

# Food Science Scoops

Department Edition



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*This newsletter is prepared by faculty of the Department of Food Science at the University of Arkansas System Division of Agriculture. If you have ideas for stories or individuals to highlight, news or photos to share, or would like to be added to the circulation list, please email Jennifer Acuff ([jcacuff@uark.edu](mailto:jcacuff@uark.edu)).*

## Recent Events



### FDSC Club Valentine's Charcuterie and Floral Arrangement Party

The FDSC Club held a special event before Valentine's Day to bring some friendly cheer to the department! Students, faculty, and staff gathered to make their own floral arrangements and charcuterie boards and play musical Bingo with romantic hits for all ages.



### FDSC Faculty Ranked as Most Cited Worldwide

Four of our incredible faculty members were recently acknowledged as the most cited for their papers in 2023! Additionally, two FDSC faculty (and one former faculty) were ranked in the most-cited list from 1996-2023, proving an incredibly impactful career. Congratulations, Drs. Atungulu, Gibson, Seo, and Wang! [Read more here!](#)



# FDSC Faculty Highlight

*Scott Lafontaine, Ph.D.*

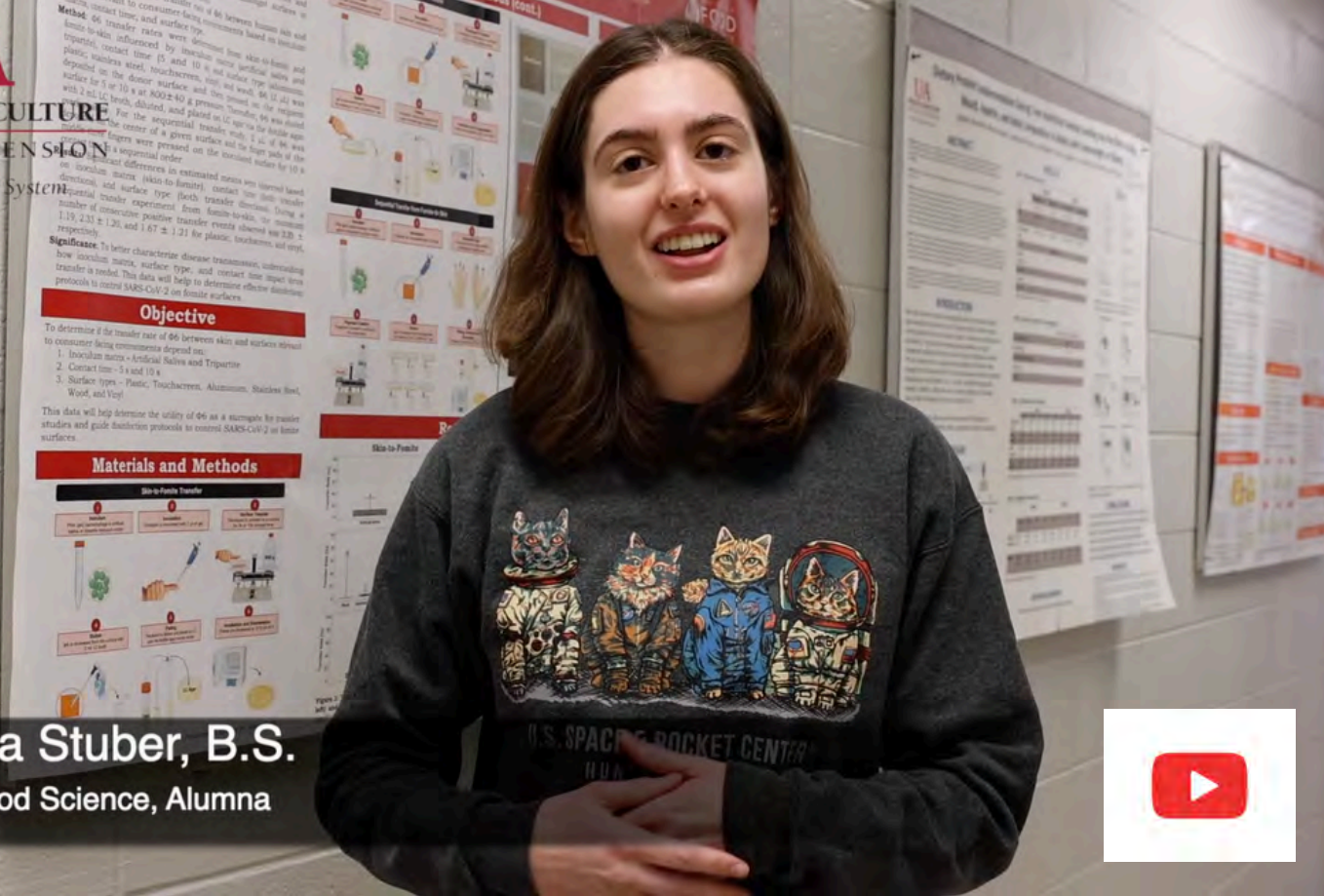
**“AT THE END OF THE DAY, OUR GOAL IS TO NOT JUST PUSH THE BOUNDARIES OF FLAVOR SCIENCE, BUT TO ENSURE THAT GREAT-TASTING FOODS AND BEVERAGES ARE ACCESSIBLE EVERYWHERE.”**

