# IAFP 2024 OPENING SESSION

#### **SUNDAY, JULY 14**



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### **OPENING SESSION**

#### WELCOME TO IAFP 2024

Tim Jackson, IAFP President

#### **IAFP FOUNDATION**

Gary Acuff, Foundation Chairperson

#### PEANUT PROUD STUDENT SCHOLARSHIP

Presented by: Darlene Cowart, Peanut Proud Shihyu Chuang

#### **TRAVEL AWARDS**

Presented by: Tim Jackson, IAFP President, and Gary Acuff, Foundation Chairperson

#### STUDENT TRAVEL SCHOLARSHIPS

Samantha Bolten Tyler Chandross-Cohen Farid Dewan Jakob Grvniewski Tahirah Johnson Harsimran Kaur Kapoor Sushant Kaushal \*Unii Kim Shenmiao Li Shpresa Musa Esther Oginni Carolina Ortiz Murillo Abbev Pollok Narindra Randriamiarintsoa Lilv Saad Jared Smith LaTaunva Tillman Namratha Valsalan Tamara Walsky So Young Woo

\*Sponsored by: The Korea Association for Food Protection

#### HEALTH OR AGRICULTURAL DEPARTMENT EMPLOYEES IN NORTH AMERICA

Virginia Hamilton Christie Radtke Marie-Eve Rousseau Nassifatou Tittikpina

#### FOOD SAFETY PROFESSIONAL IN A COUNTRY WITH A DEVELOPING ECONOMY

Gloria Arinaitwe Ernest Bonah Suresh Devatkal

#### **FELLOW AWARD**

Presented by: Tim Jackson, IAFP President, and Mark Carter, IAFP President-Elect

> Roger Cook Santos Garcia Julie Jean

#### **IVAN PARKIN LECTURE**

Introduction: Mark Carter, IAFP President-Elect

Lawrence Goodridge Leung Family Professorship in Food Safety University of Guelph & Canadian Research Institute for Food Safety (CRIFS)

Digesting Truth: Navigating Food Safety Education in the Age of Misinformation

#### **CLOSING COMMENTS**

Tim Jackson, IAFP President

#### **CHEESE AND WINE RECEPTION**

7:30 p.m. – 9:30 p.m., Exhibit Hall

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### **IVAN PARKIN LECTURE**



# LAWRENCE GOODRIDGE

Leung Family Professorship in Food Safety University of Guelph & Canadian Research Institute for Food Safety (CRIFS) Guelph, Ontario, Canada

Lawrence D. Goodridge, Ph.D., is a Full Professor and a Canada Research Chair in Foodborne Pathogen Dynamics in the Department of Food Science at the University of Guelph in Ontario, Canada. He is also the Director of Guelph's Canadian Research Institute for Food Safety.

Dr. Goodridge applies genomics to study foodborne bacterial pathogens and antibiotic resistance within a One Health context. Dr. Goodridge's expertise in food safety and public health has led to many academic, government and industrial collaborations in the Caribbean, Europe, Asia, and Africa. In addition to these partnerships, he has also worked internationally with the Food and Agriculture Organization of the United Nations and the World Bank on food safety related initiatives.

Dr. Goodridge joined the International Association for Food Protection (IAFP) in 2003. He has convened many sessions over the years at IAFP Annual Meetings. Dr. Goodridge is a member of the DEI Council and served as the Vice Chair and Chair of the Membership Committee. He received the Elmer Marth Educator Award in 2022, and is a past member of the *Journal of Food Protection (JFP)* Editorial Board.

In addition to his scientific achievements, Dr. Goodridge is an active advocate for diversity and inclusion in academia. He was awarded a North American Colleges and Teachers of Agriculture Charles N. Shepardson Meritorious Teaching Award in 2012. He is the President-Elect of the Canadian Black Scientists Network. His insights regarding the importance of representation and mentorship are invaluable.

#### **IVAN PARKIN**

Dr. Ivan Parkin was a Dairy Extension Specialist at Pennsylvania State University. Dr. Parkin served as the IAFP President in 1955 and received the IAFP Honorary Life Membership Award in 1965.

### **IVAN PARKIN LECTURE ABSTRACT**

#### Digesting Truth: Navigating Food Safety Education in the Age of Misinformation

In the era of instant information and widespread social media, the landscape of food safety education faces unprecedented challenges. For example, misinformation, or false information shared without harmful intent, and disinformation, deliberately spread to deceive, both erode the foundation of evidence-based decision-making. In the realm of science, where complexity and uncertainty are inherent, these practices exploit gaps in public knowledge and understanding, leading to skewed perceptions of risk, the adoption of pseudoscientific beliefs, and resistance to scientific consensus on critical issues like climate change, vaccination, and public health guidelines.

The rapid proliferation of such information through social media and digital platforms magnifies these challenges, allowing falsehoods to spread at unprecedented speed and scale. Combatting these forces requires concerted efforts not only to improve scientific literacy and critical thinking skills among the general public but also to develop more effective communication strategies that can bridge the gap between complex scientific information and accessible, actionable knowledge for the broader population.

This presentation will commence with an exploration of the current state of food safety misinformation, identifying several pervasive myths and the mechanisms by which they spread across digital platforms. By examining case studies, we will shed light on the impact of these falsehoods on consumer behavior and public health. Central to the discussion will be innovative strategies for food safety professionals to effectively communicate scientific truths. This includes leveraging new technologies and social media platforms to disseminate accurate information, as well as engaging with online communities to foster a culture of critical thinking and informed decision-making. Furthermore, the lecture will emphasize the importance of interdisciplinary collaboration among academics, government, and industry professionals in combating misinformation and disinformation. By uniting experts in food science, psychology, technology, and communication, we can develop more effective methods for educating the public and advocating for evidence-based practices.

The lecture will conclude with a call to action for food safety professionals, educators, and communicators to take a proactive stance against misinformation and disinformation. Through collective efforts, we can enhance the public's ability to "digest truth," ensuring a safer and more informed society on the topic of food safety and science in general.

#### **FELLOW AWARD**



#### **ROGER COOK** Wellington, New Zealand

Dr. Roger Cook is a recipient of the 2024 IAFP Fellow Award. Dr. Cook is Director of Food Science and Risk Assessment at New Zealand Food Safety, a branch of the Ministry for Primary Industries, based in Wellington, New Zealand. He is also a Principal Microbiologist, a position he has held since 1995. Dr. Cook's team leads New Zealand's regulatory food safety risk assessment and food composition/labelling initiatives with a research and outreach portfolio to support New Zealand's domestic and export food safety regulations.

