IAFP2017
ANNUAL MEETING
Tampa, Florida
July 9 - 12, 2017

PROGRAM BOOK

The Leading Food Safety Conference

Connect on the Coast.

International Association for Food Protection®

6200 Aurora Avenue, Suite 200W Des Moines, Iowa 50322-2864, USA
+1 800.369.6337 +1 515.276.3344 Fax +1 515.276.8655
www.foodprotection.org

EFFICIENCY AND RELIABILITY WITH THE EHEC SOLUTION.

LISTERIA MONOCYTOGENES • *E.COLI* O157:H7 • *LISTERIA SPP.* • *SALMONELLA*
EHEC • NOROVIRUS GI • NOROVIRUS GII • HEPATITIS A VIRUS • HEPATITIS E VIRUS

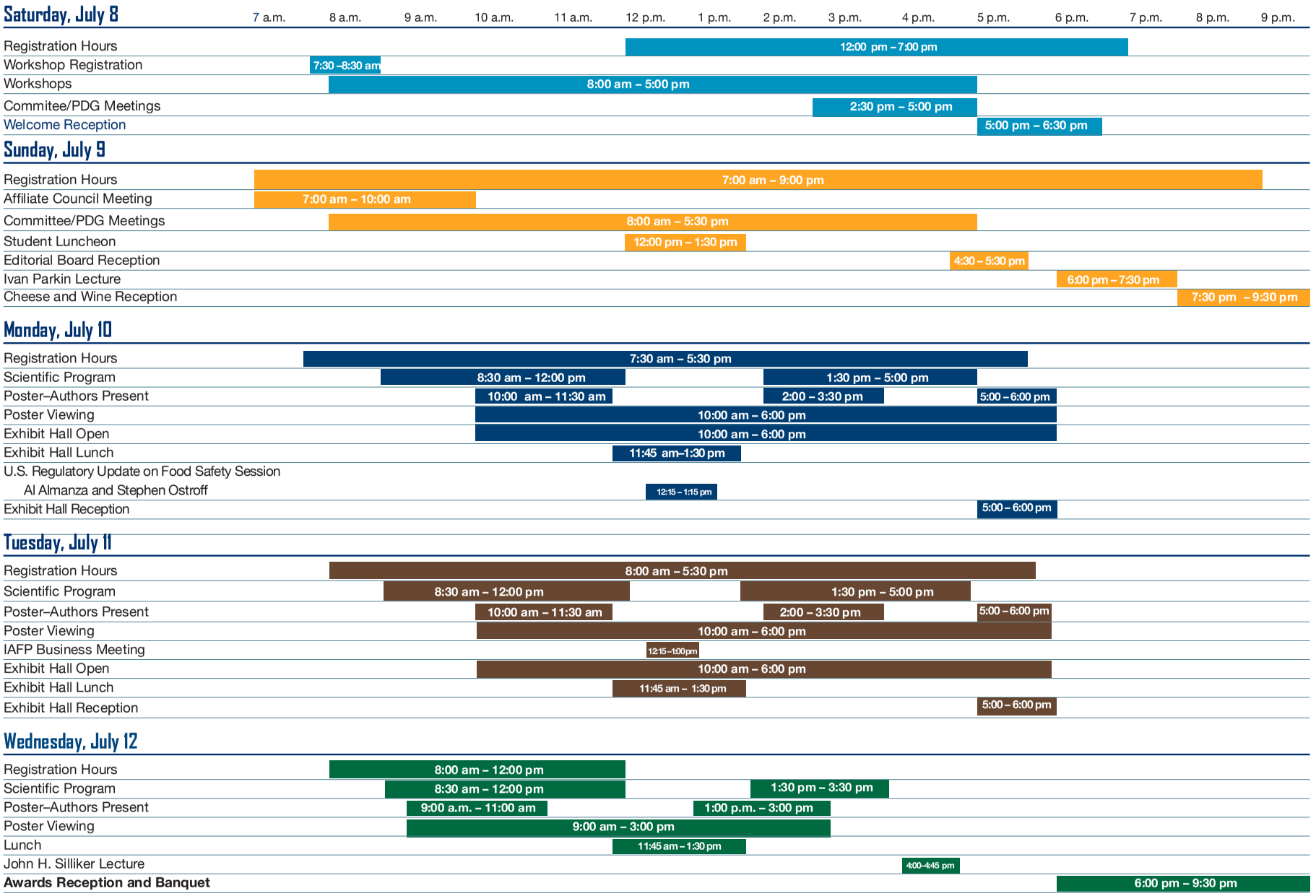
When screening for STEC and 0157:H7, you need a fast, simple, and accurate method for detecting these pathogens. GENE-UP® is a real-time PCR pathogen detection system from the microbiology experts at bioMérieux. It provides efficiency and reliability with the EHEC Solution. The kit combines stx and eae, and the top 6 serogroups in one solution. And, when used in combination with VIDAS®, the EHEC solution provides exceptional specificity.

GENE-UP® is an easy way to get rapid, reliable results when detecting food-borne pathogens. To learn more, visit **biomérieux-usa.com/gene-up**.

BIOMÉRIEUX
INDUSTRY

Table of Contents

Meeting-at-a-Glance



Schedule-at-a-Glance

All sessions will be held at the Tampa Convention Center

Room	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Room 10-11	Room 12	Room 13-14	Room 18-19	Room 20-21	Room 22-23	Room 24-25	Room 15	Room 16	Exhibit Hall
SUNDAY, JULY 9														
Sunday 6:00 p.m.–7:30 p.m.	**Opening Session – Ivan Parkin Lecture** – Tampa Convention Center Ballroom *The Anthropologist, the Chef, and the Kitchen Sink* – **Jose Emilio Esteban**, U.S. Department of Agriculture, FSIS-OPHS-EALS													
MONDAY, July 10														
Monday 8:30 a.m.–12:00 p.m.	S01 STEC Regulation: What is Needed in Global Food Trade? S02 Antibiotics in Pre-harvest Production and Associated Risks to Food	S03 Virulence Factors and Host Susceptibility of Foodborne Pathogens	S04 Developments in Mycotoxin Research: From Methodology to Prevention	S05 Pathogen Contamination at Retail: What are the Next Steps? S06 Perishable Foods Delivered to Homes via Common Carriers: Safe or Sorry?			S07 Latin America: Issues and Initiatives for Food Safety S08 FDA Food Import Entries and Refusals: Finding Meaning within the Data	S09 All You Wanted to Know about Antimicrobial Hand Sanitizers and Were Afraid to Ask S10 Developing Evidence-based Recommendations to Improve Consumer Safe Food-handling: International Approach	S11 Microbial Food Safety in Small to Medium-size Farming Systems: Risks and Mitigation Strategies S12 Urban Agriculture/ Farming and Food Safety	S13 Global Dairy Indicators (Coliform vs. *Enterobacteriaceae* vs. Other Indicators): Their Value, Regulatory Impact and Effect on Global Trade S14 Strategies for Effective Hygienic Zoning	S15 The Importance of Sample Preparation for Microbiological Analysis: Anything That Begins Badly, Ends Worse S16 Are Culture Methods Obsolete?	T1 Technical Session 1 – Produce	T2 Technical Session 2 – Molecular Analytics, Genomics and Microbiome	**P1** Poster Session 1 – Antimicrobials, Beverages and Acid/Acidified Foods, Food Defense, Food Law and Regulation, Food Processing Technologies, Food Safety Systems, General Microbiology, Modelling and Risk Assessment, Preharvest Food Safety, Sanitation
Monday 12:15 p.m.–1:15 p.m.	**U.S. Regulatory Update on Food Safety** – Ballroom B **Al Almanza**, U.S. Department of Agriculture and **Stephen Ostroff**, U.S. Food and Drug Administration													
Monday 1:30 p.m.–5:00 p.m.	S17 Wash Water Management for Post-harvest Washing of Fresh-cut Produce S18 Complexity in Managing Risk from Pathogens in the Fresh Produce Chain: How Can Risk Assessment Help?	S19 How Does GFSI Audit Criteria for Sanitation, Hygiene, and Environmental Sampling Compare to FSMA Requirements? S20 A Risk-based Approach to Microbiological Performance Criteria for Addressing Pathogens in Meat and Poultry	S21 Do Not Stumble Over a Process Deviation: Regain Control with Predictive Microbial Modeling S22 Defining, Capturing, and Assessing the Vulnerability of the Food Supply to Economically Motivated Adulteration (EMA) and Food Fraud	S23 How to Exploit Omics Data on Pathogen Behavior in Microbiological Risk Assessment: An Update on the Current Research S24 Battling Bad Bugs: Biological Approaches to Control Pathogens			S25 Non-thermal Plasma Technology for Improving Food Safety and Quality S26 Let's Get Active!	RT1 Starter Cultures as a Natural Antimicrobial to Improve the Safety of Ready-to-Eat Food RT2 Hear All About It: Managing a Crisis	S27 Biological Soil Amendments of Animal Origin and the Food Safety Modernization Act: Challenges and Opportunities Going Forward S28 The Produce Safety Alliance: From Education and Training to Implementation and Beyond	S29 After 20 Years of Seafood HACCP, is Our Food Safer?	S30 Strategic Intervention Design: A Pragmatic Approach to Validation S31 Development of Microbiological Criteria as Indicators of Process Control or Insanitary Conditions: A Summary of the Report Prepared for the United States Department of Defense by the NACMF	T3 Technical Session 3 – Communication Outreach and Education	T4 Technical Session 4 – Laboratory and Detection Methods	
TUESDAY, JULY 11														
Tuesday 8:30 a.m.–12:00 p.m.	S32 What Can We Do with 10,000 Genomes That Couldn't be Done with 100? S33 What Can Complete Closed Microbial Genomes Provide to Food Safety?	S34 Managing Risk in a Zero Tolerance World	S35 Novel and Not-so-Novel Cleaning and Sanitizing Methods	S36 Getting to the Reality of Implementation: Produce Safety Rule Water Quality Requirements S37 Pro- and/or Pre-biotics as Bio-remedies and Foodborne Infection Preventives	SF1 Predictive Microbiology and Risk Assessment Tools		RT3 Seafood-associated Vibriosis: Turning the Trend Around RT4 Artisanal Food Processing and Food Safety	RT5 What is IARC and CA Prop 65? What on Earth Do They Mean to Me and My Food Safety Program? RT6 Can Industry and Government Take Safe Food Handling and Preparation Risks Out of the Hands of the Consumer?	S38 Moving toward the Safe Use of Recycled Water for Crop Irrigation: A Sustainable Solution in an Era of Climate Variability? S39 Water, Water, Everywhere: The Effects of Flooding on the Microbial Safety of Fresh Produce	S40 Ensuring Food Safety through the Product Development Lifecycle: Successes and Pitfalls S41 Clean Label Technologies for Safety of Processed Meat and Poultry Products: Scientific Support of Efficacy	S42 Mechanisms of Hypervirulence in Selected Foodborne Pathogens S43 The Crossroad between Global Trade and Food Safety: Focus on Viruses and Parasites	T5 Technical Session 5 – Antimicrobials	T6 Technical Session 6 – Microbial Food Spoilage and Low-water Activity Foods	**P2** Poster Session 2 – Communication Outreach and Education, Dairy, Epidemiology, Food Chemical Hazards and Food Allergens, Food Toxicology, Laboratory and Detection Methods, Meat, Poultry and Eggs, Molecular Analytics, Genomics and Microbiome, Retail and Food Service Safety

Schedule-at-a-Glance

All sessions will be held at the Tampa Convention Center

Room	Ballroom A	Ballroom B	Ballroom C	Ballroom D	Room 10-11	Room 12	Room 13-14	Room 18-19	Room 20-21	Room 22-23	Room 24-25	Room 15	Room 16	Exhibit Hall
Tuesday 12:15 p.m.–1:00 p.m.	**IAFP Business Meeting** Room 16													
Tuesday 1:30 p.m.–5:00 p.m.	S44 Modeling Pathogens in Low-water Activity Foods: What, How, and How to Use It S45 Can Old Processes Satisfy New Rules? Pathogen Reduction in Legacy Processes for Low-moisture Foods	S46 Cross Pollination of *Listeria* Learnings across the Industry	S47 Stories from the Trenches: FDA Inspection after Food Safety Modernization Act (FSMA) Implementation	S48 Foodborne Viruses: Detection, Risk Assessment, and Control Options in Food Processing S49 Hepatitis E Virus: An Emerging Foodborne Pathogen?		SF2 Software Fair on Predictive Microbiology and Risk Assessment Tools	RT7 It's Going to Take a Village: Grower Perspectives on FSMA Implementation RT8 International Strategies to Deliver Food Safety Education via the "Trusted Source": Health Professionals	RT9 Next Generation Whole Genome Sequencing in the Regulatory Arena: Nomenclature, Pipelines, Applications, and Collaboration RT10 FoodOmics: Stop Using a Steamroller to Crack a Nut!	S50 Teaching for Tomorrow: Impact of School and College Food Safety Curricula on Better Informed Consumers, Career Opportunities, and the Industry Workforce of the Future S51 Establishing Effective Metrics to Advance Your Food Safety Training and Education Programs	S52 Total Diet Studies: Designs for Monitoring the Food Supply S53 Ranking Risks in Low-resource Settings	S54 Tools to Improve Interactive Food Safety Training for Small Food Facilities S55 Translating the Big Data to the Food Industry	T7 Technical Session 7 – Pre-harvest Food Safety and Water	T8 Technical Session 8 – Food Law and Regulation; Food Defense; Food Safety Systems	
WEDNESDAY, JULY 13														
Wednesday 8:30 a.m.–12:00 p.m.	D1 A Debate: Current Perspectives in Food Safety S56 Chemical and Microbial Risk Assessment: Similarities and Differences			S57 Foodborne Outbreak Updates	S58 Fresh Produce-Pathogen Pairs in the U.S. and Europe S59 Combatting Bioterrorism: How Select Agent Testing Laboratories are Staying One Step Ahead of the Bad Guys	S60 A Paradigm Shift in Understanding and Controlling *Salmonella* of the Future S61 Foodborne Parasites in Organic and Conventional Agricultural Practices: Food Safety Issues That Can Affect Your Mind	RT11 National and Regional FSMA Training Centers: Application of Lessons Learned RT12 The Devil is in the Details: Experiences with Early Implementation of the FSMA Produce Safety Rule and Efforts to Fill the Information Gaps	RT13 Variations on a Theme: The Basis and Consequences of Inconsistent *Listeria* spp. Standards in Global Regulation RT14 Hog Slaughter Modernization and *Salmonella* Performance Standards: Should Pork be Treated the Same as Poultry?	S62 Water for Food Processing Falls in the Crack Between RTCR (Revised Total Coliform Rule) and FSMA S63 Staying Ahead of the Curve: Food Allergen Contamination and Recalls in Today's Global Food System	S64 A Roadmap to Food Allergy Safety: A Consensus Report from the National Academies of Sciences, Engineering, and Medicine S65 What Is the Meaning of Zero Tolerance in the Age of Food Genomics?	S66 Challenges and Strategies in Detecting Foodborne Pathogens in Low-water Activity Foods	T9 Technical Session 9 – Food Processing Technologies	T10 Technical Session 10 – Risk Modelling	P3 Poster Session 3 – Antimicrobials, Laboratory and Detection Methods, Low-water Activity Foods, Microbial Food Spoilage, Packaging, Produce, Water
Wednesday 1:30 p.m.–3:30 p.m.	S67 Preventive Controls Other Than CCP: Choosing, Verifying, and Validating			S68 The National Antimicrobial-resistance Monitoring System: Twenty Years of Vigilance	S69 Empowering Food Laws in Emerging Economies	S70 Microbiological Safety of Unpasteurized Fruit and Vegetable Juices Sold in Juice Bars and Small Retail Outlets	S71 Advancing Food Safety Internationally through the Use of Innovative Technologies: Food Irradiation	S72 Social Responsibility's Influence over Food Safety and Quality	S73 Toward Risk-based Microbial Standards for Irrigation Water	S74 Root Cause Analysis		T11 Technical Session 11 – Meat, Poultry and Eggs and Epidemiology	T12 Technical Session 12 – Modelling and Risk Assessment & Retail and Food Service Safety	
Wednesday 4:00 p.m.–4:45 p.m	**John H. Silliker Lecture** – Ballroom A *Food Allergies: A Public Health Dilemma – How Did We Get Here? Where are We Going?* **Steve L. Taylor**, Food Allergy Research & Resource Program, Department of Food Science & Technology, University of Nebraska													

Welcome From The Executive Board

PRESIDENT
Linda J. Harris
University of California-Davis

On behalf of the Executive Board, I would like to welcome you to IAFP 2017 and to Tampa, Florida. Colleagues and friends from around the world are joining us for the next few days. First and foremost, we are here to help fulfill the Association's mission: *To provide food safety professionals worldwide with a forum to exchange information on protecting the food supply.*

Food safety remains a top priority in today's interconnected world. Our meeting will help you stay in touch with current and emerging issues, the latest science, and solutions to new and ongoing problems. And the opportunity to network with our colleagues and developing scientists is of equal or greater importance… often times the most valuable information can be gathered in an impromptu conversation in the hallway. Thank you for joining us to play your role as part of the solution for tomorrow's food safety issues.

The Executive Board offers a special thank you to Alvin C.B. Lee, Program Committee Chair, and the entire Program Committee for organizing an outstanding lineup of symposia, roundtables, technical presentations, posters and interactive sessions. The only thing in short supply will be the time needed to attend all of the interesting sessions! Your greatest challenge will be determining where best to spend your time, so review the program carefully and plan your time accordingly.

The Board would also like to thank the Florida Association for Food Protection volunteers who have been gracious enough to help host the 2017 Annual Meeting. All of their hard work will make IAFP 2017 a memorable experience for all attendees.

We also extend our sincere gratitude to our valued exhibitors, sponsors and long-time attendees for making the IAFP Annual Meeting so successful every year. Our meeting would not be the same without your continued and dedicated support.

So, whether you are a new Member, long-time Member, student Member or even a prospective Member, the Board eagerly welcomes you and encourages you to actively participate in this meeting. And if you see me, or any of our Board members, please come up and say hello. We would love to meet you.

Together, we are *Advancing Food Safety Worldwide*®!

Linda J. Harris
IAFP President

PRESIDENT-ELECT
Mickey Parish
U.S. Food and Drug Administration

VICE PRESIDENT
Timothy C. Jackson
Nestlé USA, Inc.

SECRETARY
Kalmia Kniel
University of Delaware

AFFILIATE COUNCIL CHAIRPERSON
Neil Bogart
Red Diamond Inc.

EXECUTIVE DIRECTOR
David W. Tharp
International Association for Food Protection

PAST PRESIDENT
Alejandro S. Mazzotta
Chobani, LLC

Special Contributors and Sponsors

SPONSORS

A2LA
AEMTEK Laboratories
Alpha Bio Sciences
BCN Research Laboratories, Inc.
Capital Area Food Protection Association
Charm Sciences
Conagra Brands
Covance, Inc.
Culture Media Concepts
Decon 7
Detectmet
Ecolab Inc.
Emport LLC
EMSL Analytical, Inc.
Eppendorf
F&H Food Equipment Company
Food Safety Magazine
Frozen Food Foundation
Grocery Manufacturers Association
International Commission on Food Mycology (ICFM)
International Life Science Institute, N.A.
International Packaged Ice Association
Michigan State University ProMS in Food Safety
National Registry of Food Safety Professionals
Nelson Jameson
D. L. Newslow & Associates, Inc.
NSF International
Partnership for Food Safety Education
Poinciana Milling Company
ProBrand
Process Tek
Quality Assurance and Food Safety
Randox Food Diagnostics
Rentokil
SGS North America
Sika Industrial Flooring
Smithfield Foods Packaged Meats Division
Universal Sanitizers and Supplies, Inc.
Varcode
Walmart
Weber Scientific

(as of 6/6/17)

Welcome from Local Arrangements

Let us be the first to welcome you to sunny Florida! We are sure you will find the Tampa area full of exciting and fulfilling activities. Tampa is a great place to bring the family and you will enjoy all our attractions, activities and restaurants.

IAFP 2017 is again, full of the latest and greatest symposia and presentations with even greater minds and information on the ever-evolving world of Food Safety. From the PDG meetings, to outstanding educational sessions, to the hands-on demonstrations and exhibitors on the Expo floor, we will have so many opportunities for you to collaborate and grow our collective knowledge.

The Local Arrangements Committee invites you to enjoy your stay in Tampa. We hope you take advantage of some of our local restaurants and breweries. Tampa is a city on Tampa Bay, along Florida's Gulf Coast. As a major business center, it's also known for its museums and other cultural offerings. Busch Gardens is an African-themed amusement park with thrill rides and animal-viewing areas. The historic Ybor City neighborhood, developed by Cuban and Spanish cigar-factory workers at the turn of the 20th century, is a dining and nightlife destination.

Tampa has a wide variety of things to do and your Local Florida Affiliate would like to help you get the most out of your time here. Please feel free to visit with any of our members and volunteers with your questions and we will be happy to assist you in any way we can.

Have a great conference and welcome again to sunny Tampa, Florida!

Zeb Blanton, Michele Danyluk and Peter Hibbard
Local Arrangements Committee Co-Chairs
Florida Association for Food Protection

11th DUBAI INTERNATIONAL FOOD SAFETY CONFERENCE

Predict Prevent Protect

19th to 21st November 2017
Dubai International Convention & Exhibition Centre

Internet of Things | Big Data | Data Science | Whole Genome Sequencing (WGS)
Chemical Risk Assessment | Predictive Microbiology | Nutrition

DIFSC
مؤتمر دبي العالمي لسلامة الأغذية
Dubai International Food Safety Conference

Organized by DUBAI MUNICIPALITY

In association with International Association for Food Protection
Creme GLOBAL
Expert Models For Decision Makers

For information, registration & abstract submission, visit our website: www.foodsafetydubai.com

SUSTAINING MEMBERS

GOLD MEMBERS

3M Food Safety
www.3m.com

AEMTEK, Inc.
www.aemtek.com

bioMérieux, Inc.
www.biomerieux.com

Bio-Rad Laboratories
www.biorad.com

Cargill
www.cargill.com

Chobani, LLC
www.chobani.com

The Coca-Cola Company
www.thecoca-colacompany.com

Conagra Brands
www.conagrabrands.com

Covance
www.covance.com

Diamond V
www.diamondv.com

Ecolab Inc.
www.ecolab.com

Flying Food Group
www.flyingfood.com

Hygiena
www.hygiena.com

Immer Group
www.ukrplastic.com

Kellogg Company
www.kellogg.com

Kraft Heinz Company
www.kraftheinzcompany.com

Merck Animal Health
www.merck-animal-health-usa.com

Mérieux NutriSciences
www.merieuxnutrisciences.com

Nestle USA, Inc.
www.nestle.com

PepsiCo
www.pepsico.com

Remco Products Corp.
www.remcoproducts.com

Thermo Fisher Scientific
www.thermoscientific.com

Walmart
www.walmart.com

SILVER MEMBERS

AFCO
www.afcocare.com

American Proficiency Institute
www.foodpt.com

Bia Diagnostics
www.biadiagnostics.com

Campden BRI
www.campdenbri.co.uk

Chemstar Corporation
www.chemstarcorp.com

Chestnut Labs
www.chestnutlabs.com

Dubai Municipality
www.dm.gov.ae

Eurofins
www.eurofinsus.com

F & H Food Equipment Co.
www.fhfoodequipment.com

Maple Leaf Foods
www.mapleleaf.com

MilliporeSigma
www.sigmaaldrich.com/food

Neogen Corporation
www.neogen.com

Q Laboratories, Inc.
www.qlaboratories.com

Quality Flow Inc.
www.qualityflow.com

Sealed Air Corporation
www.diversey.com

Seward Limited
www.seward.co.uk

Sodexo
www.sodexousa.com

Vitaquest International
www.supplementmanufacturers.info

Weber Scientific
www.weberscientific.com

(Continued on next page)

SUSTAINING

3-A Sanitary Standards, Inc.
www.3-a.org

Advanced Instruments, Inc.
www.aicompanies.com

AIB International
www.aibonline.org

Alchemy Systems
www.alchemysystems.com

Alpha Biosciences, Inc.
www.alphabiosciences.com

American Dairy Products Institute
www.adpi.org

Art's Way Scientific, Inc.
www.buildingsforscience.com

ASI Food Safety, Inc.
www.asifood.com

Autoscribe Informatics Inc.
www.autoscribeinformatics.com

BCN Research Laboratories, Inc.
www.bcnlabs.com

Bedford Industries Inc.
www.bedford.com

BioControl Systems, Inc.
www.biocontrolsys.com

Biolog, Inc.
www.biolog.com

Biosafe Consultants Brasil
www.biosafelab.com.br

BPI Technology, Inc.
www.beefproducts.com

Burger King Corporation
www.burgerking.com

Center of Cooperative Innovation for Food Safety Governance
www.chinafoodsecurity.com

Charm Sciences, Inc.
www.charm.com

Cherney Microbiological Services, Ltd.
www.cherneymicro.com

CultureMediaConcepts®
www.culturemediaconcepts.com

DARDEN Restaurants, Inc.
www.darden.com

De Wafelbakkers
www.dewafelbakkers.com

Deibel Laboratories, Inc.
www.deibellabs.com

Delhaize America
www.foodlion.com

DonLevy Laboratories
www.donlevylab.com

Electrol Specialties Co.
www.esc4cip.com

EMAP Holding LLC
www.enviromap.com

Food Directorate, Health Canada
www.hc-sc.gc.ca

Food Research Institute, University of Wisconsin –Madison
www.fri.wisc.edu

Food Safety Magazine
www.foodsafetymagazine.com

Food Safety Net Services, Ltd.
www.food-safetynet.com

Grocery Manufacturers Association
www.gmaonline.org

Hardy Diagnostics
www.hardydiagnostics.com

HiMedia Laboratories Pvt. Ltd.
www.himedialabs.com

Hussmann Corporation
www.hussmann.com

Hypred USA
www.hypredusa.com

IDEXX Laboratories, Inc.
www.idexx.com

IEH Laboratories & Consulting Group
www.iehinc.com

The Industrial Fumigant Company, LLC
www.indfumco.com

International Dairy Foods Association
www.idfa.org

Invisible Sentinel
www.invisiblesentinel.com

The Kroger Co.
www.kroger.com

Mastronardi Produce Limited
www.mastronardiproduce.com

Meritech
www.meritech.com

Michelson Laboratories, Inc.
www.michelsonlab.com

Michigan State University–ProMS in Food Safety
www.msu.edu

Micro-Smedt
www.micro-smedt.be

Microbac Laboratories, Inc.
www.microbac.com

Microbiologics, Inc.
www.microbiologics.com

MOCON, Inc.
www.mocon.com

MOM Brands
www.mombrands.com

Mondelez International
www.mondelez.com

Nasco Whirl-Pak Division
www.whirl-pak.com

NatureSeal, Inc.
www.natureseal.com

Nelson-Jameson, Inc.
www.nelsonjameson.com

Northland Laboratories
www.northlandlabs.com

NSF International
www.nsf.com

NSI Lab Solutions
www.nsilabsolutions.com

Orkin Commercial Services
www.orkincommercial.com

PathoGenetix, Inc.
www.pathogenetix.com

Perry Johnson Food Safety Consulting, Inc.
www.pjfsc.com

Preferred Freezer Services
www.preferredfreezer.com

Process Tek
www.processtek.net

The Procter & Gamble Company
www.pgpro.com

Publix Super Markets, Inc.
www.publix.com

QualiTru Sampling Systems
www.qualitru.com

QuanTEM Food Safety Laboratories, LLC
www.quantemfood.com

R & F Products
www.rf-products.net

Reading Thermal
www.readingthermal.com

Rentokil Steritech
www.rentokil-steritech.com

Rochester Midland Corporation
www.rochestermidland.com

Roka Bioscience, Inc.
www.rokabio.com

Romer Labs, Inc.
www.romerlabs.com

rtech™ laboratories
www.rtechlabs.com

Sensitech Inc.
www.sensitech.com

Shenzhen Bioeasy Biotechnology Company Limited
www.bioeasy.net.cn

Steritech
www.steritech.com

U.S. Pharmacopeia
www.usp.org

United Fresh Produce Association
www.unitedfresh.org

Vanguard Sciences
www.vanguard-sciences.com

Vikan A/S
www.vikan.com

Wegmans Food Markets, Inc.
www.wegmans.com

Foundation Contributors

IAFP FOUNDATION

Thank you to all our Gold and Silver Sustaining Members for your support.
A portion of your Membership dues goes directly to the Foundation!

Thanks also to the following organizations for your generous contributions:

Dairy Quality & Safety PDG

Eurofins

F & H Food Equipment Co.

Florida Association for Food Protection

Kellogg Company

Kornacki Microbiology Solutions

The Kroger Co.

Public Health Innovations LLC

Remco Products Corp.

RTI International

Saputo Cheese USA

Thermo Fisher Scientific

Weber Scientific

Foundation Contributors since January 1, 2015

Individual Contributors

Cumulative contributions from contributors since January 1, 2012

IAFP FOUNDATION

Thanks to the following individuals for their support of the IAFP Foundation!

$3,000 - $6,500

HALL, PAUL
LANE, LISA
RYSER, ELLIOT
SCOTT, JENNY

$1,000 - $2,999

APPLEBAUM, RHONA
BERNARD, DANE
CLARKE, RENATA
ENGELJOHN, DANIEL
FARBER, JEFFREY
GREIG, JUDY
GRINSTEAD, DALE
HARDIN, MARGARET
JAYKUS, LEE-ANN
LEWANDOWSKI, VICKIE
MARLER, WILLIAM
MARSHALL, DOUGLAS
MAZZOTTA, ALEJANDRO
PHEBUS, RANDALL
PRINCE, GALE
SAMADPOUR, MANSOUR
SHARIF, KHALID MOHAMED
SWANSON, KATHERINE
THARP, DAVID
TOMPKIN, R. BRUCE

$500 - $999

ANDERSON, KENNETH
BOOREN, BETSY
BRACKETT, ROBERT
BUSTA, FRANCIS
CHERNEY, DEBRA
DYENSON, NATALIE
GUZEWICH, JOHN
HARRIS, LINDA
HUNTLEY, WILLIAM
PARISH, MICKEY
POTTER, MORRIS
SANDERS, ROBERT
SPERBER, WILLIAM
STEENSON, LARRY
STIVERS, TORI
TAORMINA, PETER
TODD, EWEN
WINNICZUK, PAUL

$100 - $499

ACUFF, GARY
ACUFF, JENNIFER
ADAMS, NORA
AKINS-LEWENTHAL, DEANN
ALESKI, CHRISTINE
ANDRESS, ELIZABETH
ANGSTADT, TOM
ARBAULT, PATRICE
ARNOLD, ILENE
ATAEI, FATEMEH
ATHERTON, HENRY
BAILEY, J. STAN
BAKER, DAVID
BATZ, MICHAEL
BAUERMEISTER, LAURA
BEN EMBAREK, PETER
BENNETT, REGINALD
BERRY, ELAINE
BEVERLY, RICHELLE
BIGALKE, DARRELL
BIRBARI, WAFA
BLAIR, BETSY
BLAKISTONE, BARBARA
BLAND, BONNIE
BLANTON, ZEB
BLUHM, LESLIE
BOGART, NEIL
BOSILEVAC, JOSEPH
BOYER, RENEE
BREIDT, FRED
BRODSKY, MICHAEL
BROUILLETTE, RICHARD
BUCHANAN, JOHN
BUCHANAN, ROBERT
BUCK, JOHN
BURNHAM, GREG
BURNS, FRANK
BUTTS, JOHN
CADLE, JASON
CAHILL, SARAH
CASTILLO, ALEJANDRO
CHEN, JESSICA
CHEN, YUHUAN
CHIARELI, ALESSANDRA
CLARK, WARREN
COLES, CLAUDIA
COOK, FREDERICK
COOK, PEGGY
COOMBS, PHIL
COOPER, JACK
CRAY, WILLIAM
CRITZER, FAITH
CRUMPLER, TURONDA
CUSTER, CARL
CUTTER, CATHERINE
DAVIDSON, P. MICHAEL
DESTRO, MARIA TERESA
DIEZ, FRANCISCO
EBLEN, DENISE
EDWARDS, KEVIN
ERICKSON, DAN
FEDORKA-CRAY, PAULA
FELDSTEIN, FAYE
FLORIN, MARK
FRANKENBERG, JENNIFER
GARREN, DONNA
GATESY, TED
GILDNER, RUSTY
GLASS, KATHLEEN
GOLDEN, DAVID
GORNY, JAMES
GORRIS, LEON
GRAVANI, ROBERT
GROVE, STEPHEN
GUMMALLA, SANJAY
HABAS, KEVIN
HALFMAN, NATALIE
HARRISON, MARK
HEADLEY, ERIN
HEIDENREICH, JOE
HENRY, CRAIG
HIBBARD, PETER
HILL, WALTER
HIRSHFIELD, IRVIN
HOLT, JOSEPH
HONTZ, LLOYD
HOWLETT, SUSAN
HUNTER, RAE
HUNTLEY, ANTHONY
JACKSON, LAUREN
JACKSON, TIMOTHY
JAROSH, JOHN
JENKINS, TIM
JESUS, ANNA
JOHNSON, THOMAS
JONES, MARJORIE
KENNEDY, PETER
KENNEY, STEPHEN
KNIEL, KALMIA
KOMOTO, YASUYOSHI
KREUL, MARK
LARKIN, JOHN
LARSON, DAVE
LARSSON, ALISON
LARY, YALE
LEAKE, LINDA
LEDENBACH, LORALYN
LEE, ALVIN
LEIGHTON, SEAN
LUCHANSKY, JOHN
LUCIA, LISA
LUO, YAGUANG
MARKS, BRADLEY
MARTIN, ERIC
MASTERS, YVONNE
MCENTIRE, JENNIFER
MCKNIGHT, SUSAN
MCMEEKIN, TOM
MCMILLIN, KENNETH
MCNAMARA, ANN MARIE
MELLO, INDAUE
MENKE-SCHAENZER, JOAN
MEYER, JOSEPH
MILLER, JAMES
MOORMAN, MARK
MORTIMORE, SARA
NDE, CHANTAL
NIE, YURONG
O'DONNELL, JAMES
O'DONNELL, KATHLEEN
OGUNRINOLA, YEMI
ONTIBEROS, BELEM
ORYANG, DAVID
PARADIS, ARMAND
PETRAN, RUTH
PORTO-FETT, ANNA
PRUETT, W. PAYTON
QUAIN, RONDA
QUICHO, JOEMEL
RAJKOWSKI, KATHLEEN
REIMERS, FRED
RHODEHAMEL, E. JEFFERY
RHODES, AMY
RIVERA, RAFAEL
SANDERSON, ROBERT
SANTIAGO, LILIA
SAVARD, EDWARD
SAYLER, ALLEN
SCHAFFNER, DONALD
SHARMA, MANAN
SIMONNE, AMARAT
SINGH, MANPREET
SMITH DEWAAL, CAROLINE
SMITH, JAMES
SOBOWALE, TOYIN
SOFOS, JOHN
STONE, ROSLYN
STRATTON, RICHARD
STRAWN, LAURA
SUSLOW, TREVOR
TANG, JUMING
TAUXE, ROBERT
THEIL-GANGL, ANNA
TORTORELLO, MARY LOU
USBORNE, RON
VAN DOREN, JANE
WALLS, ISABEL
WARD, N. ROBERT
WARREN, BENJAMIN
WEDDIG, LISA
WEISGERBER, JOHN
WESCHLER, THOMAS
WHITE, WENDY
WHITING, RICHARD
WIEBE, ROBERT
WILHELMI, SANDRA
WILKIN, EDITH
WRIGLEY, DOROTHY
WYNNE, BOB
YASSENOFF, KAREN
YIANNAS, FRANK
ZEHR, DARIN
ZIMMERMANN, JOHN
ZINDULIS, JOSEPH
ZINK, DON

