2022. Efficacy of Manufacturer Recommendations for the Control of *Salmonella* Typhimurium and *Listeria monocytogenes* in Food Ink Capsules Utilized in 3D Food Printing Systems. *Journal of Food Protection*. doi:[10.1016/j.jfp.2022.100030](https://doi.org/10.1016/j.jfp.2022.100030) | | | | | | |  | | |
| 1. **Hamilton AN**, Chandran S, Baker CA, Gibson, K. E. 2022. Surface inactivation of a SARS-COV-2 surrogate with hypochlorous acid is impacted by surface type, contact time, inoculum matrix, and concentration. *Food and Environmental Virology*. doi: 10.21203/rs.3.rs-2338734/v1 | | | | | | |  | | |
| 1. **Hamilton AN**, Gibson KE. 2022. Transfer Rates of *Salmonella* Typhimurium, *Listeria monocytogenes*, and a Human Norovirus Surrogate Impacted by Macronutrient Composition of Food Inks in 3D Food Printing Systems. *Food Microbiology*. doi: 10.1016/j.fm.2023.104268 | | | | | | |  | | |
| 1. Chandran S, Baker CA, **Hamilton AN,** Dhulappanavar GR, Jones SL, Gibson KE. 2022. Efficacy of Aqueous Ozone for the Inactivation of Foodborne Pathogens on Root Vegetables. *Journal of Food Protection*. [doi: 10.1016/j.jfp.2023.100175](https://doi.org/10.1016/j.jfp.2023.100175) | | | | | | |  | | |
| 1. **Hamilton AN**, Fraser AM, Gibson KE. 2023. Barriers to Implementing Risk Management Practices in Microgreens Growing Operations in the United States: Thematic Analysis of Interviews and Survey Data. *Food Control*. doi: 10.1016/j.foodcont.2023.109836 | | | | | | |  | | |
| 1. **Hamilton AN,** Topalcengiz Z, Gibson KE. 2023. Growing safer greens: Exploring food safety practices and challenges in indoor, soilless production through thematic analysis of Leafy Greens grower interviews. *Journal of Food Protection*. doi: 10.1016/j.jfp.2023.100163 | | | | | | |  | | |
| 1. **Hamilton AN**, Gibson KE,Amalaradjou MA, Callahan CW, Millner PD, Ilic S, Lewis Ivey ML, Shaw A. 2023. Cultivating Food Safety Together: Insights about the Future of Food in the U.S. Controlled Environment Agriculture Sector. *Journal of Food Protection*. doi: 10.1016/j.jfp.2023.100190 | | | | | | |  | | |
| 1. **Hamilton AN**, Mirmahdi RS, Ubeyitogullari A, Romana CK, Baum JI, Gibson KE. 2024. From Bytes to Bites: Advancing the Food Industry with 3D Food Printing. *Comprehensive Reviews in Food Science and Food Safety.* doi: 10.1111/1541-4337.13293 | | | | | | |  | | |
| 1. **Hamilton AN**, Gibson KE. 2024. Impact of Storage Conditions on Risk of *Salmonella enterica* and *Listeria monocytogenes* in Pre- and Post-Printed 3D Food Ink. *Food Control* (submitted, Spring 2024). | | | | | | |  | | |
| 1. **Hamilton AN,** Gibson KE. 2024. Tulane Virus Inactivation in 3D Food Ink Under Various Storage Conditions: A Pre- and Post-Printing Analysis. *Food and Environmental Virology* (submitted, Spring, 2024). | | | | | | |  | | |
| 1. **Hamilton AN**, Jones SL, Baker CA, Dhulappanavar GR, Robinson A, Siepielski A, Liang X, Gibson KE. 2023. Efficacy of Chemical Sanitizers for the Removal of Bacterial Biofilms on Food Processing Surfaces: A Systematic Literature Review and Meta-Analysis (pending submission, Spring 2024). | | | | | | |  | | |
| ONLINE ARTICLES   1. **Hamilton AN**. 2022. Oyster sauce: The Asian condiment adding color and umami to all your favorites. Science Meets Food. Available on <https://sciencemeetsfood.org/oyster-sauce/> 2. **Hamilton AN**. 2022. Shaoxing Wine: Beverage and Marinade and Condiment, Oh My! Science Meets Food. Available on <https://sciencemeetsfood.org/shaoxing-wine/> 3. **Hamilton AN,** Fleming A, Threlfall R. 2022. Crush It Arkansas! Winemaking. University of Arkansas Division of Agriculture Cooperative Extension Office. Available on <https://www.uaex.uada.edu/farm-ranch/crops-commercial-horticulture/horticulture/ar-fruit-veg-nut-update-blog/posts/crush-it-arkansas-wine.aspx> 4. **Hamilton AN**. 2023. Microgreens and Food Safety. Science Meets Food. Available on <https://sciencemeetsfood.org/microgreens/> 5. Threlfall R, Hamilton AN, Fleming A. 2023. Basics of Home Wine Making in Arkansas. University of Arkansas Division of Agriculture Cooperative Extension Office. Available on <https://www.uaex.uada.edu/publications/pdf/FSFCS147.pdf>   REGIONAL AND NATIONAL CONFERENCE PRESENTATIONS | | | | | | |  | | |
| 1. Hamilton AN, Gibson KE. 2023. Preserving Safety: Storage Recommendations for 3D Printed Foods and Food Ink Capsules against *Salmonella enterica* and *Listeria monocytogenes*. Arkansas Association of Food Protection (AAFP), Don Tyson Center for Agricultural Sciences, Fayetteville, AR, Sept 26. 2. Hamilton AN, Gibson KE. 2023. Growing Safer Greens: Exploring Food Safety Practices and Challenges in Indoor, Soilless Production Through Thematic Analysis of Leafy Greens Grower Interviews, Arkansas Association of Food Protection (AAFP), Don Tyson Center for Agricultural Sciences, Fayetteville, AR, Sept 26. | | | | | | |  | | |