Dr. Cook has been an active member of IAFP since 1997 participating in many committees, some as chair, notably the *JFP* Management Committee (1998–2006); the *JFP* Editorial Board (2005–2016), and the Affiliate Council (2005–2009) during which time he founded the New Zealand Association for Food Protection. He has also organized and presented many symposia. Dr. Cook served as IAFP President from 2020–2021 through the COVID pandemic. He received the President's Recognition Award in 2023 and the IAFP President's Lifetime Achievement Award in 2005, and presented the Ivan Parkin Lecture at IAFP 2011.

Dr. Cook has a close working relationship with overseas regulatory authorities and science providers, and is a member of the International Commission on Microbiological Specifications for Foods (ICMSF) and the FAO/WHO JEMRA Working Group on STECs in food. He also represents New Zealand on the Codex Committee on Food Hygiene (CCFH) and on the Steering Committee of the Joint Australia – New Zealand Ministerial Forum on Food Regulation.

#### **FELLOW AWARD**



#### SANTOS GARCIA Nuevo Leon, Mexico

Dr. Santos Garcia is a recipient of the 2024 IAFP Fellow Award. With a career in food microbiology spanning more than 40 years, Dr. Garcia is a professor at the Universidad Autonoma de Nuevo Leon in Mexico, where he coordinates the Graduate Program in Microbiology. His research has focused on epidemiology of foodborne pathogens; antimicrobial resistance; produce and meat safety; and rapid microbial detection methods. He also serves as a consultant for the food industry and health services. He has written and contributed to several book chapters and books that are now used as textbooks or reference books.

Dr. Garcia has served in multiple research, educational, and science dissemination roles in Latin America, the U.S., the European Union, and Asian countries. He served as President of the Mexican Association of Food Science and as President of IAFP's Affiliate, the Mexico Association for Food Protection. He has served on the Management Committee and the Editorial Board of the *Journal of Food Protection, Food Biotechnology, Microbiological Discovery, Frontiers in Nutrition,* and other journals. He has been a member the Mexican Academy of Sciences; the Advisory Committee of the International Foundation for Science (Sweden); the Strategy Group of the Institute of Food Technologists; and other organizations. He is a recipient of the Fellow Award from the Institute of Food Technologists.

Dr. Garcia has been an IAFP Member since 1994. He received the Harry Haverland Citation Award in 2017 and the International Leadership Award in 2013.

#### **FELLOW AWARD**



#### JULIE JEAN Quebec City, Canada

Dr. Julie Jean is a recipient of the 2024 IAFP Fellow Award. Since 2003, Dr. Jean has been a full professor at the Department of Food Science, Université Laval, Quebec City, Canada. She is a regular member of the Université Laval's Institute of Nutrition and Functional Foods (INAF) and leads the food virology laboratory. She currently holds a partnership research chair position on the control of foodborne viruses. Along with her research group, she developed new approaches for the detection, inactivation, and control of pathogens including enteric viruses in food and environmental samples. She has advised more than 50 graduate students and post-doctoral fellows and authored more than 80 scientific publications and book chapters.

Dr. Jean teaches the undergraduate courses, "Food Microbiology" and "Recent Progresses in Microbiological Analysis of Foods," and is involved in various graduate courses. In 2019, she received the prize of excellence from Université Laval for her leadership as a Program Director for the bachelor curriculum in Food Science and Technology. She currently serves as the Program Director for the master and doctorate programs in Food Science.

A Member of IAFP since 2001, Dr. Jean was a recipient in the Developing Scientist competition and has since been involved in the Association as presenter, organizer, and convenor. For 10 years (2010–2019), she served as President of IAFP's Affiliate, the Quebec Association for Food Protection (also known as AQIA – the Association Québécoise pour l'innocuité alimentaire), operating in French. She also served on the IAFP Affiliate Council during the COVID pandemic (2020–2021). She continues to serve as the Affiliate Delegate. In 2016, Dr. Jean was the first Canadian woman to receive the prestigious IAFP Elmer Marth Educator Award for her outstanding contributions as an educator and the advancement of food safety. In 2021–2023, she chaired the IAFP Viral and Parasitic Foodborne Diseases PDG. She currently serves on the IAFP Foundation Committee.

During 2015–2016, while on sabbatical, Dr. Jean contributed to the World Health Organization (WHO), Geneva, Switzerland; Health Canada, Ottawa, Canada; and Nestlé, Lausanne, Switzerland. In 2023, she was among the experts on a Joint FAO/WHO Expert Meeting on viruses in foods.

Dr. Jean received her B.Sc., M.Sc., and Ph.D. in Food Science and Technology, all from the Université Laval, Quebec City. She also completed a post-doctoral fellowship at North Carolina State University in Raleigh.

#### TRAVEL AWARD FOR FOOD SAFETY PROFESSIONAL IN A COUNTRY WITH A DEVELOPING ECONOMY



#### GLORIA ARINAITWE Dairy Development Authority Kampula, Uganda

Ms. Gloria Arinaitwe is a recipient of the 2024 Travel Award. Ms. Arinaitwe is a Senior Inspector in the Department of Regulatory Services for the Dairy Development Authority in Kampula, Uganda. In this role, she manages the application of food safety guidelines and standards in 30 milk-producing districts in Southwest Uganda. In addition, she works as a freelance consultant of food safety, agribusiness, and trade, offering technical assistance to various actors and stakeholders in the food value chains. The technical assistance offered includes training in GHPs, HACCP, and Good Manufacturing Practices. Ms. Arinaitwe has designed training modules and manuals for small-scale processors to enable them to obtain national certifications.

Prior to joining the Dairy Development Authority, Ms. Arinaitwe worked as a Senior Food Safety Consultant with Food Safety Associates Ltd., overseeing and implementing food safety, trade, and agribusiness projects across Eastern and Southern Africa. She has developed residue monitoring plans, evaluated the regulatory impact of food safety bills, and developed early warning and quick response systems for SPS concerns in the Southern African Development Community (SADC) area.

Ms. Arinaitwe graduated from Makerere University in Uganda with both a bachelor's and master's in Food Science and Technology, with a focus on food safety. Her future goal is to obtain a Ph.D. in food safety to work as an advocate and promote food safety in Africa.



#### TRAVEL AWARD FOR FOOD SAFETY PROFESSIONAL IN A COUNTRY WITH A DEVELOPING ECONOMY



#### **ERNEST BONAH** Food and Drugs Authority Tamale, Ghana

Mr. Ernest Bonah is a recipient of the 2024 Travel Award. Mr. Bonah has more than 12 years of international experience in the food industry and research, with expertise in food safety, quality, and regulatory affairs (FSQR), as well as food risk analysis, HACCP, and food safety management systems training. His major research interests include non-destructive detection of microbial foodborne pathogens; food adulteration and authenticity using optical methods (Raman spectroscopy near-infrared spectroscopy and hyperspectral imaging); biosensors (electronic nose, calorimetric sensor arrays); and data fusion strategy, together with machine learning and deep learning approaches. He is an advocate for the use of whole-genome sequencing and metagenomics on food safety management within a One Health framework.