$50 - $99

ABDELRAHIM, KHALID
ABDELSHAHID, YOUSSEF
ACHESON, DAVID
AEHLE, SANDRA
ALSAADI, YOUSEF
AMORIL, JOSE
AMOROS, INMACULADA
ANDERSON, CARL
ANDERSON, JEAN
ANDREWS, MATTHEW
ARAKI, EMIKO
ARINO, AGUSTIN
ATCHISON, STACY
AVILA SOSA, RAUL
BACON, R. TODD
BARKER-SMITH, ANNE
BARNUM, TOM
BARTHOLOMEW, GENE
BASILE, RALPH
BAUTISTA, DERRICK
BELINA, DANIEL
BENESH, DEANN
BERRANG, MARK
BIGGS, ROY
BIHN, ELIZABETH
BIRKETT, SHARON
BOOR, KATHRYN
BOTTRELL, RONALD
BOURSILLON, DENIS
BOZZUFFI, JACK
BRASHEARS, MINDY
BRENNAN, CHRISTY
BUKER, LINDA
BURSON, DENNIS
CALHOUN, STEVE
CALICCHIA, MELISSA
CALLAWAY, ROBERT
CAMPBELL, KATHERINE
CARLING-KELLY, TERRY

Individual Contributors

IAFP FOUNDATION

CARVER, JULIE
CASSENS, BARBARA
CASTRO-ROSAS, JAVIER
CATON, DAVID
CHAMBERS, ALBERT
CHANEY, WILLIAM
CHENU, JEREMY
CHEUNG, DANNY
CLARK, TODD
CLARKE, ANDREW
COHEN, LARRY
COOK, ROGER
COOKSEY, KAY
CORREALE, LISA
COUNTRYMAN, DONALD
CRAIG, DUNCAN
CRANDALL, PHIL
CRERAR, SCOTT
CROUCH, EDMUND
CZUPRYNSKI, CHARLES
DAISE, RICHARD
DALGAARD, PAW
DANYLUK, MICHELLE
DARYAEI, HOSSEIN
DAVIES, ROB
DEIBEL, KURT
DEL CASTILLO, DAMARYS
DELAQUIS, PASCAL
DENTON, JAMES
DESFORGES, ISABELLE
DESMARCHELIER, PATRICIA
DICKSON, JAMES
DOORES, STEPHANIE
DORSA, WARREN
DOYLE, MARJORIE
DOYLE, MICHAEL
DUNNING, BRIAN
DYKES, GARY
ECHEVERRY, ALEJANDRO
ECKERT, JASON
EDDY, DOUGLAS
EISENBERG, MIRIAM
ELLINGSON, DAVE
ELLINGSON, JAY
ELSBERRY, RANDY
ESTEBAN, EMILIO
EVANSON, DAVID
FAIN, ALFRED
FARMER, SUSAN
FARZI, HAMID
FENG, PETER
FORD, THOMAS
FORTIER, YVON
FORTMAN, THOMAS
FOX, PAUL
FRADE, ANTONIO
FRANCO ABUIN, CARLOS
FREESE, CONNIE
FRENCH, LARRY
FREY, EUGENE
FUKUDA, SATOSHI
GALBRAITH, BOB
GALLAGHER, DANIEL
GAMBRILL, MURRAY
GARCES VEGA, FRANCISCO
GARCIA, SANTOS
GE, BEILEI
GEBLER, JILL
GENIGEORGIS, CONSTANTIN
GENSLER, GARY
GEORGE, BRUCE
GEORNARAS, IFIGENIA
GIAMBRONE, CHARLES
GIVICH, KENNETH
GOHIL, VIRENDRA
GOODRIDGE, LAWRENCE
GORDON, ANDRE
GORDON, JAMES
GRAGG, SARA
GRASSO-KELLEY, ELIZABETH
GRAUMLICH, THOMAS
GREEN, JENNIFER
GREEN, KIM
GRIFFITH, BILL
GRIFFITH, CHRISTOPHER
GROVES, RICHARD
GUNTER, CHRISTOPHER
HAASE, PETER
HAJER, JO ANN
HAMMACK, THOMAS
HARA-KUDO, YUKIKO
HARGROVE, BEN
HARMS, SHAREE
HARPER, KAREN
HARRISON, JUDY
HART-THAKUR, RENEE
HAVELAAR, ARIE
HAYBURN, GORDON
HAYFORD, ALICE
HEDDINGER, RHONDA
HEESCHEN, WALTHER
HENDERSON, MATTHEW
HENNON, KOEN
HENTGES, ERIC
HERNANDEZ, OMAR
HERNANDEZ-HERRERO, MANUELA
HIMELBLOOM, BRIAN
HODGE, LORI
HOLAH, JOHN
HOOD, SCOTT
HOOVER, DALLAS
HSIEH, YUN-HWA
HUANG, GUANGWEI
HUANG, HONGSHENG
HUANG, TSUI-PING
HUGE, JEANETTE
HUNGER, STEVEN
HUNTOON, STEVEN
HUTCHISON, MICHAEL
HWANG, CHENG-AN
INATSU, YASUHIRO
ISSHIKI, KENJI
JANSSON, EDWARD
JENSEN, DANE
JESPERSEN, LONE
JIMENEZ, FERNANDO
JOBE, GLENN
JOHANNESSEN, GRO
JOHNSON, JANET
JOHNSON, JENNIFER
JOHNSON, KURT
JOHNSON, LAURETTA
JOHNSON, PAT
JONES, THOMAS
KALINOWSKI, ROBIN
KASUGA, FUMIKO
KAWAI, YUJI
KAWAMOTO, SHINICHI
KELLER, SUSANNE
KELSEY, D. FRANK
KENNEDY, SHAUN
KILLINGER, KAREN
KIM, JONG-GYU
KIM, JOO-SUNG
KIMURA, BON
KLINECT, SALLY
KNECHTGES, PAUL
KOHL, LARRY
KONIE, AUGUST
KORNACKI, JEFFREY
KOSEKI, SHIGENOBU
KUBOTA, KRISTY
KUDRA, LI
KYRIAKIDES, ALEC
LABOSKY, MICHAEL
LAMPEL, KEITH
LANDGRAF, MARIZA
LAPOINTE, GISELE
LARSON BRICHER, JULIE
LEDBETTER, CRAIG
LEE, JUDY
LINDSAY, DENISE
LITCHFIELD, JOHN
LIU, JIMMY
LOGAN, PATRICK
LOURENCO, ANTONIO
LUCORE, LISA
LUNA, GILMA
LYTTON, TIMOTHY
MACKIE, THOMAS
MAILMAN, SUZANNE
MALLOCH, MARGARET
MARANINO, FRANK
MARRA, PAUL
MARTIN, ROBERT
MARTINEZ DE MARANON, INIGO
MASIELLO, STEPHANIE
MATHEW, ALAN
MCEWEN, JANE
MCGRAW, JOSEPH
MCINTYRE, LORRAINE
MCLAUCHLIN, JIM
MCMAHON, WENDY
MCSWANE, DAVID
METCALF, ROBERT
MILLER, ARTHUR
MILLER, GALA
MITCHELL, MARTIN
MOLINS, RICARDO
MOODY, KAREN
MOORE, SANDRA
MORTON, BLAINE
MORTON, R. DALE
MUKHOPADHYAY, SUDARSAN
MULDOON, MARK
MURALIDHARAN, SUDARSAN
MURIANA, PETER
MURPHY, ERICKA
MURPHY, STEVEN
MUSSON, TERRY
MUYANJA, CHARLES
NANKE, KEVIN
NAZAROWEC-WHITE, M.
NEAL, JAY
NEMORIN, EDGARD
NIEMIRA, BRENDAN
NILSSON, PER
NORTON, MARK
OHKOCHI, MIHO
OKREND, ANITA
OLIVEROS, BRYAN REY
OLSON, KARL
ORLANDI, PALMER
ORR, JOHN
OTTO, CHARLES
OVERLOCK, CRAIG
PAN, CHORNG-LIANG
PAPINAHO, PETRI
PARDIO, VIOLETA
PARK, KI-HWAN
PARK, YONG HO
PARKINSON, NINA
PARTRIDGE, JOHN
PAULSEN, PETER
PERREN, RAINER
PIERAMI, RENA
PIOTTER, HELEN
PIROCCAS, CONSTANTINOS
PODOLAK, RICHARD
PONDER, MONICA
PORTER, RANDY
POST, LAURIE
POURKOMAILIAN, BIZHAN
PRATT, MARK
PRICE, JAMES
PRIEST, KENNETH
PUTNAM, ERIC
QUESSY, SYLVAIN
QUINTO, EMILIANO
RAO, DAMANNA
RASMUSSEN, DAVID
REED, ED
REFSNIDER, KEITH
REUWEE, REBECCA
RICHEY, DEREK
RIDGLEY, FRANK
RIETVELD, HENK
RIGDON, CARRIE
RIVERA, JOE
ROBERTS, JEFF
ROBERTS, MARTHA
ROSS, STACEY
RUBENSTEIN, PETER
RYU, KYUNG
SAMELIS, IOANNIS
SASAHARA, KYLE
SCHONROCK, F. TRACY
SCHWAN, CARLA
SCHWARTZ, WILLIAM
SEAMAN, CHARLES
SEILER, JEFF
SEMANCHEK, JEFFREY
SHEEN, SHIOWSHUH
SHIMAMOTO, TADASHI
SHIRER, MICHAEL
SHUMAKER, DAVID
SMEDLEY, KAREN
SMIT, MICHELLE
SMITH, MICHELLE
SOETAERT, VAN
SOMMERS, CHRISTOPHER
SPRUNG, D. WAYNE
STANFORD, KIM
STEPHAN, ROGER
STEWART, CINDY
STEWART-BROWN, BRUCE
STIER, RICHARD
STUBBS, TIMOTHY
STYKE, MEHGAN
SUTZKO, MEREDITH
SYKES, SUE
TAN, AGNES
TANABE, MARIA ELENA
TAYLOR, STEVE
TERAVAINEN, CARL
THAYER, DONALD
THENO, DAVID
THESMAR, HILARY
THOMAS, PAUL
THOME, STEPHEN
TORRENCE, MARY
TOSHIO, MATSUDA
TRUELSTRUP HANSEN, LISBETH
TRYBA, CASIMIR
TURNER, MARK
URAKAMI, HIROSHI
UYTTENDAELE, MIEKE
VALBRUN, JEAN
VAN BRUGGEN, ARIENA
VASAVADA, PURNENDU

Individual Contributors

IAFP FOUNDATION

VILLALBA, ABIGAIL
VITALE, MARIA
WAGENER, SHARON
WAN, JASON
WANG, QIUHONG
WANG, YERU
WARREN, MOLLY
WASIK, RON
WATKINSON, ELAINE
WEAVER, GLEN
WEDERQUIST, HEIDI
WESTER, PATRICIA
WHITE, RUSSELL
WILGER, PAMELA
WILLIAMS, JOHN
WILLIAMS, ROBERT
WILSON, CHRISTINA
WILSON, GEORGE
WOLF-HALL, CHARLENE
WONG, HIN-CHUNG
WOROBO, RANDY
YAGHMAEE, PARASTOO
YAJIMA, MIZUO
YANG, QIANRU
YEMM, ROBERT
YOU, MICHELLE
ZHANG, GUODONG
ZHANG, JIANRONG
ZHAO, SHAOHUA
ZHAO, TONG
ZHENYU, SHEN
ZIEGLER, MICHAEL
ZIPORI, GIDDY
ZWEIFEL, CLAUDIO
ZWIETERING, MARCEL

$10 - $49

A DHEIR, BASIMAH
ABBAS, SYED
ABBOTT, DOUGLAS
ABDEL-KARIM, PIA
ABNOUSI, HAMLET
ABUSHELAIBI, AISHA
ACAR, JACQUES
ACHEN, MAYA
ADAMS HUTT, CATHERINE
ADAMS, CHANELLE
ADAMS-YINGST, HOPE
ADELL, FRANK
ADLER, JEREMY
AKANBI, BOLAJI
AKANNI, GABRIEL
AKINRULI, HELEN
AKINYELE, BILLY
AL TAHIR, SULTAN
ALAM, MOHAMMAD
ALBORANO, LYNN
ALBRECHT, JULIE
ALDAKHEELALLAH, ABDALLAH
ALDIHAN, MISHARI
ALGEO, SUSAN
ALI, RASHIDA
ALJETS, LORI
ALKAABI, AHMED
ALKHALDI, SUFIAN
ALLAN, JOHN
ALLARD, STEVEN
ALLEN, ANN-CHRISTINE
ALLEN, BRETT
ALLEN, KEVIN
ALLEN, LAURA
ALMAND, ERIN
ALVAREZ, VALENTE
ALZATE, LUZ
AMAIR, ELVIS
AMEZQUITA, ALEJANDRO
AMIN, S.
AMOAKO, KINGSLEY
AMUNDSON, DAWN
ANDERSEN, JENS KIRK
ANDERSON, BRIAN
ANDERSON, CONSTANCE
ANDERSON, CURTIS
ANDERSON, DAVID
ANDERSON, MAREN
ANDERSON, NATHAN
ANDERSON, REBECCA
ANDING, JENNA
ANDRADE, NELIO
ANDRADE, RAQUEL
ANDREWS, JENNIFER
ANDREWS, NAOMI
ANDREWS, NICK
ANELICH, LUCIA
ANNAN, NANA
ANTONACCI, PHYLLIS
ANVARIAN, AMIR
ARAI, SHINICHIRO
ARBOGAST, JAMES
ARCHER, DOUGLAS
ARCHIBALD, RON
ARDAGH, STEPHEN
ARDLE, CAROL
ARELLANO, ALDEN
AREVALO, KATHRYN
ARIAS RIOS, ELBA
ARIAS-ECHANDI, MARÍA
ARMENTA, THOMAS
ARMSTRONG, BENNETT
ARMSTRONG, BRIAN
ARMSTRONG, MARCIA
ARNDT, ROSEMARIE
ARRITT, FLETCHER
ASMUNDSON, RODERICK
ASSAR, SAMIR
ASTRIDGE, BRIAN
ASWATHANARAYAN, JAMUNA BAI
ATKINS, KEVIN
AVERY, PAULA
AW, TIONG GIM
AYALA, DIANA
BACUS, JAMES
BAGAAYA, SHARON
BAGENDA, DOMINIC
BAILEY, PETER
BAILEY, WARREN
BAIRD, GARY
BAKER, ANN
BAKER, CHRISTOPHER
BAKER, ROB
BAKER, STEPHEN
BAKHSH, JAMAL
BALDUS, KARA
BALDWIN, JAMES
BALL, BRITA
BANERJEE, PRATIK
BANKER, JEFFERY
BANSAL, ANIKA
BAPANPALLY, CHANDRA
BARAK, JERI
BARANYI, JOZSEF
BARBANO, DAVID
BAREFOOT, SUSAN
BARKET, DANIEL
BARLOW, KRISTINA
BARNETT, JOHN
BARNEY, RICK
BARONE, PATRIZIA
BAROS, BRANDI
BAROUDI, ATALLAH
BARRETT, DONALD
BARRON, FELIX
BARTELL, JOHN
BARTHEL, COLIN
BARTLESON, CHARLES
BASHALL, ANTHONY
BASSETT, JOHN
BATES, JOHN
BATTILANI, PAOLA
BAUER, NATHAN
BAUER, NICK
BAUGHER, JONATHAN
BAUMERT, JOSEPH
BAUMLER, DAVID
BAUTISTA, GLENN RAMON
BAXTER, PAUL
BAYLIS, CHRISTOPHER
BAYSAL, AYSE
BEARDALL, LINDSAY
BEAUCHAMP, CATHERINE
BEAUDIN, REBECCA
BEAUDOIN, ANDRE
BEAULIEU, JUSTINE
BEAULIEU, STEPHEN
BECZNER, JUDIT
BEDALE, WENDY
BEDNAR, CAROLYN
BEERS, KAREN
BELK, KEITH
BELL, THOMAS
BENJAMIN, LISA
BENJAMIN, MARLA
BENNETT, DIANA
BENO, SARAH
BENSCHEIDT, MEGHAN
BENSON, ANDREW
BERG, TYLER
BERGER, LISA
BERNARD, AUSTIN
BERNARD, CHERYL
BERNASCONI, MARKUS
BERRY, SHAWN
BESHEARSE, ELIZABETH
BESKAL, NAGY
BETTEN, CRAIG
BEVILACQUA, ANTONIO
BEYERLEIN, FRED
BEZANSON, GREGORY
BHATT, CHIRAG
BHATT, TEJAS
BHATTACHARYA, DEBARATI
BICHOT, YANNICK
BIERHALS, KARRIE
BIGGS, JOEL
BIRMINGHAM, TIM
BISCHOFF, MATTHEW
BISWAS, DEBABRATA
BITTEL, RALPH
BLACK, GLENN
BLACK, JAMES
BLACKMAN, ISABEL
BLADE, WILLIAM
BLAGOYEVICH, PHILIP
BLASZYK, MARIA
BLEDSOE, GLEYN
BLESSINGTON, TYANN
BLOMQUIST, DAVID
BLOUNT, JANET
BLUBAUM, SARAH
BLUNDEN, DERRICK
BLYTH, CHRISTIAN
BODENDORFER, CHRISTINE
BODIFORD, SHELLY
BOGNAR, ERIKA
BOLTON, JASON
BOND, ROBERT
BONNAULT, CYRIL
BONO, JAMES
BONTEMPO, NANCY
BOOTHE, THERESA
BORDERS, JULIE
BORGER, ADAM
BORJAS ORELLANA, EVA
BORNAND, VALERIE
BORNEMAN, THERESE
BORRUSSO, PATRICIA
BOSHOFF, DELENE
BOSTAN, HATICE
BOSTOCKY, SHERROD
BOUCH, JIM
BOUCHER, LYLE
BOURDICHON, FRANCOIS
BOWES, KATRINA
BOWMAN, LARRY
BOWMAN, TED
BOYER, KENNETH
BOZKURT CEKMER, HAYRIYE
BOZZETTA, ELENA MARIA
BRADSHAW, ELIZABETH
BRADY, MARGARET
BRANDAO DELGADO, JOSE
BRAR, JAGPINDER
BRAUNINGER, ROGER
BREHMER, BRENT
BREHM-STECHER, BYRON
BREINER, DON
BREMER, WILLIAM
BRENNAN, JAMES
BRENNECKE, STEVEN
BRESNAHAN, DAVID
BREVETT, CAROL
BRIESMEISTER, DEBORAH
BRIGGS, MARIE
BRIGHT, GEOFF
BRILLINGER, TINA
BRINE, PETER
BROCK, BARRY
BROCK, GORDON
BROOKMEYER, KYLE
BROOKS, ROBERT
BROSSE, NATHALIE
BROWN, DAREN
BROWN, GRANT
BROWN, JANICE
BROWN, JESSICA
BROWN, PATRICK
BROWN, SUSAN
BROWNING, KEVIN
BROWNING, PAUL
BRUHN, CHRISTINE
BRUNNER, ALBERT
BUCKLEY, JIM
BUCKMAN, KURT
BUCKNER, REBECCA
BUENAVENTURA, ENRICO
BULTHAUS, MARY
BUNCH, LORI
BUNCIC, SAVA
BUNNING, MARISA
BURALL, LAUREL
BUREAU, CATHERINE
BURGESS, WILLIAM
BURKE, RAY
BURKE, RONALD
BURLIN, JOHANNES
BURMESTER, ELIZABETH
BURNESS, MIKE
BURNETT, PORTER
BURNETT, SCOTT
BURROW, RICHARD
BURTON, NADINE
BUSER, HANS
BUSSE, LARRY
BUTEYN, DAVID
BYBEE, NADIA
BYRNE, TIM
BYRON, JIM

Individual Contributors

IAFP FOUNDATION

CABALLERO, OSCAR
CAIPO, MARISA
CALDWELL, JANE
CAMPAGNOLI, MATTEO
CAMPANO, STEPHEN
CAMPBELL, BRIAN
CANNON, JENNIFER
CAO, CONG
CAO, GUOJIE
CAPPOZZO, JACK
CARAVETTA, DOMENIC
CAREY, ROBERT
CARLIN, CATHARINE
CARLIN, FREDERIC
CARLISLE, THOMAS
CARLSON, BRANDON
CARROLL, JOANNA
CARROLL, LAURA
CART, DOUG
CARTER, MARK
CARTIER, NICOLAS
CASELLA, TIAGO
CASEY, RANDY
CASIAS, MICHELLE
CASTELLO, ASHLEY
CASTILLO HERNANDEZ, SANDRA
CASTRILLON, JORGE
CASTRO, CARLOS
CAVALIERO, KELLI
CAVER, CHRISTOPHER
CENTRELLA, BILL
CEVALLOS-CEVALLOS, JUAN
CHABLAIN, PATRICE
CHAI, LAY CHING
CHAKRABORTY, APURBA
CHAMBERLAIN, MARTY
CHANDRA, SARATH
CHAPIN, TRAVIS
CHAPMAN, BENJAMIN
CHASE, MELISSA
CHATURONGAKUL, SORAYA
CHATZIKYRIAKIDOU, KYRIAKI
CHAUVET, JEAN-FRANCOIS
CHAVEN, SUCHART
CHAVES ULATE, EVELYN CAROLINA
CHAVES, BYRON
CHAZAN, ADAM
CHECKETTS, NEIL
CHEN, FUR-CHI
CHEN, JINRU
CHERMALA, RAVI
CHEUNG, SALLY
CHIANG, JING
CHIPLEY, JOHN
CHIRTEL, STUART
CHMIELEWSKI, REVIS
CHO, SUNG MIN
CHONG, JEEYOUN
CHOW, EDITH
CHU, HYUNSIK
CHU, LYNETTA
CHUAH, SOO
CHUN, HYANG SOOK
CHUNG, DUCK-HWA
CHUNG, HYUN-JUNG
CHUNG, MYUNG SUB
CHUNG, SOO-HYUN
CID, ANTONIO
CIPRIANI, ANDREA
CIRIGLIANO, MICHAEL
CLARK, MICHAEL
CLAYTON, KATIE
CLEMENS, KRISTINE
COCOMA, GEORGE
COE, PAULA
COELHO, BRIAN
COHEN, GARY
COLAVECCHIO, ANNA
COLE, MARTIN
COLE, TANESIA
COLE, WILLIAM
COLEMAN, GARY
COLEMAN, PAM
COLEMAN, SHANNON
COLOMBO, STEFANO
COLONY, KRISTIN
COMEAU, NATHALIE
CONDON, DAVID
CONDON, SANTIAGO
COOK, NIGEL
COOMES, JOHN
COOPER, KERRY
COOPER, RENETTA
CORKRAN, SYDNEY
COSBY, CATHERINE
COSSI, MARCUS
COTTON, CORRIE
COURTNEY, POLLY
COUSIN, MARIBETH
COVENTRY, JOHN
COX, JULIAN
CRAMER, MICHAEL
CRANFORD, VANESSA
CRAWFORD, CHRIS
CRAWFORD, WILLETTE
CRESPO, DONNA
CROMPTON, ROBERT
CROWLEY, CECILIA
CROWLEY, ERIN
CURIALE, MICHAEL
CURTIS, JULIE
CURTIS, PATRICIA
CYPESS, RAYMOND
DA ROCHA, LIZIANE
DACOSTA, LUIS
DAFF, JENNIFER
DAHL, KRISTEN
DALINA, DAN
DALMACIO, IDA
DAMBAUGH, TIMOTHY
DAMODARAN, SUNDAR
DANESH MANESH, ALI
DANIELLO, SCOTT
DANIELS, WILL
DANISAVICH, THOMAS
DANZEISEN, GREGORY
DAS, KATIE
DATTA, ATIN
DAVENPORT, KEN
DAVID, DOUGLAS
DAVID, ORLANDO
DAVIDSON, CATHERINE
DAVIDSON, DEAN
DAVIDSON, PHILIP
DAVIE, JAMES
DAVIE, JAMIE
DAVIS, CHRISTOPHER
DAVIS, DELILAH
DAVIS, KATE
DAVIS, MEGAN
DAVIS, SHERRY
DAWSON, ROBERT
DE BRUIN, WILLEKE
DE LATHOUDER, YANCY
DE SENNA, ANTOINETTE
DEARDORFF, DAVID
DEBECKER, DANNY
DECKELMANN, WILLIAM
DEERING, AMANDA
DEGEER, STACI
DEIBEL, CAROL
DEIBEL, R.
DEIBEL, VIRGINIA
DELAZARI, IVONE
DELICH, JOHN
DELMORE, JAMI
DEMESA, RICARLO
DEMIREL ZORBA, NUKHET
DEN BESTEN, HEIDY
DENG, KAIPING
DENIRO, JULIA
DENUDE, CHRISTOPHER
DEPAOLA, ANGELO
DESAUTELS, GREG
DESRIAC, NOEMIE
DEV KUMAR, GOVINDARAJ
DEVULDER, GREGORY
DEWANTI, RATIH
DEWITT, CHRISTINA
DI TOMMASO, KATHERINE
DIARRA, MOUSSA
DIBLASI, JOHN
DIEDERICH, SARA
DIGRINO, SUSAN
DIJK, OLAF
DILLEY, JOHN
DING, TIAN
DING, YIRAN
DINSDALE, MICHAEL
DINUZZO, FRAN
DIPERSIO, PATRICIA
DIPLOCK, KENNETH
DIRKS, BRIAN
DIWU, JACK
DODD, ALLISON
DOERING, HELGA
DOHNAL, THEODORE
DOLAN, MICHAEL
DOMIG, KONRAD J.
DONAHUE, DARRELL
DONG, QINGLI
DOWNHAM, JAMES
DRAGT, STEVEN
DRAKE, MARK
DRAKE, STEPHENIE
DRAPER, MICHAEL
DREYLING, ERIN
DRISCOLL, ELIZABETH
DRUCKER, EMILY
D'SOUZA, DORIS
DUARTE, MARCEL
DUBREUIL, ELISA
DUCHARME, DIANE
DUDICK, CAROL
DUEHOLM, BORGE
DUEHRING, JUDY
DUFORT, EVANN
DUFOUR, CHRISTOPHE
DUFRESNE, DENISE
DUMONT, NELLY
DUNN, MICHAEL
DURST JOSEPH, GLORIA
DUTTA, VIKRANT
DWIVEDI, HARI
DWORKIN, LAWRENCE
DZUBAK, JOHN
ECKNER, KARL
ECONOMOU, EFI
EDEN, RUTH
EDWARDS, PAUL
EIFERT, JOSEPH
EISEL, WILLIAM
EISENBERG, BARRY
ELDRED, BRAD
ELLINGSEN, ANETTE
ELLIOTT, ROBERT
ELLOUZE, MARIEM
ELLS, TIMOTHY
EMARD, MICHAEL
EMBWAGA, PATRICK
ENACHE, ELENA
ENGLAND, TOM
ENGLISH, ANDREA
ENNIST, LEWIS
ENRIQUEZ, ALICIA
ERLANDSON, KARN
ESAKI, HIDETAKE
ESCUDERO-ABARCA, BLANCA
ESKIN, SANDRA
ESPINDOLA, GERSON
ESPITIA, PAULA
ESTRADA, MARIO
ETHY ETHY, MARTIN GUY
EUBANKS, THEA
EVANS, PETER
EVERSON, THOMAS
FALLON, KRISTEN
FAM, JOHN
FANNING, SEAMUS
FAOUR-KLINGBEIL, DIMA
FARAH, KRISTY
FARKAS, JOZSEF
FARROKH, CHOREH
FATEMI, PEYMAN
FATICA, MARIANNE
FAULKNER, JEFFREY
FEIRTAG, JOELLEN
FEIST, SHELLEY
FENG, GUOPING
FENG, YAOHUA
FENIMORE, THOMAS
FENOCKETTI, MIKE
FENTON, LAURA
FERGUSON, ROBERT
FERNANDES, RICHARD
FERREE, BRUCE
FIGUERAS, SERGI
FINNEY, SENYA
FINNIN, ERIC
FISHER, SUZANNE
FLETCHER, JACQUELINE
FLICK, GEORGE
FLINT, CAROLYN
FLINT, STEVE
FLOOD, ANTHONY
FLOWERS, RUSSELL
FLUCKEY, WADE
FOK, NELSON
FONTANAZZA, MARIA
FORD, RANDALL
FORESTER, MATTHEW
FORGEY, ROBIN
FORSTNER, MATTHEW
FORSYTHE, STEPHEN
FORT FINDLEY, CHARLOTTE
FORTUNATI, TYLER
FOURNAISE, SYLVAIN
FOWNES, IAN
FOX, EDWARD
FOX, WENDY
FRAGEDAKIS, NICK
FRANCHIN, PAULO ROGERIO
FRANCIS, DORRIE
FRANCO, BERNADETTE
FRANCOTTE, CLAUDE
FRANK, JOSEPH
FRANKISH, ELIZABETH
FRANZ, EELCO
FRASER, ANGELA
FRASER, RHONDA
FRATAMICO, PINA
FREEBORN, KEVIN
FREEMAN, DEBRA
FREEMAN, SUSAN
FREESTONE, PRIMROSE
FREIER, TIMOTHY

Individual Contributors

IAFP FOUNDATION

FRIEDRICH, LORETTA
FRIPP, CASEY
FRITZINGER, ANGELA
FU, TONG-JEN
FUJIKAWA, HIROSHI
FUKUSHIMA, KAZUKO
FUNSTON, DARYL
FURUKAWA, YUICHI
FUSCO, KAREN
GABEL, SURAYA
GABOWICZ, ALEXANDRA
GADOTTI, CAMILA
GAHMI, HEND
GAHUKAR, RUPARAO
GAJADHAR, ALVIN
GALARPE, GREG
GALER, CHAD
GALLOTTINI, CLAUDIO
GALVAN, NOE
GANE, PAM
GANNON, KEVIN
GAPUD, VENERANDA
GARDNER, BRETT
GARDNER, ROSS
GARNER, JASON
GARRIGA, MARGARITA
GARRISON, CRISTAL
GATES, ROBERT
GATHRIGHT, ANN MARIE
GATTA, EDWARD
GAULIN, COLETTE
GAZE, JOY
GEARHART, GEORGE
GEBREYES, WONDWOSSEN
GELLER, TODD
GELLERMAN, MICHAEL
GENC, ISMAIL
GENDEL, STEVEN
GENE, JOSE
GENEST, BERENGERE
GENSEL, CATHARINE
GERNER-SMIDT, PETER
GHASEMLOU, MEHRAN
GIESENSCHLAG, JACK
GIL, JOSE
GILCHRIST, AMANDA
GILGOUR, MITCHELL
GILL, ALEXANDER
GILL, COLIN
GILL, JASON
GILLIAM, A. SCOTT
GIOMBELLI, AUDECIR
GIRARD, MARYLINE
GKOGKA, ELISSAVET
GLAROS, TIMOTHY
GLEASON, STEPHANIE
GLOVER, JACKIE
GODDARD, NOEL
GODEFROY, SAMUEL
GODWIN, SANDRIA
GOEDESKY, GEORGE
GOJIC, ZELJKO
GOLTRY, SCOTT
GONG, JOSHUA
GONZALES, RORY
GONZALES-BARRON, URSULA
GONZALEZ, GABRIELA
GONZALEZ-ESCALONA, NARJOL
GOODBURN, CAROLINE
GOODBURN, MBE, KAARIN
GOODFELLOW, STEVEN
GOODMAN, RICHARD
GOODRICH, WENDY
GOODYEAR, NANCY
GORMAN, MICHELE
GOSKOWICZ, BRAD
GOULD, ANDREW
GOULTER, REBECCA
GOURAMA, HASSAN
GOURLEY, MARSHALL
GRADL, DANA
GRAHAM, R. ROSS
GRAHAM, RICHARD
GRAMMENTZ, DILON
GRANT, SARAH
GRASSMANN, DUANE
GRAY, DOREY
GREEN, DALE
GREEN, DAVID
GREENE, JANIE
GREGG, TIMOTHY
GREGRO, SUSAN
GREIBY, IBRAHIM
GREVE, JOSIE
GRIFFITH, LEENA
GRIFFITH, SARAH
GRIFFITHS, MANSEL
GRILLO, DEREK
GRIM, CHRISTOPHER
GROFF, RANDY
GROM, JOHN
GROOTERS, SUSAN
GROVER, SHAWN
GROVER, STEVEN
GUDDENDORF, TRACEY
GUEVREMONT, EVELYNE
GUGLIELMONE, FABIANA
GUILLEN, LACEY
GUINTINI, MEGAN
GURMAN, PHILLIP
GURON, GISELLE KRISTI
GURRAM, SUBBA RAO
GURTLER, JOSHUA
GUTIERREZ-RODRIGUEZ, EDUARDO
GUZZLE, PATRICK
GWEE, KAAN
HAAS, ALLEN
HAAS, BETH
HACHMEISTER, KATHY
HAFER, TROY
HAGBERG, ROBERT
HAILS, STEVE
HALBROOK, BRENDA
HALE, CHRISTOPHER
HALL, CATHERINE
HALL, JEFF
HALLEN-ADAMS, HEATHER
HALLMAN, WILLIAM
HAMIL, BETH
HAMIL, JEAN
HAMILTON, ANN
HAMILTON, JANEE
HAMILTON, JENNIFER
HAMM, ROBIN
HAMMONS, SUSAN
HAN, DONG
HANLEY, ALEXANDRE
HANLON, PAUL
HANNA, SCOTT
HANSEN, MICHELLE
HARAPAS, KONSTAS
HARDEN, MICHELLE
HARDIN, ANGELA
HARDING, MELISSA
HARKEY, WILLIAM
HARKINS, SETH
HARPER, NIGEL
HARRIS, DAVID
HARRIS, MILES
HART, CATHERINE
HARTMAN, JAMES
HARTNETT, EMMA
HARTZOG, ASHLEY
HARVELL, DIANNE
HARVEY, ROBERT
HASHEM, FAWZY
HAWKINS, BRIAN
HAYDEN, CARRIE
HAYS, BARRY
HAZAN, STAN
HE, LILI
HEED, KAROLINA
HEENAN, CLAIRE
HEFFNER, DAVID
HEFLICH, LEONARD
HEGGUM, CLAUS
HEIN, TOBIAS
HEINZELMANN, JOE
HELANDER, MARY
HELDMAN, DENNIS
HELLQVIST, RIKARD
HEMMING, DANIEL
HENDERSON, NICOLE
HENDRA, FRANK
HENDRA, TIM
HENDRICKS, KAYLA
HENYON, DEBRA
HEPERKAN, DILEK
HERBOLD, NICOLE
HEREDIA, NORMA
HERMANSKY, STEVE
HERMIDA, CARLOS
HERMSMEIER, MEGAN
HERNANDEZ, ERIK
HERRICK, ROBERT
HERRINGTON, PATRICIA
HERSZAGE, BRUNO
HERTRICH, SARAH
HERWEYER, DAVID
HEYNDRICKX, MARC
HILDABRAND, BRADFORD
HIMES, ROBERT
HINCKLEY, LYNN
HINGSTON, PATRICIA
HINTON, ARTHUR
HIRSCH, DIANE
HIRST, ROBERT
HITT, KELLY
HOCHSTEIN, JILL
HODGE, MEREDITH
HOELZER, KARIN
HOFFMANN, JOHN
HOFFMANN, MARIA
HOFFMANN, SANDRA
HOHLSTEIN, REBECCA
HOLDEN, ANN
HOLICKA, JANE
HOLLEKIM, ERIC
HOLLEY, RICHARD
HOLZER, DAN
HOORFAR, J.
HORN, STEVEN
HOSKING, EDAN
HOUCK, KRISTEN
HOUF, KURT
HOUSTON, BROOKE
HOWE, DAVID
HSIAO, HSIN-I
HU, PHYLLIS
HUANG, DIANA
HUANG, EN
HUANG, YANYAN
HUANG, YAOWEN
HUDSON, JESSICA
HUFF, ANDREW
HUFF, KENNA
HUGHES, MARIA
HUGHES, MELISSA
HULBERT, KEVIN
HULICK, BARBARA
HULS, NANCY
HUME, SANDY
HUMPHREY, KEVIN
HUNDT, MATT
HUNT, BARBARA
HUNT, KRISTEN
HURCKES, CHRISTINE
IACONO, JOSEPH
IANNOTTI, EUGENE
IDRISS, ATEF
IGO, MATTHEW
IKEDA, TETSUYA
ILIC, SANJA
IN 'T VELD, PAUL
INGHAM, BARBARA
INGRAM, DAVID
IOSSIFIDOU, ELENI
IRVIN, KARI
IRVING, MARQUES
IRVING, STEPHEN
ITH, PHEAKDEY
ITURRIAGA, MONTSERRAT
IVERSEN, CAROL
IVY, REID
IWUCHUKWU, GABRIELLA
IZUMI, HIDEMI
JACKSON, LEEANNE
JACKSON-DAVIS, ARMITRA
JACOBS, GREGG
JACOBS, RICHARD
JACOBSON, ANDREW
JADHAV, SNEHAL
JAMES, MICHAEL
JAMES, SANDY
JANES, KENNETH
JANES, MARLENE
JANKOVIC, RADE
JANSSEN, ALEX
JANTSCHKE, MICHAEL
JARONI, DIVYA
JAROS, PATRICIA
JASTI, NANDITHA
JAY-RUSSELL, MICHELE
JEDLICKA, JUSTYCE
JEFFERS, JACK
JENOTT, JACOB
JENSEN, MEGAN
JENSON, IAN
JEONG, DONG-KWAN
JEONG, KWANGCHEOL
JEONG, SANGHYUP
JETER, OSCAR
JHAVERI, SID
JIANG, CINDY
JIANG, XIUPING
JIN, TONY
JOHN, LISA
JOHNSON, ANDREA
JOHNSON, BILLIE
JOHNSON, CHRISTOPHER
JOHNSON, ERIC
JOHNSON, JODY
JOHNSON, KEN
JOHNSON, MICHAEL
JOHNSON, TIM
JONES, DONALD
JONES, JESSICA
JONES, MICHELLE
JONES, NICOLE
JONES, SARAH
JONES, STEPHEN
JONES, TIM
JONES, TINEKE
JONQUIERES, RENAUD
JORDAN, HEATHER
JORDAN, KIERAN