Dr. Scott Lafontaine’s research redefines food science by focusing on flavor innovation and sustainability. “Taste drives what we eat,” he explains. “While food must be nutritious and safe, it is flavor that creates desire and differentiation.” His lab at the University of Arkansas identifies and characterizes flavor molecules to enhance food and beverage quality through advanced analytical techniques. Recently, their group has been working to enhance blackberry breeding for better flavor, screening over 200 blackberry varieties for chemical composition, consumer preference, and genetic profiles. They’ve identified key compounds, like isoamyl alcohol, which imparts banana-like flavors that consumers prefer. “By linking genetics to consumer preference, we aim to accelerate the breeding process for better-tasting blackberries.”

One other major research area is shifting the perception of rice in brewing. “Historically, rice has been unfairly dismissed as a ‘cheap adjunct’ rather than a valuable brewing ingredient,” he says. His team demonstrates that aromatic rice varieties, like ARoma 22, introduce novel creamy and vanilla-like flavors. “This work positions rice as a premium, cost-effective raw ingredient for brewing.” Beyond flavor, his lab investigates rice as a sustainable starch alternative. “The brewing industry faces increasing raw material volatility due to climate change and trade disruptions,” he explains. With rising barley prices and costly gluten-free alternatives, his team evaluates rice’s malting potential. “Rice yields two to three times more per acre than barley, making it a more sustainable option.”

As consumer demand for healthier beverages grows, his lab is improving the flavor and safety of non-alcoholic beer (NAB). “We evaluate specialized yeast strains and hop extracts that impact NAB flavors,” he says. Collaborating with others in the department, his team also assesses NAB safety and quality. “Our goal is to develop NABs that are both scientifically validated for quality and preferred by consumers.” Dr. Lafontaine’s research tackles key industry challenges like the improving NAB flavors, but also studies ingredient volatility, premium flavor demand, and food safety, actively collaborating with industries like Anheuser-Busch InBev and Boston Beer Company to translate scientific insights into real-world applications.

Looking ahead, he sees the future of food science tied to consumer preferences, ingredient functionality, and sustainability. “By leveraging molecular characterization and sensory analysis, we can redefine how crops and raw materials are perceived and utilized,” he states. Ultimately, his passion for flavor science drives his work. “At the end of the day, our goal is not just to push the boundaries of flavor science but to ensure that great-tasting foods and beverages are accessible to all,” he concludes.



**Amanda Stuber, B.S.**  
Dept. of Food Science, Alumna

# FOOD SCIENCE

## *Fun Fact*

## What can you do with a degree in Food Science and Culinary Arts?

Have you ever wondered what you could do with a food science degree with a culinary concentration? Amanda Stuber, a recent alumna of the Department of Food Science, talks about the creativity, imagination, and trend-setting science that these students get to develop and use in their [career in for more!](#)



# FDSC Alumni Highlight

*Brittany White, Ph.D.*

Brittany White's journey into food science began with a fascination for the science of cooking, sparked by watching Alton Brown's Good Eats. "It was fascinating to see how scientific principles could be applied to something so universal and essential: food," she recalls. Initially a chemistry major, everything clicked when she received a brochure from the University of Arkansas Food Science department before her freshman year. "I immediately switched my major to Food Science—and I've never looked back."

During her time in the food science program, White thrived in hands-on experiences, particularly product development competitions. "Competing in product development competitions was an unforgettable highlight," she says. Her team placed second in the Danisco competition, traveling to Scottsdale, Arizona, to accept their award. "It challenged us to think about

every aspect of the food industry, from concept to commercialization." Though her career has been in pet food rather than human food, she credits this foundation in product development as central to her work today. Another defining experience was competing on the IFT College Bowl team, which won the national championship in 2007. "Being part of that team for four years honed my teamwork and problem-solving skills and gave me a deep appreciation for the breadth of food science."