Mr. Bonah holds a B.Sc. in Community Nutrition from the University for Development Studies and post-graduate degrees in Food Quality Management and Food Science and Engineering from the Kwame Nkrumah University of Science and Technology and Jiangsu University. He is a recipient of the prestigious Norman E. Borlaug Fellowship Program.



#### TRAVEL AWARD FOR FOOD SAFETY PROFESSIONAL IN A COUNTRY WITH A DEVELOPING ECONOMY



#### SURESH DEVATKAL Indian Council of Agricultural Research – National Meat Institute Kowkur, Hyderabad, India

Dr. Suresh Devatkal is a recipient of the 2024 Travel Award. Dr. Devatkal is a principal scientist for the Indian Council of Agricultural Research – National Meat Research Institute, Hyderabad, India. He completed his Ph.D. in Livestock Products Technology from the Indian Veterinary Research Institute. He served as Assistant Professor, Senior Scientist, and Principal Scientist in P.A.U. and ICAR-CIPHET, Ludhiana, India. In addition, Dr. Devatkal was a visiting research scholar in the Food Safety Engineering Laboratory at The Ohio State University in Columbus. He has also undergone training on HACCP and thermal processing of meat products at The Ohio State University.

For the last 20 years, Dr. Devatkal has worked on research projects focusing on meat and poultry processing and the quality and safety of fresh and processed meat products. The results of his research projects on the safety and quality of traditional meat products (Haleem) are being adopted as standards by the Indian Food Safety Regulator – FSSAI. Most of his projects are funded by national scientific bodies and the meat and poultry industry.

Dr. Devatkal serves as an expert and advisor to various government agencies working in the fields of agriculture, livestock, food, and nutrition. His current research projects are focused on sensors and AI tools for meat safety, application of higher-pressure processing, ozone, and natural bioactive plant-based preservatives in improving the shelf life and safety of meat and poultry products. In addition, he is a certified food safety trainer and has successfully trained hundreds of meat retailers, street food vendors, and meat industry personnel.





#### VIRGINIA HAMILTON Kentucky Department for Public Health Lexington, Kentucky

Ms. Virginia Hamilton is a recipient of the 2024 Travel Award. Ms. Hamilton began her work in Public Health with the Kentucky Food Safety Branch in 2017, moving to her career following a bachelor's from the University of Kentucky and a master's in English Literature from the University of British Columbia. Earning her REHS certification, she proceeded to oversee various facets of the state food safety program. In 2019, she took on the role of Program Coordinator for the Tattoo/Piercing and Home-Based Food programs, guiding both through regulation re-writes and providing statewide training to local health departments.

In 2020, Ms. Hamilton served as Food Labeling Compliance Specialist, designing an electronic system for manufactured food label reviews and providing regulation interpretation for producers. When Kentucky's Manufactured Foods Regulatory Program Standards (MFRPS) Coordinator retired in 2021, she was promoted into the role and overhauled the paper-based program into a new electronic document control system while successfully maintaining the state's full conformance status through federal audits.

In 2022, Ms. Hamilton accepted a role as Regulatory Quality Assurance Performance Consultant. After a year of development, she is now implementing a new statewide quality assurance system to standardize the delivery of environmental and retail food safety programs at all 61 local health departments across Kentucky. In addition to her work with Kentucky Public Health, she is a proud member of the Association of Food and Drug Officials' Southern affiliate, AFDOSS, currently serving as Board President.





#### CHRISTIE RADTKE

*Minnesota Department of Agriculture* St. Paul, Minnesota

Ms. Christie Radtke is a recipient of the 2024 Travel Award. Ms. Radtke is a laboratory specialist with the Minnesota Department of Agriculture (MDA) Laboratory Services Division in St. Paul in the Microbiology Unit. The Microbiology Unit provides regulatory testing for dairy, food, meat, and animal feed samples for the state of Minnesota. She earned a B.S. in Biology and B.S. in Food Science from the University of Minnesota in Minneapolis.

Ms. Radtke began her career at the Minnesota Department of Health as a media technician. She then transferred to the Agriculture Department as a bacteriologist. During her career with the MDA, she has worked from an entry level laboratory position to a senior analyst and leader within the lab. She has operated the National Antimicrobial Resistance Monitoring System (NARMS) grant project testing for the FDA for five years. This includes collecting the samples from retail establishments through the testing and confirmation in the laboratory for numerous food pathogens such as *Salmonella, Campylobacter, E. coli, Vibrio,* and other organisms.

Ms. Radtke also works on cooperative agreement programs with the FDA and USDA. While collecting samples for numerous laboratory divisions, she has developed an appreciation for the retail side of food safety. During her career, she has participated in numerous outbreak events and is very interested in the process from start to finish.





#### MARIE-EVE ROUSSEAU

*Quebec Ministry of Agriculture, Fisheries, and Food Quebec, Canada* 

Dr. Marie-Eve Rousseau is a recipient of the 2024 Travel Award. Dr. Rousseau is a newlyappointed Strategic Advisor in Food Safety within the Quebec Ministry of Agriculture, Fisheries, and Food. With more than 17 years of experience in both the Quebec and Canadian public sectors and the private industry, her career has largely been dedicated to food safety surveillance, analysis, planning, and risk management.

Dr. Rousseau received her Ph.D. in Chemistry from Laval University in 2007. She began her professional career as a Staff Scientist in the private sector where she developed useful problem solving skills. She followed that with a brief stint as a chemist at the Radioprotection Bureau at Health Canada, where she contributed to a better understanding of the human exposure to low level radioactivity.

At the end of 2009, Dr. Rousseau joined the provincial public sector where she acted as a team leader and analyst in developing innovative approaches for the analysis of persistent organic pollutants in food matrices. In 2015, she added the surveillance of pesticides residues to her expertise. After acquiring relevent experience in planning surveillance programs up until 2019, she took on a new challenge by getting involved in risk management.

Dr. Rousseau's current mandate aims at developing a provincial food safety network, which will foster collaboration and optimize prevention, surveillance, and control measures to manage health risks in the bio-food chain.





NASSIFATOU KOKO TITTIKPINA Connecticut Agricultural Experiment Station New Haven, Connecticut

Dr. Nassifatou Koko Tittikpina is a recipient of the 2024 Travel Award. Dr. Tittikpina is a scientist for the Connecticut Agricultural Experiment Station (CAES) in the Department of Analytical Chemistry, joining in January 2023. She worked as a researcher and lecturer in analytical chemistry and bromatology after receiving a Ph.D. in Analytical Chemistry and Natural Sciences, both at the University of Saarland (Germany) and the University of Lorraine (France) in 2017.