Individual Contributors

IAFP FOUNDATION

JU, WENTING
JUBERG, METTE JULIE
JULIEN, GISELLE
KADER MAIDEEN, ABDUL MUTHALIF
KANE, DEBORAH
KANENAKA, REBECCA
KANG, JEA WOO
KANG, JIHUN
KAPLAN, SHANNON
KARLTON-SENAYE, BERNICE
KATAOKA, AI
KAUFMAN, JAMES
KAUSCH, MATTHIAS
KAWATA, JASON
KEATEN, WINN
KEAVEY, BRENDA
KEEBLE, ALLISON
KEELARA VEERAPPA, SHIVARAMU
KEETON, JIMMY
KEIPER, SAM
KEITH, GABE
KELLEHER, GILLIAN
KELLY, BILL
KELLY, MEGAN
KELLY-HARRIS, SANDRA
KEMP, RIKA
KEMPKES, MICHAEL
KENDRICK, JOHANNAH
KENNEDY, PATRICK
KENNEDY, TERRENCE
KEPHART, DAN
KERR, DAVID
KERR, RALPH
KERSTAN, PETER
KEYS, CHRISTINE
KHAKBAZ HESHMATI, MARYAM
KHAKSAR, RAMIN
KHAN, MOHIB AHMED
KHAN, SAEED
KHINOUCHE, KARIM
KHOJASTEH, AZADEH
KIERMEIER, ANDREAS
KILLNER, MARIO
KILONZO-NTHENGE, AGNES
KIM, CHYER
KIM, GUN-HEE
KIM, JEONG-WEON
KIM, JI HOE
KIM, JINHEE
KIM, SANGPIL
KIM, SEJEONG
KIM, SEUNG
KIMBER, MARTHA
KINCHLA, AMANDA
KINDER, JULIE
KINDER, THOMAS
KING, HAL
KING, ROBIN
KING, SCOTT
KINGSLEY, DAVID
KINKAID, DARRELL
KIRBY, CONNIE
KIRCHNER, MARGARET
KLEIN, DEBORAH
KLOSTER, CORBETT
KMET, MATTHEW
KNABEL, STEPHEN
KNEDGEN, ERIK
KNEELAND, DANNI
KNUEVEN, CARL
KNUTSON, KATHY
KOENIG, ELLEN
KOERIS, MICHAEL
KOERNER, MARSHA
KOH, YOUNG JOON
KOIWA, TOMOHIRO
KOLSTAD, JENS
KONAGAYA, YUKIFUMI
KOO, MINSEON
KOOPMANN, CARSTEN
KORSAK, NICOLAS
KOWALCYK, BARBARA
KOZAK, SARAH
KOZULIC, MIRJANA
KRAMER, ADAM
KRAMER, GINA
KRAMER, MATT
KRAMER, MELVIN
KRAMER, ROBERT
KRESSNER, ANITA
KRISHNA, BOBBY
KROGULL, MARY
KRONENBERG, JEFF
KUBOTA, KUNIHIRO
KUEHM, JEFFREY
KUHN, THOMAS
KUHNE, MICHAEL
KUKOLY, JOHN
KUMAR, SAURABH
KUMAR, SHINE
KURTZ, GLEN
KUSUMANINGRUM, HARSI
KUTZLEB, LARRY
KWON, SUN-AH
LABORDE, LUKE
LABUHN, NANCY
LABUZA, THEODORE
LACROIX, BONNIE
LACROIX, CHRISTOPHE
LAI, WEIHUA
LAMBESEDER, JEFF
LAMMERDING, ANNA
LANDRY, KYLE
LANE, DONALD
LANGE, MARIE
LANGSRUD, SOLVEIG
LANI, MOHD NIZAM
LANINI, SHARAN
LANNA, FREDERICO
LARA, EDEN
LARKIN, BENJAMIN
LARSEN, LEE
LARSON, KURT
LARVICK, CAROL
LASIC, DAN
LATREILLE, GUY
LAU, TERENCE
LAWRENCE, ROGER
LAWRUK, TIMOTHY
LEAMAN, SUSAN
LEASER, DWAIN
LECEA, EDUARDO
LEDGERWOOD, KEVON
LEE, AMY
LEE, DONG WOO
LEE, EUN SEOK
LEE, HYUN JUNG
LEE, JEEYEON
LEE, JU-WOON
LEE, KEITH
LEE, KYU RI
LEE, MARILYN
LEE, MIN HWA
LEE, PETER
LEE, REGINA
LEE, RICHARD
LEE, SUN
LEFEBVRE, JACINTHE
LEGAN, J. DAVID
LEGUERINEL, IVAN
LEITCH, STEVEN
LEKKAS, PANAGIOTIS
LEONARD, CYNTHIA
LEONG, BELLA
LEROUX, DIDIER
LESAULT, FABRICE
LESLIE, SUSAN
LEWIS, GLENDA
LI, HAIPING
LI, KA WANG
LI, YANBIN
LI, ZENGXIN
LIACOURAS, GLENN
LIANOU, ALEXANDRA
LILLEMO, JANET
LILLEY, CALEB
LILLY, JASON
LIM, DAVID
LINDHOLM, JEFFREY
LINDPAINTNER, KLAUS
LINDQVIST, ROLAND
LINDSAY, JAMES
LINE, J. ERIC
LINEBACK, CAITLINN
LINN, SUSAN
LINTON, RICHARD
LITTLE, TONYA
LITWIN, IVONNE
LIU, BIN
LIU, HENRY
LIU, TONG
LIU, XIUMEI
LIVEZEY, KRISTIN
LOEFFLER, MYRIAM
LOEROP, BOB
LOISY, FABIENNE
LOMBARDO, TIMOTHY
LOPES, ELLEN
LOPEZ-VELASCO, GABRIELA
LORENZ, ANDREW
LORENZO, FERNANDO
LOSS, CHRISTOPHER
LOUKIADIS, ESTELLE
LOVETT, MICHELLE
LOVEY, THOMAS
LOWRY, DAVID
LOWRY, PAUL
LUCAS, JEFFERY
LUKER, JOHN
LUM, KENNY
LUNGU, BWALYA
LUO, YONGKANG
LUZ, LUCIANA
LUZURIAGA, DIEGO
LYNCH, ROBERT
LYNN, DAN
LYON, STEPHEN
MA, LI
MABILAT, CLAUDE
MACDONALD, BOB
MACINGA, DAVID
MACK, KEVIN
MACKENZIE, ALLISON
MACKLIN, KENNETH
MACPHERSON, SCOTT
MADDEN, JOSEPH
MADDEN, ROBERT
MADDOX, BRENT
MADGWICK, DANIEL
MADUFF, WENDY
MAEHLER, ROGER
MAFFEI, DANIELE
MAGAJNA, BRENDA
MAHMOUD, BARAKAT
MAHON, JIM
MAHONEY, PATRICIA
MAINAR-JAIME, RAUL
MAITLAND, JESSICA
MAKDESI, ADEL
MALBERG, HOWARD
MALDONADO, HUMBERTO
MALDONADO-SIMAN, EMA
MALLEY, THOMAS
MALM, BRIAN
MALONE, KENNETH
MALOTA, CHRIS
MAMBER, STEPHEN
MANALILI, PANCITA
MANES, MINDI
MANGALASSARY, SUNIL
MANGIONE, CYNTHIA
MANION, JENNIFER
MANN, JEFFREY
MANSOURIAN, MARJAN
MANTHE, CRAIG
MANUEL, CLYDE
MAOUNOUNEN-LAASRI, ANNA
MARCHAND, CHARLES
MARGAS, EDYTA
MARQUEZ GONZALEZ, MAYRA
MARROQUIN-CARDONA, ALICIA
MARSHALL, NEIL
MARSHALL, ROBYN
MARTIN, CHARLES
MARTIN, JENNIFER
MARTIN, ROSARIO
MARTINEZ, DAVID
MARTINEZ, FRANCISCO
MARTINEZ, FREDERIC
MARTINEZ, JOE
MARTINEZ, MARTIN
MASSEY, CHRISTOPHER
MASSIAH, EDWARD
MASTERS, BARBARA
MATCZYNSKI, AMANDA
MATTHEWS, KARL
MAUNULA, LEENA
MAZENGIA, EYOB
MCALOON, TODD
MCBRIDE, PAUL
MCCARDELL, AMY JO
MCCARTHY, NOELLE
MCCONNAUGHEY, MARY
MCCOY, BILL
MCCULLOUGH, WILLIAM
MCCURDY, SANDRA
MCDONNELL, RYAN
MCDONOUGH, MEGHAN
MCDOWELL, HAROLD
MCEGAN, RACHEL
MCEVOY, ROB
MCFARLANE, CARLA
MCGARRY, SHERRI
MCGOLDRICK, KEVIN
MCGRATH, BRENDA
MCGUILL, CHARLES
MCGUIRE, RUTH
MCKENNA, CRYSTAL
MCKOY, JONATHAN
MCNAMARA, CHRISTOPHER
MCNAMARA, CRONAN
MCREYNOLDS, JACKSON
MCVAY, GEORGE
MEDEIROS, LYDIA
MELDRUM, RICHARD
MELLOR, GLEN
MELNYCZENKO, WILLIAM
MEMBRE, JEANNE-MARIE
MENDOZA, JOSE
MENES, CARLOS
MENESES, NICOLAS
MENG, JIANGHONG
MERK, KAITLEN
MERTINS, KAREN

Individual Contributors

IAFP FOUNDATION

MERTZ, ERIN
MESCHKE, JOHN
MESNER, SHAWN
MESSELHAEUSSER, UTE
MEYER, ROLF
MEYERS, TRACY
MICALLEF, SHIRLEY
MICIK, JAMES
MIGNOGNA, MARK
MIGONES, ALEJO
MILILLO, MICHAEL
MILKE, DONKA
MILLER, BRYAN
MILLER, DAMON
MILLER, EMILY
MILLS, RYAN
MINOCHA, UDIT
MINOR, AMIE
MITCHELL, CAMPBELL
MITH, HASIKA
MOCKUS, HOLLY
MOEHLENBROCK, MICHAEL
MOELHMAN, MARK
MOHR, JACOB
MOHSENI, ALI
MOKHTARI, AMIR
MONAHAN, BERNARD
MONROY, PAUL
MONTEIRO, SILVIA
MONTGOMERY, BUFFY
MONTVILLE, THOMAS
MONU, EMEFA
MOODY, LISA
MOON, HYE-KYUNG
MOORE, ERIC
MOORE, MATTHEW
MOOSEKIAN, SCOTT
MOOTIAN, GABRIEL
MORALES, ANABELLE
MORENO SWITT, ANDREA
MORETRO, TROND
MORLEY, KATIJA
MORSE, MICHAEL
MORTON, AARON
MOTTA, MICHAEL
MOUCHKA, GREG
MOUSCADET, JEAN FRANCOIS
MOUSSAVI, MAHTA
MOXLEY, RODNEY
MOYNE, ANNE-LAURE
MOZINGO, ROGER
MPUCHANE, SESAE
MRACHEK, LAURA
MUELLER, GEORGE
MUFUMBIRO, HAKIM
MULLER, TONY
MUNCE, BARBARA
MUNDY, KEN
MUNIESA, MAITE
MURDOCH, RHONDA
MURINDA, SHELTON
MURPHY, BRENDAN
MURPHY, DARCY
MURRAY, PATRICK
MUSGROVE, MICHAEL
MUSTAFA, NAZIK
MYATT, DAVID
MYATT, JOSEPH
MYRICK, JAMES
NADEEM, LINDA
NAGARAJA, T. G.
NAIK, PRIYA
NAKANISHI, RYOTA
NANNAPANENI, RAMAKRISHNA
NANYUNJA, JESSICA
NARAJOWSKI, WALTER
NARINE, NADIA
NARVAEZ, CLAUDIA
NAUTA, MAARTEN
NAVA, GERARDO
NAZARETH, JOSHUA
NAZIR, SERAP
NDEFRU-TUMANJONG, ODILIA
NEAL, JACK
NEAL, JAMES
NEARY, CARMEN
NEEDHAM, JONATHAN
NEETOO, HUDAA
NELSON, BRAD
NELSON, BRADLEY
NELSON, MARIA
NEMETH, CSABA
NERO, LUIS
NEUMANN-CHERNEY, MELANIE
NEVAREZ-MOORILLON, GUADALUPE
NEWMAN, GREGORY
NEWSLOW, DEBBY
NICHOLS, TAMMY
NICHOLSON, TOM
NICKELSON II, RANZELL
NICOLOSI, ROBERT
NIELSEN, TOM
NIELSEN, TONNY
NIGHTINGALE, KENDRA
NISHIBU, JUN
NISHIKAWA, YOSHIKAZU
NIXON, RICHARD
NJONGMETA, NENGE
NNOKA, CATHERINE
NOAKES, JUSTEN
NOH, KEE YEUL
NOLANDER, RANDY
NORD, JENNIFER
NORTON, JOHN
NOU, XIANGWU
NOVAK, JOHN
NTULI, VICTOR
NWADIKE, LONDA
NYARKO, ESMOND
NYATI, HILDA
NYGAARD, MICHAEL
O'BRIEN, TOM
O'BRYAN, CORLISS
O'CONNOR, LISA
ODUMERU, JOSEPH
OGI, SUSAN
OH, DEOG-HWAN
OH, SE-WOOK
OKE, MOUSTAPHA
O'KEEFFE, JOHN
OKENU, PH.D., DAN
OKEREKE, AMECHI
OLANYA, MODESTO
OLDFATHER, SUSAN
OLISHEVSKYY, SERGIY
OLIVER, ERIC
OLIVER, HALEY
OLIVO, RUBIA
OLMSTED, STEPHANIE
OLSON, LINDA
OLSON, TERESA
O'MAHONY, CIAN
ONODERA, SHUNYA
OOKAWARA, NORIYUKI
ORNER, MICHELLE
ORTEGA, KATELYN
ORTIZ, TINA
ORUE, NYDIA
OSHIMA, AKIRA
OSOLU, OBETA
O'SULLIVAN, FRANK
OSWALD, STEVE
OTT, MARILYN
OTTENHEIMER, CAROLYN
OVERBEY, KATIE
OWENS, ELIS
OWUSU-DARKO, RODNEY
OYARZABAL, OMAR
PADDEN, JAMES
PADILLA-ZAKOUR, OLGA
PAGADALA, SIVARANJANI
PAGE, JIM
PAIKOWSKY, ZEEV
PALMER, ELIZABETH
PALUMBO, MARY
PAN, XIAO JUN
PAN, YOUWEN
PAOLI, GEORGE
PAOLI, GREGORY
PAPA, CHARLES
PARK, CHUNG MYEON
PARK, IL KYU
PARK, JONG-HYUN
PARKER, ALAN
PARKER, BRECK
PARKER, STEVEN
PARRA FLORES, JULIO
PARSONS, BARRY
PARTO, NAGHMEH
PARVEEN, SALINA
PASTER, TARA
PATEL, JITU
PATEL, SHEENA
PAUL, DAVID
PAVLETIC, DAVID
PEACE, BROOKE
PEARCE, DAVID
PEARSALL, MICHAEL
PEEL, TARA
PEIST, RALF
PELADAN, FABRICE
PELAGGI, BRET
PENALOZA, WALTER
PENDERGAST, JAMES
PENG, LINDA XUAN
PENNYCUICK, ANDREW
PEREIRA, KAREN
PEREZ-LEWIS, KEILA
PEREZ-MENDEZ, ALMA
PEREZ-MONTANO, JULIA
PEREZ-RODRIGUEZ, FERNANDO
PERKINS, JOHN
PERRY, BRIAN
PETERSEN, ANTHONY
PETERSON, SARAH
PETREY, LAURIE
PETROVIC, MARIJANA
PETRUCCI, TONY
PETTIGREW, CHARLES
PFAFF, SYLVIA
PFEFER, TINA
PHAN-THIEN, KIM-YEN
PHILLIPS, ROBERT
PHILPOTT, A. CRISPIN
PIAT, FELIX
PICKETT, PAUL
PICKLES, JOHN
PIDGEON, MARGO
PIEPENHAGEN, ANNIE
PIERSON, CAROL
PILLAI, SURESH
PINCUS, DAVID
PINKAS, JOAN
PINTO, GEORGE
PIONTEK, PAULA
PIRES, ALDA
PITT, JOHN
PITTET, JEAN-LOUIS
PITTMAN, CURTIS
PITTMAN, JOANN
PLACE, ERIC
PLAISTED, RICHARD
PLATISA, GORANKA
PLATT, MARY ANN
PLEITNER, AARON
PLUIMER, GREGORY
PO, CAITLIN
POAPOLATHEP, AMNART
PODESTA, RICHARD
POGREBA-BROWN, KRISTEN
POI, ROBERTO JOSE
POLLARD, STEPHANIE
PONCE DE LEON, JUAN
POSTOLLEC, FLORENCE
POSY, PHYLLIS
POWELL, CHARLES
POWLIN, THOMAS
POZIT, MICHAEL
PRADHAN, ABANI
PREONAS, DEMETRI
PREVOST, HERVE
PRIEBE, JEFFREY
PRINE, MATTHEW
PRINSTER, MICHAEL
PRITCHARD, GREGORY
PRUITT, GARY
PRUITT, ROBERT
PUERTA-GOMEZ, ALEX
PUTRI, TUFLIKHA
PUTZ, MARTY
QUEENAN, MARK
QUICKERT, STEPHEN
QUILLEN, DANIEL
QUIMBY, WILLIAM
QUINLAN, JENNIFER
RABIN, DAVID
RADLOFF, CORY
RADOCAJ, OLGA
RAGHUBEER, ERROL
RAHMAN, NUR
RAJA, HARISH
RALLIOS, RHONDA
RAMJI, NIZAR
RAMOOZ, ASQ CHA, HUMAYUN
RANALLI, RYAN
RANDALL, LORI
RANDOLPH, JAYNE
RAWICZ, DAVE
REDDY, RAVINDER
REDDY, VASUDHA
REDONDO, MAURICIO
REED, CHRISTINA
REEVE, JON
REEVE, LANCE
REHANI, KUNAL
REIDY, EDWARD
REINHARD, ROBERT
REIS, NUNO
RENCOVA, EVA
REO, GINA
REYES, MARIA ANGELA
REYES, SARA
REYNOLDS, BRYAN
RICE, CINDY
RICHARDS, GARY
RICHARDSON, MELISSA
RICHARDSON, STACI
RICO-MUNOZ, EMILIA
RIEMENAPP, BRAD
RIETH, LEE
RIFFE, BETH
RINGROSE, MICHAEL

Individual Contributors

IAFP FOUNDATION

RIVAS, LUCIA
ROBERSON, MICHAEL
ROBERTS, SHERRY
ROBERTS, TANYA
ROBERTSON, LARRY
ROBERTSON, REBECCA
ROBERTSON, RONA
ROBERTSON, ROSALIND
ROBITAILLE, GILLES
ROCK, CHRISTINE A.
RODERICK, ALLISON
RODRIGUES, ROSALINE
RODRIGUEZ, ANA
RODRIGUEZ, CRISTINA
RODRIGUEZ, MAWILL
RODRIGUEZ-GONZALEZ, OSCAR
RODRIGUEZ-RIVERA, LORRAINE
ROGAN, DRAGAN
ROHRBECK, JEFFREY
ROMANI, MARCO
ROMANIV, OSTAP
ROMANIW, MICHAEL
ROMERO, JAIRO
ROMERO, MARTA
ROMERO, STEVE
ROMULO, DIEGO
ROOP, RICHARD
ROSE, JESSICA
ROSEN, EVAN
ROSENBAUM, DONNA
ROSENBLATT, DAVID
ROSSITTO, PAUL
ROTHMUND, JEAN
ROUZEAU-SZYNALSKI, KATIA
ROVIRA SANZ, PABLO
RUBIAO, CYNTHIA
RUBIO, FERNANDO
RUCKER, NED
RUEBL, JOANNE
RUIZ, ELISA
RUMP, LYDIA
RUSH, MARGARET
RUSS, AMY
RUSSELL, BRADLEY
RUSSELL, HAROLD
RUSSELL, JOSEPH
RUTH, GERARD
RUTHMAN, TODD
RUZANTE, JULIANA
RYAN, JEFFREY
RYAN, MICHAEL
RYU, JEE-HOON
SABA, COURAGE
SABAL, JOSE
SALAS, SONIA
SALAZAR, JOELLE
SALERNO, ROBERTA
SAMANDOULGOU, IDRISSA
SAMPEDRO, FERNANDO
SANCHEZ GARCIA, EDUARDO
SANCHEZ, MARCOS
SANCHEZ, PATRICK
SANDERS, GREGORY
SANDERSON, SARAH
SANER, SAMIM
SANT'ANA, ANDERSON
SANTIBANEZ - RIVERA, RODRIGO
SANTILLANA FARAKOS, SOFIA
SANTOS, STEPHEN
SASANYA, JAMES
SASHIHARA, NOBUHIRO
SATCHWELL, KATIE
SATHYAMOORTHY, VENUGOPAL
SATTELY, DEBORAH
SAUCIER, LINDA
SAUDERS, BRIAN
SAVAGE, ROBERT
SAVELL, JEFF
SAVRAN, DERYA
SAYLES, MICHELE
SAYLOR-YARBER, ALICE
SCHEFFLER, ROGER
SCHEINBERG, JOSHUA
SCHERR, FELICITAS
SCHIEFFER, JEAN
SCHILL, KRISTIN
SCHILLINGER, JOHN
SCHLABS, MELISSA
SCHLUETER, WILLIAM
SCHMIDT, JOHN
SCHMITHORST, KAY
SCHMITT, RUDOLF
SCHODER, DAGMAR
SCHOELLER, ERNST
SCHOENHERR, MICHAEL
SCHOENI, JEAN
SCHOUPPE, NANCY
SCHROEDER, ANGELA
SCHUKAR, JOSHUA
SCHULTZ, GREG
SCHWARZ, PAUL
SCIULLI, REBECCA
SCOGLAND, STEPHANIE
SCOLA, TOM
SCOTT, VICKI-LYNNE
SEGARRA, MARTA
SEID, AWOL
SEIPLE, JAMES
SELMAN, CAROL
SENEVIRATHNE, RESHANI
SEO, DONG JOO
SEO, KUN-HO
SEO, SEUNGWOOK
SERRA, LOUIS
SERRAINO, ANDREA
SETO, VICKY
SETTLE, LORI
SEXTON, MARGARET
SEYMOUR, JASON
SHAPOS, DEBORAH
SHAW, ANGELA
SHAZER, ARLETTE
SHEEN, LEE-YAN
SHEMESH, MOSHE
SHEPARD, RON
SHEPHERD, JOANNA
SHERGILL, GURJIT
SHI, CHUNLEI
SHI, XIANMING
SHIELDS, RICHARD
SHIM, SHEOUNGBO
SHIN, JOOYEON
SHIRAISHI, RICHARD
SHOEMAKER, CRAIG
SHOOP, MIKE
SHOWS, KEVIN
SHRESTHA, NIRAJ
SIERRA, VALENTIN
SIGLER, PATRICIA
SILK, TODD
SILMON, MONYETTE
SIMCOX, JULIE
SIMMONS, SHARRANN
SIMON, MICHAEL
SIMS, STEVEN
SINDERSON, PAMELA
SINGH, ATUL
SINGH, JENNIFER
SIPP, MIKE
SIWIK, JOLANTA
SKANDAMIS, PANAGIOTIS
SKIPNES, DAGBJORN
SKJERDAL, TARAN
SLATKIN, ALYSON
SLIEKERS, OLAV
SLIWINSKI, EDWARD
SMATHERS, SARAH
SMILEY, RONALD
SMITH, DAVID
SMITH, JIM
SMITH, KEVIN
SMITH, MARY ALICE
SMITH, RICK
SMITH, STEPHANIE
SMOOT, L. MICHELE
SMOOT, LES
SMUKOWSKI, MARIANNE
SNELLEN, PETRA
SNELLMAN, MIKAEL
SNIDER, SUE
SNYDER, ABIGAIL
SNYDER, HEATHER
SNYDER, KIM
SNYDER, OSCAR
SOHIER, DANIELE
SOLOMOTIS, MARIANNE
SONI, ASWATHI
SONNTAG, JACOB
SOON, JAN MEI
SOULTOS, NIKOLAOS
SOUTHWORTH, SUZANNE
SOYER, YESIM
SPANGENBERG, CHRIS
SPANNINGER, PATRICK
SPARKS, STEPHANIE
SPEIRS, ALISON
SPENCE, CARI
SPITZNAGEL, DIANA
SREEDHARAN, ASWATHY
STAHL, BRENDA
STALEY, KATHLEEN
STARK, MICHELLE
STASIEWICZ, MATTHEW
STATES, CRISTINA
STEAD, DAWN
STEARNS, KENNETH
STEELE, JAMES
STEINBRUNNER, PHILIP
STEINKE, GRACE
STENNER, JEFFERY
STEPHENS, LORI
STEPHENS, TYLER
STERLING, ISAAC
STESSL, BEATRIX
STEVENSON, HEATHER
STEWART, AMBER
STEWART, RICH
STOCK, RICHARD
STOCKWELL, DANIEL
STONE, LORA
STOPFORTH, JARRET
STORMS, SCOTT
STOUT, JOSEPH
STOVICEK, ROBERT
STRATTON, JAYNE
STREET, STACY
STROMBERG, STAN
STRONG, ROBERT
STROUD, DEBBIE
STUTTARD, EDWARD
SUEHR, QUINCY
SULAIMAN, IRSHAD
SUNDARAM, PRIYA
SURIYARAK, SARISA
SUSKA, MIROSLAV
SUTTON, BILL
SWANSON, MICHAEL
SWETWIWATHANA, ADISORN
SWICK-BROWN, GLORIA
SYBIRTSEVA, IRYNA
SZABO, ELIZABETH
SZABO, JEREMIAH
TALBOT, CLAIRE
TALL, BEN
TALLENT, SANDRA
TAMPLIN, MARK
TAN, CONNIE
TAN, HONG LIONG
TAN, PETER
TANG, SILIN
TANSEY, LORI
TARTE, RODRIGO
TASCI, SERKAN
TATAVARTHY, APARNA
TAYLOR, LANCE
TAYLOR, MICHAEL
TAYLOR, PAUL
TAYLOR, TODD
TEBBS, ROBERT
TEJEIRA DE PALMA, ICELA
TEMPLET, TIMOTHY
TENTSER, MARGARET
TEOH, KENG NGEE
TER HAAR, ROBBERT
TERAMURA, HAJIME
TERNS, MATTHEW
THAKUR, HARI
THAKUR, SIDDHARTHA
THARP, SARAH
THEBAULT, ANNE
THELANDER, JANESSA
THEODORE, JOANNE
THINEY, PIERRE LOUIS
THIPPAREDDI, HARSHAVARDHAN
THOMAS, ELLEN
THOMAS, JAMES
THOMPSON, MELODY
THOTA, HAMSA
TIBAYAN, ARLEEN
TOBILLA, LAURA
TOCCO, PHILLIP
TOENISKOETTER, STEVE
TOKAR, AL
TOLLESON, WILLIAM
TOMAS CALLEJAS, ALEJANDRO
TOMAS FORNES, DAVID
TOPALCENGIZ, ZEYNAL
TOROK, VALERIA
TORRES VITELA, MA REFUGIO
TORTORELLI, SUZANNE
TOURNIAIRE, JEAN PHILIPPE
TRACEY, STEPHEN
TRAVIS, JEREMY
TRIPLETT, JENNY
TRIPP-LAZAKIS, PATRICIA
TRITT, JULIE
TROKHYMCHUK, ANATOLIY
TROPPY, SCOTT
TROUT, ROSEMARY
TRUE, ROBERT
TRZASKOWSKA, MONIKA
TSAI, YUNG-HSIANG
TSUCHIDO, TETSUAKI
TULEU, DAMIEN
TUNCAN, ERDAL
TURCOTTE, CARL
USAGA BARRIENTOS, JESSIE

Individual Contributors

IAFP FOUNDATION

VACA, JEFFREY
VAL, VICTORIA
VALADEZ, ANGELA
VALDRAMIDIS, VASILEIOS
VALENZUELA, CAROL
VALLINA, DAVID
VAN HORNE, AMY
VAN KESSEL, JO ANN
VAN LENT, HENDRIK JAN
VAN NORT, LARRY
VAN OSTENBRIDGE, MARK
VAN ZILE, KATHLEEN
VANDERVEER, BRAD
VANTARAKIS, APOSTOLOS
VASEGHI, NEDA
VELICKOVIC, NENA
VENKITANARAYANAN, KUMAR
VERA, LEONEL
VERGARA ESCOBAR, CONSTANZA
VIATOR, CATHERINE
VILLA-ROJAS, ROSSANA
VIPHAM, JESSIE
VISVALINGAM, JEYACHCHANDRAN
VOISELLE, WENDELL
VOLK, TIM
VOMVORIS, WILLIAM
VOSS, DANIELLE
WACHER, CARMEN
WACKER, RON
WAGGENER, CHRISTOPHER
WAGGONER, DANA
WAGNER, JIM
WAGNER, MARTIN
WALDRON, CALVIN
WALKER, DONALD
WALKER, MERRITT
WALL, PATRICK
WALLACE, CAROL
WALLER, PATTI
WANG, CHINLING
WANG, FRANK
WANG, LUXIN
WANKOWSKI, JULIE
WASILUK, KAREN
WATKINS, JAMES
WATSON, CLYTRICE
WATTS, WILLIAM
WEBB, CATHY
WEBB, CHRISTOPHER
WEBER, CASEY
WEBSTER, KEVIN
WEGNER, TODD
WEILAGE, LAUREL
WEINBERG, MITCHELL
WENDELL, JOHN
WENTZ, SANDI
WERFELMANN, DON
WESCHE, ALISSA
WESLEY, IRENE
WEST, MARYHELEN
WESTMORELAND, KURT
WETHERINGTON, DIANE
WHEATLEY, VIRGINIA
WHEELER, JON
WHITAKER, ROBERT
WHITBECK, GORDON
WHITE, JAMES
WHITE, JUSTIN
WHITEWOOD, CARL
WHITMIRE, MARK
WHITNEY, ERIC
WICKWARE, CARMEN
WIDMER, KENNETH
WIESTER, THOMAS
WILCOCK, ANNE
WILKINS, STEPHANIE
WILLEMSEN, STEFAN
WILLIAMS, BARBARA
WILLIAMS, ELIZABETH
WILLIAMS, JILL ANN
WILLIAMS, JOEL
WILLIAMS, PETER
WILLIAMS, SALLY
WILLIAMS-HILL, DONNA
WILLIS, TERRY
WILLSON, STACEY
WILSON, CRAIG
WILSON, KATHY
WILSON, STEVEN
WILSON, WILLIAM
WIND, CHARLIE
WINKELSTROTER, LIZZIANE
WINKER, VERN
WINKLER, ANETT
WINN, JAMES
WISBY, REBECCA
WIST, RYAN
WITCHER, ROYAL
WITHERS, HELEN
WOJTYSKA, DEBRA
WOLDE-MARIAM, WONDU
WOLDESENBET, SELAMAWIT
WOLF, MAXWELL
WOLFF, PHILIP
WOLLENZIEN, MICHELLE
WOLLERT, AMANDA
WOLTMAN, NANCY
WOMACK, WILLIAM
WOO, SANG KEE
WOOD, MICHAEL
WOOD, TAMARA
WORLEY, JAY
WORON, AMY
WRIGHT, DYLAN
WU, CHANGQING
WU, JIAN
WU, SHUANG
XIAOLI, LINGZI
XU, WENQING
YAMASAKI, TAKAAKI
YAMAZAKI, FUMINORI
YAN, ZHINONG
YANG, JULIE
YANG, LILY
YANG, XIANQIN
YAQUB, UMAR
YARRIS, CHARLES
YERSIN, ANDREW
YEZAK, JENNIFER
YOKOTE, ROYCE
YOON, KI SUN
YOON, YOHAN
YOUNG, IAN
YOUNG, THOMAS
YOUSSEF, MICHAEL
YUK, HYUN-GYUN
YURDAKUL, EMINE FEZAL
ZACH, LORNA
ZAZISKI, LINDA
ZELENKA, DANIEL
ZELL, ELLIOTT
ZELTNER, RUTH
ZETTERLUND, KRIS
ZHANG, WEI
ZHANG, XUAN
ZHENG, CHEE
ZHENG, GUOLU
ZHENG, JIE
ZHENG, YUE
ZHOU, BIN
ZHOU, SHAN
ZHOU, TING
ZHU, JIANMEI
ZHU, MEIJUN
ZIEMER, WAYNE
ZIMMERS, KARLA
ZOELLNER, CLAIRE
ZOU, LIKOU
ZULFAKAR, SITI SHAHARA
ZWEIG, CAROL

For more than 30 years, the IAFP Foundation has been working hard to support the mission of the International Association for Food Protection. But we would like to do more. Much more. Food safety concerns and food defense challenges continue to grow. As a result, it is more important than ever that we provide additional programs and services to achieve our common mission of *Advancing Food Safety Worldwide*®. Remember, when you support the IAFP Foundation everyone benefits, including you.

IAFP FOUNDATION

CONTRIBUTE TODAY BY CALLING 515.276.3344
OR VISITING www.foodprotection.org

IAFP 2017 Schedule

All events held at Tampa Convention Center unless noted.

FRIDAY, JULY 7

IAFP Workshop – 8:00 a.m. – 5:00 p.m.
Validating Pasteurization Processes for Low-moisture Products

FRIDAY JULY 7 AND SATURDAY, JULY 8

IAFP Workshops – 8:00 a.m. – 5:00 p.m.
Characterization and Identification of Spoilage-causing Fungi: A Hands-on Workshop
Developing Environmental Monitoring Programs for Small and Midsize Processors

SATURDAY, JULY 8

IAFP Registration Hours — 12:00 p.m. – 7:00 p.m.
IAFP Workshops – 8:00 a.m. – 5:00 p.m.
Drying Technologies: Strategies for Managing Pathogen and Allergen Risks
Next Generation Sequencing – A Tutorial and Hands-on Workshop to Help Understand This Emerging Technology
Committee and PDG Meetings • 2:30 p.m. – 5:00 p.m.
Welcome Reception – 5:00 p.m. – 6:30 p.m. – *Sponsored by Eurofins*

SUNDAY, JULY 9

IAFP Registration Hours — 7:00 a.m. – 9:00 p.m.
Affiliate Council Meeting • 7:00 a.m. – 10:00 a.m.
Committee and PDG Meetings • 8:00 a.m. – 5:15 p.m.
Student Luncheon (ticket required) • 12:00 p.m. – 1:30 p.m. – *Sponsored by Publix*
Editorial Board Reception (by invitation) • 4:30 p.m. – 5:30 p.m.
Opening Session and Ivan Parkin Lecture • 6:00 p.m. – 7:30 p.m.
Cheese and Wine Reception • 7:30 p.m. – 9:30 p.m. – *Sponsored by Land O'Lakes, Inc. and Mars, Incorporated*
Exhibit Hours • 7:30 p.m. – 9:30 p.m.