After completing her PhD in Food Science, White started her career with the USDA-ARS in their peanut research lab. She then spent 11 years leading the pet food product development team at Simmons Pet Food before moving to her current role as Vice President of R&D, FSQA, and Regulatory Affairs at Ollie Pets. "It's much broader than when I started in the industry, and my food science education has been invaluable," she says. "From Food Chemistry to Food Microbiology, Food Engineering, and Food Law, I draw on every single class I took during my undergraduate and graduate years."

White sees sustainability and responsible AI use as two of the biggest challenges in the food industry. "Sustainability is a priority at Ollie, where we focus on meaningful, lasting changes like improving packaging, sourcing more sustainable ingredients, and optimizing processes," she explains. AI also holds enormous potential in food science, from predicting demand to enhancing food safety. "At Ollie, we're leveraging AI to better understand consumer behavior and personalize nutrition for pets while ensuring responsible and ethical use."

Her advice for students? "Be open to unexpected opportunities. Your first job might not be exactly what you envisioned, but it could become the foundation for a fulfilling career. Stay curious, seek mentors, and embrace challenges that stretch you. The food industry is vast and ever-evolving, and those who thrive are the ones who remain open to new ideas and experiences."



**"STAY CURIOUS, SEEK MENTORS, AND EMBRACE CHALLENGES THAT STRETCH YOU. THE FOOD INDUSTRY IS VAST AND EVER-EVOLVING, AND THOSE WHO THRIVE ARE THE ONES WHO REMAIN OPEN TO NEW IDEAS AND EXPERIENCES."**

# FDSC Student Highlights

**Lucianna Rico**'s journey into food science was anything but conventional. Originally a biology major with plans for medical school, she realized her true passion lay elsewhere. "Both of my parents were chefs, so I grew up in the kitchen," she says. "After working in the medical field for two years, I kept coming back to what I loved most—food." While transferring to the University of Arkansas, she discovered food science and immediately knew it was the perfect blend of her interests in food, public health, and science.

Despite being in the program for only two years, Rico has made the most of her time, gaining hands-on experience in both industry and research. She spent last summer as a Platform Quality Intern with Conagra Brands in Iowa, an experience that reinforced her confidence in food safety and quality assurance. "I was worried I was underqualified, but I quickly realized my foundation in sanitation, food law, and processing gave me a strong start," she explains. Since then, she has been working as a Research and Development Intern at the Arkansas Food Innovation Center at the Market Center of the Ozarks. "I've loved seeing the difference between large-scale corporate food production and small-scale community-driven innovation," she says.

Her passion for food science extends beyond the classroom. She highlights food processing and production tours as some of her most impactful experiences. "My first apple butter production day was an exciting, hands-on moment where I felt truly connected to the program," she recalls. Looking ahead, Rico hopes to bridge sustainability and food safety in her career, ensuring transparency and innovation in the industry. "Switching my major to food science was the easiest decision I've ever made," she says.

**Francis Torko**'s passion for food science is rooted in a deep concern for public health. "Food is essential to life, but growing up, I heard stories of people falling seriously ill from contaminated food," she shares. "This made me question why something so necessary could become a source of harm." Determined to find solutions, she pursued a degree in Food Science to investigate food safety risks and develop strategies to prevent contamination. "Food safety should never be negotiable," she emphasizes.

Torko's research focuses on evaluating the effectiveness of commercially available foam hand sanitizers against viruses. "My goal is to improve public health guidance on proper sanitizer use to reduce viral pathogens on hands effectively," she explains. This research has challenged her to balance coursework with lab work, enhancing her time management, analytical thinking, and problem-solving skills. "Bridging the gap between theory and practice has been one of the most rewarding aspects of my studies."

To stay informed about industry trends, Torko regularly reads peer-reviewed research and tracks foodborne outbreaks through sources like the CDC and Food Safety News. She encourages students to explore food science with curiosity. "Go for it! Be prepared to learn the fascinating science behind food—it will open your eyes to aspects you never knew existed."

Looking ahead, Torko is committed to improving food safety through enhanced hygiene and sanitation practices. "Hands are a major cause of foodborne viral illnesses," she notes. "By promoting proper hand hygiene, I hope to reduce the risk of pathogen transmission and contribute to a safer food supply for everyone."

*Lucianna Rico ('25)*



*Francis Torko ('25 & '28)*