At CAES, Dr. Tittikpina has a dual role involving research and regulatory activities. Her research project is on the impact of wildfire-derived nanoparticles on food safety. Currently, she is specifically assessing the interaction of contaminants from wildfire particles, namely polycyclic aromatic hydrocarbons (PAHs), with crops when they are deposited on leaf surfaces. For her regulatory work, she is involved in the FDA-funded Laboratory Flexible Funding Model (LFFM) programs on the analysis of human and animal foods for toxic/ foreign substances, including heavy metals, mycotoxins, and pesticides. As part of the LFFM program, she is currently working on the analysis of Vitamin B1 in animal feed using the AOAC 2015.14 method with the goal of expanding the matrix to include cat and dog food.





#### SAMANTHA BOLTEN Cornell University Ithaca, New York

Dr. Samantha Bolten recently received her Ph.D. in Food Science and Technology from Cornell University, Ithaca, New York. Before coming to Cornell, Dr. Bolten received her B.S. in Microbiology from the University of Maryland, College Park, and worked as a research lab technician at the United States Department of Agriculture's Agricultural Research Service (USDA-ARS) for four years.

Dr. Bolten's research at Cornell primarily focuses on investigating strategies to improve *Listeria* control in dairy and fresh produce supply chains. To this end, she has published three first author manuscripts that leverage both classical culture-based and molecular methods (e.g., whole genome sequencing) to investigate factors that contribute to *Listeria monocytogenes* persistence and sanitizer tolerance in food packing/processing environment settings. In addition to research, Dr. Bolten has worked with more than 20 food production facilities during her time at Cornell, where she has helped facility personnel develop, implement, revise, and validate their environmental monitoring programs. Moreover, she's been able to lend her expertise in *Listeria* environmental sampling towards supporting local outbreak investigations and helping food facilities appropriately respond to *Listeria*-associated food recalls.

Dr. Bolten is honored to receive the IAFP Student Travel Scholarship. She looks forward to learning about current food safety research trends, and establishing connections with key food safety professionals to explore current career opportunities in food safety.





**TYLER CHANDROSS-COHEN** *The Pennsylvania State University* State College, Pennsylvania

Tyler Chandross-Cohen is a Ph.D. candidate in the Department of Food Science at The Pennsylvania State University in State College, under the mentorship of Dr. Jasna Kovac.

Mr. Chandross-Cohen also earned his B.S. in Food Science with a minor in microbiology at Penn State. Mr. Chandross-Cohen was born and raised in Somerset, New Jersey, where his two scientist parents encouraged him to investigate the unknown at an early age.

During his undergraduate freshman year, Mr. Chandross-Cohen became involved with undergraduate research where he investigated the safety of wine in the presence of spotted lanternflies. This experience ultimately led him during his junior year to join Dr. Kovac's lab in the Department of Food Science studying the interaction between *Listeria monocytogenes* and lactic acid bacteria in dairy environments. After graduation, he remained at Penn State to further study *Bacillus cereus* in the Kovac lab, where his research has focused on better understanding and predicting the virulence potential of *B. cereus* by utilizing genotypic and phenotypic data.

Mr. Chandross-Cohen is also extremely passionate about undergraduate research and teaching food safety and microbiology. During his time as a Ph.D. candidate, he has mentored four undergraduate students and was a teaching assistant for a food microbiology course during the fall of 2023. He is also the active President of the Penn State Chapter of Phi Tau Sigma and Treasurer of IAFP's Student Professional Development Group where he enjoys planning engaging events and fundraising throughout the year.

Mr. Chandross-Cohen is thrilled and honored to receive the 2024 Student Travel Scholarship. After attending the 2023 Annual Meeting for the first time, he is excited to attend this year's meeting to present his research and network with experts in the food safety field.



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**FARID DEWAN** *Bangladesh Agricultural University* Mymensingh, Bangladesh

Md. Farid Dewan is a student in the Feed the Future Innovation Lab for Food Safety (FSIL), managed by Purdue University and Cornell University, and is pursuing a Ph.D. at Bangladesh Agricultural University (BAU) under the co-supervision of Dr. Madan Mohan Dey. Md. Farid is also an Assistant Professor in the Department of Economics of Noakhali Science and Technology University (NSTU), Bangladesh. He received his B.Sc. in Agricultural Economics and M.Sc. in Agribusiness and Marketing from BAU.

Md. Farid joined FSIL in 2021 and is currently conducting his Ph.D. research, which is financially supported by the USAID-funded FSIL project 'Enhancing Food Safety of Fish and Chicken Value Chains of Bangladesh.' His research focuses on two main aspects: assessing fish value chain actors' existing knowledge, attitude, and practices (KAP), developing need-based training modules, and suggesting the intervention arena for policymakers; and eliciting how much premium the consumers are willing to pay (WTP) for safer fish produced following Good Aquaculture Practices (GAP) than the conventional wet market fish through experimental auction approach.

Md. Farid is passionate about being a researcher in the sustainable food safety system, incorporating economic principles, theories, and models to address different food safety issues. In 2023, he was awarded the FSIL scholarship to attend IAFP 2023 in Ontario, Canada, as an international student. He received full-funded sponsorship from FSIL to participate in the 17th Dubai International Food Safety Conference in 2023.

Md. Farid is grateful for the opportunity to attend IAFP 2024 and looks forward to networking with attendees in academia, industry, and government to learn about new food science developments.

AFP OUNDATION

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JAKOB GRYNIEWSKI University of Wisconsin – Madison Madison, Wisconsin

Jakob Gryniewski is an undergraduate student in the College of Agriculture and Life Sciences at the University of Wisconsin – Madison in Madison. Mr. Gryniewski is pursuing dual degrees in Biochemistry and Microbiology.

Mr. Gryniewski's interests regarding pathogens combined with a background in microbiology led him to the Applied Food Safety Laboratory under the supervision of Dr. Kristin Schill and Dr. Kathleen Glass. There, he developed a passion for food safety, contributing to numerous projects involving food products and their relationship with foodborne pathogens. The increased interest drove him to investigate his own project as a researcher for the Summer Scholar Program at the Food Research Institute in Madison. The project entailed exploring the antimicrobial compounds produced in coffee extracts as alternative, clean-label antimicrobials. Dark and light roast coffee beans are utilized through a hot and cold extraction process to produce the coffee extracts. Mr. Gryniewski continues to examine the relationship between the coffee extracts against vegetative pathogens with aims to evaluate the antimicrobial effects against spore-forming bacteria, namely *C. botulinum*. After graduation, he intends to remain at the Applied Food Safety Laboratory while working on his current research.