MONDAY, JULY 10

IAFP Registration Hours — 7:30 a.m. – 5:30 p.m.
Symposia & Technical Sessions • 8:30 a.m. – 5:00 p.m.
Poster Sessions • 10:00 a.m. – 6:00 p.m.
Exhibit Hours • 10:00 a.m. – 6:00 p.m.
Exhibit Hall Lunch • 11:45 a.m. – 1:30 p.m. – *Sponsored by Nestle USA*
U.S. Regulatory Update – 12:15 p.m. – 1:15 p.m.
Exhibit Hall Reception • 5:00 p.m. – 6:00 p.m. – *Sponsored by Merck Animal Health*

TUESDAY, JULY 11

IAFP Registration Hours — 8:00 a.m. – 5:30 p.m.
Committee and PDG Chairperson Breakfast (by invitation) • 7:30 a.m. – 9:00 a.m.
Symposia & Technical Sessions • 8:30 a.m. – 5:00 p.m.
Poster Sessions • 10:00 a.m. – 6:00 p.m.
Exhibit Hours • 10:00 a.m. – 6:00 p.m.
Exhibit Hall Lunch • 11:45 a.m. – 1:30 p.m. – *Sponsored by Roka Bioscience, Inc.*
Business Meeting • 12:15 p.m. – 1:00 p.m.
Exhibit Hall Reception • 5:00 p.m. – 6:00 p.m. – *Sponsored by Sealed Air Corporation*
*President's Reception (by invitation) • 6:00 p.m. – 7:00 p.m. – *Sponsored by Q Laboratories, Inc.*
*Past President's Dinner (by invitation) • 7:00 p.m. – 9:00 p.m.
Student Mixer • 7:00 p.m. – 9:00 p.m.

*Held at the Marriott Tampa Waterside

WEDNESDAY, JULY 12

IAFP Registration Hours — 8:00 a.m. – 12:00 p.m.
Symposia & Technical Sessions • 8:30 a.m. – 3:30 p.m.
Poster Sessions • 9:00 a.m. – 3:00 p.m.
Networking Lunch • 11:45 a.m. – 1:30 p.m.
Closing Session – John H. Silliker Lecture • 4:00 p.m. – 4:45 p.m.
Awards Reception and Banquet • 6:00 p.m. – 9:30 p.m.

General Information

Speaker-Ready Room

The Speaker-Ready Room is located in *Room 17* and is available for speakers Sunday through Wednesday, 8:00 a.m. to 5:00 p.m.

Press Release Postings

A Press Release poster board will be available in the Exhibit Hall for Press Releases. Post your Press Release for maximum exposure.

Cell Phone Policy

As a courtesy to our presenters, we request that you turn off cell phones while attending sessions. Thank you for your cooperation.

Recording Policy

Unauthorized video, still photography or audio recording will not be allowed without prior approval. By attending the IAFP Annual Meeting, you authorize IAFP to take your picture and use it in our publications.

All sessions, with speaker approval, will be audio recorded by IAFP and posted on the IAFP Web site for attendees' access.

Sessions sponsored by ILSI North America will be video recorded.

Meeting App

The IAFP 2017 app is available through the App Store, the Android market and through a web-based version.

Sponsored by 3M

Internet Café

The Internet Café is in the IAFP Registration area.

Sponsored by FSNS Food Safety Net Services — Expert Resources. Unsurpassed Results.

WiFi Internet

Complimentary WiFi Internet is available throughout the lobbies, Exhibit Hall, and meeting rooms. To access:

Use the IAFP 2017 "WiFi" Network.
Login: IAFP2017
Password: florida

Sponsored by hygiena

CONNECT AT IAFP 2017

Twitter: twitter.com/IAFPFood
#IAFP2017

Program Committee

Chairperson

Alvin Lee, Institute for Food Safety and Health

Vice Chairperson

Renee Boyer, Virginia Tech

Members

Laura Brown, CDC-EHSB
Yuhuan Chen, FDA-CFSAN
Heidy Den Besten, Wageningen University
Martin Duplessis, Food Directorate, Health Canada
Tong-Jen Fu, U.S. Food and Drug Administration
Dale Grinstead, Sealed Air Corporation
Mark Moorman, Kellogg Company
Laurie Post, Deibel Laboratories
Manpreet Singh, University of Georgia
Caroline Smith DeWaal, FDA-CFSAN
Tori Stivers, University of Georgia
Jarret Stopforth, Chobani, LLC
Peter Taormina, Club Chef

Board Liasons

Linda Harris, University of California-Davis
Mickey Parish, U.S. Food and Drug Administration

IAFP2017 ANNUAL MEETING Tampa, Florida July 9 - 12, 2017

Committee and PDG Meetings

MAKE CONNECTIONS BASED ON YOUR INTEREST

All attendees are invited and encouraged to participate

While attending IAFP 2017, we welcome your participation in one or more of IAFP's Professional Development Group (PDG) meetings. These groups provide the opportunity for food safety professionals to be part of open and in-depth discussions that help guide the efforts of the Association. The benefits are many with participants discussing a variety of timely and important topics; networking with other food safety professionals in similar positions; and being part of organized presentations on critical issues pertaining to the specific area of interest.

All meetings take place at the Convention Center.
Don't miss out on this additional Annual Meeting benefit!

TIMES	MEETING	ROOM
SATURDAY, JULY 8		
2:30 p.m. – 5:00 p.m.	International Food Protection Issues PDG	*18–19*
3:00 p.m. – 4:30 p.m.	Membership Committee	*4*
3:30 p.m. – 4:30 p.m.	Past Presidents' Committee	*3*
4:00 p.m. – 5:00 p.m	Committee/PDG Chairs and Vice Chairs	*5–6*
SUNDAY, JULY 9		
7:00 a.m. – 10:00 a.m.	Affiliate Council	*Ballroom D*
8:00 a.m. – 5:00 p.m.	Committee on Control of Foodborne Illness	*7*
8:00 a.m. – 10:00 a.m.	Food Hygiene and Sanitation PDG	*20–21*
9:00 a.m. – 11:00 a.m.	Advanced Molecular Analytics PDG	*Ballroom A*
9:00 a.m. – 11:00 a.m.	Microbial Modelling and Risk Analysis PDG	*24–25*
9:00 a.m. – 11:00 a.m.	Pre-harvest Food Safety PDG	*22–23*
9:00 a.m. – 11:00 a.m.	Viral and Parasitic Foodborne Disease PDG	*16*
9:00 a.m. – 11:00 a.m.	Water Safety and Quality PDG	*12*
9:00 a.m. – 12:00 p.m.	Meat and Poultry Safety and Quality PDG	*13–15*
10:00 a.m. – 12:00 p.m.	Food Defense PDG	*18–19*
10:00 a.m. – 12:00 p.m.	*JFP* Management Committee	*8–9*
10:00 a.m. – 12:00 p.m.	3-A Committee on Sanitary Procedures	*5–6*
11:00 a.m – 12:00 p.m.	Constitution and Bylaws Committee	*4*
12:00 p.m. – 1:30 p.m.	Student PDG	*Ballroom D*
1:00 p.m. – 3:00 p.m.	Beverages and Acid/Acidifed Foods PDG	*16*
1:00 p.m. – 3:00 p.m.	Dairy Quality and Safety PDG	*20–21*
1:00 p.m. – 3:00 p.m.	Food Packaging PDG	*12*
1:00 p.m. – 3:00 p.m.	Food Safety Culture PDG – Organizational	*24–25*
1:00 p.m. – 3:00 p.m.	Fruit and Vegetable Safety and Quality PDG	*Ballroom A*
1:00 p.m. – 3:00 p.m.	HACCP Utilization and Food Safety Systems PDG	*18–19*
1:00 p.m. – 3:00 p.m.	Retail and Foodservice PDG	22-23
1:00 p.m. – 3:00 p.m.	Seafood Safety and Quality PDG	*5–6*
2:00 p.m. – 4:00 p.m.	*FPT* Management Committee	*8–9*
2:00 p.m. – 4:00 p.m.	Low-water Activity Foods PDG	*13–15*
3:15 p.m. – 5:15 p.m.	Applied Laboratory Methods PDG	*Ballroom A*
3:15 p.m. – 5:15 p.m.	Developing Food Safety Professionals PDG	*22–23*
3:15 p.m. – 5:15 p.m.	Food Chemical Hazards and Food Allergy PDG	*12*
3:15 p.m. – 5:15 p.m.	Food Law PDG	*16*
3:15 p.m. – 5:15 p.m.	Food Safety Education PDG	*18–19*
3:15 p.m. – 5:15 p.m.	Food Safety Assessment, Audit and Inspection – Organizational	*24–25*
3:15 p.m. – 5:15 p.m.	Sanitary Equipment and Facility Design PDG	*5–6*
4:00 p.m. – 5:00 p.m.	Nominating Committee	*4*

Exhibit Hall Events and Information

CHEESE AND WINE RECEPTION

Sunday 7:30 p.m. – 9:30 p.m.
Sponsored by LAND O'LAKES, INC.
and MARS global food safety center

EXHIBIT HALL BREAKS

Monday 10:00 a.m. Pastries and Coffee
Sponsored by DEIBEL LABORATORIES

3:00 p.m. Coffee Break
Sponsored by P&G Professional every experience counts.

Tuesday 10:00 a.m. Pastries and Coffee
Sponsored by Roka BIOSCIENCE

3:00 p.m. Coffee Break

EXHIBIT HALL LUNCH

Monday 11:45 a.m. – 1:30 p.m.
Sponsored by Nestlé

Tuesday 11:45 a.m. – 1:30 p.m.
Sponsored by Roka BIOSCIENCE

EXHIBIT HALL RECEPTIONS

Monday 5:00 p.m. – 6:00 p.m.
Sponsored by MERCK Animal Health The Science of Healthier Animals®

Tuesday 5:00 p.m. – 6:00 p.m.
Sponsored by Sealed Air Diversey Care

Exhibit Hall Hours

Sunday, July 9
7:30 p.m. – 9:30 p.m.

Monday, July 10
10:00 a.m. – 6:00 p.m.

Tuesday, July 11
10:00 a.m. – 6:00 p.m.

30-YEAR EXHIBITORS

3M Food Safety
Merieux Nutrisciences
Weber Scientific
Whirl-Pak

25-YEAR EXHIBITORS

3-A Sanitary Standards, Inc.
bioMerieux, Inc.
Charm Sciences Inc.
Nelson-Jameson, Inc.
Q Laboratories
Thermo Fisher Scientific

20-YEAR EXHIBITORS

Ecolab
Food Quality & Safety Magazine
Food Safety Magazine
IEH Laboratories and Consulting Group
METER Group, Inc., USA
Microbiology International
Neogen Corporation
NSF International

15-YEAR EXHIBITORS

American Proficiency Institute
ASI Food Safety
Bio-Rad Laboratories
Deibel Laboratories of FL Inc.
Food Safety Net Services
Hardy Diagnostics
Hygiena
International Food & Meat Topics
Meritech
Michigan State University Online Master of Science in Food Safety
Microbiologics
MilliporeSigma
Orkin
Springer Nature

10-YEAR EXHIBITORS

A2LA
AEMTEK, Inc.
Alpha Biosciences, Inc.
Chemstar Corporation
COPAN Diagnostics, Inc.
CRC Press, Taylor & Francis Group
Eurofins
HiMedia Laboratories Pvt. Ltd.
Interscience Laboratories Inc.
Microbac Laboratories, Inc.
National Registry of Food Safety Professionals
Partnership for Food Safety Education
Quality Assurance & Food Safety Magazine
R & F Products
SQFI (Safe Quality Food Institute)
USDA National Agricultural Library Food Safety Research Information Office

Student Activities

Student Luncheon

SUNDAY, JULY 9

12:00 p.m. – 1:30 p.m.

Tampa Convention Center – *Ballroom D*

Student Mixer

TUESDAY, JULY 11

7:00 p.m. – 9:00 p.m

Tampa Convention Center – *Room 7–9*

Job Fair

Attention Job Seekers and Employers!

Job announcements will be posted on the career board at the Student PDG booth.

SUPPORT THE STUDENTS OF IAFP

The IAFP Student Professional Development Group will be selling T-shirts at the Annual Meeting. The shirts will be available at the Student PDG booth.

Silent Auction

Your participation in the IAFP Foundation Silent Auction is a fun way to support the IAFP Foundation.

The money raised helps to fund the programs of the IAFP Foundation including:

- Ivan Parkin Lecture
- John H. Silliker Lecture (Funded through a contribution from Merieux NutriSciences, Inc.)
- Student Travel Scholarships for Annual Meeting
- Student Travel Scholarships for the European Symposium
- Travel Awards for State or Provincial Health or State Agricultural Department Employees
- Travel Awards for Food Safety Professionals in Countries with Developing Economies
- Travel Support for Speakers at Global IAFP Conferences
- Developing Scientist Student Competition
- Undergraduate Student Competition
- Global Food Traceability Center
- Shipment of *JFP* and *FPT* Journals to Countries with Developing Economies through FAO

IAFP FOUNDATION

All proceeds benefit the IAFP Foundation

Opening Session

SUNDAY, JULY 9

Tampa Convention Center _____ 6:00 p.m.
Ballroom

WELCOME TO IAFP 2017

Linda Harris, IAFP President
Zeb Blanton, Florida Association for Food Protection

PEANUT PROUD STUDENT SCHOLARSHIP

Presented by: Darlene Cowart, Peanut Proud
Yagmur Yegin

IAFP FOUNDATION

Vickie Lewandowski, Foundation Chairperson

TRAVEL AWARDS

Presented by: Linda Harris, IAFP President and Vickie Lewandowski, Foundation Chairperson

STUDENT TRAVEL SCHOLARSHIPS

Makala Bach
Stephanie Barnes
Sarah Beno
Sarah Cope
Dorothy Dupree
Hillary Kelbick
Giannis Koukkidis
Shuxiang Liu
Itumeleng Matle
Rianna Murray
Eugene Niyonzima
Rodney Owusu-Darko
Hao Pang
Laura Patterson
Kristen Saniga
Nicholas Sevart
Aswathi Soni
Constanza Vergara
Sophie Tongyu Wu
Xingning Xiao

Special Support by MARLER CLARK THE FOOD SAFETY LAW FIRM

STATE OR PROVINCIAL HEALTH OR AGRICULTURAL DEPARTMENT EMPLOYEES

Ted Gatesy
Michael Perry

Special Support by MARLER CLARK THE FOOD SAFETY LAW FIRM

FOOD SAFETY PROFESSIONAL IN A COUNTRY WITH A DEVELOPING ECONOMY

Frederick Adzitey
Alonzo Gabriel
Patrick Njage

FELLOWS AWARD

Presented by: Linda Harris, IAFP President and Alejandro Mazzotta, IAFP Past President

Judy Greig
Dale Grinstead
Vijay Juneja
Jeffrey Kornacki
Don Schaffner

THE IVAN PARKIN LECTURE

Introduction: Mickey Parish, IAFP President-Elect

The Anthropologist, the Chef, and the Kitchen Sink
Jose Emilio Esteban, Ph.D.

CLOSING COMMENTS

Linda Harris, IAFP President

CHEESE AND WINE RECEPTION

Sponsored by: LAND O'LAKES, INC. MARS global food safety center

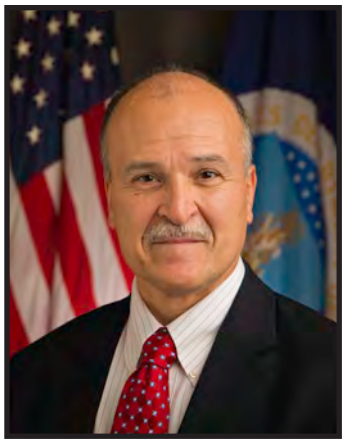
IAFP Exhibit Hall, Tampa Convention Center _____ 7:30 p.m.

IAFP2017 ANNUAL MEETING
Tampa, Florida
July 9 - 12, 2017

Ivan Parkin Lecture

SUNDAY, JULY 9
OPENING SESSION
6:00 P.M. – 7:30 P.M.

The Anthropologist, the Chef, and the Kitchen Sink



Jose Emilio Esteban
Science Advisor
United States Department of Agriculture
FSIS-OPHS-EALS
Athens, Georgia

Jose Emilio Esteban, DVM, MPVM, MBA, Ph.D., is Executive Associate for Laboratory Services for the Food Safety and Inspection Service (FSIS) of the U.S. Department of Agriculture (USDA) in Athens, Georgia. He has served in this role since 2011 (his third position within FSIS, all within the Office of Public Health Science). Prior to his current position, Dr. Esteban served as Scientific Advisor for Laboratory Services and Research Coordination, and as Laboratory Director for the Western Laboratory in Albany, California, where he began his tenure with the USDA FSIS. He previously worked at the Centers for Disease Control and Prevention (CDC) as an Epidemic Intelligence Service Officer, Staff Epidemiologist and Assistant Director of the Food Safety Office.

Dr. Esteban oversees the activities of the USDA FSIS laboratories, including the disciplines of microbiology, chemistry, and pathology. The data generated by the labs is the foundation for documenting the effectiveness of FSIS' food safety policies. Laboratory data provides empirical verification of HACCP control, identification of violations, and support of recall activities. Throughout Dr. Esteban's tenure, the laboratories have maintained a high quality of analytical results while increasing the throughput. He has focused on streamlining the sampling process from the collection point at the plant to the reporting of results. Under his leadership, the laboratory system is also reducing the number of independent data management systems, allowing for a more flexible and responsive IT infrastructure.

More recently, Dr. Esteban led the expansion of the laboratory services by adding capability to characterize pathogens with molecular technologies including serotyping, antimicrobial sensitivity testing, pulsed-field gel electrophoresis (PFGE), and genome sequencing. Adding this capability to the FSIS regulatory activities tremendously enhances the ability of the Agency to detect and respond to food contamination incidents.

Dr. Esteban has been an IAFP Member since 2002, and has served on numerous Committees and Professional Development Groups (PDGs). He also serves as Chair for the Codex Alimentarius Commission Committee on Food Hygiene, where international food hygiene standards are defined for international trade.

A native of Mexico, Dr. Esteban received his DVM and MBA from the National Autonomous University in Mexico, and his Master of Preventive Veterinary Medicine (MPVM) and Ph.D. in Epidemiology from the University of California – Davis.

Sponsored by IAFP FOUNDATION

Ivan Parkin Lecture Abstract

The Anthropologist, the Chef, and the Kitchen Sink

Jose Emilio Esteban
Science Advisor
United States Department of Agriculture
FSIS-OPHS-EALS
Athens, Georgia

Food safety today is not the same as it was yesterday or a year ago or even a decade ago. How we interact within and between academia, industry, and government has to change and adapt. Pathogens change; we adjust by creating new interventions. Biocides are developed and drug residues are introduced into our food supply; we find better ways to decontaminate. Constant changes in hazards require us to generate new detection and characterization technologies in an endless attempt to detect at lower levels with faster speed and with more accuracy. Where does this cycle end? In this lecture, I will share two perspectives — that of an anthropologist and that of a chef; both addressing the same goal: to have enough food, feed, and fuel, to sustain an ever-growing (and aging) population.

When was the last time you had time to think about how we got to here? What is considered food today may not have been "food" a few years ago. What is normal for one consumer group may be considered strange for another. Today's level of detection for an analytical method was only considered theoretical a few years ago. Remember life without a cell phone? Remember life without the internet? Pathogens that could be easily neutralized are now resistant and that resistance is now a permanent part of the genetic possibilities for the foreseeable future.

We may all walk different paths and we will all have intermediate stops; however, we are all headed in the same general direction. The IAFP Annual Meeting is the one occasion where industry, academia, and government representatives from around the world assemble to exchange information. Relationships are forged, lifelong partnerships are made, and the seeds of change are planted. We all have one goal in mind — food safety. Unless we try to understand where we came from and where we are, it's impossible to know where we want to be.

The anthropologist view will help us understand characteristics of consumers, behaviors, and preferences. Only by understanding this can we move forward to where we want to be. The chef perspective will then give us a sense of reality for today and instill creativity for where we can go.

Hope you enjoy a personal perspective of the world through metaphors.

IAFP 2017

Leadership Sponsor

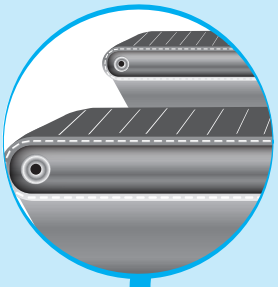
Cargill®

IAFP acknowledges your efforts to preserve the safety of the world's food supply.

OUR SINCERE THANKS!

Raw Ingredient Testing

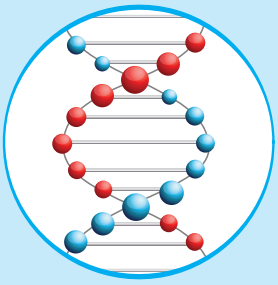
Food Transportation



Plant Sanitation

Environmental Monitoring

Finished Product Testing



DNA Fingerprinting

hygiena™

IAFP booth #607

With you at every step.

Find the rapid solution for your food safety needs at hygiena.com

- ATP sanitation monitoring
- Surface residue testing
- Allergen prevention
- Indicator organism testing
- PCR pathogen detection
- Microbial identification & characterization
- Sample collection

MONDAY

Monday, July 10

ALL DAY

10:00 a.m – 6:00 p.m. **Poster Session 1**

Exhibit Hall

Viruses and Parasites	Beverages and Acid/Acidified Foods	Pre-harvest Food Safety
General Microbiology	Food Defense	Food Law and Regulation
Food Safety Systems	Food Processing Technologies	Modeling and Risk Assessment
Sanitation and Hygiene	Antimicrobials	

P1-01 through P1-111 – Authors present 10:00 a.m. – 11:30 a.m. and 5:00 p.m. – 6:00 p.m.
P1-112 and above – Authors present 2:00 p.m. – 3:30 p.m. and 5:00 p.m. – 6:00 p.m.

MORNING

8:30 a.m. – 12:00 p.m.

Ballroom B	S3	Virulence Factors and Host Susceptibility of Foodborne Pathogens
Ballroom C	S4	Developments in Mycotoxin Research: From Methodology to Prevention
Room 15	T1	Technical Session 1 – Produce
Room 16	T2	Technical Session 2 – Molecular Analytics, Genomics, and Microbiome

8:30 a.m. – 10:00 a.m.

Ballroom A	S1	STEC Regulation: What is Needed in Global Food Trade?
Ballroom D	S5	Pathogen Contamination at Retail: What are the Next Steps?
Room 13-14	S7	Latin America: Issues and Initiatives for Food Safety
Room 18-19	S9	All You Wanted to Know about Antimicrobial Hand Sanitizers and Were Afraid to Ask
Room 20-21	S11	Microbial Food Safety in Small- to Medium-size Farming Systems: Risks and Mitigation Strategies
Room 22-23	S13	Global Dairy Indicators (Coliform vs. *Enterobacteriaceae* vs. Other Indicators): Their Value, Regulatory Impact and Effect on Global Trade
Room 24-25	S15	The Importance of Sample Preparation for Microbiological Analysis: Anything That Begins Badly, Ends Worse

10:00 a.m. – 10:30 a.m. **Break – Refreshments Available in the Exhibit Hall**

10:30 a.m. – 12:00 p.m.

Ballroom A	S2	Antibiotics in Pre-harvest Production and Associated Risks to Food
Ballroom D	S6	Perishable Foods Delivered to Homes via Common Carriers: Safe or Sorry?
Room 13-14	S8	FDA Food Import Entries and Refusals: Finding Meaning within the Data
Room 18-19	S10	Developing Evidence-based Recommendations to Improve Consumer Safe Food-handling: International Approach
Room 20-21	S12	Urban Agriculture/Farming and Food Safety
Room 22-23	S14	Strategies for Effective Hygienic Zoning
Room 24-25	S16	Are Culture Methods Obsolete?

11:45 a.m. – 1:30 p.m. **Lunch Available in the Exhibit Hall**

AFTERNOON

12:15 p.m. – 1:15 p.m.

Ballroom B **U.S. Regulatory Update on Food Safety**

1:30 p.m. – 5:00 p.m.

Room 15	T3	Technical Session 3 – Communication Outreach and Education
Room 16	T4	Technical Session 4 – Laboratory and Detection Methods
Room 22-23	S29	After 20 Years of Seafood HACCP, is Our Food Safer?

1:30 p.m. – 3:00 p.m.

Ballroom A	S17	Wash Water Management for Postharvest Washing of Fresh-cut Produce
Ballroom B	S19	How Does GFSI Audit Criteria for Sanitation, Hygiene, and Environmental Sampling Compare to FSMA Requirements?
Ballroom C	S21	Do Not Stumble Over a Process Deviation: Regain Control with Predictive Microbial Modeling
Ballroom D	S23	How to Exploit Omics Data on Pathogen Behavior in Microbiological Risk Assessment: An Update on the Current Research
Room 13-14	S25	Non-thermal Plasma Technology for Improving Food Safety and Quality
Room 18-19	RT1	Starter Cultures as a Natural Antimicrobial to Improve the Safety of Ready-to-Eat Food
Room 20-21	S27	Biological Soil Amendments of Animal Origin and the Food Safety Modernization Act: Challenges and Opportunities Going Forward
Room 24-25	S30	Strategic Intervention Design: A Pragmatic Approach to Validation

3:00 p.m. – 3:30 p.m. **Break – Refreshments Available in the Exhibit Hall**

3:30 p.m. – 5:00 p.m.

Ballroom A	S18	Complexity in Managing Risk from Pathogens in the Fresh Produce Chain: How Can Risk Assessment Help?
Ballroom B	S20	A Risk-based Approach to Microbiological Performance Criteria for Addressing Pathogens in Meat and Poultry
Ballroom C	S22	Defining, Capturing, and Assessing the Vulnerability of the Food Supply to Economically Motivated Adulteration (EMA) and Food Fraud
Ballroom D	S24	Battling Bad Bugs: Biological Approaches to Control Pathogens
Room 13-14	S26	Let's Get Active!
Room 18-19	RT2	Hear All About It: Managing a Crisis
Room 20-21	S28	The Produce Safety Alliance: From Education and Training to Implementation and Beyond
Room 24-25	S31	Development of Microbiological Criteria as Indicators of Process Control or Insanitary Conditions: A Summary of the Report Prepared for the United States Department of Defense by the NACMF

EVENING OPTIONS

5:00 p.m. – 6:00 p.m.	**Exhibit Hall Reception**
6:00 p.m. – 8:00 p.m.	bioMérieux Symposium

AFFLIATE MEETINGS

5:15 p.m. – 6:00 p.m.	Latin America Group Meeting, *Room 18–19*
5:15 p.m. – 6:15 p.m.	Africa Association for Food Protection, *Room 15*
5:15 p.m. – 6:15 p.m.	SE Asia Association for Food Protection, *Room 16*
5:15 p.m. – 7:00 p.m.	China Association for Food Protection and Chinese Association for Food Protection in North America, *Room 22–23*

Program

MONDAY MORNING JULY 10

Posters will be on display 10:00 a.m. – 6:00 p.m.
(See details beginning on page 67)

S1 **STEC Regulation: What is Needed in Global Food Trade?**
Ballroom A
Organizers and Convenors: Patrice Arbault, Roger Cook, Ian Jenson

8:30 Molecular Characterization and Virulence Factors of STEC Strains Involved in Global Foodborne Outbreaks
PETER GERNER-SMIDT, Centers for Disease Control and Prevention, Atlanta, GA, USA

9:00 From Adulterant in Beef Products to Contaminant of Concern in Other Foods: A U.S. Perspective of Now and the Future
PETER FENG, U.S. Food and Drug Administration, College Park, MD, USA

9:30 How Have New Zealand and Australia Responded to STEC Regulations for Food in International Trade and What about the Future?
IAN JENSON, Meat & Livestock Australia, North Sydney, Australia

10:00 Break – Refreshments Available in the Exhibit Hall

S2 **Antibiotics in Pre-harvest Production and Associated Risks to Food**
Ballroom A
Organizer and Convenor: John Heller
Sponsored by the IAFP Foundation

10:30 Production Impacts from Antibiotic Removal in the Poultry Industry
ASHLEY PETERSON, National Chicken Council, Washington, D.C., USA

11:00 Synergies of Antibiotic Programs in the Swine Industry: Removing Risks as a Team
LIZ WAGSTROM, National Pork Producers Council, Urbandale, IA, USA

11:30 Utilizing Research to Inform Antibiotic Use Protocols in the Beef Industry
PAUL MORLEY, Colorado State University, Fort Collins, CO, USA

12:00 Lunch Available in the Exhibit Hall

S3 **Virulence Factors and Host Susceptibility of Foodborne Pathogens**
Ballroom B
Organizers and Convenors: Michael Doyle, Joshua Gurtler, Jeffrey Kornacki
Sponsored by the IAFP Foundation

8:30 Foodborne Pathogens and Host Predilection
DAVID BEAN, Federation University Australia, Ballarat, Australia

9:00 In Defense of the European 100 CFU of *Listeria monocytogenes* Limit in Ready-to-Eat Foods
ROY BETTS, Campden BRI, Gloucestershire, United Kingdom

9:30 The USDA Perspective: Science to Support the Prevention of *Listeria monocytogenes* in Food
JANELL KAUSE, U.S. Department of Agriculture–FSIS, Washington, D.C., USA

10:00 Break – Refreshments Available in the Exhibit Hall

10:30 Infectious Dose as Affected by Pathogen Virulence
TRUDY WASSENAAR, Molecular Microbiology and Genomics Consultants, Zotzenheim, Germany

11:00 The Effects of Environmental Conditions and External Treatments on Virulence of Foodborne Pathogens
KUMAR VENKITANARAYANAN, University of Connecticut, Storrs, CT, USA

11:30 The Effects of Food Composition on Foodborne Illness Infectious Dose and Host Susceptibility
MONICA PONDER, Virginia Tech, Blacksburg, VA, USA

12:00 Lunch Available in the Exhibit Hall

S4 **Developments in Mycotoxin Research: From Methodology to Prevention**
Ballroom C
Organizers: Margarita Gomez, Emilia Rico-Munoz
Convenors: Frank Burns, Margarita Gomez
Sponsored by: The International Commission in Food Mycology (ICFM), BCN Research Laboratories, Inc., Universal Sanitizers and Supplies, Inc., and the IAFP Foundation

8:30 Introduction to Spoilage and Mycotoxin Production by Foodborne Fungi
ROB SAMSON, CBS-KNAW Fungal Biodiversity Centre, Utrecht, Netherlands

9:00 New Methods for the Detection of Mycotoxins
LUDWIG NIESSEN, Lehrstuhl für Technische Mikrobiologie, Freising, Germany

9:30 New Insights on Safety and Quality of Salami Production Related to *Penicillium* Species and Ochratoxin A (OTA) Risk Accumulation
GIANCARLO PERRONE, Institute of Sciences of Food Production National Research Council, Bari, Italy

10:00 Break – Refreshments Available in the Exhibit Hall

10:30 Mycotoxins and Food Security: Deciphering the Impacts of Climate Change Scenarios
NARESH MAGAN, Cranfield University, Shrivenham, United Kingdom

11:00 Occurrence of Ochratoxin A (OTA) in the U.S.
DOJIN RYU, University of Idaho and Washington State University, Moscow, ID, USA

11:30 Prevention of Mold Spoilage and Mycotoxin Production: Is It Possible?
EMILIA RICO-MUNOZ, BCN Research Laboratories, Inc., Rockford, TN, USA

12:00 Lunch Available in the Exhibit Hall

S5 Pathogen Contamination at Retail: What are the Next Steps?

Ballroom D

Organizers: Kristina Barlow, Susan Hammons
Convenor: Kristina Barlow

8:30 FSIS Retail *Listeria monocytogenes* Surveillance Program and Grinding Log Requirements
KRISTINA BARLOW, U.S. Department of Agriculture–FSIS, Washington, D.C., USA

9:00 FDA Food Code Controls for Foodborne Pathogens
GLENDA LEWIS, U.S. Food and Drug Administration–CFSAN, College Park, MD, USA

9:30 Retailers' Perspective on FSIS Grinding Logs and Retail Deli Surveillance
HILARY THESMAR, Food Marketing Institute, Arlington, VA, USA

10:00 Break – Refreshments Available in the Exhibit Hall

S6 Perishable Foods Delivered to Homes via Common Carriers: Safe or Sorry?