| 1. Hamilton AN, Gibson KE. 2022. Determination of Factors Influencing Microbial Food Safety Risks of Additive Manufacturing and 3D Printing of Food: Machine Hygiene. Ozark section of the Institute of Food Technologists (OIFT) and the University of Arkansas Food Science Club Food Research Competition 2022, Don Tyson Center for Agricultural Sciences, Fayetteville, AR, April 19. | | | | | | |  | | |
| 1. Hamilton AN, Gibson KE. 2022. Efficacy of Manufacturer Recommendations for the Control of *Salmonella* Typhimurium and *Listeria monocytogenes* in Food Ink Capsules Utilized in 3D Food Printing Systems. Arkansas Association of Food Protection (AAFP), Fayetteville Town Center, Fayetteville, AR, Sept 13. | | | | | | |  | | |
| **SCHOLARSHIPS, AWARDS, & NOMINATIONS** | | | | | | |  | | |
| 2023 | **Poultry Federation Scholarship for Graduate Students –** Awarded $5,000 for having career goals aligned with the advancement of the poultry industry. | | | | | |  | | |
| 2023 | **Dale Bumpers Distinguished Scholars, Ph.D. Student Nomination** – The purpose of this award is to recognize outstanding students for academic achievements while attending the University of Arkansas. | | | | | |  | | |
| 2022 | **Dale Bumpers Distinguished Scholars, Ph.D. Student Nomination** – The purpose of this award is to recognize outstanding students for academic achievements while attending the University of Arkansas. | | | | | |  | | |
| 2022 | **Philanthropic Educational Organization (PEO) Scholar Award Nomination** –The purpose of this award is to support women in the last two years of their dissertation to allow for international dissemination of results, conference attendance, and to provide financial support during dissertation completion. | | | | | |  | | |
| 2021 – 2025 | **Distinguished Doctoral Fellowship** –The award was earned by having a graduate GPA of at least 3.8/4.0, a combined GRE verbal and quantitative score of at least 308, and a GRE analytical writing score of at least 4.5. Award of $22,000 per year, tuition waiver, and graduate assistantship. | | | | | |  | | |
| 2021 – 2022 | **George Roy Hayes, Jr. Endowed Fellowship** | | | | | |  | | |
| 2015 – 2019 | **Hutton Honors College Notation** – undergraduate students must maintain a GPA ≥3.4 and take 24 honors credits during their principal degree. | | | | | |  | | |
| 2015 – 2019 | **Executive Dean’s List (x8)** –undergraduate students must maintain a GPA of ≥3.7 | | | | | |  | | |
| 2015 – 2019 | **Indiana University Founder’s Scholar (x8)** –undergraduate students must maintain a GPA of ≥3.8 | | | | | |  | | |
| 2015 – 2019 | **Indiana University Provost Scholarship (x4)** | | | | | |  | | |
| 2017 | **Organic Chemistry Course Award** | | | | | |  | | |
| 2015 | **American Legion Family Scholarship** | | | | | |  | | |
| 2015 | **Michael and Shelley Mossburg Scholarship** | | | | | |  | | |
| 2015 | **Pretzel's Scholarship** | | | | | |  | | |
| 2014 | **Rotary Youth Leadership Award** | | | | | |  | | |
| 2013 | **Claes Nobel Educator of Distinction** – Earned for establishing after-school elementary tutoring led by the National Honors Society. | | | | | |  | | |
| **PROFESSIONAL MEMBERSHIPS** | | | | | | |  | | |
| 2022 – present | International Association for Food Protection (IAFP), Member | | | | | |  | | |
| 2022 – present | IAFP Data Management and Analytics Professional Development Group, Member | | | | | |  | | |
| 2022 – present | Institute of Food Technologists, Member | | | | | |  | | |
| 2022 – present | Arkansas Association for Food Protection, Member | | | | | |  | | |
| 2018 – 2019 | Student Conduct Board, Indiana University, Member | | | | | |  | | |
| 2018 – 2019 | Phi Beta Kappa Honor Society, Indiana University, Member – Only about 1% of students are selected based on an exemplary record in academia, undergraduate research, and community service. | | | | | |  | | |
| 2015 – 2019 | Hutton Honors College, Indiana University, Member | | | | | |  | | |
| **SERVICE** | | | | | | |  | |
| 2023 – 2024 | **University of Arkansas Food Science Club, Vice President** – I have transitioned from Garden Director into the role of Vice President of the Food Science Club and become responsible for club organization, membership, and events.   * 2023 Welcome Back BBQ * 2023 Apple Butter Fundraiser Event * 2023 Halloween Event * 2023 Holiday Event | | | | | |