Mr. Gryniewski is extremely honored to be awarded the 2024 Student Travel Scholarship. He is looking forward to attending the conference to collaborate with many peers who share his passion for food safety while engaging in important topics.





#### **TAHIRAH JOHNSON** *University of Maryland Eastern Shore* Princess Anne, Maryland

Tahirah Johnson graduated from Morgan State University (MSU) in Baltimore, Maryland, with a Bachelor of Science in Nutritional Science in 2018. At MSU, Ms. Johnson discovered her love for food science and decided to pursue Food Microbiology by beginning her master's in Food and Agricultural Sciences at the University of Maryland Eastern Shore in Fall 2019.

Ms. Johnson is currently a Ph.D. candidate and is collaborating with Dr. Salina Parveen on her dissertation project titled "Prevalence, Antibiotic Resistance, Whole Genome Sequencing and Control of *Shewanella* spp. in Oysters (*Crassostrea virginica*) and Seawater collected from the Mid-Atlantic Region."





HARSIMRAN KAUR KAPOOR University of Georgia Athens, Georgia

Harsimran Kaur Kapoor is a Ph.D. candidate in Dr. Abhinav Mishra's laboratory at the University of Georgia in Athens. A native of India, Ms. Kapoor earned her bachelor's in Agriculture from Punjab Agricultural University and her master's in Plant Sciences from Texas Tech University.

Ms. Kapoor joined Dr. Mishra's lab in the fall of 2022 and focused her research on "Modeling the fate of enteric pathogens during production and storage of fresh produce." She specifically aims to address some of the research gaps during pre-harvest and postharvest environments by moving along the path of prediction of dependence of bacterial lag phase duration, modeling the effect of pre-inoculation temperature history on regrowth lag time of bacteria in the leafy greens.

Ms. Kapoor is also working in collaboration with the CONTACT Produce Safety Research team to identify several spatiotemporal, agricultural, and weather factors that influence the survival of *E. coli* in the soil and its transfer to Vidalia onions growing in the field. Additionally, she is working in collaboration with the Specialty Crop Multi-State Program (SCMP) grant team to characterize the meteorological variables that play an essential role in the spread of *Salmonella* and STEC bioaerosols from poultry and cattle operations adjoining agricultural lands of the produce in Alabama, Florida, and Georgia.

Ms. Kapoor is genuinely honored to receive the 2024 Student Travel Scholarship, granting her the opportunity to attend IAFP 2024. She eagerly anticipates gaining insights into the latest research and innovations. She looks forward to sharing her research, expanding her professional network, and connecting with colleagues, researchers, and practitioners who share a common passion for food safety.

AFP

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SUSHANT KAUSHAL National Pingtung University of Science and Technology Pingtung, Taiwan

Sushant Kaushal is a dedicated Ph.D. candidate in the Department of Tropical Agriculture and International Cooperation (DTAIC) at the National Pingtung University of Science and Technology, Pingtung, Taiwan, under the guidance of Dr. Ho-Hsien Chen in the Food Pilot Laboratory. As a master's student in biotechnology, Mr. Kaushal received training in several food industries, where he gained knowledge of GMP implementation and food safety methods. These experiences provided him with practical insights into the challenges and opportunities within the realm of food science and food safety.

Mr. Kaushal's current research is focused on cutting-edge research that uses an Alpowered electronic nose device coupled with machine learning methods to address the issue of geographical discrimination in oolong tea. His research pursuits are driven by a passion for food characterization and a strong commitment to combating food fraud. Moreover, he is also determined to identify various volatile compounds responsible for individual aromas, which will help to differentiate between fake and genuine oolong tea. This would significantly contribute to the fields of food science and food safety, particularly in ensuring the authenticity of oolong tea.

Attending the prestigious IAFP 2024 will not only provide Mr. Kaushal with a platform to learn and exchange research knowledge in his field, but will also help him develop his career as a successful researcher in food science and food safety. He feels deeply privileged to be awarded the Student Travel Scholarship this year, providing him the opportunity to participate in the largest community of food safety experts globally.



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UNJI KIM Kookmin University Seoul, South Korea

Unji Kim is a Ph.D. candidate in the Laboratory of Food Safety and Microbiology at Kookmin University in Seoul, South Korea, under the direction of Professor Se-Wook Oh. Ms. Kim obtained both her bachelor's and master's degrees in Food Science and Biotechnology at Kookmin University.

Ms. Kim's current research focus is on characterization of multi-species biofilm and rapid detection of foodborne pathogens. Specifically, she is investigating the bacterial interactions within the multi-species biofilm, the potential for antimicrobial resistance among multi-species biofilms, and the cross-contamination induced by multi-species biofilms. In terms of rapid detection, she is currently investigating the isothermal amplification method coupled with CRISPR/Cas12a to specifically detect the foodborne pathogens without false-positive results. She has also developed rapid enrichment broths for six different foodborne pathogens for the rapid detection of foodborne pathogens.

Ms. Kim received this year's Student Travel Scholarship under a sponsorship from IAFP's Affiliate, the Korea Association for Food Protection. She is passionate about ensuring food safety for public health by removing biofilms and rapidly detecting the small amounts of foodborne pathogens present in both food and food contact surfaces. She is honored to be awarded the 2024 Student Travel Scholarship and looks forward to attending IAFP 2024 to present her research and gain knowledge from global professionals.



#### SHENMIAO (IVY) LI McGill University Montreal, Canada

Shenmiao (Ivy) Li is a Ph.D. candidate in Food Science at McGill University in Montreal, Canada, under the supervision of Dr. Xiaonan Lu. Ms. Li completed both her B.Sc. and M.Sc. in Food Science at the University of British Columbia in Canada, where her master's research primarily focused on exploring the potential of natural compounds to disrupt the biofilm formation of *Campylobacter jejuni*, a prevalent foodborne pathogen.

Upon graduation, Ms. Li continued her doctoral studies in the same research group, relocating to McGill University in 2020. Her current research investigates the role of food-related environment in promoting dormant *C. jejuni* and how this dormancy contributes to the survival of the pathogen during food processing and storage. Her research highlights the public health risks posed by dormant bacteria, which exhibit high tolerance to both harsh environments and antibiotics. Utilizing advanced techniques like bulk and single-cell RNA sequencing, as well as machine learning, her project aims to elucidate the survival tactics of this foodborne pathogen in the agri-food system, which will identify potential targets for innovative control strategies.

Ms. Li has actively engaged with IAFP, presenting her research at several Annual Meetings and contributing to its affiliations. She served as Secretary and Student Coordinator for the British Columbia Food Protection Association (BCFPA) during her master's studies and currently serves as the Student Chair for the Chinese Association for Food Protection in North America (CAFPNA).