Ballroom D

Organizers: Meghan Cox, Faye Feldstein, Clyde Manuel, Donald W. Schaffner
Convenors: Meghan Cox, Clyde Manuel

10:30 FSIS Regulations and How They Relate to Shipping Perishable Meat, Poultry and Processed Egg Products
MELANIE ABLEY, U.S. Department of Agriculture, Washington, D.C., USA

11:00 Food Safety Risks Associated with Perishable Poultry, Meat and Seafood Delivered Directly to Consumers
WILLIAM HALLMAN, Rutgers University, New Brunswick, NJ, USA

11:30 How Online Grocery Shopping is Redefining Food Safety
FRANK YIANNAS, Walmart, Bentonville, AR, USA

12:00 Lunch Available in the Exhibit Hall

S7 Latin America: Issues and Initiatives for Food Safety

Room 13-14

Organizers and Convenors: Linda Leake, Isabel Walls
Sponsored by the IAFP Foundation

8:30 Innovative Approaches to Trends in Global Food Markets: Overview of Food Safety Challenges in Latin America
MARISA CAIPO, Food and Agriculture Organization of the United Nations, Santiago, Chile

9:00 Marrying Local Food Safety Risk Management and Inspection with International Sanitary and Phytosanitary Measures: The Status of Public Private Partnerships among Food Industry Stakeholders in South America
JAIRO ROMERO, Jairo Romero y Asociados SAS, Bogota, Colombia

9:30 Quantifying Microbiological Challenges: Food Laboratory Framework Operations in Latin America
MARIA TERESA DESTRO, bioMérieux, Inc., São Paulo, Brazil

10:00 Break – Refreshments Available in the Exhibit Hall

S8 FDA Food Import Entries and Refusals: Finding Meaning within the Data

Room 13-14

Organizer and Convenor: Jeffrey Read

10:30 An Overview of FDA Import Refusals Data
JEFFREY READ, U.S. Food and Drug Administration, College Park, MD, USA

11:00 USDA-ERS Experience Working with FDA Import Refusals Data
JEAN BUZBY, U.S. Department of Agriculture, Economic Research Service, Washington, D.C., USA

11:30 TBD

12:00 Lunch Available in the Exhibit Hall

S9 All You Wanted to Know about Antimicrobial Hand Sanitizers and Were Afraid to Ask

Room 18-19

Organizer: Efstathia Papafragkou
Convenor: Stephen Grove

8:30 Efficacy of Hand Sanitizers against Resistant Pathogens: Viruses and Spores
LEE-ANN JAYKUS, North Carolina State University, Raleigh, NC, USA

9:00 Regulation of Over-the-Counter Antiseptics: An FDA Perspective
PRANVERA ICONOMI, FDA-CDER, White Oak, MD, USA

9:30 Industry Perspectives on the Regulatory Landscape for Hand Sanitizers
PETE CARLSON, Ecolab Inc., St. Paul, MN, USA

10:00 Break – Refreshments Available in the Exhibit Hall

S10 Developing Evidence-based Recommendations to Improve Consumer Safe Food-handling: International Approach
Room 18-19
Organizers and Convenors: Sanja Ilic, Wenqing Xu, Ian Young

10:30 A Systematic Review and Meta-analysis of Psychosocial Factors That Affect Consumer Safe Food-handling
IAN YOUNG, Ryerson University, Toronto, ON, Canada

11:00 Food Safety Behaviors and Strategies to Improve Food Safety in Developing Countries and Marginalized Populations in the U.S.
SANJA ILIC, Ohio State University, Columbus, OH, USA

11:30 An International and Innovative Perspective on the Methods and Measures Used in Consumer Food Safety Research
ELLEN W. EVANS, ZERO2FIVE Food Industry Centre, Cardiff, United Kingdom

12:00 Lunch Available in the Exhibit Hall

S11 Microbial Food Safety in Small to Medium-size Farming Systems: Risks and Mitigation Strategies
Room 20-21
Organizers and Convenors: Eduardo Gutierrez, Siddhartha Thakur

8:30 A Grower's Perspective on Microbial Risks and FSMA Regulations within Small to Medium Farming Operations
STEVE WARSHAWER, Beneficial Farms CSA, Santa Fe, NM, USA

9:00 Pathogen Survival in Raw Manure, Soil and Water Remediation
CHARLES GERBA, University of Arizona, Tucson, AZ, USA

9:30 On-farm Risk Assessment in Small- and Medium-size Farms
RICHARD BAINES, Royal Agriculture University, Gloucestershire, United Kingdom

10:00 Break – Refreshments Available in the Exhibit Hall

S12 Urban Agriculture/Farming and Food Safety
Room 20-21
Organizers and Convenors: Tong-Jen Fu, Patricia Millner
Sponsored by the IAFP Foundation

10:30 Urban Farming: Current Practices and Food Safety Considerations
PATRICIA MILLNER, U.S. Department of Agriculture–ARS, Beltsville, MD, USA

11:00 Produce Safety Rule: Compliance and Implementation in an Urban Farm Environment
MICHELLE SMITH, U.S. Food and Drug Administration, College Park, MD, USA

11:30 Meeting Food Safety Requirements: An Urban Farmer's Perspective
JAMES RATKE, Urban Produce Farms, West Chicago, IL, USA

S13 Global Dairy Indicators (Coliform vs. *Enterobacteriaceae* vs. Other Indicators): Their Value, Regulatory Impact and Effect on Global Trade
Room 22-23
Organizer: DeAnn Benesh
Convenors: DeAnn Benesh, Deon Mahoney

8:30 Overview of the Use of Dairy Bacterial Indicators in the Global Dairy Industry: The History, Present Day Practices, Governmental Requirements, and Impact on International Trade
ALLEN SAYLER, EAS Consulting Group, Alexandria, VA, USA

9:00 The Case for *Enterobacteriaceae*
MIEKE UYTTENDAELE, Ghent University, Ghent, Belgium

9:30 The Case for Coliform
DEON MAHONEY, Dairy Food Safety Victoria, Melbourne, Australia

10:00 Break – Refreshments Available in the Exhibit Hall

S14 Strategies for Effective Hygienic Zoning
Room 22-23
Organizer: Frederick Cook
Convenors: Frederick Cook, Duane Grassmann

10:30 Tools and Procedures for Effective Hygienic Zoning
DUANE GRASSMANN, Nestle USA, Solon, OH, USA

11:00 Overcoming Obstacles to the Implementation of Hygienic Zoning Concepts
POLLY COURTNEY, General Mills, Inc, Golden Valley, MN, USA

11:30 Risk-based Approach for Application of Hygienic Zoning Controls
DOUG CRAVEN, Hormel, Austin, MN, USA

12:00 Lunch Available in the Exhibit Hall

S15 The Importance of Sample Preparation for Microbiological Analysis: Anything That Begins Badly, Ends Worse
Room 24-25
Organizers: Keith Lampel, David Tomas Fornes
Convenor: Keith Lampel

8:30 The New ISO 6887 Standards for Sample Preparation and the Specific Protocols for Challenging Matrices
DAVID TOMAS FORNES, Nestlé, Lausanne, Switzerland

9:00 Sampling for Environmental Monitoring and Impact on Further Microbiological Analysis
GEOFF BRIGHT, World Bioproducts, Bothell, WA, USA

9:30 Sample Preparation Challenges from the Regulatory Perspective
PAUL MORIN, U.S. Food and Drug Administration, Jamaica, NY, USA

10:00 Break – Refreshments Available in the Exhibit Hall

S16 **Are Culture Methods Obsolete?**
Room 24-25
Organizers and Convenors: Byron Brehm-Stecher, Suresh D. Pillai
Sponsored by the IAFP Foundation

10:30 Recent Innovations in Microbial Culture
BYRON BREHM-STECHER, Iowa State University, Ames, IA, USA

11:00 A Hidden Pitfall in the Preparation of Agar Media Undermines Microorganism Cultivability
CINDY NAKATSU, Purdue University, West Lafayette, IN, USA

11:30 Isolation and Identification of Spoilage Microorganisms Using Food-based Media Combined with rDNA Sequencing: Ranch Dressing as a Model Food
AHMED YOUSEF, The Ohio State University, Columbus, OH, USA

12:00 Lunch Available in the Exhibit Hall

T1 **Technical Session 1 – Produce**
Room 15
Convenors: Norma Heredia, Erin DiCaprio

T1-01 8:30 Thermal Tolerance of Foodborne Pathogens on Inoculated Pistachios
MAHTA MOUSSAVI, Christopher Theofel, Linda J. Harris, University of California-Davis, Davis, CA, USA

T1-02 8:45 Colonization and Internalization of *Salmonella enterica* in Cucumber Plants
KELLIE P. BURRIS, Otto Simmons, Hannah M. Webb, Lee-Ann Jaykus, Jie Zheng, Elizabeth Reed, Christina Ferreira, Eric Brown, Rebecca L. Bell, North Carolina State University, Raleigh, NC, USA

T1-03 9:00 Assessment of Zoonotic Risks in Aquaponic Lettuce Production: A Prototype for Experimental Greenhouse Trials
Elizabeth Antaki, Geoffrey Mangalam, Peiman Aminabadi, Fernanda de Alexandre Sebastião, Esteban Soto, Beatriz Martínez López, Fred Conte, Sarah Taber, MICHELE JAY-RUSSELL, Western Center for Food Safety, University of California-Davis, Davis, CA, USA

T1-04 9:15 Dynamic Changes in Water Quality and Microbial Survival during Commercial Fresh-cut Produce Wash Operation
YAGUANG LUO, Bin Zhou, Boce Zhang, Xiangwu Nou, Sam Van Haute, Ellen Turner, Zi Teng, Qin Wang, Patricia Millner, U.S. Department of Agriculture–ARS, Beltsville, MD, USA

T1-05 9:30 Efficacy of Wash Water Disinfectants in Reducing Water-to-Mango Cross-contamination by *Salmonella* under Simulated Mango Packing House Operations
ELZA NEELIMA MATHEW, Muhammed Shafeekh Muyyarikkandy, Mary Anne Amalaradjou, University of Connecticut, Storrs, CT, USA

T1-06 9:45 Assessing Optimal Sanitization Procedures for a Postharvest Produce Brush Washer
AMANDA KINCHLA, Kelsi Harper, Catherine Gensler, University of Massachusetts-Amherst, Amherst, MA, USA

10:00 Break – Refreshments Available in the Exhibit Hall

T1-07 10:30 Inactivation of *Escherichia coli O157:H7, Salmonella* Typhimurium, and *Listeria innocua* Inoculated onto Grape Tomato, Spinach, and Cantaloupe with Aerosolized Hydrogen Peroxide
Yunbin Jiang, Kimberly Sokorai, Georgios Pyrgiotakis, Philip Demokritou, Xihong Li, Sudarsan Mukhopadhyay, Tony Jin, XUETONG FAN, USDA-ARS, Eastern Regional Research Center, Wyndmoor, PA, USA

T1-08 10:45 Control of Cross-contamination during Retail Handling of Cantaloupe
CHRISTOPHER RUPERT, Laura Strawn, Michelle D. Danyluk, Loretta Friedrich, Benjamin Chapman, North Carolina State University, Raleigh, NC, USA

T1-09 11:00 Minimizing the Risk of Microbial Contamination in Berry Primary Production: From Theory to Implementation in Different Regions of the World
FRANÇOISE JULIEN-JAVAUX, John Donaghy, Jean-Jacques Lerouge, Liesbeth Jacxsens, Sophie Zuber, Nestlé Research Center, Lausanne, Switzerland

T1-10 11:15 The Use of Systems Thinking to Conceptualize Approaches for Co-managing Produce Production Environments for Food Safety, Conservation, and Profit
DANIEL WELLER, Martin Wiedmann, Cornell University, Ithaca, NY, USA

T1-11 11:30 Improvement of Bacterial Separation from Leafy Vegetables by Enzymatic Digestion
DANHUI WANG, Ziyuan Wang, Fei He, Sam Nugen, Cornell University, Ithaca, NY, USA

T1-12 11:45 Inactivation of *Salmonella*, Shiga-toxin Producing *Escherichia coli*, *Listeria monocytogenes,* Hepatitis A Virus, and Selected Surrogates on Frozen Blueberries by Candying
MATTEO CAMPAGNOLI, Xi Bai, Lise Michot, Thierry Putallaz, Sophie Butot, Frédérique Cantergiani, Mireille Moser, Sophie Zuber, Nestlé Research Center, Lausanne, Switzerland

12:00 Lunch Available in the Exhibit Hall

T2 **Technical Session 2 – Molecular Analytics, Genomics, and Microbiome**
Room 16
Convenor: Haley Oliver, Dean Akins-Lehenthal

T2-01 8:30 Enteroaggregative *Escherichia coli* is the Predominant Diarrheagenic *Escherichia coli* Pathotype among Irrigation Water and Food Sources in South Africa
MATTHEW AIJUKA, Araceli Santiago, Jorge Girón, James Nataro, Elna Buys, University of Pretoria, Pretoria, South Africa

T2-02 8:45 Antibiotic-resistance Reservoir in Urban Agricultural Soils
ABDULLAH IBN MAFIZ, Liyanage Nirasha Perera, Shujie Xiao, Weilong Hao, Yifan Zhang, Wayne State University, Detroit, MI, USA

T2-03 9:00 Effect of Antibiotic Withdrawal from Broiler Diets on Gut Microbiome and Foodborne Pathogen Prevalence
SANJAY KUMAR, Chongxiao Chen, Nagaraju Indugu, Gabriela Werlang, Manpreet Singh, Woo Kyun Kim, Harshavardhan Thippareddi, University of Georgia, Athens, GA, USA

T2-04 9:15 Microbial Community Drivers of *Escherichia coli* O157 Colonization and Shedding in Early Lactation Dairy Cattle
CHLOE STENKAMP-STRAHM, Sheryl Magzamen, Craig McConnel, Zaid Abdo, Amanda VanDyke-Gonnerman, Joshua Schaeffer, Stephen Reynolds, Colorado State University, Fort Collins, CO, USA

T2-05 9:30 Characterization of Multidrug-resistant *Salmonella* Typhimurium and *Salmonella* Kentucky Strains Recovered from Chicken Carcasses Using Genotypic and Phenotypic Methods
SALINA PARVEEN, Rizwana Tasmin, Nur Hasan, Christopher Grim, Arquette Grant, Seon Choi, Mohammad Alam, Rebecca Bell, Christopher Cavanaugh, Kannan Balan, Uma Badu, University of Maryland Eastern Shore, Princess Anne, MD, USA

T2-06 9:45 Contribution of Alternative Sigma Factors on *Listeria monocytogenes* Survival in Synthetic Bile
ATSADANG BOONMEE, Soraya Chaturongakul, Haley Oliver, Mahidol University, Bangkok, Thailand

10:00 Break – Refreshments Available in the Exhibit Hall

T2-07 10:30 Phenotypic and Pan-genomic Characterization of *Salmonella enterica* serovar Uganda, an Uncommon Foodborne Pathogen
DANIEL HURLEY, Maria Hoffmann, Ellen Wall, Eric Brown, Marc Allard, Salim Mattar, Séamus Fanning, University College Dublin, Dublin, Ireland

T2-08 10:45 Complete Genome Sequence of the Thermotolerant Foodborne Pathogen *Salmonella enterica* Serovar Senftenberg ATCC 43845 and Phylogenetic Analysis of Loci Encoding Thermotolerance
SCOTT NGUYEN, James Bono, Timothy Smith, Gregory Harhay, Dayna Harhay, USDA ARS U.S. Meat Animal Research Center, Clay Center, NE, USA

T2-09 11:00 Surveillance of the *Listeria monocytogenes* Profile of an Irish Food Processing Facility over Five Years Using Whole-genome Sequencing
LAURA LUQUE-SASTRE, Craig T. Parker, Steven Huynh, Séamus Fanning, University College Dublin, Dublin, Ireland

T2-10 11:15 Virulence Genes and Multi-drug Efflux Pumps are Differentially Expressed in *Salmonella* Heidelberg Exposed to Heat Shock
ANDREA RAY, Haley Oliver, Purdue University, West Lafayette, IN, USA

T2-11 11:30 Differentiation of Live and Dead *Escherichia coli* O157:H7 Using a PCR-based Method Combined with DNA Photo Labeling
AMY JONES, K.C. Jeong, Keith Schneider, Soohyoun Ahn, University of Florida, Gainesville, FL, USA

T2-12 11:45 Molecular Epidemiology of an Emerging Strain of *Salmonella enterica* serotype Infantis in the United States
JESSICA CHEN, Allison Brown, Lee Katz, Davina Campbell, Heather Tate, Jason Folster, IHRC, Inc., Decatur, GA, USA

12:00 Lunch Available in the Exhibit Hall

Check the Program Addendum for changes to the Program.

■ – Symposia ■ – Roundtables ■ – Technicals ■ – Developing Scientist Competitor

U.S. Regulatory Update on Food Safety

Al Almanza

Acting Deputy Under Secretary for Food Safety
U.S. Department of Agriculture

Stephen Ostroff

Deputy Commissioner for Foods and Veterinary Medicine
U.S. Food and Drug Administration

Monday, July 10
12:15 p.m. – 1:15 p.m.
Ballroom B

MONDAY AFTERNOON JULY 10

Posters will be on display 10:00 a.m. – 6:00 p.m.
(See details beginning on page 67)

12:15 P.M. – 1:15 P.M.

U.S. REGULATORY UPDATE ON FOOD SAFETY
AL ALMANZA, U.S. Department of Agriculture
and STEPHEN OSTROFF, U.S. Food and Drug Administration
Ballroom B

S17 Wash Water Management for Post-harvest Washing of Fresh-cut Produce
Ballroom A
Organizers and Convenors: Tong-Jen Fu, Yaguang Luo

1:30 Validation Strategies for Fresh-cut Produce Washing
TONG-JEN FU, U.S. Food and Drug Administration, Division of Food Processing Science and Technology, Bedford Park, IL, USA

2:00 Assessing the Risk of Pathogen Cross-contamination during Post-harvest Washing of Fresh-cut Produce
ELLIOT RYSER, Michigan State University, East Lansing, MI, USA

2:30 Current Advances in Wash Water Management Practices: An Industry Perspective
JIM BRENNAN, SmartWash Solutions, LLC, Salinas, CA, USA

3:00 Break – Refreshments Available in the Exhibit Hall

S18 Complexity in Managing Risk from Pathogens in the Fresh Produce Chain: How Can Risk Assessment Help?
Ballroom A
Organizers: Yuhuan Chen, Marcel Zwietering
Convenors: Sherri McGarry, Marcel Zwietering

3:30 Risk Assessment for Fresh Produce: Issues Faced While Putting "Formal MRA" into Industrial Practice in the Field
ROY BETTS, Campden BRI, Gloucestershire, United Kingdom

4:00 Risk Assessment of *Salmonella* in Alfalfa Sprouts and Evaluation of the Public Health Impact of Sprout Seed Treatment and Spent Irrigation Water Testing
YUHUAN CHEN, U.S. Food and Drug Administration, College Park, MD, USA

4:30 Collecting and Modeling Practical Data to Assess and Mitigate Risks in Fresh Produce
MICHELLE D. DANYLUK, University of Florida, Lake Alfred, FL, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

S19 How Does GFSI Audit Criteria for Sanitation, Hygiene, and Environmental Sampling Compare to FSMA Requirements?
Ballroom B
Organizer and Convenor: Charles Giambrone

1:30 Certification Body Perspectives of GFSI and FSMA
ROBERT PREVENDAR, NSF International, Ann Arbor, MI, USA

2:00 How Edition 8 Has/Has Not Improved Synergies with FSMA
LEANN CHUBOFF, Safe Quality Food Institute, Chicago, IL, USA

2:30 FSMA and GFSI: How Will Medium and Small Processing Plants Deal with and Satisfy All Requirements of Both?
PAUL HALL, Flying Food Group, Lakeland, FL, USA

3:00 Break – Refreshments Available in the Exhibit Hall

S20 A Risk-based Approach to Microbiological Performance Criteria for Addressing Pathogens in Meat and Poultry
Ballroom B
Organizers: Barbara Kowalcyk, Elisabetta Lambertini, Juliana Ruzante
Convenors: Elisabetta Lambertini, Juliana Ruzante

3:30 An Assessment of Prevalence-based Models for Predicting Reductions in Illnesses Attributed to Microbial Food Safety Policies
MICHAEL WILLIAMS, U.S. Department of Agriculture-FSIS, Washington, D.C., USA

4:00 The Public Health Impact of Semi-quantitative Performance Criteria for *Salmonella* in Ground Turkey
BARBARA KOWALCYK, RTI International, Research Triangle Park, NC, USA

4:30 More is Different: Demonstrating and Validating the Relationship between Levels of Contamination and Risk of *Salmonella* Outbreaks
CRAIG HEDBERG, University of Minnesota, School of Public Health, Minneapolis, MN, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

S21 Do Not Stumble Over a Process Deviation: Regain Control with Predictive Microbial Modeling
Ballroom C
Organizers: Ilene Arnold, Timothy Mohr, Meryl Silverman
Convenor: Vijay Juneja

1:30 Evaluating Cooling Deviations in Cooked/Heat-treated Meat and Poultry Products
TIMOTHY MOHR, Science Staff/OPHS/FSIS/USDA, Salem, OR, USA

2:00 Evaluating Type I Heating Deviation (Failure to Meet Critical Limit of Cooking CCP) in Cooked/Heat-treated Meat and Poultry Products
DONALD W. SCHAFFNER, Rutgers University, New Brunswick, NJ, USA

MONDAY PM

Check the Program Addendum for changes to the Program.

■ – Symposia ■ – Roundtables ■ – Technicals ■ – Developing Scientist Competitor

2:30 Evaluating Type II Heating Deviation (Slow Heating Come-up Time) in Cooked/Heat-treated Meat and Poultry
HARSHAVARDHAN THIPPAREDDI, University of Georgia, Athens, GA, USA

3:00 Break – Refreshments Available in the Exhibit Hall

S22 Defining, Capturing, and Assessing the Vulnerability of the Food Supply to Economically Motivated Adulteration (EMA) and Food Fraud
Ballroom C
Organizers: Samantha Cooper, Brian Hawkins, Joseph Scimeca
Convenors: Samantha Cooper, Brian Hawkins, Joseph Scimeca, John Spink
Sponsored by the IAFP Foundation

3:30 Capturing and Cataloging EMA Incidents: Understanding the Past to Protect the Future
KAREN EVERSTINE, USP, Rockville, MD, USA

4:00 Case Studies and Trends in Food Fraud Vulnerability Assessments
QUINCY LISSAUR, SSAFE, London, United Kingdom

4:30 Validation of a Predictive Approach to Assessing EMA Vulnerability
BRIAN HAWKINS, Battelle, Columbus, OH, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

S23 How to Exploit Omics Data on Pathogen Behavior in Microbiological Risk Assessment: An Update on the Current Research
Ballroom D
Organizers: Luca Cocolin, Lilou van Lieshout, Marcel Zwietering
Convenors: Luca Cocolin, Marcel Zwietering
Sponsored by the IAFP Foundation and ILSI Europe's Microbiological Food Safety Task Force

1:30 The Use of Metagenomics in Quantitative Microbiological Risk Assessment (QMRA)
KALLIOPI RANTSIOU, University of Turin-DISAFA, Turin, Italy

2:00 The Use of Omics in Exposure Assessment
HEIDY DEN BESTEN, Wageningen University, Wageningen, Netherlands

2:30 The Use of Omics in Hazard Characterization
TREVOR PHISTER, PepsiCo, Leicester, United Kingdom

3:00 Break – Refreshments Available in the Exhibit Hall

S24 Battling Bad Bugs: Biological Approaches to Control Pathogens
Ballroom D
Organizer: Delia Murphy
Convenors: Kendra Nightingale, Isabel Walls
Sponsored by ILSI North America Technical Committee on Food Microbiology

3:30 Biocontrol of the Foodborne Pathogens *Listeria monocytogenes* and *Salmonella enterica* Serovar Poona on Fresh-cut Apples with Naturally Occurring Bacterial and Yeast Antagonists
WOJCIECH JANISIEWICZ, U.S. Department of Agriculture–ARS, Kearneysville, WV, USA

4:00 Application of Probiotics to Control Foodborne Pathogens from Farm to Fork
MINDY BRASHEARS, Texas Tech University, Lubbock, TX, USA

4:30 Application of Bacteriophage to Control Foodborne Pathogens in the Food Processing Environment and in Ready-to-Eat Foods
SAM ALCAINE, Cornell University, Ithaca, NY, USA

S25 Non-thermal Plasma Technology for Improving Food Safety and Quality
Room 13-14
Organizers and Convenors: Nitin Nitin, Roger Ruan
Sponsored by USDA-NIFA and the IAFP Foundation

1:30 Non-thermal Plasma Fundamentals and Mechanism of Inactivation
ALEXANDER FRIDMAN, Drexel University, Philadelphia, PA, USA

2:00 Non-thermal Plasma Application and Industrial Implementation
ROGER RUAN, University of Minnesota, St. Paul, MN, USA

2:30 Quality Control and Regulatory Considerations
BRENDAN NIEMIRA, U.S Department of Agriculture–ARS, Wyndmoor, PA, USA

3:00 Break – Refreshments Available in the Exhibit Hall

S26 Let's Get Active!
Room 13-14
Organizers: Cynthia Ebner, Dale Grinstead, Upasana Hariram
Convenor: Dale Grinstead

3:30 Introduction to Active Packaging and Odor Scavenging
CYNTHIA EBNER, Sealed Air Corporation, Duncan, SC, USA

4:00 Oxygen Scavenging Technology
JOE DUNN, Performance Packaging of Nevada, Daytona Beach, FL, USA

4:30 Bacteriophages for Microbial Control Packaging
S. BALAMURUGAN, Agriculture & Agri-Food Canada, Guelph, ON, Canada

S27 Biological Soil Amendments of Animal Origin and the Food Safety Modernization Act: Challenges and Opportunities Going Forward
Room 20-21
Organizers and Convenors: Phillip Tocco, Patricia Millner, Michelle Smith

1:30 Biological Soil Amendments of Animal Origin (BSAAO) in Fresh Fruit and Vegetable Production: A Regulatory Perspective
DAVID INGRAM, U.S. Food and Drug Administration, College Park, MD, USA

2:00 A Research Framework to Assess Pathogen Prevalence and Survival in Raw Manure Used in Produce Production
ALDA PIRES, University of California-Davis, Davis, CA, USA

2:30 Use of Predictive Risk Modeling to Assess Persistence of Pathogens of Human Health Concern in Biological Soil Amendments of Animal Origin (BSA of AO)
ELISABETTA LAMBERTINI, RTI International, Rockville, MD, USA

3:00 Break – Refreshments Available in the Exhibit Hall

S28 The Produce Safety Alliance: From Education and Training to Implementation and Beyond
Room 20-21
Organizers: Elizabeth Bihn, Gretchen Wall
Convenor: Elizabeth Bihn

3:30 Produce Safety Frequently Asked Questions from the Field
DONNA PAHL, Cornell University, Riverside, CA, USA

4:00 Lessons Learned in Regional Food Safety Coordination and Collaboration
ELIZABETH NEWBOLD, University of Vermont, Bennington, VT, USA

4:30 Global Partnerships in Produce Safety Education
JAMES RUSHING, JIFSAN–University of Maryland, College Park, MD, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

S29 After 20 Years of Seafood HACCP, is Our Food Safer?
Room 22-23
Organizers: Jessica Jones, Lori Pivarnik, Tori Stivers
Convenors: Lori Pivarnik, Tori Stivers

1:30 History of Seafood HACCP and Impact on the Seafood Industry
LISA WEDDIG, National Fisheries Institute, McLean, VA, USA

2:00 The Foundational Role Seafood HACCP Played in Development of Food Safety Systems/Programs
STEVEN BLOODGOOD, U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition, College Park, MD, USA

2:30 U.S. Trends in Illnesses Attributed to Seafood, 1998–2015
ERIN BURDETTE, Centers for Disease Control and Prevention, Atlanta, GA, USA

3:00 Break – Refreshments Available in the Exhibit Hall

3:30 Vibrios and Natural Toxins: Can We Use Ecological Forecasting to Predict When Seafood is Safer to Harvest?
JOHN JACOBS, NOAA, Oxford, MD, USA

4:00 Seafood Authenticity and Its Effects on HACCP and Safety
JONATHAN DEEDS, U.S. Food and Drug Administration–CFSAN, College Park, MD, USA

4:30 What are the Challenges with Farmed Seafood Safety?
STEVE OTWELL, University of Florida, Gainesville, FL, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

S30 Strategic Intervention Design: A Pragmatic Approach to Validation
Room 24-25
Organizer: Pablo Alvarez
Convenor: Patrice Arbault
Sponsored by the IAFP Foundation

1:30 Proving Process Control When You Cannot Find the Pathogens
GARY ACUFF, Texas A&M University, College Station, TX, USA

2:00 Proving Process Control: Where Do You Start and What Do You Do
JAMES DICKSON, Iowa State University Food Microbiology Group, Ames, IA, USA

2:30 Surrogates for In-plant Validation: How to Make an Optimal Choice
PABLO ALVAREZ, Novolyze Inc., Cambridge, MA, USA

3:00 Break – Refreshments Available in the Exhibit Hall

S31 Development of Microbiological Criteria as Indicators of Process Control or Insanitary Conditions: A Summary of the Report Prepared for the United States Department of Defense by the NACMF
Room 24-25
Organizers: Jeffrey Kornacki, Robert (Skip) Seward
Convenor: Jeffrey Kornacki

3:30 Overview of the Department of Defense (DOD) Charge: Identification of Food Categories and Development of Process Flow Diagrams for Use in Designing Microbiological Sampling Plans
STEVE INGHAM, Wisconsin Department of Agriculture, Trade and Consumer Protection, Madison, WI, USA

4:00 Identification of Target Microorganisms, Microbiological Limits, and Recommended Exceeds-limits Actions for Department of Defense (DOD) Supplier Food Categories
KATHLEEN GLASS, University of Wisconsin-Madison, Madison, WI, USA

4:30 Taking the Next Steps: Establishment of Microbiological Criteria for Use in a Statistical Process Control Regime
MARGERY HANFORD, U.S. Army Medical Research Institute of Chemical Defense (USAMRICD), Aberdeen Proving Ground, MD, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

RT1 Starter Cultures as a Natural Antimicrobial to Improve the Safety of Ready-to-Eat Food
Room 18-19
Organizer: Veronique Zuliani
Convenor: Veronique Zuliani, Chad Galar

1:30 Panelists:
ALEX BRANDT, Food Safety Net Services, San Antonio, TX, USA

KATHLEEN GLASS, University of Wisconsin-Madison, Madison, WI, USA

DAVID B. SCHMIDT, U.S. Department of Agriculture, Leesburg, VA, USA

PETER TAORMINA, Club Chef LLC, Cincinnati, OH, USA

ABIGAIL SNYDER, The Ohio State University, Columbus, OH, USA

VERONIQUE ZULIANI, CHR HANSEN, Arpajon, France

3:00 Break – Refreshments Available in the Exhibit Hall

RT2 Hear All About It: Managing a Crisis
Room 18-19
Organizers: Meghan Cox, Faye Feldstein, David Luedeke, William Weichelt
Convenor: Craig Henry, Denise Pacofsky

3:30 Panelists:

HAL KING, Public Health Innovations LLC, Fayetteville, GA, USA

ANN MARIE MCNAMARA, Target, Minneapolis, MN, USA

THEODORA MORILLE-HINDS, Kellogg Company, Battle Creek, MI, USA

RYAN NEWKIRK, U.S. Food and Drug Administration, College Park, MD, USA

JENNIFER PIERQUET, Iowa Dept of Inspections & Appeals, Des Moines, IA, USA

MICHAEL ROBERSON, Publix Super Markets, Inc., Lakeland, FL, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

T3 Technical Session 3 – Communication Outreach and Education
Room 15
Convenors: Carol Anne Wallace, Rhoma Johnson

T3-01 1:30 Changes in Food-handling Following a Food Safety Intervention among High School Students (Ontario, Canada)
KENNETH DIPLOCK, Andria Jones-Bitton, Scott Leatherdale, Steven Rebellato, Joel Dubin, David Hammond, Shannon Majowicz, School of Public Health and Health Systems, University of Waterloo, Waterloo, ON, Canada

T3-02 1:45 Food Safety Attitudes and Self-reported Behaviours of Undergraduate Students from a Canadian University
SARAH COURTNEY, Ashok Chaurasia, Kitty Corbett, Shannon Majowicz, University of Waterloo, Waterloo, ON, Canada

T3-03 2:00 Educating Tailgaters on Best Food Safety Practices at College Football Tailgates
MARY YAVELAK, John Luchansky, Anna Porto-Fett, Jill Hochstein, Benjamin Chapman, North Carolina State University, Raleigh, NC, USA

T3-04 2:15 Safe Food-handling Behaviors of Student Volunteers in an On-campus Food Reclamation Program
HARRY SCHONBERGER, Renee Boyer, Melissa Chase, Virginia Tech, Blacksburg, VA, USA

T3-05 2:30 An Evaluation of Food Safety Culture and a Training Intervention: Getting the Most Out of Your Training Program
KRISTEN SANIGA, Clint Stevenson, North Carolina State University, Raleigh, NC, USA

T3-06 1:30 "Wash Your Produce": Determination of the Efficacy of a Piloted Food Safety Intervention at the Farmers' Market
SHAUNA HENLEY, David Martin, Jack Fu, Deanna Baldwin, Shelby Watson-Hampton, University of Maryland Extension, Baltimore County, Cockeysville, MD, USA

3:00 Break – Refreshments Available in the Exhibit Hall

T3-07 3:30 An Assessment of Produce Growers' Sanitizer Practices and Knowledge about Antimicrobial Resistance
VAISHALI DHARMARHA, Monica Ponder, Renee Boyer, Laura Strawn, Tiffany Drape, Joell Eifert, Amber Vallotton, Amy Pruden, Virginia Tech, Blacksburg, VA, USA

T3-08 3:45 Mug Cakes Baked in Microwave Ovens: The Influence of Baking Time and Internal Temperature on Risk of Foodborne Illness
SARAH COPE, Natalie Seymour, Mary Yavelak, Benjamin Chapman, North Carolina State University, Raleigh, NC, USA

T3-09 4:00 Needs Assessment of Educational Intervention for Artisan Cheesemakers in the United States
MADHUMEETA DUTTA, Clint Stevenson, North Carolina State University, Raleigh, NC, USA

T3-10 4:15 Thermometer Usage Behaviors for Thanksgiving Turkeys: Analysis of Data Collected by Citizen Scientists
MINH DUONG, John Luchansky, Anna Porto-Fett, Caitlin Warren, Benjamin Chapman, North Carolina State University, Raleigh, NC, USA

T3-11 4:30 Valuable Metrics That Link Training to Successful Implementation
ZHENGFANG WANG, Janie Dubois, University of Maryland – FDA JIFSAN, College Park, MD, USA

T3-12 4:45 Capacity Building through Water Quality and Safety Analyses in Herat, Afghanistan
Paul Ebner, Amanda Deering, Mosa Mojadady, Zahra Rahimi, Roma Amini, Nesar Isaqzehi, Ehsanulla Azizi, Ershad Ershad, Solaiman Barak, Maqsood Popal, Shakib Amini, Neman Mohammadi, Mirwais Rahimi, Kevin McNamara, HALEY OLIVER, Purdue University, West Lafayette, IN, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

T4 Technical Session 4 – Laboratory and Detection Methods
Room 16
Convenors: Francisco Diez-Gonzalez, David Baumler

T4-01 1:30 Validation of a Multiplex Real-time PCR Method for the Detection of Crustacean Allergens (Shrimp, Crab, and Lobster) in Complex Food Matrices
SARAH STADIG, Anne Eischeid, U.S. Food and Drug Administration, College Park, MD, USA

T4-02 1:45 Comparison of Methods for the Detection and Isolation of Shiga Toxin-producing *Escherichia coli* (STEC) in Meat Samples
Mst. Thangima Zannat, Carlos Leon-Velarde, Saleema Saleh-Lakha, Jiping Li, Honghong Li, Anli Gao, Roger Johnson, SHU CHEN, University of Guelph, Guelph, ON, Canada

T4-03 2:00 Novel Immunoassay Pathogen Detection Method for *Listeria* spp. in Food and Environmental Samples
SIMON ILLINGWORTH, Nevin Perera, Solus Scientific Solutions Ltd., MANSFIELD, United Kingdom

T4-04 2:15 Determination of Trace Metals in Several Off-the-Shelf Spices Using Aerosol Phase Dilution
NEAL JULIEN, MRIGlobal, Palm Bay, FL, USA

T4-05 2:30 Bacteriophage-based Dipstick: Inkjet Printing of Bacteriophages to Detect Different Foodborne Pathogens
HANY ANANY, Jennifer Sohar, Heather Fenn, Noha Eldougdoug, Nada Alasiri, Luba Brovko, Mansel Griffiths, Agriculture and Agri-Food Canada, Guelph, ON, Canada

T4-06 2:45 Development of a Novel Hygiene Monitoring System Based on the Detection of Total Adenylate (ATP+ADP+AMP)
MIKIO BAKKE, Shigeya Suzuki, Kikkoman Biochemifa Company, Noda-shi, Chiba, Japan

3:00 Break – Refreshments available in the Exhibit Hall

T4-07 3:30 Extended Enrichment Procedures Can be Used to Define False Negative Rate for Cultural Gold Standard Methods for *Salmonella* Detection Facilitating Comparisons between Gold Standard and Alternative Methods
GENEVIEVE SULLIVAN, Xiaodong Guo, Jeffrey Tokman, Sherry Roof, Aljosa Trmcic, Robert Baker, Silin Tang, Peter Markwell, Martin Wiedmann, Jasna Kovak, Cornell University, Ithaca, NY, USA

T4-08 3:45 Digging Deep: Making the Case for Molecular Based Detection with Real-world Performance and Discrepant Evaluation
WILLIAM CHANEY, Sarah Verver, Janelle Lauffer, Cambria Berry, Ted Andrew, Mary Duseau, Roka Bioscience, San Diego, CA, USA

T4-09 4:00 Insect Contaminants in Foods: Detection Limits of a Qualitative PCR-based Method
MONICA PAVA-RIPOLL, Amy K. Miller, George C. Ziobrio, Food and Drug Administration (FDA), Center for Food Safety and Applied Nutrition (CFSAN), Office of Food Safety (OFS), College Park, MD, USA

T4-10 4:15 Culture-independent Detection and Confirmation of Shiga Toxin-producing *Escherichia coli* by Digital PCR
JIANFA BAI, Xuming Liu, Lance Noll, Xiaorong Shi, T G Nagaraja, Gary Anderson, Kansas State University, Manhattan, KS, USA

T4-11 4:30 Integration and Public Health Protection as Outcomes of Food Laboratory Accreditation
Shari Shea, ROBYN RANDOLPH, Association of Public Health Laboratories, Silver Spring, MD, USA

T4-12 4:45 A Unique Workflow Consisting of Metagenomic Sequencing and Bioinformatic Analysis to Routinely Recover High Quality *Cyclospora cayetanensis* Whole Genome Sequences from Clinical Samples
GOPAL GOPINATH, Hediye Cinar, Helen Murphy, ChaeYoon Lee, Sonia Almeria, Mauricio Durigan, Alexandre da Silva, U.S. Food and Drug Administration, Laurel, MD, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

EVENING OPTIONS

5:00 p.m. – 6:00 p.m. Exhibit Hall Reception

AFFLIATE MEETINGS

5:15 p.m. – 6:00 p.m. Latin America Group Meeting, *Room 18–19*

5:15 p.m. – 6:15 p.m. Africa Association for Food Protection, *Room 15*

5:15 p.m. – 6:15 p.m. SE Asia Association for Food Protection, *Room 16*

5:15 p.m. – 7:00 p.m. China Association for Food Protection and Chinese Association for Food Protection in North America, *Room 22–23*

MONDAY PM

Check the Program Addendum for changes to the Program.