| 2022 – 2023 | **University of Arkansas Food Science Club, Garden Director** – I oversaw and managed the use of the food science department’s garden plots (utilized by approximately 20 people). I also participated in organizing and leading events organized by the club for food science students, and several recruiting events for the food science department. Specific events included:   * 2022 Welcome Back BBQ * 2022 Apple Butter Fundraiser Event * 2022 Halloween Event * 2022 Holiday Event * 2023 Valentine’s Day Event | | | | | |
| 2022 – 2023 | **ExCEL program with F2OCUS (Future of Food: Opportunities and Careers for Undergraduate Students) fellows, Graduate Student Mentor** – I traveled to Little Rock, AR, and completed the University of Arkansas Division of Agriculture ExCEL program at the Vines Center, along with two cohorts of undergraduates and numerous faculty members over the course of three days. I mentored one undergraduate student for the duration of the summer on her individual research project in 2022. | | | | | |
| 2022 – present | **Science Meets Food Blog Writer** – I write a monthly blog post for the Science Meets Food website in order to help educate the community about food science topics. Science Meets Food is the official blog for the Institute of Food Technologists Student Association. | | | | | |
| 2022 | **Mount Sequoyah’s Fenix Youth Refuge Experience (F.Y.R.E.) after school art program, Volunteer** – I served as a volunteer for students ages 12 – 18 who are also a part of the LGBTQ community. I was passionate about this opportunity because it gave students the ability to connect with LGBTQ adults and receive the mentoring I know I would have benefitted from at their age. Conversation topics were broad in nature and included conflict resolution, identity development and realization, managing family dynamics after coming out, and career counseling. | | | | | |
| 2022 | **Arkansas Quality Wine Competition, Organizer and Wine Lab Assistant** – I assisted Dr. Threlfall and Amanda Fleming with the execution of the 2022 Arkansas Quality Wine Competition. This was an all-day event on May 19th, 2022, where over 30 Arkansas wines were evaluated by professional judges from across the US. After judging, all wines had to be tested for 13 attributes associated with quality in order to help winemakers improve their wines. In all, approximately 40 hours were dedicated to this event and lab analysis of the wines. | | | | | |
| 2022 | **Hobbs State Park-Conservation Area, Volunteer** –I participated in the Keep Arkansas Beautiful Commission’s “Great Arkansas Cleanup” at Hobbs State Park by planting native plants, removing invasive species, and leading groups of volunteers under the supervision of Park Interpreter Chris Pistole. | | | | | |
| 2021 – present | **International LGBTQ+ Graduate Student Group, Founder and Coordinator** – On a weekly basis, I coordinate and run a session of Dungeons and Dragons for an international group of LGBTQ+ graduate students using Discord and Roll20 platforms. These sessions provide a mental break from academia and serve as a networking opportunity for graduate students in the queer community. Moreover, the sessions afford students the chance to develop their imagination and empathy, work collaboratively with others to solve problems, and enhance their critical thinking skills; all of which will lead to more successful careers. | | | | | |
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| **BACKGROUND, INTERESTS, AND PHILOSOPHY** | | | | | | |  | | |
| Raised in the heartland of Indiana, a state rich with sprawling cornfields and soybean farms, my upbringing was intertwined with the natural beauty and community spirit that defines this place. Indiana's abundant rivers offered endless opportunities for kayaking and fishing, while its vast trails beckoned for hiking and camping adventures. My childhood was further enriched by the state's thriving 4-H fairs, where local children, including myself, would rear livestock, and our mothers would showcase their culinary and crafting talents. Friday night football games were more than just sporting events; they were community gatherings that reinforced our collective identity and spirit. This environment cultivated not only a deep appreciation for nature and community but also instilled in me the quintessential "Hoosier hospitality" and a resilient, can-do attitude. These core values and experiences continue to shape my personal and professional life, emphasizing the importance of community, perseverance, and the genuine warmth in interactions with others. | | | | | | |  | | |

REFERENCES

Dr. Kristen E. Gibson

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