Honored with this year's Student Travel Scholarship, Ms. Li is keenly looking forward to enhancing her knowledge in food safety and networking with global experts in the field.



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#### SHPRESA MUSA Karlsruhe Institute of Technology Karlsruhe, Germany

Shpresa Musa is a Ph.D. candidate in the Department of Bioactive and Functional Food Chemistry at Karlsruhe Institute of Technology in Germany, under the guidance of Dr. Katharina Scherf. She received her bachelor's at the University of Mitrovica in Kosovo and her master's at the University of Nebraska–Lincoln in Food Science and Technology.

For her master's thesis, Ms. Musa focused on exploring potential technologies and industry interventions aimed at enhancing the safety and quality of wheat and wheat-based products. Her research specifically investigated the impact of steam in the tempering process of wheat prior to milling, focusing on its potential to improve safety without compromising the functionality of the final flour. Additionally, during her time in Nebraska, Ms. Musa was a member of the food microbiology lab, where she acquired valuable insights into food safety protocols, risk assessment, and quality control measures. During that time, she obtained certifications related to food safety such as HACCP and Food Safety Preventive Controls Alliance for Human Food.

Her current research is focused on the reduction of acrylamide content in cereal products via systematic use of asparaginases and antioxidants. Given that acrylamide (classified as probably carcinogenic) remains a significant safety concern, immediate mitigation strategies are crucial to help food producers comply with European regulations. Her focus lies in exploring various approaches to find the most cost-effective solutions for the industry while maintaining high-quality standards in the final product and achieving the highest level of safety for consumers.

Ms. Musa is also a member of the ACRYRED COST action (CA21149), whose aim is to understand the potential for mitigating acrylamide formation in cereal-based foods to enhance the safety. She also conducted a research stay during her Ph.D. at Rothamsted Research in the UK, working in Professor Nigel Halford's lab, where her focus was on analyzing the relationship between asparagine and acrylamide formation in CRISPR-edited wheat.

Ms. Musa is honored to have been awarded the 2024 Student Travel Scholarship and is enthusiastic about continuing her work in advancing food safety for consumers worldwide. She looks forward to networking with food safety experts from academia and industry, further enriching her food safety career endeavors.



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**ESTHER OGINNI** *The University of Texas Rio Grande Valley* Edinburg, Texas

Esther Oginni is an M.Sc. candidate in Sustainable Agriculture at The University of Texas Rio Grande Valley in Edinburg. She earned her B.Sc. in Animal Science from the University of Ibadan in Nigeria, where her research focused on enhancing broiler chicken growth, skin pigmentation, and nutrition using natural pigments. Her current research revolves around the use of the probiotic *Lactobacillus rhamnosus* and its metabolites to combat major foodborne pathogens.

Ms. Oginni is a committed researcher with a lifelong dedication to ensuring food safety and advancing sustainable agriculture. She has conducted research to investigate the impacts of foodborne outbreaks on low-income communities. Ms. Oginni's work has been recognized through multiple fellowships and travel awards, acknowledging her promising contributions to the field. Her research interests span food safety, microbial interactions, sustainable agriculture practices, and the application of beneficial lactic acid bacteria to mitigate the risks of foodborne illnesses.

Driven by a profound curiosity about pathogen behavior in diverse environments, Ms. Oginni aims to integrate innovative interventions such as probiotics and bacteriophages into agriculture and the food industry to enhance safety and sustainability.

Attending the Annual Meeting is a significant opportunity, and Ms. Oginni is thrilled to have received this Student Travel Scholarship. IAFP 2024 provides an invaluable chance to acquire insights that foster both academic and career advancement. Moreover, it serves as a platform to connect with professionals, experts, and peers in the field of food protection, facilitating networking and collaboration.



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#### **CAROLINA ORTIZ-MURILLO** *Universidad Autonoma de Nuevo Leon* Monterrey, Mexico

Carolina Ortiz-Murillo is an undergraduate student in Microbiology at the Facultad de Ciencias Biologicas of the Universidad Autonoma de Nuevo Leon in Monterrey, México. Under the supervision of Drs. Norma Heredia and Santos García, she joined the Laboratory of Biochemistry and Microbial Genetics (LABGEM) as a volunteer, driven by her desire to learn more about basic techniques in microbiology. As time went by, she became immersed in the world of food safety and how important it is, and learned about molecular biology techniques as a tool for research in microbiology.

Ms. Ortiz-Murillo's current research concerns the influence of antibiotics on the virulence of foodborne pathogens. She studies how low concentrations of ampicillin increase the virulence *E. coli* 0104:H4. She seeks to provide more information to understand the role of continuous antibiotic use in the food industry and how it affects the survival and virulence of pathogenic bacteria. Ultimately, she is interested in reducing the number of foodborne illnesses and providing information to properly treat these illnesses.

Ms. Ortiz-Murillo feels very honored to be selected for a travel scholarship to attend the Annual Meeting and take advantage of this opportunity to enrich her knowledge and apply it to her promising career in food safety.





**ABBEY POLLOK** University of Georgia Athens, Georgia

Abbey Pollok is a first-year master's student and graduate research assistant in the Food Science and Technology Department at the University of Georgia (UGA) in Athens. Ms. Pollock earned her B.Sc. in Food Science and Technology from Texas A&M University in College Station. She has worked closely with food safety during her entire undergraduate and graduate studies.

Before enrolling at UGA, Ms. Pollock worked with Cargill, Inc. in their Food Safety, Quality, and Regulatory Department in a Ready-to-Eat facility to gain essential industry experience. She also spent four years in the lab as an undergraduate researcher in the Food Microbiology, Meat Sciences, and Animal Science Departments at Texas A&M University. Some of her undergraduate research projects include "Analysis of a *Salmonella* cocktail in Cumin Seeds after Electron Beam Irradiation Lethal Dosage Treatment," with Dr. Suresh Pillai; and "Comparing Reductions in *Salmonella enterica* with Non-Pathogenic *Salmonella* Surrogates in a Fermented and Dried Sausage for In-Plant Safety Validation," with Dr. Matthew Taylor.

Ms. Pollock is currently a graduate research assistant with Dr. Govindaraj Dev Kumar at the University of Georgia Center for Food Safety. Her master's thesis project focuses on the potential bioindicators for foodborne pathogens in soil following poultry litter amendments.

Ms. Pollock is very passionate about the applied research of food safety and the endless capability it has to reduce the on-going issues of food insecurity. Following graduation, she would like to continue her career towards providing research efforts for communities that are non-developing and less proficient in environmental resources that may depend on annual crop and livestock yield to survive.