■ – Symposia ■ – Roundtables ■ – Technicals ■ – Developing Scientist Competitor

Notes

LABPLAS

SPECIALIST IN SAMPLING SOLUTIONS FOR THE FOOD INDUSTRY

Let us help with your sampling needs!

VISIT US AT BOOTH
913

TUESDAY

Tuesday, July 11

ALL DAY

10:00 a.m – 6:00 p.m. **Poster Session 2**

Exhibit Hall

Food Chemical Hazards and Food Allergens
Epidemiology
Molecular Analytics, Genomics and Microbiome
Food Toxicology
Retail and Food Service Safety
Laboratory and Detection Methods
Meat, Poultry and Eggs
Communication Outreach and Education
Dairy

P2-01 through P2-119 – Authors present 10:00 a.m.– 11:30 a.m. and 5:00 p.m. – 6:00 p.m.
P2-120 and above – Authors present 2:00 p.m. – 3:30 p.m. and 5:00 p.m. – 6:00 p.m

MORNING

8:30 a.m. – 12:00 p.m.

Ballroom B	S34	Managing Risk in a Zero Tolerance World
Ballroom C	S35	Novel and Not-so-Novel Cleaning and Sanitizing Methods
Room 10-11	SF1	Predictive Microbiology and Risk Assessment Tools
Room 15	T5	Technical Session 5 – Antimicrobials
Room 16	T6	Technical Session 6 – Microbial Food Spoilage and Low-water Activity Foods

8:30 a.m. – 10:00 a.m.

Ballroom A	S32	What Can We Do with 10,000 Genomes That Couldn't be Done with 100?
Ballroom D	S36	Getting to the Reality of Implementation: Produce Safety Rule Water Quality Requirements
Room 13-14	RT3	Seafood-associated Vibriosis: Turning the Trend Around
Room 18-19	RT5	What is IARC and CA Prop 65? What on Earth Do They Mean to Me and My Food Safety Program?
Room 20-21	S38	Moving toward the Safe Use of Recycled Water for Crop Irrigation: A Sustainable Solution in an Era of Climate Variability?
Room 22-23	S40	Ensuring Food Safety through the Product Development Lifecycle: Successes and Pitfalls
Room 24-25	S42	Mechanisms of Hypervirulence in Selected Foodborne Pathogens

10:00 a.m. – 10:30 a.m. **Break – Refreshments Available in the Exhibit Hall**

10:30 a.m. – 12:00 p.m.

Ballroom A	S33	What Can Complete Closed Microbial Genomes Provide to Food Safety?
Ballroom D	S37	Pro- and/or Pre-biotics as Bio-remedies and Foodborne Infection Preventives
Room 20-21	S39	Water, Water, Everywhere: The Effects of Flooding on the Microbial Safety of Fresh Produce
Room 22-23	S41	Clean Label Technologies for Safety of Processed Meat and Poultry Products: Scientific Support of Efficacy
Room 24-25	S43	The Crossroad between Global Trade and Food Safety: Focus on Viruses and Parasites
Room 13-14	RT4	Artisanal Food Processing and Food Safety
Room 18-19	RT6	Can Industry and Government Take Safe Food Handling and Preparation Risks Out of the Hands of the Consumer?

11:45 a.m. – 1:30 p.m. **Lunch Available in the Exhibit Hall**

AFTERNOON

12:15 p.m. – 1:15 p.m.

Room 16 **IAFP Business Meeting**

1:30 p.m. – 5:00 p.m.

Ballroom B	S46	Cross Pollination of *Listeria* Learnings across the Industry
Ballroom C	S47	Stories from the Trenches: FDA Inspection after Food Safety Modernization Act (FSMA) Implementation
Room 12	SF2	Software Fair on Predictive Microbiology and Risk Assessment Tools
Room 15	T7	Technical Session 7 — Pre-harvest Food Safety and Water
Room 16	T8	Technical Session 8 — Food Law and Regulation; Food Defense; Food Safety Systems

1:30 p.m. – 3:00 p.m.

Ballroom A	S44	Modeling Pathogens in Low-water Activity Foods: What, How, and How to Use It
Ballroom D	S48	Foodborne Viruses: Detection, Risk Assessment, and Control Options in Food Processing
Room 13-14	RT7	It's Going to Take a Village: Grower Perspectives on FSMA Implementation
Room 18-19	RT9	Next Generation Whole Genome Sequencing in the Regulatory Arena: Nomenclature, Pipelines, Applications, and Collaboration
Room 20-21	S50	Teaching for Tomorrow: Impact of School and College Food Safety Curricula on Better Informed Consumers, Career Opportunities, and the Industry Workforce of the Future
Room 22-23	S52	Total Diet Studies: Designs for Monitoring the Food Supply
Room 24-25	S54	Tools to Improve Interactive Food Safety Training for Small Food Facilities

3:00 p.m. – 3:30 p.m. **Break – Refreshments Available in the Exhibit Hall**

3:30 p.m. – 5:00 p.m.

Ballroom A	S45	Can Old Processes Satisfy New Rules? Pathogen Reduction in Legacy Processes for Low-moisture Foods
Ballroom D	S49	Hepatitis E Virus: An Emerging Foodborne Pathogen?
Room 13-14	RT8	International Strategies to Deliver Food Safety Education via the "Trusted Source:" Health Professionals
Room 18-19	RT10	FoodOmics: Stop Using a Steamroller to Crack a Nut!
Room 20-21	S51	Establishing Effective Metrics to Advance Your Food Safety Training and Education Programs
Room 22-23	S53	Ranking Risks in Low-resource Settings
Room 24-25	S55	Translating the Big Data to the Food Industry

EVENING OPTIONS

5:00 p.m. – 6:00 p.m. Exhibit Hall Reception
6:00 p.m. – 7:00 p.m. President's Reception (by invitation), Tampa Marriott Waterside, *Florida Ballroom*
7:00 p.m. – 9:00 p.m. Student Mixer, *Room 7-9*

AFFLIATE MEETINGS

5:15 p.m. – 6:15 p.m. Indian Association for Food Protection in North America Meeting, *Room 16*
5:30 p.m. – 6:30 p.m. Korea Association for Food Protection Meeting, *Room 22–23*

TUESDAY MORNING JULY 11

Posters will be on display 10:00 a.m. – 6:00 p.m.
(See details beginning on page 79)

S32 What Can We Do with 10,000 Genomes That Couldn't be Done with 100?
Ballroom A
Organizer and Convenor: Edward Dudley
Sponsored by the IAFP Foundation

8:30 Insights from Massive *Salmonella* Datasets
YAN LUO, U.S. Food and Drug Administration, College Park, MD, USA

9:00 Application of Machine Learning to Predict the Zoonotic Potential of *Salmonella enterica* and *E. coli*
DAVID GALLY, University of Edinburgh, Edinburgh, United Kingdom

9:30 Phylogenetic and Phenotypic Analysis of Isolates from Common and Rare *Salmonella enterica* Serovars
LAWRENCE GOODRIDGE, McGill University, Ste-Anne-de-Bellevue, QC, Canada

10:00 Break – Refreshments Available in the Exhibit Hall

S33 What Can Complete Closed Microbial Genomes Provide to Food Safety?
Ballroom A
Organizers and Convenors: Narjol Gonzalez-Escalona, Maria Hoffmann
Sponsored by: NSF International and the IAFP Foundation

10:30 Shiga Toxin-producing *Escherichia coli* O157:H7 Complete Genomes: Is the Added Expense Worth the Additional Information?
JAMES BONO, USDA-ARS U.S. Meat Animal Research Center, Clay Center, NE, USA

11:00 Using Closed Whole Genome Sequence Data to Protect Your Business
DANIEL HURLEY, University College Dublin, Dublin, Ireland

11:30 The Value of Using Complete Genome Sequencing for an Improved Inference of Disease Transmission and Phylogeny of *Salmonella*
JAIME MARTINEZ-URTAZA, University of Bath, Bath, United Kingdom

12:00 Lunch Available in the Exhibit Hall

S34 Managing Risk in a Zero Tolerance World
Ballroom B
Organizer: Delia Murphy
Convenors: Laurie Post, Edith Wilkin
Sponsored by ILSI North America Technical Committee on Food Microbiology

8:30 The Changing Landscape: Implications of New Regulations on Risk Assessment
DON ZINK, IEH Laboratories & Consulting Group, Herndon, VA, USA

9:00 The International Dynamic of Risk Assessment
ROBERT BUCHANAN, University of Maryland, College Park, MD, USA

9:30 How is Whole Genome Sequencing Impacting Assessments of Risk and Setting of Standards?
LUCA COCOLIN, University of Torino-DISAFA, Grugliasco, Italy

10:00 Break – Refreshments available in the Exhibit Hall

10:30 Setting Risk-based Performance Standards
ROY BETTS, Campden BRI, Gloucestershire, United Kingdom

11:00 Risk Management: Strategies and Challenges in a Zero Risk Environment
TIMOTHY JACKSON, Nestle USA, North America, Glendale, CA, USA

11:30 Consumer Perceptions of Risk and How It Influences Their Choices
WILLIAM HALLMAN, Rutgers University, New Brunswick, NJ, USA

12:00 Lunch Available in the Exhibit Hall

S35 Novel and Not-so-Novel Cleaning and Sanitizing Methods
Ballroom C
Organizer: Richard Brouillette
Convenors: Jeffrey Kornacki, Nadia Narine

8:30 Overview of the Problems and Technologies Associated with Traditional Cleaning and Sanitization in Both Wet and Dry Environments.
JEFFREY KORNACKI, Kornacki Microbiology Solutions, Inc., Madison, WI, USA

9:00 Experiences with Dry Ice Blasting for Cleaning
JOHN MERENICK, Sargento, Plymouth, WI, USA

9:30 Using Phage Technology to Control Pathogens in a Plant Environment
ROBIN PETERSON, Micreos, Atlanta, GA, USA

10:00 Break – Refreshments available in the Exhibit Hall

10:30 Novel and Not-so-Novel Cleaning Methods for Low-water Activity Foods
TBD

11:00 Experiences with Chlorine Dioxide and Heat Disinfection
NATHAN MIRDAMADI, Commercial Food Sanitation, Aliquppa, PA, USA

11:30 Verification or Validation of Sanitation Controls: What Should We Do?
EVAN ROSEN, PacMoore, Hammond, IN, USA

12:00 Lunch Available in the Exhibit Hall

S36 Getting to the Reality of Implementation: Produce Safety Rule Water Quality Requirements
Ballroom D
Organizers and Convenors: Diane Ducharme, Laura Strawn

8:30 Water Testing Methods and Representative Samples
MICHELLE D. DANYLUK, University of Florida, Lake Alfred, FL, USA

9:00 Water Treatment Alternatives for Non-compliance Utilizing EPA-registered Antimicrobial Devices and Pesticides
FAITH CRITZER, University of Tennessee, Knoxville, TN, USA

9:30 Implementation Programs Benefit from Ag Water Surveys and On-farm Preparedness Assessments
TREVOR SUSLOW, University of California-Davis, Davis, CA, USA

10:00 Break – Refreshments Available in the Exhibit Hall

S37 Pro- and/or Pre-biotics as Bio-remedies and Foodborne Infection Preventives
Ballroom D
Organizer and Convenor: Debabrata Biswas

10:30 Role of Secondary Metabolites in Enteric Bacterial Infections and Gut Health
DEBABRATA BISWAS, University of Maryland, College Park, MD, USA

11:00 Pre- and Probiotis in Chronic Diseases: Cancer and Adipogenesis
SEONG-HO LEE, University of Maryland, College Park, MD, USA

11:30 Pre- and Probiotic in Chronic Diseases: Cardiac
SHAIK RAHAMAN, University of Maryland, College Park, MD, USA

12:00 Lunch Available in the Exhibit Hall

S38 Moving toward the Safe Use of Recycled Water for Crop Irrigation: A Sustainable Solution in an Era of Climate Variability?
Room 20-21
Organizers: Sarah Allard, Bassam Annous, Kalmia Kniel, Shirley Micallef, Manan Sharma
Convenors: Sarah Allard, Manan Sharma
Sponsored by the IAFP Foundation

8:30 Recycled Water, Crop Irrigation, and Public Health: Moving the Science Forward to Achieve Sustainable Water Reuse in a Changing Climate
AMY SAPKOTA, Maryland Institute for Applied Environmental Health, University of Maryland, School of Public Health, College Park, MD, USA

9:00 Will They Use It? Grower Perspectives and the Regulatory Landscape Concerning Recycled Water Use for Irrigation
CHANNAH ROCK, University of Arizona, Maricopa, AZ, USA

9:30 Learning from Leaders in Water Reuse: Practices in Israel and Other Water Conserving Nations
CLIVE LIPCHIN, Arava Institute for Environmental Studies, Ketura, Israel

10:00 Break – Refreshments Available in the Exhibit Hall

S39 Water, Water, Everywhere: The Effects of Flooding on the Microbial Safety of Fresh Produce
Room 20-21
Organizers: Kellie Burris, Wenqing Xu
Convenors: Bassam Annous, Kellie Burris, Wenqing Xu
Sponsored by the IAFP Foundation

10:30 Spatiotemporal Analysis of Microbiological Contamination in New York State Produce Fields Following Extensive Flooding from Hurricane Irene, August 2011
PETER BERGHOLZ, North Dakota State University, Fargo, ND, USA

11:00 Prevalence and Diversity of *Salmonella* on the Eastern Shore of Virginia after a Flooding Event
LAURA STRAWN, Virginia Tech-Eastern Shore, AREC, Painter, VA, USA

11:30 Survival of Fecal Indicators and Presence of Foodborne Pathogens on Cantaloupes after Flooding in Louisiana
MELANIE IVEY, The Ohio State University, Wooster, OH, USA

12:00 Lunch Available in the Exhibit Hall

S40 Ensuring Food Safety through the Product Development Lifecycle: Successes and Pitfalls
Room 22-23
Organizer: Rocelle Clavero
Convenor: Fatemeh Ataei

8:30 New Product Development: A Business Perspective
KATHRYN MCCANN, The Kellogg Company, Battle Creek, MI, USA

9:00 Manufacturing Considerations in Designing Foods
JOSEPH MEYER, The Kraft Heinz Company, Glenview, IL, USA

9:30 Justification for Microbial Intervention Strategies
KATHLEEN GLASS, University of Wisconsin-Madison, Madison, WI, USA

10:00 Break – Refreshments Available in the Exhibit Hall

S41 Clean Label Technologies for Safety of Processed Meat and Poultry Products: Scientific Support of Efficacy
Room 22-23
Organizers: Betsy Booren, Kathleen Glass, Amanda King
Convenor: Amanda King

10:30 Food Safety Equivalence of Curing Ingredients from Synthetic and Natural Sources
KATHLEEN GLASS, Food Research Institute, University of Wisconsin-Madison, Madison, WI, USA

11:00 Adjunct Clean Label Food Safety Ingredients
JAMES DICKSON, Iowa State University, Ames, IA, USA

11:30 Process-based Food Safety Solutions, Spoilage Control, and Pitfalls of Clean Label from a Meat Processor's Perspective
AARON ASMUS, Hormel Foods, Austin, MN, USA

12:00 Lunch Available in the Exhibit Hall

S42 Mechanisms of Hypervirulence in Selected Foodborne Pathogens
Room 24-25
Organizers and Convenors: Arun Bhunia, Byron Brehm-Stecher
Sponsored by the IAFP Foundation

8:30 Hypervirulent *Salmonella*?
JOHN MAUER, University of Georgia, Athens, GA, USA

9:00 Emergence of a Highly Pathogenic *Campylobacter jejuni* Clone in the United States
QIJING ZHANG, Iowa State University, Ames, IA, USA

9:30 Dynamics of Lysine Acetylation in the Protozoan Parasite *Toxoplasma gondii*: Opportunities for Drug Development
VICTORIA JEFFERS, Indiana University, Bloomington, IN, USA

10:00 Break – Refreshments Available in the Exhibit Hall

S43 The Crossroad between Global Trade and Food Safety: Focus on Viruses and Parasites
Room 24-25
Organizers: Alex Da Silva, David Kingsley
Convenor: Alex Da Silva
Sponsored by the IAFP Foundation

10:30 Hepatitis A Virus Epidemiology and Food Safety Issues
ROSA PINTO, University of Barcelona, Barcelona, Spain

11:00 Emerging and Re-emerging Foodborne Parasites and Their Global Impact on the Safety of Foods
RICHARD BRADBURY, Centers for Disease Control and Prevention, Atlanta, GA, USA

11:30 Strengthening Compliance to Control the Contamination of Foods by Foodborne Viruses and Parasites
DORILIZ DE LEON, U.S. Food and Drug Administration–CFSAN, College Park, MD, USA

12:00 Lunch Available in the Exhibit Hall

SF1 Predictive Microbiology and Risk Assessment Tools
Room 10-11
Organizers and Convenors: Fanny Tenenhaus-Aziza, Mariem Ellouze
Sponsored by the IAFP Foundation

8:30 Introduction to Predictive Microbiology and Risk Assessment
MARIEM ELLOUZE, Fanny Tenenhaus-Aziza, Nestlé, Lausanne, Switzerland

9:00 Presentation of FDA-iRISK®
YUHUAN CHEN, U.S. Food and Drug Administration, College Park, MD, USA

9:30 Presentation of GroPIN
PANAGIOTIS SKANDAMIS, Agricultural University of Athens, Athens, Greece

10:00 Break – Refreshments Available in the Exhibit Hall

10:30 Presentation of MicroHibro
FERNANDO PÉREZ-RODRÍGUEZ, University of Cordoba, Cordoba, Spain

11:00 Presentation of Sym-Previus
YVAN LE MARC, ADRIA Development, Quimper, France

11:30 Presentation of ComBase
MARK TAMPLIN, Food Safety Centre, Tasmanian Institute of Agriculture, University of Tasmania, Hobart, Australia

12:00 Lunch Available in the Exhibit Hall

RT3 Seafood-associated Vibriosis: Turning the Trend Around
Room 13-14
Organizers and Convenors: Jessica Jones, Angela Ruple

8:30 Panelists:
ERIN BURDETTE, Centers for Disease Control and Prevention, Atlanta, GA, USA

JOHN JACOBS, NOAA, Oxford, MD, USA

KEN MOORE, Interstate Shellfish Sanitation Conference, Columbia, SC, USA

SALINA PARVEEN, University of Maryland Eastern Shore, Princess Anne, MD, USA

CHRIS SCHILLACI, Massachusetts Division of Marine Fisheries, New Bedford, MA, USA

WILLIAM WALTON, Auburn University, Dauphin Island, AL, USA

10:00 Break – Refreshments Available in the Exhibit Hall

RT4 Artisanal Food Processing and Food Safety
Room 13-14
Organizer and Convenor: Carl Custer

10:30 Panelists:
JOSEPH CORBY, Association of Food and Drug Officials, New York, NY, USA

BARBARA INGHAM, University of Wisconsin-Madison, Madison, WI, USA

PANAGIOTIS LEKKAS, University of Vermont, Burlington, VT, USA

ANNA PORTO-FETT, USDA-ARS-ERRC, Wyndmoor, PA, USA

12:00 Lunch Available in the Exhibit Hall

RT5 What is IARC and CA Prop 65? What on Earth Do They Mean to Me and My Food Safety Program?
Room 18-19
Organizers: Anthony Flood, Christie Gray
Convenor: Anthony Flood, David Crownover

8:30 Panelists:
JAMES COUGHLIN, Coughlin and Associates, Laguna Niguel, CA, USA

LAURIE DOLAN, U.S. Food and Drug Administration – HHS, College Park, MD, USA

Check the Program Addendum for changes to the Program.

■ – Symposia ■ – Roundtables ■ – Technicals ■ – Developing Scientist Competitor

CHRISTIE GRAY, Decernis LLC, Rockville, MD, USA

ERIC MITTENTHAL, North American Meat Institute (NAMI), Washington, D.C., USA

GEORGE PUGH, The Coca Cola Company, Atlanta, GA, USA

10:00 Break – Refreshments Available in the Exhibit Hall

RT6 Can Industry and Government Take Safe Food Handling and Preparation Risks Out of the Hands of the Consumer?
Room 18-19
Organizers and Convenors: Nicole Arnold, Cameron Bardsley, Stephanie Barnes, Lily Yang

10:30 Panelists:
KRISTINA BARLOW, U.S. Department of Agriculture–FSIS, Washington, D.C., USA

TAMIKA SIMS, International Food Information Council, Washington, D.C., USA

DONNA GARREN, American Frozen Food Institute, McLean, VA, USA

SANJAY GUMMALLA, American Frozen Food Institute, McLean, VA, USA

LONE JESPERSEN, Cultivate, Hauterive, Switzerland

KELLY STEVENS, General Mills, Minneapolis, MN, USA

12:00 Lunch Available in the Exhibit Hall

T5 Technical Session 5 – Antimicrobials
Room 15
Convenors: John Luchansky, Dennis D'Amico

T5-01 Application of Edible Coatings Formulated with Antimicrobials to Control *Listeria monocytogenes* as Surface Contaminants on Fresh Cheese
STEPHANIE BARNES, Sarah Kozak, Dennis D'Amico, University of Connecticut, Department of Animal Science, Storrs, CT, USA

T5-02 Characterization of Cattle Feedlot Isolated *Salmonella* spp. Bacteriophages and Evaluation of Their Antimicrobial Capacity against *Salmonella* on a Cattle Hide Model
YICHENG XIE, Jason Gill, Texas A&M University, College Station, TX, USA

T5-03 Reduced *Campylobacter jejuni* Colonization in Poultry Ceca with Natural Phenolics from Industry Byproducts
SERAJUS SALAHEEN, Zajeba Tabashsum, Debabrata Biswas, University of Maryland, College Park, MD, USA

T5-04 Use of *Olea europaea* Byproducts to Stimulate the Growth of Probiotic and Competitively Exclude Enteric Pathogens
MENGFEI PENG, Debabrata Biswas, University of Maryland, College Park, MD, USA

T5-05 Control of *Escherichia coli* O157:H7 with Deodorized Mustard in Mennonite Fermented Sausages
ROCIO MORALES-RAYAS, Angela Tellez, Richard Holley, Jeffrey Farber, Arthur Hill, University of Guelph, CRIFS, Department of Food Science, Guelph, ON, Canada

T5-06 The Lytic Capacity of Listeriophage is Affected by Phenotypic and Genotypic Characteristics of *Listeria monocytogenes*
AJITA SUNDARRAM, Jia Liu, Karina Desiree, Paige LeMaster, Danielle Marks, MaryKate Harrod, Shelby Meyer, Paul Ebner, Haley Oliver, Purdue University, West Lafayette, IN, USA

10:00 Break – Refreshments Available in the Exhibit Hall

T5-07 Disruption of Shiga-toxigenic *Escherichia coli* Biofilms In Vitro and on Food Contact Surfaces Using Bacteriophages
PUSHPINDER KAUR LITT, Tony Kountoupis, Pramila Lamichhane, Divya Jaroni, Oklahoma State University, Stillwater, OK, USA

T5-08 Reverting Multidrug-resistant Phenotypes of *Escherichia coli* Isolated from Cattle Using 1-(1-Naphthylmethyl)-Piperazine
JOÃO ANES, Daniel Hurley, Séamus Fanning, Shabarinath Srikumar, University College Dublin, Dublin, Ireland

T5-09 Efficacy of Individual and Combinatory Antimicrobial Dip Treatments for the Control of *Listeria monocytogenes* on Fresh Cheese
SARAH KOZAK, Yustyna Bobak, Dennis D'Amico, University of Connecticut, Storrs, CT, USA

T5-10 Decontamination of Chicken Breast Meat, Romaine Lettuce Leaves, and Stainless Steel Surfaces from a Multidrug-resistant Strain of *Salmonella enterica* Serovar Heidelberg Using a 2D-Air-based DBD-Plasma Microdischarge Array
HAMADA ABOUBAKR, Muhammad Nisar, Kakambi Nagaraja, James Collins, Peter Bruggeman, Sagar Goyal, University of Minnesota, College of Veterinary Medicine, St. Paul, MN, USA

T5-11 Use of Bacteriophage as an Additive during the Preparation of Ready-to-Eat (RTE) Meat Products to Control *Listeria monocytogenes*
Hanie Ahmadi, Shai Barbut, Loong-Tak Lim, S. BALAMURUGAN, Agriculture & Agri-Food Canada, Guelph, ON, Canada

T5-12 Evaluation of Recirculating Chlorinated Nanobubble Water to Control Shiga Toxin-producing *Escherichia coli* Surrogates in a Novel Commercial Ground Beef Production System
AMANDA WILDER, Nicholas Sevart, Anna Porto-Fett, John Luchansky, Harshavardhan Thippareddi, Christopher Vahl, Gary Acuff, Randall Phebus, Kansas State University, Manhattan, KS, USA

T6 Technical Session 6 – Microbial Food Spoilage and Low-water Activity Foods
Room 16
Convenor: Stephen Kenney

T6-01 Strategies for Enhanced Protection of Agricultural Produce in Outdoor Storage
CHIN GOUK, Simone Kreidl, Peta Faulkner, Department of Economic Development, Jobs, Transport and Resources, Melbourne, Australia

T6-02 The In Vitro and In Vivo Effects of *Pseudomonas aeruginosa Des*B on Pathogen-host Interaction
JIMYEONG HA, Sejeong Kim, Yohan Yoon, Kyoung-Hee Choi, Sookmyung Women's University, Seoul, South Korea

T6-03 Occurrence of Spore Formers in Processed Milk from Household Refrigerators and the Effect of Heat Treatment on *Bacillus* Spore Activation
Sarisha Devnath, AJIBOLA OYEDEJI, Oluwatosin Ademola Ijabadeniyi, Durban University of Technology, Durban, South Africa

T6-04 Thermal Death Kinetics of *Bacillus sporothermodurans* Spores Isolated from Ultra-high Temperature Milk
RODNEY OWUSU-DARKO, Lungile Shongwe, Elna Buys, University of Pretoria, Pretoria, South Africa

T6-05 Desaturase-mediated Adaptation to High Salt Concentration in *Pseudomonas aeruginosa*
SEJEONG KIM, Jimyeong Ha, Yohan Yoon, Kyoung-Hee Choi, Sookmyung Women's University, Seoul, South Korea

T6-06 Can the Adsorption-Desorption State Affect *Salmonella* Thermal Inactivation Kinetics in Low-moisture Foods?
FRANCISCO GARCÉS-VEGA, Bradley Marks, Michigan State University, East Lansing, MI, USA

10:00 Break – Refreshments Available in the Exhibit Hall

T6-07 Survival of *Salmonella* in Low-moisture Military Ration Products
Andre Senecal, GENEVIEVE FLOCK, Michelle Richardson, Courtney Cowell, Dominique Pacitto, U.S. Army NSRDEC, Natick, MA, USA

T6-08 Heat Resistance of *Salmonella* spp. and *Enterococcus faecium* Increased Exponentially at Reduced Water Activity in Silicon Dioxide
SHUXIANG LIU, Ravi Kiran Tadapaneni, Meijun Zhu, Sablani Shyam, Juming Tang, Washington State University, Pullman, WA, USA

T6-09 Evaluation of Survival on Flaxseeds and Subsequent Heat Resistance among Four *Salmonella* Serovars
SAHAR MALEKMOHAMMADI, Teresa Bergholz, North Dakota State University, Fargo, ND, USA

T6-10 A Novel Method to Determine Thermal Death Kinetics of Microorganisms in Low-moisture Foods: Thermal-Death-Time Sandwich
SOON KIAT LAU, Harshavardhan Thippareddi, Jeyamkondan Subbiah, University of Nebraska-Lincoln, Lincoln, NE, USA

T6-11 Microbial Safety of Edible Low-water Activity Foods: Study of Simulated and Durban Household Samples
OLUWATOSIN ADEMOLA IJABADENIYI, Yovani Pillay, Durban University of Technology, Durban, South Africa

T6-12 Utilization of *Enterococcus faecium* as a *Salmonella* spp. Surrogate for Thermal Treatment in Selected Low-moisture Food Products
NURUL AHMAD, Ian Hildebrandt, Shannon Pickens, Soon Kiat Lau, Jie Xu, Shuxiang Liu, Hsieh-Chin Tsai, Angela Maria Rincon, Jeyamkondan Subbiah, Harshavardhan Thippareddi, Meijun Zhu, Juming Tang, Nathan Anderson, Elizabeth Grasso-Kelley, Elliot Ryser, Bradley Marks, Michigan State University, East Lansing, MI, USA

Notes

TUESDAY AFTERNOON JULY 11

Posters will be on display 10:00 a.m. – 6:00 p.m.
(See details beginning on page 79)

12:15 p.m. – 1:15 p.m. IAFP Business Meeting
Room 16

S44 Modeling Pathogens in Low-water Activity Foods: What, How, and How to Use It
Ballroom A
Organizers and Convenors: Sofia Santillana Farakos, Michelle D. Danyluk

1:30 What to Look for and Where? A Risk Ranking Approach to Pathogens in Low-water Activity Foods
SARAH CAHILL, Food and Agriculture Organization of the United Nations, Rome, Italy

2:00 Plugging in the Numbers: Data Collection, Predictive Modeling and Risk Assessment in Dry Foods
SOFIA SANTILLANA FARAKOS, U.S. Food and Drug Administration, College Park, MD, USA

2:30 Application of Models in a Processing Plant: Understanding the Importance of Validation
LINDA J. HARRIS, University of California-Davis, Davis, CA, USA

3:00 Break – Refreshments Available in the Exhibit Hall

S45 Can Old Processes Satisfy New Rules? Pathogen Reduction in Legacy Processes for Low-moisture Foods
Ballroom A
Organizer: Bradley Marks
Convenors: Elizabeth Grasso-Kelley, Sanghyup Jeong

3:30 A Systems Approach to Validating Pathogen Reduction in a Legacy Process for Low-moisture Foods
NATHAN ANDERSON, U.S. Food and Drug Administration, Bedford Park, IL, USA

4:00 Modifying Existing (Legacy) Thermal Processes to Achieve Pathogen Reduction Goals
BRADLEY MARKS, Michigan State University, East Lansing, MI, USA

4:30 When Existing Legacy Processes are Insufficient: What are the Novel Dedicated Technology Options?
JEYAMKONDAN SUBBIAH, University of Nebraska-Lincoln, Lincoln, NE, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

S46 Cross Pollination of *Listeria* Learnings across the Industry
Ballroom B
Organizers and Convenors: Nancy Eggink, Timothy Freier

1:30 *Listeria* and Listeriosis in the Dairy Industry
JOHN ALLAN, International Dairy Foods Association, Alexandria, VA, USA

2:00 Applied Learnings from *Listeria* Outbreaks, Investigations and Environmental Monitoring
MATTHEW RANIERI, Acme Smoked Fish Corporation, Brooklyn, NY, USA

2:30 Hygenic Design: What We Have Learned from Past Issues That Can be Applied to New Segments
JOSEPH STOUT, Commercial Food Sanitation, Kenosha, WI, USA

3:00 Break – Refreshments Available in the Exhibit Hall

3:30 *Listeria* Control in Grocery and Retail Food Environments
HILARY THESMAR, Food Marketing Institute, Arlington, VA, USA

4:00 The Art of Sampling
TIMOTHY FREIER, Merieux NutriSciences, Maple Grove, MN, USA

4:30 Listeriostatic Antimicrobials: Use Across Segments and Options for Validating Effectiveness
KATHLEEN GLASS, University of Wisconsin-Madison, Madison, WI, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

S47 Stories from the Trenches: FDA Inspection after Food Safety Modernization Act (FSMA) Implementation
Ballroom C
Organizers and Convenors: Akhila Vasan, Wendy White
Sponsored by the IAFP Foundation

1:30 FSMA Inspection: An Inspector's Perspective
LILLIAN HSU, U.S. Food and Drug Administration, CFSAN, College Park, MD, USA

2:00 FSMA Inspection: An Industry Perspective
BENJAMIN WARREN, Land O' Lakes, Arden Hills, MN, USA

2:30 GMA's 10,000 Foot View of Their Members' FSMA Inspection Experiences: Pros and Cons
SAMANTHA COOPER, GMA, Washington, D.C., USA

3:00 Break – Refreshments Available in the Exhibit Hall

3:30 How Academia is Supporting Industry Implementation of FSMA
TRAVIS CHAPIN, University of Florida, Lake Alfred, FL, USA

4:00 FSPCA's Plans to Expand FSMA Education across the Globe
KATHY GOMBAS, Retired CFSAN, Laurel, MD, USA

4:30 An Indepth Look at FDA's FSMA Technical Assistance Network
SHARMI DAS, U.S. Food and Drug Administration, Washington, D.C., USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

S48 **Foodborne Viruses: Detection, Risk Assessment, and Control Options in Food Processing**
Ballroom D
Organizer and Convenor: Lilou van Lieshout
Sponsored by ILSI Europe and Microbiological Food Safety Task Force

1:30 Pros and Cons of Methods of Detection for Viruses in Foods
ALBERT BOSCH, University of Barcelona, Barcelona, Spain

2:00 Translating Risk Assessment of Viruses in Foods into Practice
TREVOR PHISTER, PepsiCo, Leicester, United Kingdom

2:30 Effect of Processing Technologies to Control Viruses in Foods
ALVIN LEE, Institute for Food Safety and Health, Illinois Institute of Technology, Bedford Park, IL, USA

3:00 Break – Refreshments Available in the Exhibit Hall

S49 **Hepatitis E Virus: An Emerging Foodborne Pathogen?**
Ballroom D
Organizers: David Kingsley, Efstathia Papafragkou
Convenors: Julie Jean, David Kingsley
Sponsored by the IAFP Foundation

3:30 Hepatitis E Virus: Foodborne and Zoonotic Transmission
DANIELLE YUGO, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA

4:00 The Silent HEV Epidemic in Europe
NICOLE PAVIO, ANSES, Maisons-Alfort, France

4:30 Risk Profile for Hepatitis E Virus (HEV) from Pigs and Pork in Canada, and HEV Sero-prevalence in Non-endemic Countries
BARBARA WILHELM, Big Sky Health Analytics, Vermilion, AB, Canada

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

S50 **Teaching for Tomorrow: Impact of School and College Food Safety Curricula on Better Informed Consumers, Career Opportunities, and the Industry Workforce of the Future**
Room 20-21
Organizers: Brian Bedard, Akhila Vasan, Carol Wallace
Convenors: Brian Bedard, Carol Wallace

1:30 Meeting WHO Strategic Objectives by Educating Children in Food Safety: Lessons from the "Five Keys to Safer Food" Program
FRANCOISE FONTANNAZ, World Health Organisation (WHO), Geneva, Switzerland

2:00 The "Hands On" Middle Schools Program: An Impact Case Study
JENNIFER RICHARDS, University of Tennessee Institute of Agriculture, Knoxville, TN, USA

2:30 Embedding Current Standards for Hazard Control into the Community College Workforce Education Curriculum
CHRIS REEDY, BioNetwork, Raleigh, NC, USA

3:00 Break – Refreshments Available in the Exhibit Hall

S51 **Establishing Effective Metrics to Advance Your Food Safety Training and Education Programs**
Room 20-21
Organizers: Lone Jespersen, Laura Nelson, Carol Wallace
Convenors: Lone Jespersen, Laura Nelson

3:30 Setting Learning Strategies That Incorporate Appropriate Metrics for All Layers of Decision Makers within an Organization
IRENE BOLAND, Learning Development Institute, Orlando, FL, USA

4:00 Setting Operational Metrics to Measure Training Effectiveness across Diverse Enterprises
KRISTIN KASTRUP, Alchemy Systems, Austin, TX, USA

4:30 Use of Organizational Assessments to Determine Gaps and Deployment Strategies for Effective Improvement
DAN DENNISON, Denison Consulting and IMD, Braunau, Switzerland

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

S52 **Total Diet Studies: Designs for Monitoring the Food Supply**
Room 22-23
Organizers: Barbara Kowalcyk, Archana Lamichhane. Katherine Woodward
Convenors: Archana Lamichhane, Katherine Woodward
Sponsored by the IAFP Foundation

1:30 Total Diet Studies: Origin, Evolution, and Current Status
GERALD MOY, Food Safety Consultants International, Geneva, Switzerland

2:00 Current Thinking in the U.S. Total Diet Study
MARK WIRTZ, U.S. Food and Drug Administration, College Park, MD, USA

2:30 Trade-offs in Total Diet Study Sampling Design
KATHERINE WOODWARD, RTI International, Research Triangle Park, NC, USA

3:00 Break – Refreshments Available in the Exhibit Hall

S53 **Ranking Risks in Low-resource Settings**
Room 22-23
Organizers: Sarah Cahill, Barbara Kowalcyk, Juliana Ruzante
Convenors: Sarah Cahill, Barbara Kowalcyk
Sponsored by IAFP Foundation

3:30 A Proposed Approach for Ranking Food Safety Risks in Low-resource Settings
JULIANA RUZANTE, RTI International, Research Triangle, NC, USA

4:00 Lessons Learned from Ranking Food Safety Risks in Qatar and Palestine
JOHN BASSETT, John Bassett Consulting Ltd, Bedford, United Kingdom

4:30 Lessons Learned from Ranking Food Safety Risks Locally and Globally
SARAH CAHILL, Food and Agriculture Organization of the United Nations, Rome, Italy

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

Check the Program Addendum for changes to the Program.

■ – Symposia ■ – Roundtables ■ – Technicals ■ – Developing Scientist Competitor

S54 **Tools to Improve Interactive Food Safety Training for Small Food Facilities**
Room 24-25
Organizers: Omar Oyarzabal, Kaiping Deng
Convenor: James Rogers

1:30 Experience Gained from Training Sprout Growers of Small-size Operations
KAIPING DENG, Institute for Food Safety and Health (IFSH), Lisle, IL, USA

2:00 Use of Written and Observational Needs Assessments to Develop Tools for Food Regulation Compliance
ANGELA SHAW, Iowa State University, Ames, IA, USA

2:30 Interactive Food Safety Training for Adult Participants from Mid-size to Small-size Food Facilities
OMAR OYARZABAL, University of Vermont Extension, South Burlington, VT, USA

3:00 Break – Refreshments Available in the Exhibit Hall

S55 **Translating the Big Data to the Food Industry**
Room 24-25
Organizer and Convenor: Shima Shayanfar

3:30 Pathogen Metabolomic Fluxes during Different Food Processing Conditions
SURESH D. PILLAI, Texas A&M University, College Station, TX, USA

4:00 Ensuring Product Quality with Molecular Signatures
RAMIN KHAKSAR, Clear Labs Inc., Menlo Park, CA, USA

4:30 Molecular Barcoding for Transparency and Traceability in Food Supplies
ANTONIOS ZOGRAFOS, SafeTraces, Livermore, CA, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

1:30 p.m. – 5:00 p.m.

SF2 **Software Fair on Predictive Microbiology and Risk Assessment Tools**
Tampa Convention Center, Room 12
Organizers: Mariem Ellouze, Fanny Tenenhaus-Aziza

Presentation of FDA-Irisk
YUHUAN CHEN, U.S. Food and Drug Administration–CFSAN, College Park, MD, USA

Presentation of Gropin
PANAGIOTIS SKANDAMIS, Agricultural University of Athens, Athens, Greece

Presentation of Microhibro
FERNANDO PÉREZ-RODRÍGUEZ, University of Cordoba, Cordoba, Spain

Presentation of Sym'Previus
YVAN LE MARC, ADRIA Dévelopement, Quimper, France

Presentation of Combase
MARK TAMPLIN, University of Tasmania, Hobart, Australia

RT7 **It's Going to Take a Village: Grower Perspectives on FSMA Implementation**
Room 13-14
Organizers and Convenors: Justin Falardeau, Angela Ferelli, Daniel Weller

1:30 Panelists:
SAMIR ASSAR, U.S. Food and Drug Administration, College Park, MD, USA

ELIZABETH BIHN, Produce Safety Alliance, Geneva, NY, USA

CHELSEA MATZEN, National Farmer's Union, Washington, D.C., USA

ROBERT SAKATA, Sakata Farms, Brighton, CO, USA

JANIE SIMMS HIPP, Indigenous Food and Agriculture Initiative, Fayetteville, AR, USA

BOB ZIEL, J & J Family of Farms, Loxahatchee, FL, USA

3:00 Break – Refreshments Available in the Exhibit Hall

RT8 **International Strategies to Deliver Food Safety Education via the "Trusted Source": Health Professionals**
Room 13-14
Organizers: Ellen W. Evans, Yaohua Feng, Shauna Henley
Convenors: Christine Bruhn, Carol Anne Wallace
Sponsored by the IAFP Foundation

3:30 Panelists:

ELLEN W. EVANS, ZERO2FIVE Food Industry Centre, Cardiff, United Kingdom

YAOHUA FENG, University of California-Davis, Davis, CA, USA

ANTHONY FLOOD, International Food Information Council, Washington, D.C., USA

SHAUNA HENLEY, University of Maryland Extension, Baltimore County, Cockeysville, MD, USA

JEFFREY LEJEUNE, The Ohio State University, Wooster, OH, USA

GLEE VAN LOON, University of California-Davis, Health System, Sacramento, CA, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

RT9 **Next Generation Whole Genome Sequencing in the Regulatory Arena: Nomenclature, Pipelines, Applications, and Collaboration**
Room 18-19
Organizers and Convenors: Peter Evans, Stevie Hretz, William Shaw

1:30 Panelists:
ERIC BROWN, U.S. Food and Drug Administration, College Park, MD, USA

BILL KLIMKE, NCBI, Washington, D.C., USA

PETER GERNER-SMIDT, Centers for Disease Control and Prevention, Atlanta, GA, USA

GLENN TILLMAN, USDA, FSIS, OPHS, Athens, GA, USA

3:00 Break – Refreshments Available in the Exhibit Hall

RT10 FoodOmics: Stop Using a Steamroller to Crack a Nut!
Room 18-19
Organizer: Danièle Sohier
Convenor: Patrice Arbault

3:30 Panelists:
ROY BETTS, Campden BRI, Gloucestershire, United Kingdom

ERIC BROWN, U.S. Food and Drug Administration, College Park, MD, USA

DOUGLAS MARSHALL, Eurofins Scientific Inc., Fort Collins, CO, USA

KENDRA NIGHTINGALE, Texas Tech University, Lubbock, TX, USA

DANIEL SMIESZEK, Nestlé, Dublin, OH, USA

MIEKE UYTTENDAELE, Ghent University, Ghent, Belgium

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

T7 Technical Session 7 – Pre-harvest Food Safety and Water
Room 15
Convenors: Renee Boyer, Benjamin Chapman

T7-01 Cantaloupe Fruit Microbiome: Responses to Field Location, Cover Crop, and Cold Storage
Maria Albarracin, Christopher Gunter, Penelope Perkins-Veazie, Benjamin Chapman, Jonathan Baros, Sophia Kathariou, EDUARDO GUTIERREZ-RODRIGUEZ, North Carolina State University, Raleigh, NC, USA

T7-02 Fate of Shiga-toxigenic *Escherichia coli* and Generic *Escherichia coli* in Central Florida Surface Waters at Different Temperatures
ZEYNAL TOPALCENGIZ, Michelle D. Danyluk, Mu□ Alparslan University, Mu□, Turkey

T7-03 Spatiotemporal Variability in Microbial Quality of Agricultural Water Supplies: Implications for Cooperative Sampling
MELISSA L PARTYKA, Ronald F. Bond, Jennifer A. Chase, Edward R. Atwill, University of California-Davis, Davis, CA, USA

T7-04 Prevalence of *Escherichia coli*, *Salmonella* spp., and *Listeria monocytogenes* in Nontraditional Irrigation Waters in the Mid-Atlantic United States: A CONSERVE Project
ERIC HANDY, Cheryl East, Mary Theresa Callahan, Sarah Allard, Hillary Craddock, Shirley Micallef, Kalmia Kniel, Fawzy Hashem, Salina Parveen, Eric May, Joseph Haymaker, Amy Sapkota, Manan Sharma, U.S. Department of Agriculture–ARS, Beltsville, MD, USA

T7-05 Evaluation of Cover Cropping, Farming System, and Meteorological Factors on the Survival of Generic *Escherichia coli* and *Listeria innocua* in Produce Fields
HAO PANG, Shirley Micallef, Kathryne Everts, Abani Pradhan, University of Maryland, College Park, MD, USA

T7-06 Persistence and Transmission of *Escherichia coli* and *Salmonella* spp. in a Watermelon Field Ammended with Poultry Litter: Year Two
Thais De Melo Ramos, Shani Craighead, Patrick Spanninger, Claire Marik, Samantha Gartley, Adam Vanore, Gordon Johnson, Manan Sharma, KALMIA KNIEL, University of Delaware, Newark, DE, USA

3:00 Break – Refreshments Available in the Exhibit Hall

T7-07 Association of Fresh Produce Food Safety Hazard with Growth and Persistence of *Escherichia coli* in Soils Amended with FSMA-compliant Heat-treated Manure
PATRICIA MILLNER, Kathryn White, Herbert Clark, Fawzy Hashem, Manan Sharma, U.S. Department of Agriculture–ARS, Beltsville, MD, USA

T7-08 Differential Tissue Distribution of Internalized Human Norovirus, Porcine Sapovirus, and Tulane Virus in Lettuce and Spinach Plants
MALAK ESSEILI, Sarah Tegtmeier, Linda Saif, Tibor Farkas, Qiuhong Wang, Ohio State University, Wooster, OH, USA

T7-09 Risk Assessment of Factors Associated with the Occurrence of *Escherichia coli* O157:H7 on Cow/Calf Operations in Oklahoma and Louisiana
JOYJIT SAHA, Buddhini Jayasundera, Ravirajsinh Jadeja, Divya Jaroni, Oklahoma State University, Stillwater, OK, USA

T7-10 Multiplex PCR-based Identification of Shiga Toxin-producing *Escherichia coli* Other Than the Top Seven Serogroups Found in the Feces of Feedlot Cattle
JUSTIN LUDWIG, Xiaorong Shi, Lance Noll, Jianfa Bai, T. G. Nagaraja, Kansas State University, Manhattan, KS, USA

T7-11 *Escherichia coli* and *Salmonella* Derby Carry a Novel Family of Temperate Bacteriophages That Encode Extended Spectrum Beta Lactamase Genes
ANNA COLAVECCHIO, Michca Gordon, Julie Jeukens, Jean-Guillaume Emond Rheault, Luca Freschi, Irena Kukavica-Ibrulj, Roger Levesque, Lawrence Goodridge, McGill University, Ste-Anne-de-Bellevue, QC, Canada

T7-12 Mathematical Modeling Approach for Enhancing Pre-harvest Sampling Plans for the Detection of Pathogenic Bacteria through Consideration of Prior Knowledge of Factors Related to Non-random Contamination
AIXIA XU, Robert Buchanan, University of Maryland, College Park, MD, USA

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

T8 Technical Session 8 – Food Law and Regulation; Food Defense; Food Safety Systems
Room 16
Convenor: M. Alexandra Calle

T8-01 Comparison of Alternative Sanitizers to Chlorine Disinfection for Reducing Foodborne Pathogens in Avocados, Melon, Citrus, and Cucumbers
ADRIAN SBODIO, David Hill, Jeremy Roland, John Alaniz, Trevor Suslow, University of California-Davis, Davis, CA, USA

TUESDAY PM

Check the Program Addendum for changes to the Program.

■ – Symposia ■ – Roundtables ■ – Technicals ■ – Developing Scientist Competitor

T8-02 Enteroaggregative *Escherichia coli*: Predominant Diarrheagenic *Escherichia coli* Pathotype among Irrigation Water and Food Sources
Matthew Aijuka, Araceli Santiago, Jorge Girón, James Nataro, ELNA BUYS, University of Pretoria, Pretoria, South Africa

T8-03 Evaluating the United States Food Safety Modernization Act Standard for Microbial Quality of Agricultural Water for Produce Growing
KATHLEEN VAZQUEZ, Arie Havelaar, Zeynal Topalcengiz, Rafael Muñoz-Carpena, Michelle D. Danyluk, University of Florida, Gainesville, FL, USA

T8-04 Methods for Identifying and Mitigating Vulnerable Nodes in a Food Process
Clint Fairow, CAROL BREVETT, Jessica Cox, Luke Bicknese, Penny Norquist, Ted Steinmann, Lehman Waiswisz, Joseph Zarzycki, Leidos, Gunpowder, MD, USA

T8-05 Toward an Extended Food Safety Culture Model: Studying the Moderating Role of Burnout and Job Stress, the Mediating Role of Food Safety Knowledge, and Motivation in the Relation between Food Safety Climate and Food Safety Behavior
ELIEN DE BOECK, Anneleen V. Mortier, Liesbeth Jacxsens, Lisa Dequidt, Peter Vlerick, Ghent University, Ghent, Belgium

T8-06 Assessment of Nigerian Food Inspection Capabalities, Practices, and Procedure
CHRISTINE IKPEME-EMMANUEL, University of Calabar, CALABAR, Nigeria

3:00 Break – Refreshments Available in the Exhibit Hall

T8-07 USDA-FSIS Food Defense and Recall Preparedness Scenario-based Table Top Exercise Tool
BRYAN NORRINGTON, U.S. Department of Agriculture – FSIS, Washington, D.C., USA

T8-08 Challenging the Food Emergency Response Network with the Detection of a Select Agent in Foods
AMIE MINOR, Christian Robinson, Zachary Kuhl, Justin Ferrell, Brenda Keavey, West Virginia Department of Agriculture, Charleston, WV, USA

T8-09 The Beneficial Impact of Restaurant Letter Grade Posting on the Occurrence of *Salmonella*
Ana Ebbert, CRAIG HEDBERG, University of Minnesota, Minneapolis, MN, USA

T8-10 Safe Food for Canadians Regulations
RICHARD ARSENAULT, Kevin McBain, Canadian Food Inspection Agency, Ottawa, ON, Canada

T8-11 Valuing the Burden of Foodborne Illness in Regulatory Analysis
ANGELA LASHER, U.S. Food and Drug Administration, College Park, MD, USA

T8-12 Assessment of the Presence of Foodborne Physical Hazards in South East Europe Using Data from EU Rapid Alert System for Food and Feed (RASFF)
ANDREJA RAJKOVIC, Danijela Jankovic, Ilija Djekic, Ghent University, Ghent, Belgium

5:00 p.m. – 6:00 p.m. – Exhibit Hall Reception

EVENING OPTIONS

5:00 p.m. – 6:00 p.m. **Exhibit Hall Reception**

6:00 p.m. – 7:00 p.m. **President's Reception (by invitation),** Tampa Marriott Waterside, *Florida Ballroom*

7:00 p.m. – 9:00 p.m. **Student Mixer,** *Room 7-9*

AFFLIATE MEETINGS

5:15 p.m. – 6:15 p.m. **Indian Association for Food Protection in North America Meeting,** *Room 16*

5:30 p.m. – 6:30 p.m. **Korea Association of Food Protection Meeting** *Room 22–23*

Notes

MERIEUX NutriSciences
Protecting consumer health for 50 years

Mérieux NutriSciences is a global food quality partner whose mission is to protect consumer health by providing food testing, auditing, certification, consulting, education and research services to aid our clients in delivering the safest and highest quality products.

This year we are celebrating 50 years of protecting consumers' health.

We are experts in:

- Food Testing
- GMO Testing
- Audits and Inspections
- Education and Training
- Environmental Monitoring
- Sensory and Consumer Research
- Digital Solutions
- Safety and Quality Consulting
- Contract Research
- FDA Detention Services
- Labeling and Regulatory Services

We Have Solutions For:

- Dairy
- Pet Food
- Meat
- Poultry
- Produce
- Seafood
- Spices
- Grains
- Nutrition

MERIEUX NutriSciences

Mérieux NutriSciences
111 East Waker Drive, Suite 2300
Chiacgo, IL 60601
Tel: +1 (312) 938-5151
www.merieuxnutrisciences.com/us

Wednesday, July 12

ALL DAY

9:00 a.m – 3:00 p.m. **Poster Session 3**

East Hall

Low-water Activity Foods	Packaging	Produce
Microbial Food Spoilage	Antimicrobials	Laboratory and Detection Methods
Water		

P3-01 through P3-109 – Authors present 9:00 a.m. – 11:00 a.m.
P3-110 and above – Authors present 1:00 p.m. – 3:00 p.m.

MORNING

8:30 a.m. – 12:00 p.m.

Ballroom D	S57	Foodborne Outbreak Updates
Room 24-25	S66	Challenges and Strategies in Detecting Foodborne Pathogens in Low-water Activity Foods
Room 15	T9	Technical Session 9 – Food Processing Technologies
Room 16	T10	Technical Session 10 – Risk Modeling

8:30 a.m. – 10:00 a.m.

Ballroom A	D1	A Debate: Current Perspectives in Food Safety
Room 10-11	S58	Fresh Produce–Pathogen Pairs in the U.S. and Europe
Room 12	S60	A Paradigm Shift in Understanding and Controlling *Salmonella* of the Future
Room 20-21	S62	Occurrence of Pathogens in Community and Non-community Wells in Minnesota and Performance of Water Quality Indicators
Room 22-23	S64	A Roadmap to Food Allergy Safety: A Consensus Report from the National Academies of Sciences, Engineering, and Medicine
Room 13-14	RT11	National and Regional FSMA Training Centers: Application of Lessons Learned
Room 18-19	RT13	Variations on a Theme: The Basis and Consequences of Inconsistent *Listeria* spp. Standards in Global Regulation

10:00 a.m. – 10:30 a.m. **Break – Refreshments Available in the Exhibit Hall**

10:30 a.m. – 12:00 p.m.

Ballroom A	S56	Chemical and Microbial Risk Assessment: Similarities and Differences
Room 10-11	S59	Combatting Bioterrorism: How Select Agent Testing Laboratories are Staying One Step Ahead of the Bad Guys
Room 12	S61	Foodborne Parasites in Organic and Conventional Agricultural Practices: Food Safety Issues That Can Affect Your Mind
Room 20-21	S63	Staying Ahead of the Curve: Food Allergen Contamination and Recalls in Today's Global Food System
Room 22-23	S65	What is the Meaning of Zero Tolerance in the Age of Food Genomics?
Room 13-14	RT12	The Devil is in the Details: Experiences with Early Implementation of the FSMA Produce Safety Rule and Efforts to Fill the Information Gaps
Room 18-19	RT14	Hog Slaughter Modernization and *Salmonella* Performance Standards: Should Pork be Treated the Same as Poultry?

11:45 a.m. – 1:30 p.m. **Lunch Available in the Exhibit Hall**

AFTERNOON

1:30 p.m. – 3:30 p.m.

Ballroom A	S67	Preventive Controls Other Than CCP: Choosing, Verifying, and Validating
Ballroom D	S68	The National Antimicrobial Resistance Monitoring System: Twenty Years of Vigilance
Room 10-11	S69	Empowering Food Laws in Emerging Economies
Room 12	S70	Microbiological Safety of Unpasteurized Fruit and Vegetable Juices Sold in Juice Bars and Small Retail Outlets
Room 13-14	S71	Advancing Food Safety Internationally through the Use of Innovative Technologies: Food Irradiation
Room 18-19	S72	Social Responsibility's Influence over Food Safety and Quality
Room 20-21	S73	Toward Risk-based Microbial Standards for Irrigation Water
Room 22-23	S74	Root Cause Analysis
Room 15	T11	Technical Session 11 – Meat, Poultry and Eggs, and Epidemiology
Room 16	T12	Technical Session 12 – Modeling and Risk Assessment and Retail and Food Service Safety

3:30 p.m. – 4:00 p.m. **Break – Refreshments Available Outside of Ballroom A**

4:00 p.m. – 4:45 p.m.
Ballroom A

JOHN H. SILLIKER LECTURE

Food Allergies: A Public Health Dilemma – How Did We Get Here? Where are We Going?
Steve L. Taylor, Food Allergy Research & Resource Program, Department of Food Science & Technology, University of Nebraska

EVENING OPTIONS

6:00 p.m. – 7:00 p.m. Reception, *Tampa Convention Center Foyer*
7:00 p.m. – 9:30 p.m. IAFP Awards Banquet, *Tampa Convention Center Ballroom*

WEDNESDAY MORNING JULY 12

Posters will be on display 9:00 a.m. – 3:00 p.m.
(See details beginning on page 91)

D1 A Debate: Current Perspectives in Food Safety
Ballroom A
Organizer: Delia Murphy
Convenors: Charles Barton, Kendra Nightingale
Sponsored by ILSI North America Technical Committees on Food Microbiology and Food and Chemical Safety

8:30 The Good, the Bad, and the Ugly Foods: Should We Encourage the Consumption of Ugly and Expired Foods?
SARAH CAHILL, Food and Agriculture Organization of the United Nations, Rome, Italy

ROBERT TAUXE, Centers for Disease Control and Prevention, Atlanta, GA, USA

Who's to Blame? Do Consumers Own a Piece of Food Safety?

SARAH BREW, Faegre Baker Daniels LLP, Minneapolis, MN, USA

BILL MARLER, Marler Clark, The Food Safety Law Firm, Seattle, WA, USA

Which is the Real Obesogen? The Pizza or the Pizza Box?

RUTH KAVA, American Council on Science and Health, New York, NY, USA
TBD

10:00 Break – Refreshments Available in the Poster Session Area

S56 Chemical and Microbial Risk Assessment: Similarities and Differences
Ballroom A
Organizer: Mansi Krishan
Convenor: Douglas Holt
Sponsored by ILSI North America Technical Committee on Food and Chemical Safety

10:30 Chemical Risk Assessments and Their Uses in Decision Making
JOSEPH RODRICKS, Ramboll Environ, Arlington, VA, USA

11:00 Quantitative Microbiological Risk Assessment: Dealing with Biological Diversity
ROBERT BUCHANAN, University of Maryland, College Park, MD, USA

11:30 Safety and Risk Assessments: Fit for Purpose
JANE VAN DOREN, U.S. Food and Drug Administration, College Park, MD, USA

12:00 Lunch Available in East Hall

S57 Foodborne Outbreak Updates
Ballroom D
Organizers: Judy Greig, John Guzewich, Ewen Todd
Convenors: Judy Greig, John Guzewich

8:30 Hepatitis A in Strawberries, 2016: Implications for Fresh and Frozen Fruit
KARI IRVIN, U.S. Food and Drug Administration, CORE, CFSAN, College Park, MD, USA

9:00 Assessing Contributing Factors for *Salmonella* I 4,[5],12:I: Outbreak Investigations Associated with Pork and Rotisserie Chicken
BONNE KISSLER, U.S. Department of Agriculture-FSIS, OPHS, AES, Atlanta, GA, USA

9:30 Policy Challenges Posed by Improved Outbreak Detection: *Listeria* in Frozen Vegetables
MICKEY PARISH, U.S. Food and Drug Administration–CFSAN, College Park, MD, USA

10:00 Break – Refreshments Available in the Poster Session Area

10:30 *E. coli* O157 in Soynut Butter
ALVIN CROSBY, U.S. Food and Drug Administration, Greenbelt, MD, USA

11:00 *Listeria monocytogenes* in Soft Cheese
EVELYN PEREIRA, U.S. Food and Drug Administration, College Park, MD, USA

11:30 Panel Discussion or Late Breaking Topic

12:00 Lunch Available in East Hall

S58 Fresh Produce-Pathogen Pairs in the U.S. and Europe
Room 10-11
Organizer: Christopher Baker
Convenors: Alan Gutierrez, Zeynal Topalcengiz

8:30 Source Tracing is the Key to Successful Fresh Produce Outbreak Investigations
CRAIG HEDBERG, University of Minnesota, School of Public Health, Minneapolis, MN, USA

9:00 Hazard Assessment of Global Produce Chains: An Update
CHRISTOPHER BAKER, University of Florida, Gainesville, FL, USA

9:30 The Microbial Ecology of Fresh Produce: Can Behavior of Resident Bacteria Affect Transient Colonizers?
ANA ALLENDE, CEBAS-CSIC, Espinardo, Spain

10:00 Break – Refreshments Available in the Poster Session Area

S59 Combatting Bioterrorism: How Select Agent Testing Laboratories are Staying One Step Ahead of the Bad Guys
Room 10-11
Organizer: Amie Minor
Convenors: Brenda Keavey, Amie Minor

10:30 Research, Validation, Proficiency, and National Surveillance: A Behind-the-Scenes Look at the Impact of Food Defense Projects with the Food Emergency Response Network
RANDAL LAYTON, Food Emergency Response Network, USDA-FSIS, Athens, GA, USA

11:00 Identifying *Clostridium botulinum* and Ricin Toxin in Foods by Mass Spectrometry
MICHAEL PERRY, New York State Department of Health, Saratoga Springs, NY, USA

11:30 Development of an Effective Method for Detecting and Isolating *Yersinia pestis* from Intentionally Contaminated Foods
STEVE WEAGENT, Weagant Consulting, Poulsbo, WA, USA

12:00 Lunch Available in East Hall

S60 A Paradigm Shift in Understanding and Controlling *Salmonella* of the Future
Room 12
Organizers: Jessica Chen, John Marcy, Amit Morey
Convenors: Andrea Ray, Ellen Thomas
Sponsored by the IAFP Foundation

8:30 Systemic Spread of Bacterial Population through Gut Translocation in Broiler Chickens: Implications for Food Safety in Chicken Meat
YOUNG MIN KWON, University of Arkansas, Fayetteville, AR, USA

9:00 Microbiome Associated with *Salmonella* in Poultry
STEVEN RICKE, University of Arkansas, Fayetteville, AR, USA

9:30 Studying the Genomic/Metabalomic Evolution of Microorganisms
MEGAN BEHRINGER, Indiana University, Bloomington, IN, USA

10:00 Break – Refreshments Available in the Poster Session Area

S61 Foodborne Parasites in Organic and Conventional Agricultural Practices: Food Safety Issues That Can Affect Your Mind
Room 12
Organizers and Convenors: Robert Cowie, Alex Da Silva
Sponsored by the IAFP Foundation

10:30 Advanced Detection of Parasites in Produce Commodities
HELEN MURPHY, U.S. Food and Drug Administration–CFSAN, Office of Applied Research and Safety Assessment, Laurel, MD, USA

11:00 Risk Factors for *Toxoplasma gondii* Infection in the Old Order Amish
TEODOR POSTOLACHE, University of Maryland, Baltimore, MD, USA

11:30 Severe Cases of Cerebral Angiostrongyliasis Acquired in the U.S.
ROBERT COWIE, University of Hawaii, Honolulu, HI, USA

12:00 Lunch Available in East Hall

S62 Water for Food Processing Falls in the Crack Between RTCR (Revised Total Coliform Rule) and FSMA
Room 20-21
Organizers: Phyllis Posy, Dorothy Wrigley, Ewen Todd
Convenor: Phyllis Posy

8:30 Occurrence of Pathogens in Community and Non-community Wells in Minnesota and Performance of Water Quality Indicators
JOEL STOKDYK, U.S. Geological Survey, Wisconsin Water Science Center, Marshfield, WI, USA

9:00 Do We Only Find What We Are Looking for?
VINCENT HILL, Centers for Disease Control and Prevention, Division of Foodborne, Waterborne and Environmental Diseases, Atlanta, GA, USA

9:30 Solutions Panel: Is There an Addressable Gap and What are Options and Models for Addressing It?
Moderator: Phyllis Posy, Atlantium Technologies
EPA Perspective: Julie Javier
FSIS Perspective: William Shaw

10:00 Break – Refreshments Available in the Poster Session Area

S63 Staying Ahead of the Curve: Food Allergen Contamination and Recalls in Today's Global Food System
Room 20-21
Organizers: Anthony Flood, Bobby Krishna
Convenors: Brent Kobielush, Bobby Krishna
Sponsored by IAFP Foundation

10:30 Statistics and Analysis: Allergen Recalls, FSMA, and Foreign Supplier Verification Program
STEVEN GENDEL, IEH Laboratories and Consulting Group, Rockville, MD, USA

11:00 Food Recalls and Public Health Alerts: Communicating Food Risk in a Global Environment
PETER BEN EMBAREK, World Health Organization/INFOSAN Network, Geneva, Switzerland

11:30 Best Practices for Allergen Recall Management: How to Stay Ahead of the Issue
DONALD JONES, Atkins Nutritionals, Inc, Denver, CO, USA

12:00 Lunch Available in East Hall

S64 A Roadmap to Food Allergy Safety: A Consensus Report from the National Academies of Sciences, Engineering, and Medicine
Room 22-23
Organizer: Maria Oria
Convenor: Anthony Flood

8:30 The Roadmap to Food Allergy Safety: Overall Recommendations
VIRGINIA STALLINGS, Children's Hospital of Philadelphia, Philadelphia, PA, USA

9:00 Prevalence and Prevention of Food Allergies
SHARON DONOVAN, University of Illinois, Urbana, IL, USA

9:30 The Roles of the Food, Food Service Industries and Public Health Agencies
STEVE L. TAYLOR, Food Allergy Research & Resource Program, Department of Food Science & Technology, University of Nebraska, Lincoln, NE, USA

10:00 Break – Refreshments Available in the Poster Session Area

S65 What Is the Meaning of Zero Tolerance in the Age of Food Genomics?
Room 22-23
Organizer: Gregory Siragusa
Convenors: Douglas Marshall, Gregory Siragusa

10:30 Using Microbiome Information for Understanding Pathogen Potential in Processing
MATTHEW RANIERI, Acme Smoked Fish Corporation, Brooklyn, NY, USA

11:00 Zero Tolerance and Diagnostic Performance Impacting Foodborne Pathogen Control
DOUGLAS MARSHALL, Eurofins Scientific Inc., Fort Collins, CO, USA

11:30 Will Microbiome Data Become the Basis of Zero Tolerance Food Regulations?
PALMER ORLANDI, U.S. Food and Drug Administration, Silver Spring, MD, USA

12:00 Lunch Available in East Hall

S66 Challenges and Strategies in Detecting Foodborne Pathogens in Low-water Activity Foods
Room 24-25
Organizer: Junia Jean-Gilles Beaubrun
Convenors: Junia Jean-Gilles Beaubrun, Aparna Tatavarthy
Sponsored by the IAFP Foundation

8:30 Challenges in Recovering Foodborne Pathogens from Low-water Activity (a_w) Foods (e.g., spices, nuts and flour) as Influenced by Inhibitors or Antimicrobial Components that Interfere with Detection
JOSHUA GURTLER, USDA-ARS, Eastern Regional Research Center, Wyndmoor, PA, USA

9:00 Mechanisms of Survival, Responses, and Sources of *Salmonella* in Low-moisture Environments
SHABARINATH SRIKUMAR, University College Dublin, Dublin, Ireland

9:30 BAM Method for *Salmonella* Detection and a Novel Approach Using Corn Oil to Increase *Salmonella* Recovery in Spices
JUNIA JEAN-GILLES BEAUBRUN, U.S. Food and Drug Administration, Laurel, MD, USA

10:00 Break – Refreshments Available in the Poster Session Area

10:30 Strategies for Detection of Human Pathogens in Low-water Activity (a_w) Foods: Application of Current Methods to Some Difficult Matrices
MONICA PONDER, Virginia Tech, Blacksburg, VA, USA

11:00 The Challenges of Detecting *Salmonella* in Tahini Using Real-time PCR
FATMEH KOBAISSI, MEFOSA-MENA, Hamnra Beirut, Lebanon

11:30 *Escherichia coli* Outbreak in Flour: A Case Study on Low-water Activity Pathogen Detection
JULIE ANN KASE, U.S. Food and Drug Administration, College Park, MD, USA

12:00 Lunch Available in East Hall

RT11 National and Regional FSMA Training Centers: Application of Lessons Learned
Room 13-14
Organizer: Angela Shaw
Convenor: Bassam Annous

8:30 Panelists:

ELIZABETH BIHN, Cornell University, Geneva, NY, USA

MICHELLE D. DANYLUK, University of Florida, Lake Alfred, FL, USA

ROBERT MCGORRIN, Oregon State University, Coralville, OR, USA

ELIZABETH NEWBOLD, University of Vermont, Bennington, VT, USA

DAVID READ, IFPTI, Battle Creek, MI, USA

ANGELA SHAW, Iowa State University, Ames, IA, USA

10:00 Break – Refreshments Available in the Poster Session Area

RT12 The Devil is in the Details: Experiences with Early Implementation of the FSMA Produce Safety Rule and Efforts to Fill the Information Gaps
Room 13-14
Organizers and Convenors: Michelle Smith, Bassam Annous

10:30 Panelists:

MICHELLE D. DANYLUK, University of Florida, Lake Alfred, FL, USA

BOB EHART, National Association of State Departments of Agriculture, Arlington, VA, USA

JENNIFER MCENTIRE, United Fresh, Washington, D.C., USA

JAMES RUSHING, JIFSAN-University of Maryland, College Park, MD, USA

DON STOECKEL, Cornell, Geneva, NY, USA

TREVOR SUSLOW, University of California-Davis, Davis, CA, USA

12:00 Lunch Available in East Hall

RT13 Variations on a Theme: The Basis and Consequences of Inconsistent *Listeria* spp. Standards in Global Regulation
Room 18-19
Organizers: Leon Gorris, Tim Jackson
Convenor: Jane Van Doren

8:30 Panelists:

KRIS DE SMET, European Commission, Brussels, Belgium

JEFFREY FARBER, University of Guelph, CRIFS, Department of Food Science, Guelph, ON, Canada

MARTA HUGAS, European Food Safety Authority, Parma, Italy

MICKEY PARISH, U.S. Food and Drug Administration, College Park, MD, USA

TAMIKA SIMS, IFIC, Washington, D.C., USA

JANE VAN DOREN, U.S. Food and Drug Administration, College Park, MD, USA

10:00 Break – Refreshments Available in the Poster Session Area

RT14 Hog Slaughter Modernization and *Salmonella* Performance Standards: Should Pork be Treated the Same as Poultry?
Room 18-19
Organizers: Alex Bruner, Brooke Schwartz, Morgan Wallace
Convenor: Brooke Schwartz

10:30 Panelists:

MARTIN APPELT, Canadian Food Inspection Agency, Ottawa, ON, Canada

MICHAEL BRADLEY, Smithfield, Clinton, NC, USA

KATIEROSE MCCULLOUGH, North American Meat Institute, Washington, D.C., USA

DEIRDRE SCHLUNEGGER, STOP Foodborne Illness, Chicago, IL, USA

WILLIAM SHAW, U.S. Department of Agriculture-FSIS-OPPD, Washington, D.C., USA

12:00 Lunch Available in East Hall

T9 Technical Session 9 – Food Processing Technologies
Room 15
Convenor: Joshua Gurtler

T9-01 Spores under High-pressure High-temperature Processing Conditions
Brigitte Cadieux, Hamed Vatankhah, LAWRENCE GOODRIDGE, John W. Austin, Hosahalli S. Ramaswamy, McGill University, Ste-Anne-de-Bellevue, QC, Canada

T9-02 High-pressure Processing and Cultures: The Right Combination to Produce Safe Semi-dried Italian Fermented Sausages without Taste Compromise
Elena Brugnoli, Jenny Triplett, VERONIQUE ZULIANI, CHR HANSEN, Arpajon, France

T9-03 Effect of Pressure, Spoilage Microbiota, and Antimicrobials on Survival and Post-pressure Growth of *Listeria monocytogenes* on Ham
JANUANA TEIXEIRA, Lynn McMullen, Michael Gänzle, University of Alberta, Edmonton, AB, Canada

T9-04 Quality and Safety Evaluation of Striped Catfish Processing Byproducts in Vietnam
NGUYEN. V. NGUYEN, Thao. T.H. Nguyen, Trung. D. Le, Men. T. Dinh, Research Center for Aquafeed Nutrition and Fishery Post harvest Technology, Ho Chi Minh, Vietnam

T9-05 Efficacy of a High-intensity Preconditioner for Reducing *Enterococcus faecium* Populations as a Nonpathogenic *Salmonella* Surrogate in Kibble-style Pet Food
NICHOLAS SEVART, Tiya Zhou, Sajid Alavi, Charles Stark, Randall Phebus, Kansas State University, Manhattan, KS, USA