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#### NARINDRA RANDRIAMIARINTSOA Michigan State University East Lansing, Michigan

Narindra Randriamiarintsoa is a Ph.D. student in Biosystems Engineering at Michigan State University (MSU) in East Lansing, under the supervision of Dr. Bradley Marks. She also received her undergraduate and master's degrees in the same program. Ms. Randriamiarintsoa's passion for food safety stemmed from her experience growing up on a family farm in Madagascar where food safety was often overlooked. For this reason, one of her career goals is to pioneer multidisciplinary food safety research and innovations globally, especially in developing countries including Sub-Saharan Africa.

Ms. Randriamiarintsoa's current doctoral research focuses on *Salmonella* inactivation modeling in fruit drying, such as apples, accounting for the simultaneous dynamic change of moisture and temperature of the product. Her goal is to estimate optimal parameters that would ensure sufficient pathogen control required by the FSMA Preventative Controls Rules. As part of her research, Ms. Randriamiarintsoa evaluates factors affecting *Salmonella* inactivation during convective drying of apples based on a wide range of industry parameters, including temperature and air velocity. She also incorporates *Salmonella* inactivation targets to produce safe dried fruits. Her current research will directly benefit the fruit drying industry and ultimately consumers of dried fruit.

Outside of research, Ms. Randriamiarintsoa is actively engaged with the Biosystems Engineering graduate student association at MSU, serving as the current president and former DEI representative. She is also involved internationally in the Montpellier Process in France on pooling collective intelligence for global sustainable food systems, in which food safety is an important topic.

Ms. Randriamiarintsoa is honored to receive this year's Student Travel Scholarship. Attending IAFP 2024 will be a valuable opportunity, not only to enrich her professional and research experience through scientific exchange, but also to form meaningful connections that could lead to future collaborations.





LILY SAAD University of Massachusetts Amherst Amherst, Massachusetts

Lily Saad is a fourth-year undergraduate student pursuing dual degrees in Food Science and Nutrition at the University of Massachusetts Amherst in Amherst. Ms. Saad is currently conducting research in Dr. Matthew Moore's laboratory in the Department of Food Science. She discovered her interest in Food Science and Nutrition in high school when taking AP Environmental Science. She is interested in the impact of current food systems and food safety on public health and human nutrition.

Ms. Saad is currently working on a project with Dr. Moore that applies to environmental virology. Her research focuses on assessing the potential of Deep Eutectic Solvents (DESs) to capture and concentrate human Noroviruses, aiming to address the challenge of detecting viral contamination in food, which often occurs at minimal levels. There is a need for advancements in virus detection and monitoring utilizing novel technologies. This project is in collaboration with research labs at Iowa State University, and she is grateful to have had the opportunity to work with and learn from researchers from other institutions. Ms. Saad gives special thanks to Ph.D. student, Sloane Stoufer, for her assistance and guidance throughout the project.

Aside from research, Ms. Saad is the President of the UMass Food Science Club, is an active member of the Food Science Department Recruiting Committee, and is a peer advisor. After graduation, she will complete a master's degree at UMass Amherst in Food Science.

Ms. Saad is very appreciative for the opportunity to attend IAFP 2024 as a recipient of the Student Travel Scholarship. She looks forwards to networking with attendees in academia, government, and industry.

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JARED SMITH University of Georgia Athens, Georgia

Jared Smith is a fourth-year Ph.D. candidate in the Department of Microbiology at the University of Georgia in Athens, under the direction of Dr. Nikki Shariat. Mr. Smith received his B.S. in Biological Sciences with a concentration in Microbiology at the University of Tennessee at Knoxville under the direction of Dr. Elizabeth Fozo.

Mr. Smith's current research focuses on the transmission and diversity of *Salmonella* serovars within food production and the environment, including surface water, wild birds, produce, and cattle. The purpose of this research is to identify potential contamination points within production and external factors that increase or decrease the likelihood of *Salmonella* within these systems. These projects have shown him the importance of food safety research, and he intends to pursue a career in continuing to mitigate bacterial foodborne illness.

Due to the collaborations within groups affiliated with IAFP, i.e., academic extension, FDA, USDA, and the CDC, Mr. Smith has had the opportunity to explore the variety of careers and research available in food safety and is eager to continue these conversations.

Mr. Smith is extremely grateful and honored to receive a Student Travel Scholarship to attend IAFP 2024 and present his research. He is excited to network with researchers in academia, industry, and government at this year's event and learn about cutting-edge research performed in food safety.





**LATAUNYA TILLMAN** *University of Florida* Gainesville, Florida

LaTaunya Tillman is a Ph.D. student in Dr. Michelle Danyluk's laboratory at the University of Florida (UF) in Gainesville, where she previously completed an M.Sc. in 2023. She received a dual bachelor's in biological anthropology and biology from Appalachian State University in 2017.

Ms. Tillman began her food safety career in 2017 when she was hired as the U.S. and Canada East Coast Food Safety Representative at Driscoll's. In this role, she conducted pre-audits for numerous GAP, GMP, and HACCP schemes on affiliated farms. She also assisted growers in developing operation and commodity-specific food safety management systems and programs. During this time, she participated in the International Fresh Produce Association (IFPA) Produce Safety Immersion Program, which focused on building technical skills, critical thinking, and leadership in food safety. Her interest in food safety research began during the immersion program and a collaboration with the University of Florida to help address food safety concerns regarding the use of surface water for strawberry frost protection.

While at the University of Florida, Ms. Tillman has participated in the 3-A SSI Education Program Annual Meeting and the FMI SQF Conference and presented the results of her master's work on sanitizer effectiveness to decrease foodborne pathogen populations in agricultural water at four scientific conferences, receiving second place at the 2023 Graduate Poster Competition within her unit at UF. She is a founder of the UF Food Science Graduate Student Association and the recipient of the 2023 UF College of Agricultural and Life Sciences Dean's Fellowship Award.

Ms. Tillman is honored to be a recipient of the 2024 Student Travel Scholarship. She looks forward to interacting with industry professionals and other students as well as learning about current food microbiological research. She would also like to express gratitude for the support and guidance of her mentors.



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NAMRATHA VALSALAN Kerala Veterinary and Animal Sciences University Kerala, India

Namratha Valsalan is a Ph.D. candidate at Kerala Veterinary and Animal Sciences University, Faculty of Livestock Products Technology, in Kerala, India, under the guidance of Dr. Kavitha Rajagopal. Dr. Valsalan is a veterinary doctor who is passionate about food safety with a strong background in meat and milk technology.

Dr. Valsalan's fascination with food safety began while working on thermal processing postgraduation, where she developed shelf-stable chicken biriyani, which emphasized the way in which the deliciousness of a food was maintained without affecting its integrity. Currently, her doctoral research is on the meat quality of indigenous chicken reared under a free-range system and developing innovative products from the meat. The study targets to shed light on sustainable meat production practices without compromising food quality, thereby helping traditional farmers and entrepreneurs to adopt better practices in raising and processing the chicken. She also collaborated with the Department of General Education, Government of Kerala, to promote awareness on food safety in livestock products.

Dr. Valsalan is honored and grateful to be awarded the Student Travel Scholarship and is excited to attend IAFP 2024. She looks forward to networking with food safety experts and is sure that this travel scholarship will benefit in aiding her professional development.





TAMARA WALSKY Cornell University Ithaca, New York

Tamara (Tammy) Walsky is a Ph.D. student in Food Science and Technology at Cornell University in Ithaca, New York, in the lab of Dr. Martin Wiedmann. Ms. Walsky received a B.S. in Biological Sciences and a B.S. in Environmental Science and Technology from the University of Maryland, where she conducted research in the soil microbial ecology and fruit pathology labs. Ms. Walsky also received an M.S. in Water Resource Sciences at the University of Minnesota, researching microbial water quality in stormwater reuse systems. She previously worked as an agricultural educator in an HIV diagnostic laboratory and conducted wastewater epidemiology research at USFDA-CFSAN.

Since arriving at Cornell, Ms. Walsky's research focuses on utilizing amplicon sequencing to chart how bacterial and fungal communities on baby spinach change over shelf life, bettering our understanding of how shifts in microbial populations over shelf life may drive spoilage. This data will inform the development of a model to better estimate shelf life of leafy greens. She is leveraging her water quality background to analyze the bacterial communities of water from controlled environmental agriculture (CEA) ponds and assess survival of *E. coli, Listeria monocytogenes,* and *Salmonella* in CEA water. She also co-organized an IAFP webinar on the impacts, practices, and knowledge gaps around flooding of agricultural fields, which is scheduled for later in 2024. She volunteers with the Food Science Community Outreach Club, Cornell Graduate Students United, Cooperative Extension Master Gardeners, and teaches a spin class with University Group Fitness.

Ms. Walsky is honored to receive the IAFP Student Travel Scholarship. She looks forward to receiving feedback on her research, networking with conference attendees (including with potential users of the aforementioned shelf-life model!) and gaining inspiration for future research, particularly with regard to the impacts of climate change on food safety.



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**SO YOUNG WOO** *Chung-Ang University* Seoul, South Korea

So Young Woo is a Ph.D. candidate in the Food Toxicology Laboratory at Chung-Ang University in Seoul, South Korea, under the direction of Professor Hyang Sook Chun. Ms. Woo obtained her bachelor's in Food Science and Engineering and master's in Food Chemistry from Chung-Ang University.

Ms. Woo's master's research focused on developing analytical methods to simultaneously determine multi-mycotoxin profiling using LC-MS/MS and risk assessment in traditional fermented soybean foods. Her current research focuses on the development of a preventive safety management method for aflatoxin contamination during the manufacturing of Korean traditional fermented soybean paste by introducing the "back-slopping" technique in a process in which the fermented soybean is susceptible to infection by aflatoxigenic fungi. This approach allows the non-aflatoxigenic fungal community to be well-adopted in the early stages of fermentation, thereby increasing fungal diversity, which was confirmed by high-throughput sequencing analysis. The developed reduction method could potentially reduce the health risk associated with aflatoxin exposures and the economic loss caused by aflatoxin contamination.

Ms. Woo is truly honored to be awarded the Student Travel Scholarship to participate at IAFP 2024, and is looking forward to learning innovative research findings, networking with experts for collaborations, and sharing various opinions with food safety professionals in the field.



### **PEANUT PROUD STUDENT SCHOLARSHIP**



#### SHIHYU CHUANG University of Massachusetts Amherst Amherst, Massachusetts

The Peanut Proud Student Scholarship Award provides a \$2,000 academic scholarship and travel funding for a U.S. student in the field of food microbiology – specifically in the area of peanuts and peanut butter food safety – to attend the Annual Meeting. Peanut Proud is a nonprofit industry organization based in Georgia.

Shihyu Chuang is a Ph.D. candidate in Food Science at the University of Massachusetts Amherst, under the direction of Dr. Lynne McLandsborough. Mr. Chuang earned a B.S. in Nutritional Science from Fu Jen Catholic University, and an M.S. in Food Science and Technology from National Taiwan University, during which time he visited the Eastern Regional Research Center, Agricultural Research Service, U.S. Department of Agriculture for food safety research emphasizing upon predictive microbiology.

Mr. Chuang's current research explores the use of nonpolar solvents as a novel delivery system for undissociated organic acids for dry cleaning and sanitation of low-moisture food production machinery, such as is found in peanut butter and chocolate facilities. Formulated antimicrobial oil was found efficacious against planktonic and biofilm-associated cells of *Salmonella* spp. which had undergone desiccation upon surfaces. The established technical framework was verified with a tubing system contaminated by inoculated peanut butter. System decontamination was achieved by a two-step procedure involving flushing the tubing with fresh oil for debris removal, and holding it with the antimicrobial oil for sanitization. *Enterococcus faecium* NRRL B-2354 was identified as a *Salmonella* surrogate for validating such a process in the food-processing environment. This oil-based approach could allow a paradigm shift in food sanitation systems, precluding traditional wet cleaning and flammable alcohol sanitizers.

Mr. Chuang's article, "Oil-Based Sanitization in Low-Moisture Environments: Delivery of Acetic Acid with Water-in-Oil Emulsions," *Microbiology Spectrum* (2023), was selected as a breakthrough scientific accomplishment and an innovation for the 2024 CNS Mahoney Life Sciences Prize. Alongside academic publications, a patent application pertaining to the developed technology has been filed with the Technology Transfer Office at UMass Amherst.

### **PEANUT PROUD STUDENT SCHOLARSHIP**

Apart from the curriculum, Mr. Chuang serves as Student Chair of IAFP's Affiliate, the Taiwan Association for Food Protection, and is involved in several Professional Development Groups in his field of study. During IAFP 2022, he was awarded third place in the J. Mac Goepfert Developing Scientist Competition for his technical presentation.

Mr. Chuang's engagement and commitment to food safety goes beyond IAFP. He received the Dr. Ron Schmidt Student Travel Award for participation in the 3-A Sanitary Standards, Inc. (3-A SSI) 2023 Education Program and Annual Meeting. Mr. Chuang is involved with IFT through volunteering as a scientific reviewer for Global Food System Challenge, IFT FIRST Scientific Session Proposals, and the *Journal of Food Science*, and as a session host for IFT FIRST Scientific and Technical Forums.

Mr. Chuang is honored to receive the Peanut Proud Student Scholarship to take part in IAFP 2024, and would like to reiterate how involvement with IAFP has been a rewarding journey for him to learn from and network with professionals within their respective fields.



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