10:00 Break – Refreshments Available in the Poster Session Area

T9-06 Determination of Acrylamide in Fried Potato Chips and the Impact of Various Treatments on Acrylamide Formation during Frying
ASAD AMJAD, Muhammad Nasir, Frasat Rizwan, Mateen Abbas, Muhammad Shahbaz, Abdul Muqeet Khan, Umar Bacha, University of Veterinary & Animal Sciences, Lahore, Pakistan

T9-07 Design of a Low Concentration Sodium Nitrite Meat Product by Including *Ullucus tuberosum* from Ventaquemada, Boyacá, Colombia
LAURA CHAVES, Pontificia Universidad Javeriana, Bogotá, Colombia

T9-08 Inactivation of Pathogenic Bacteria in Ice Using an Ultra Violet C Light-emitting Diode
SUGURU MURASHITA, Shuso Kawamura, Shigenobu Koseki, Hokkaido University, Sapporo, Japan

T9-09 Effect of Gaseous Ozone on Foodborne Pathogens and Their Surrogates on Fresh and Frozen Strawberries
ZIJIN ZHOU, Frédérique Cantergiani, Frank Devlieghere, Sophie Zuber, Mieke Uyttendaele, Ghent University, Ghent, Belgium

T9-10 Thermal Process for Inactivating *Listeria monocytogenes* on Surfaces of Whole Fresh Cantaloupes
BASSAM ANNOUS, Angela Burke, U.S. Department of Agriculture-ARS-ERRC, Wyndmoor, PA, USA

T9-11 Inactivation of *Salmonella* in Corn Flour by Radio Frequency Heating and the Effect of Cold Shock
SAMET OZTURK, Fanbin Kong, Rakesh K. Singh, Juming Tang, Shuxiang Liu, University of Georgia, Athens, GA, USA

T9-12 Inactivation of *Listeria monocytogenes* on the Surface of Smoked Salmon by Riboflavin-based, 460nm Light Emitting Diode Illumination
Min-Jeong Kim, Lianto Dian Kartikasari, HYUN-GYUN YUK, Korea National University of Transportation, Chungju-si, South Korea

12:00 Lunch Available in East Hall

T10 Technical Session 10 – Risk Modelling
Room 16
Convenor: Arie Havelaar

T10-01 A Quantitative Risk Model to Assess Post-harvest Parameters That Impact the Levels of *Salmonella* on Pistachios
JAVAD BAROUEI, Donald W. Schaffner, Linda J. Harris, University of California-Davis, Davis, CA, USA

T10-02 Farm-to-Fork Quantitative Microbial Risk Assessment for Norovirus on Frozen Berries
ROBYN MIRANDA, Donald W. Schaffner, Rutgers University, New Brunswick, NJ, USA

T10-03 A Farm-to-Fork Exposure Model Predicting *Alternaria* Mycotoxin Exposure from Derived Tomato Products Evaluating Impact of Climate Change and Processing Conditions
LIESBETH JACXSENS, Bruno De Meulenaer, Frank Devlieghere, Ghent University, Ghent, Belgium

T10-04 Evaluating the Relative Impact of Swine Deep Tissue Lymph Nodes on Human Salmonellosis Due to Consumption of Ground Pork Based on Quantitative Simulation Modeling
YANGJUNNA ZHANG, Annette O'Connor, Chong Wang, James Dickson, Bing Wang, University of Nebraska-Lincoln, Lincoln, NE, USA

T10-05 Prioritizing Pig Farms in the Netherlands to Reduce the Foodborne Disease Burden of *Toxoplasma gondii*
MARTIJN BOUWKNEGT, Derk Oorburg, Bert Urlings, Vion, Boxtel, Netherlands

T10-06 Developing a Risk Management Framework to Improve Public Health Outcomes by Enumerating *Salmonella* in Ground Turkey Products
FERNANDO SAMPEDRO, Scott Wells, Jeff Bender, Craig Hedberg, University of Minnesota, St. Paul, MN, USA

T10-07 Farm-to-Fork Risk Assessment of *Listeria monocytogenes* in Cold-smoked Salmon in Scotland
STOYKA CHIPCHAKOVA, Francisco Perez-Reche, Kenneth Forbes, Ovidiu Rotariu, David Watts, Norval Strachan, University of Aberdeen, Aberdeen, United Kingdom

10:00 Break – Refreshments Available in the Poster Session Area

T10-08 Assessment of Public Health Risk Associated with Formalin Exposure in Fish in Southern Bangladesh
Md. Sazedul Hoque, LIESBETH JACXSENS, Md. Boktheir Hossain, SM Oasiqul Azad, AKM Nowsad Alam, Bruno De Meulenaer, Carl Lachat, Md. Shahin Alom, Patuakhali Science and Technology University, Patuakhali, Bangladesh

T10-09 Performance Assessment of the Canadian Food Inspection Agency Establishment-based Risk Assessment Model
Cecile Ferrouillet, Manon Racicot, Alexandre Leroux, Mathieu Cormier, ROMINA ZANABRIA, Julie Arsenault, Ann Letellier, Anna Mackay, Ashwani Tiwari, Solomon Aklilu, Mansel Griffiths, Richard Holley, Tom Gill, Sylvain Charlebois, Sylvain Quessy, Canadian Food Inspection Agency, Guelph, ON, Canada

T10-10 Bayesian Approach to the Evaluation of the Potential Impact of Climatic Change on Hepatocellular Carcinoma Risk Attributable to Chronic Aflatoxins Exposure through Food
PATRICK NJAGE, Joseph Wambui, University of Nairobi, Nairobi, Kenya

T10-11 Development of a Probability Model to Describe the Variability in the Time to Inactivation of *Salmonella enterica*
KENTO KOYAMA, Hidekazu Hokunan, Mayumi Hasegawa, Shuso Kawamura, Shigenobu Koseki, Hokkaido University, Sapporo, Japan

T10-12 Estimating Risk Attributed to Food-handling Behaviors in Retail and Households
IOANA (JULIA) MARASTEANU, Girvin Liggans, Jessica Otto, Angela Lasher, U.S. Food and Drug Administration, Silver Spring, MD, USA

12:00 Lunch Available in East Hall

Notes

WEDNESDAY AFTERNOON JULY 12

Posters will be on display 9:00 a.m. – 3:00 p.m.
(See details beginning on page 91)

S67 **Preventive Controls Other Than CCP: Choosing, Verifying, and Validating**
Ballroom A
Organizers: Balasubrahmanyam Kottapalli, Loralyn Ledenbach
Convenors: Balasubrahmanyam Kottapalli, Loralyn Ledenbach

1:30 Using Decision Trees to Determine Whether a Preventive Control is a CCP, OPRP, or PRP
LORALYN LEDENBACH, Kraft Heinz Company, Glenview, IL, USA

2:00 Practical Examples and Considerations for Controls Other Than CCP
BALASUBRAHMANYAM KOTTAPALLI, Conagra Brands, Omaha, NE, USA

2:30 Verification and Validation of Controls Other Than CCP
RICHARD BROUILLETTE, Commercial Food Sanitation, South Burlington, VT, USA

3:00 Regulatory Implications
MAILE HERMEIDA, Hogan Lovells US LLP, Washington, D.C., USA

3:30 Refreshments Available Outside of Ballroom A

S68 **The National Antimicrobial-resistance Monitoring System: Twenty Years of Vigilance**
Ballroom D
Organizer: Patrick McDermott
Convenors: Cindy Friedman, Patrick McDermott

1:30 The National Antimicrobial-resistance Monitoring System: Two Decades of Vigilance
PATRICK MCDERMOTT, U.S. Food and Drug Administration, Laurel, MD, USA

2:00 Antimicrobial Resistance in Human Enteric Pathogens: Twenty Years of NARMS at CDC
CINDY FRIEDMAN, Centers for Disease Control and Prevention, Atlanta, GA, USA

2:30 Monitoring Antimicrobial Resistance in Retail Meats: NARMS at the FDA
SHAOHUA ZHAO, U.S. Food and Drug Administration, Laurel, MD, USA

3:00 NARMS at the USDA: Monitoring Antimicrobial Resistance in Food Animals at Slaughter and Processing
UDAY DESSAI, U.S. Department of Agriculture-FSIS, Washington, D.C., USA

3:30 Refreshments Available Outside of Ballroom A

S69 **Empowering Food Laws in Emerging Economies**
Room 10-11
Organizers: Atef Idriss, Emefa Monu
Convenor: Emefa Monu
Sponsored by the IAFP Foundation

1:30 The 2010 Food Safety Law in Vietnam: Is It Working?
GERALD MOY, Food Safety Consultants International, Geneva, Switzerland

2:00 Lebanon's Food Safety Authority and Sectarian Politics
ATEF IDRISS, MEFOSA, Beirut, Lebanon

2:30 The Harmonization of Food Regulation in Ghana: Progress and Future Steps
MARIA LOVELACE-JOHNSON, Food and Drug Authority, Accra, Ghana

3:00 Lessons Learned from CODEX Alimentarius: An Outsider's Perspective
VINCENT HEGARTY, Michigan State University, Dearborn, MI, USA

3:30 Refreshments Available Outside of Ballroom A

S70 **Microbiological Safety of Unpasteurized Fruit and Vegetable Juices Sold in Juice Bars and Small Retail Outlets**
Room 12
Organizers: Aubrey Mendonca, Armitra Jackson-Davis
Convenor: Armitra Jackson-Davis
Sponsored by the IAFP Foundation

1:30 Trends in Production of Raw Juice Blends: A Pathogen Control Perspective
ARMITRA JACKSON-DAVIS, Alabama A&M University, Madison, AL, USA

2:00 Raw Juice Characteristics: Influence on Pathogen Survival
AUBREY MENDONCA, Iowa State University, Ames, IA, USA

2:30 Microbiological Safety and Regulatory Considerations for Juice
DAVID WHITMAN, CFSAN Office of Food Safety, San Diego, CA, USA

3:00 An International Perspective of Raw Juice
LAWRENCE GOODRIDGE, McGill University, Montreal, QC, Canada

3:30 Refreshments Available Outside of Ballroom A

S71 **Advancing Food Safety Internationally through the Use of Innovative Technologies: Food Irradiation**
Room 13-14
Organizers: Christine Bruhn, Yaohua Feng, Anthony Flood
Convenors: Christine Bruhn, Anthony Flood

1:30 Overview of Foodborne Illness with a Focus on Where Innovations, Like Irradiation, Could Reduce Foodborne Illness
ROBERT TAUXE, Centers for Disease Control and Prevention, Atlanta, GA, USA

2:00 Health Canada's Review and Proposal to Permit Irradiated Ground Beef in the Marketplace
MARTIN DUPLESSIS, Bureau of Microbial Hazards, Food Directorate, Health Canada, Ottawa, ON, Canada

2:30 Food Industry Motivators, Barriers, and Uses of Irradiation Today
RONALD EUSTICE, Food Irradiation Newsletter, Tucson, AZ, USA

3:00 Messages That Work in the Marketplace
YAOHUA (BETTY) FENG, University of California-Davis, Davis, CA, USA

S72 Social Responsibility's Influence over Food Safety and Quality
Room 18-19
Organizer and Convenor: Wendy White

1:30 Animal Welfare Systems and Their Impact on Quality
RUTH WOIWODE, Food Safety Net Services, San Antonio, TX, USA

2:00 Vertical Sourcing of Spices in Developing Countries
LARRY LICHTER, McCormick, Baltimore, MD, USA

2:30 The Validity of Shelf-life Dates and Their Contribution to Food Waste
BOBBY KRISHNA, Dubai Municipality, Dubai, United Arab Emirates

3:00 Pros and Cons of Dry vs. Wet Approaches to Cleaning and Sanitation: Which is Better?
JEFFREY KORNACKI, Kornacki Microbiology Solutions, Inc., Madison, WI, USA

3:30 Refreshments Available Outside of Ballroom A

S73 Toward Risk-based Microbial Standards for Irrigation Water
Room 20-21
Organizer: Elisabetta Lambertini
Convenors: Bassam Annous, Katherine Woodward
Sponsored by the IAFP Foundation

1:30 Assessment of the Microbial Quality of Irrigation Waters in the Southwest, United States
KELLY BRIGHT, University of Arizona, Tucson, AZ, USA

2:00 A Risk-based Approach to Assess the Role of Microbial Irrigation Water Quality in Pre-harvest Produce Contamination
ELISABETTA LAMBERTINI, RTI International, Rockville, MD, USA

2:30 Implementing Risk-based Water Source Monitoring and Intervention Practices: Advantages and Obstacles
WILL DANIELS, Will Daniels Consulting Group, Carmel Valley, CA, USA

3:00 A Regulatory Perspective on Microbial Risk Management for Irrigation Water
KRUTI RAVALIYA, U.S. Food and Drug Administration, College Park, MD, USA

3:30 Refreshments Available Outside of Ballroom A

S74 Root Cause Analysis
Room 22-23
Organizers: Judy Greig, John Guzewich, Ewen Todd
Convenors: John Guzewich, Ewen Todd

1:30 History of Root Cause Analysis
KARIN HOELZER, The Pew Charitable Trusts, Washington, D.C., USA

2:00 Root Cause Analysis and the National Environmental Assessment Reporting System
LAURA BROWN, Centers for Disease Control and Prevention, Atlanta, GA, USA

2:30 Root Cause Analysis in the Food Industry
TIMOTHY JACKSON, Nestle USA, North America, Glendale, CA, USA

3:00 Use of Root Cause Analysis by Government Regulatory Programs
JENNY SCOTT, U.S. Food and Drug Administration–CFSAN, College Park, MD, USA

3:30 Refreshments Available Outside of Ballroom A

T11 Technical Session 11 – Meat, Poultry and Eggs, and Epidemiology
Room 15
Convenors: Elna Buys, Dane Bernard

T11-01 Effect of Moisture, pH, and Salt on Pathogen Lethality and Stabilization in Ham with Extended Come-Up and Extended Cooling Profiles
MAX GOLDEN, Amanda Skarlupka, Katie Osterbauer, Jeffrey Sindelar, Kathleen Glass, University of Wisconsin-Madison, Madison, WI, USA

T11-02 Tuning the Bloodhound® VOC Analyzer to Detect *Campylobacter* during Broiler Poultry Production
LYNN MCINTYRE, Tim Gibson, Harper Adams University, Newport, United Kingdom

T11-03 Antimicrobial Neutralization Ability of Buffered Peptone Water Compared to Neutralizing Buffered Peptone Water on *Salmonella*-inoculated Broiler Carcasses
JENNIFER VUIA-RISER, Christine Alvarado, Christopher Kerth, Matt Taylor, Texas A&M University, College Station, TX, USA

T11-04 Prevalence of *Salmonella* in Deep Tissue Lymph Nodes of Pork
TINEKE JONES, Cara Service, Scott Hrycauk, Agriculture and Agri-Food Canada, Lacombe, AB, Canada

T11-05 Evaluation of Transfer Rates of *Salmonella* from Single-use Gloves and Sleeves to Dehydrated Pork Jerky
JIAN WU, Monica Ponder, Thomas Saunders, Kendall Fogler, Kim Waterman, Virginia Tech, Blacksburg, VA, USA

T11-06 Effect of Persistent and Transient Generic *Escherichia coli* and *Salmonella* spp. Recovered from a Beef Packing Plant on Biofilm Formation of *Escherichia coli* O157:H7
Jeyachchandran Visvalingam, XIANQIN YANG, Agriculture and Agri-Food Canada, Lacombe, AB, Canada

T11-07 Changing United States Population Demographics: What Does This Mean for Listeriosis Incidence and Exposure?
AURELIE POHL, Regis Pouillot, Jane Van Doren, U.S. Food and Drug Administration–CFSAN, College Park, MD, USA

T11-08 Prevalence and Antibiotic Resistance of *Escherichia coli* and *Enterococcus* spp. in Urban Agriculture
LIYANAGE NIRASHA PERERA, Abdullah Ibn Mafiz, Yifan Zhang, Wayne State University, Detroit, MI, USA

3:30 Refreshments Available Outside of Ballroom A

T12 Technical Session 12 – Modeling and Risk Assessment and Retail and Food Service Safety
Room 16
Convenors: Lenny Ogomo, Fatemeh Ataei

T12-01 Microbiological Safety of Chicken Sold in Flow Pack Wrappers
THOMAS OSCAR, U.S. Department of Agriculture-ARS, Princess Anne, MD, USA

T12-02 Using a Quantitative Risk Assessment on Norovirus Transmission in Food Establishments to Improve and Prioritize the Implementation of Control Measures
GIRVIN LIGGANS, Wendy Fanaselle, Steven Duret, Efstathia Papafragkou, Regis Pouillot, Laurie Williams, Jane Van Doren, U.S. Food and Drug Administration, College Park, MD, USA

T12-03 Modeling for Predicting the Growth of *Salmonella* in Chicken Fillets under Different Temperatures
HAIYING PANG, Wen Wang, Xingning Xiao, Jianming Zhang, Ming Liao, Yanbin Li, Zhejiang University, College of Biosystems Engineering and Food Science, Hangzhou, China

T12-04 Growth of *Salmonella* Enteritidis in Liquid Egg Whites during Refrigerated Storage and Temperature Abuse: A One-step Dynamic Analysis
LIHAN HUANG, U.S. Department of Agriculture-ARS, Wyndmoor, PA, USA

T12-05 Evaluating a Demonstration-based Training Model for Educating Environmental Health Specialists on Validation and Verification of HACCP Plans
VERONICA BRYANT, Natalie Seymour, Katrina Levine, Benjamin Chapman, NC Dept of Health & Human Services, Raleigh, NC, USA

T12-06 Analysis of Certified Food Protection Manager Examination Results after a New Training Approach
NATALIE SEYMOUR, Benjamin Chapman, North Carolina State University, Raleigh, NC, USA

T12-07 Evaluation of Grocery Store Food Safety Audits for Patterns in Handwashing and Temperature Compliance
Natalie Seymour, THOMAS FORD, Eric Laber, Joyce Cahoon, Benjamin Chapman, Ecolab Inc., Greensboro, NC, USA

T12-08 Food Safety Knowledge and Practices and Consumers' Willingness to Pay for Fresh-cut Produce
HEYAO YU, Jack Neal, Sujata A. Sirsat, University of Houston, Houston, TX, USA

3:30 Refreshments Available Outside of Ballroom A

4:00 p.m. – 4:45 p.m.

JOHN H. SILLIKER LECTURE, *Ballroom A*

Food Allergies: A Public Health Dilemma
How Did We Get Here? Where are We Going?

Steve L. Taylor, Food Allergy Research & Resource Program, Department of Food Science & Technology, University of Nebraska

EVENING OPTIONS

6:00 p.m. – 7:00 p.m.
Reception
Tampa Convention Center Ballroom Foyer

7:00 p.m. – 9:30 p.m.
IAFP Awards Banquet
Tampa Convention Center Ballroom

IAFP2017 ANNUAL MEETING
Tampa, Florida
July 9 - 12, 2017

John H. Silliker Lecture

WEDNESDAY, JULY 9
CLOSING SESSION
4:00 P.M. – 4:45 P.M.

Food Allergies: A Public Health Dilemma – How Did We Get Here? Where are We Going?

Steve L. Taylor
University of Nebraska
Lincoln, Nebraska

Dr. Steve L. Taylor, Ph.D., is a Professor in the Department of Food Science and Technology, and Founder and Co-Director of the Food Allergy Research and Resource Program (FARRP) at the University of Nebraska – Lincoln (UNL).

Dr. Taylor initiated his professional interest in food allergies and sensitivities in 1980. His primary research interests involve the development of methods for the detection of residues of allergenic foods; the determination of the minimal eliciting doses for specific allergenic foods and their use in quantitative risk assessment; the assessment of the allergenicity of ingredients derived from allergenic sources; and the assessment of the allergenicity of foods produced through agricultural biotechnology. Dr. Taylor is heavily involved in outreach to the food industry on food allergies and sensitivities and has helped countless companies on a wide range of allergen-related topics.

Prior to his current position, Dr. Taylor served as Head of the Department of Food Science & Technology at UNL for 17 years. Before joining the university, he was an Associate Professor and Assistant Professor in the Food Research Institute at the University of Wisconsin – Madison for nine years. Throughout his academic career, he has mentored approximately 30 graduate students, several postdoctoral students, and numerous technicians.

An IAFP Member since 1988, Dr. Taylor is a member of the Food Chemical Hazards and Food Allergy Professional Development Group (PDG). He is also a member and Fellow of the Institute of Food Technologists, as well as a member of the American Academy of Allergy, Asthma & Immunology; the American Chemical Society; the European Academy of Allergology & Clinical Immunology; and the AOAC International. In addition, Dr. Taylor has served in a variety of roles with two dozen other professional organizations and has been recognized with more than a dozen awards and honors from various establishments.

Dr. Taylor received his B.S. and M.S. in Food Science and Technology from Oregon State University in Corvallis, Oregon, and his Ph.D. in Biochemistry, along with the National Institute of Environmental Health Sciences (NIEHS) Postdoctoral Fellow in Environmental Toxicology Nutrition, from the University of California – Davis. Dr. Taylor is the author/co-author of nearly 400 publications.

John H. Silliker Lecture Abstract

Food Allergies: A Public Health Dilemma – How Did We Get Here? Where are We Going?

Steve L. Taylor
Professor & Co-Director
Food Allergy Research & Resource Program
Department of Food Science & Technology
University of Nebraska
Lincoln, Nebraska

Food allergies have been described in medical literature for over 100 years. But the first 75 years of that history were fairly quiescent. Beginning in about 1990, food allergies began to emerge as an important public health issue. The prevalence of food allergies began to rise and rise dramatically, especially among infants and young children. Food allergies began to be recognized as a potentially severe, life-threatening condition. And, the potency of certain foods as allergens – "it only takes one bite" – became known. As the awareness and seriousness of food allergies emerged, the food industry struggled because the most commonly allergenic foods and especially milk, egg, soy and wheat were almost ubiquitous in food processing facilities. The industry had no tools or ability to assess the risk. The public health authorities similarly lacked tools and knowledge but were obliged to take a conservative approach to protect food-allergic consumers.

In the intervening 25 years, enormous progress in our understanding of food allergies has been made. We are beginning to understand the reasons for the increasing prevalence of food allergies. The path toward prevention of the development of food allergies among infants and young children seems clear. While a cure for food allergies still seems elusive, clinicians are investigating immunotherapy strategies that promise to curtail the potency and severity of food allergies. On the public health side, improved labeling regulations have been implemented in the U.S. and several other countries; packaged foods are safer for those with food allergies than they have ever been. The Food Safety Modernization Act identifies food allergens as a recognized public health hazard and mandates the development of preventive allergen controls. The industry now has the analytical tools needed to identify allergen hazards and assess the effectiveness of allergen control approaches. Quantitative risk assessment is emerging as a decision-making approach to guide labeling and industrial allergen management.

We may not put this public health issue completely behind us over the next 25 years, but I do think that we will lessen the public health impact of food allergies considerably.

JOIN IAFP TODAY.

YOUR CAREER. YOUR FUTURE. YOUR ORGANIZATION.

Join more than 4,000 food safety professionals who are committed to **Advancing Food Safety Worldwide®.**

foodprotection.org

International Association for Food Protection®

Advancing Food Safety Worldwide®

POSTER

NeoNet™

Bring Multi-Site ATP Test Data Into Focus

Introducing a new level of information, insight and control.

NeoNet™ for AccuPoint®

NeoNet is cloud based software that allows you to seamlessly collect and analyze ATP testing data from multiple facilities. Easily access, interpret, compare and report sanitation information from all of your facilities in one place.

- *Centralized data*
- *Dynamic Reporting*
- *Easy to deploy*
- *Automatic syncing*

All from your desk or on the road.

Contact Neogen for more information.

See Neogen at IAFP
Booth No. 723

NEOGEN®

800-234-5333 (USA/Canada) • 517-372-9200
foodsafety@neogen.com • foodsafety.neogen.com

Poster Sessions

MONDAY, JULY 10 • 10:00 a.m. – 6:00 p.m.

Tampa Convention Center, Exhibit Hall

Poster Session 1

Viruses and Parasites
Beverages and Acid/Acidified Foods
Pre-harvest Food Safety
General Microbiology
Food Defense
Food Law and Regulation
Food Safety Systems
Food Processing Technologies
Modeling and Risk Assessment
Sanitation and Hygiene
Antimicrobials

P1-01 through P1-111 – Authors present 10:00 a.m. – 11:30 a.m. and 5:00 p.m. – 6:00 p.m.
P1-112 and above – Authors present 2:00 p.m. – 3:30 p.m. and 5:00 p.m. – 6:00 p.m.

TUESDAY, JULY 11 • 10:00 a.m. – 6:00 p.m.

Tampa Convention Center, Exhibit Hall

Poster Session 2

Food Chemical Hazards and Food Allergens
Food Toxicology
Meat, Poultry and Eggs
Epidemiology
Retail and Food Service Safety
Communication Outreach and Education
Molecular Analytics, Genomics and Microbiome
Laboratory and Detection Methods
Dairy

P2-01 through P2-119 – Authors present 10:00 a.m.– 11:30 a.m. and 5:00 p.m. – 6:00 p.m.
P2-120 and above – Authors present 2:00 p.m. – 3:30 p.m. and 5:00 p.m. – 6:00 p.m

WEDNESDAY, JULY 12 • 9:00 a.m. – 3:00 p.m.

Tampa Convention Center, East Hall

Poster Session 3

Low-water Activity Foods
Packaging
Produce
Microbial Food Spoilage
Antimicrobials
Laboratory and Detection Methods
Water

P3-01 through P3-109 – Authors present 9:00 a.m. – 11:00 a.m.
P3-110 and above – Authors present 1:00 p.m. – 3:00 p.m.

Posters

MONDAY POSTERS
10:00 AM – 6:00 PM

P1 **Viruses and Parasites**
Beverages and Acid/Acidified Foods
Preharvest Food Safety
General Microbiology
Food Defense
Food Law and Regulation
Food Safety Systems
Food Processing Technologies
Modelling and Risk Assessment
Sanitation and Hygiene
Antimicrobials
Tampa Convention Center, Exhibit Hall

P1-01 through P1-111 – Authors present 10:00 a.m. – 11:30 a.m. and 5:00 p.m. – 6:00 p.m.

P1-112 and above – Authors present 2:00 p.m. – 3:30 p.m. and 5:00 p.m. – 6:00 p.m.

Viruses and Parasites

P1-01 Detecting Thermal Inactivation of Human Norovirus on Spinach Using Propidium or Ethidium Monoazide Combined with Real-time Quantitative Reverse Transcription-polymerase Chain Reaction — MYEONG-IN JEONG, Shin Young Park, Seh Eun Kim, Rui Meiling, Heedae Park, Sang-Do Ha, Advanced Food Safety Research Group, Brain Korea 21 Plus, Chung-Ang University, Ansung, South Korea

P1-02 Withdrawn

P1-03 The Effects of Electron Beam Irradiation on the Inactivation of Murine Norovirus-1 in Abalone Meat and Viscera — SEH EUN KIM, Rui Mei-ling, Shin Young Park, Jiyeon Jo, Sang-Do Ha, Advanced Food Safety Research Group, Brain Korea 21 Plus, Chung-Ang University, Ansung, South Korea

P1-04 Efficacy of Hypochlorite Bleach Treatment on Different Human Norovirus Genotypes — Flor Maes, Genesis Chavez Reyes, Giselle Almeida, KRISTEN GIBSON, University of Arkansas, Fayetteville, AR, USA

P1-05 Thermal Stability of Viruses in Coculture with *Enterobacter cloacae* — KRISTEN GIBSON, Giselle Almeida, University of Arkansas, Fayetteville, AR, USA

P1-06 Rapid Association of Enteric Viruses with Whole Cell Bacteria in Suspension — Giselle Almeida, KRISTEN GIBSON, University of Arkansas, Fayetteville, AR, USA

P1-07 Impact of Moisture Content and Temperature during Rice Storage on Levels of Mold and Aerobic Bacteria over Time — KRISTEN GIBSON, Giselle Almeida, Wenjun Deng, Bhagwati Prakash, Shweta Kumari, Terry Siebenmorgen, University of Arkansas, Fayetteville, AR, USA

P1-08 Effect of Plant Proteases on Infectivity of Tulane Virus, Murine Norovirus, and Hepatitis A Virus — ADRIENNE SHEARER, Kalmia Kniel, University of Delaware, Newark, DE, USA

P1-09 Persistence of Murine Norovirus in Vegetable Wash and Brackish Tidal Surface Waters — ADAM VANORE, Adrienne Shearer, Samantha Gartley, Kalmia Kniel, University of Delaware, Newark, DE, USA

P1-10 Optimization of Virus Recovery from Non-porous Surfaces with Application in Environmental Persistence Studies — NICOLE TURNAGE, Kristen Gibson, University of Arkansas, Fayetteville, AR, USA

P1-11 Survival of Norovirus Surrogates, Feline Calicivirus, and Murine Norovirus on Carpets — DAVID BUCKLEY, Angela Fraser, Guohui Huang, Xiuping Jiang, Clemson University, Clemson, SC, USA

P1-12 Development and Evaluation of Nucleic Acid Aptamers to a Novel Target Protein for Treatment and Detection of Human Norovirus — MATTHEW MOORE, Jeremy Faircloth, Lee-Ann Jaykus, North Carolina State University, Raleigh, NC, USA

P1-13 Detection of Human Norovirus in Fermented Food Using a Conductive Polymer Coated Magnetic Separation Combined with Quantitative Reverse Transcription-PCR — JEEHYOUNG HA, Sung Hyun Kim, Su-Ji Kim, Hee Min Lee, Hae-Won Lee, Ji-Hyun Lee, Jae Yong Lee, World Institute of Kimchi, Gwangju, South Korea

P1-14 Norovirus Contamination on Environmental Surfaces during Norovirus Outbreaks on Cruise Ships, 2015 to 2016 — GEUN WOO PARK, Amy Freeland, Nikail Collins, Aimee Treffiletti, Jan Vinjé, Centers for Disease Control and Prevention, Atlanta, GA, USA

P1-15 Evaluation of the Efficacy of Copper (100% Cu) and Brass (70% Cu) for Inactivation of a Human Norovirus Surrogate by Porcine Gastric Mucin Binding and Infectivity Assays — JORDAN RECKER, Xinhui Li, University of Wisconsin-La Crosse, La Crosse, WI, USA

P1-16 Comparison of Filtration Methods to Recover *Cyclospora cayetanensis* Oocysts from Agricultural Water Samples — ALEXANDRE DA SILVA, Mauricio Durigan, Helen Murphy, Amy Kahler, Mia Mattioli, Jannifer Murphy, Vincent Hill, U.S. Food and Drug Administration–CFSAN, Office of Applied Research and Safety Assessment, Laurel, MD, USA

Blue Text – Developing Scientist Competitor Green Text – Undergraduate Student Competitor

P1-17 Molecular Characterization of *Cyclospora cayetanensis* in Produce and Clinical Samples Using Whole Mitochondrial Genome Sequencing — HEDIYE CINAR, Gopal Gopinath, Seon Ju Choi, Jeongu Lee, Sonia Almeria, Mauricio Durigan, Helen Murphy, Alexandre da Silva, U.S. Food and Drug Administration–CFSAN, Office of Applied Research and Safety Assessment, Laurel, MD, USA

P1-18 Comparison of Detection of *Cyclospora cayetanensis* in a Variety of Food Matrices — SONIA ALMERIA, Alexandre da Silva, Mauricio Durigan, Tyann Blessingnton, Helen Murphy, U.S. Food and Drug Administration–CFSAN, Office of Applied Research and Safety Assessment, Laurel, MD, USA

P1-19 Evaluation of 405 nm CW Visible Blue Light as a Means of Inactivating Tulane Virus on Blueberries — DAVID KINGSLEY, Rafael Perez, Glenn Boyd, Joseph Sites, Brendan Niemira, U.S. Department of Agriculture, Dover, DE, USA

P1-20 Occurrence of Hepatitis E Virus in Regionally Produced Meat Products and the Meat Processing Environment — ARTUR RZEZUTKA, Iwona Kozyra, Ewelina Bigoraj, National Veterinary Research Institute, Pulawy, Poland

P1-21 The Use of an Atmospheric Cold Plasma Jet to Inactivate *Cryptosporidium parvum* Oocysts on Cilantro — SHANI CRAIGHEAD, Adrienne Shearer, Sarah Hertrich, Glenn Boyd, Joseph Sites, Brendan Niemira, Kalmia Kniel, University of Delaware, Newark, DE, USA

P1-22 Development of PCR Amplification Methods Based on *Cyclospora cayetanensis* Mitochondrial Genomes — MAURICIO DURIGAN, Gopal Gopinath, ChaeYoon Lee, Hediye Cinar, Sonia Almeria, Helen Murphy, Alexandre da Silva, U.S. Food and Drug Administration–CFSAN, Office of Applied Research and Safety Assessment, Laurel, MD, USA

P1-23 A New RT-Real-time PCR Method for Simultaneous Detection of Hepatitis A Virus, Norovirus (GI, GII), and MS2 Phage in Food and Water Samples — Arnt Ebinger, OLAF DEGEN, Cordt Groenewald, Kornelia Berghof-Jager, BIOTECON Diagnostics, Potsdam, Germany

P1-24 Survival of Hepatitis A Virus on Strawberries under Freeze Drying and Room Temperature Storage — YAN ZHANG, Runan Yan, Christina K. Carstens, David Laird, Y. Carol Shieh, Illinois Institute of Technology, Chicago, IL, USA

P1-25 Differential Virus Recoveries from Contaminated Abiotic Surfaces — RUNAN YAN, Rutuja Khadye, Karl Reineke, Ashutosh Sharma, Timothy Duncan, Y. Carol Shieh, Illinois Institute of Technology, Chicago, IL, USA

P1-26 Isolation and Characterization of *Bacillus cereus* Bacteriophages from Foods and Soil — HYEJIN OH, Dong Joo Seo, Su Been Jeon, Hyunkyung Park, Suntak Jeong, Hyang Sook Chun, Mihwa Oh, Changsun Choi, Chung-Ang University, Ansung-si, South Korea

P1-27 Aqueous Extracts of the Underutilized Garcinia Fruit and Pulp Decrease Tulane Virus Infectivity — MANAS SAHOO, Doris D'Souza, University of Tennessee, Knoxville, TN, USA

P1-28 Recovery Efficiency of Coccidian Parasites from Cilantro Depending on Sample Size and Elution Solution Volume — YNES R. ORTEGA, Maria Torres, University of Georgia, Griffin, GA, USA

P1-29 Hepatitis A Virus in Scallops Implicated in a 2016 Outbreak — JACQUELINA WOODS, Rachel Rodriguez, Toni Morales, Gilberto Vaughan, Yulin Lin, Guo-Liang Xia, U.S. Food and Drug Administration, Dauphin Island, AL, USA

P1-30 Organic Load Impacts the Virucidal Efficacy of Heat and Chlorine against Human Norovirus and Tulane Virus, a Cultivable Surrogate — NAIM MONTAZERI, Eric Moorman, Matthew Moore, Blanca Escudero-Abarca, Lee-Ann Jaykus, North Carolina State University, Raleigh, NC, USA

Beverages and Acid/Acidified Foods

P1-31 Quantifying the Destruction of *Salmonella* spp. during a 24-hour Kombucha Brewing Process — CHRISTINE A. ROCK, Daniel Unruh, Sara Gragg, Kansas State University, Olathe, KS, USA

P1-32 Influence of Sodium Chloride and Calcium Chloride on the Growth and Death of Pathogenic *Escherichia coli* and Lactic Acid Bacteria in Cucumber Brines — FRED BREIDT, Robert Price, Breanne Burgess, Dorothy Dupree, Elizabeth Andress, U.S. Dept. of Agriculture–ARS, Raleigh, NC, USA

P1-33 Microbial Safety and Quality Evaluation of Ultraviolet Treated, Cold-pressed, Colored and Turbid, Fruit and Vegetable Beverages — JESSIE USAGA, Randy Worobo, Cornell University, Geneva, NY, USA

Preharvest Food Safety

P1-34 Investigation of the Prevalence and Distribution of *Salmonella* in United States Feed Mills — GABRIELA MAGOSSI, Natalia Cernicchiaro, Steve Dritz, Terry Houser, Jason Woodworth, Cassandra Jones, Valentina Trinetta, Kansas State University, Food Science Institute, Manhattan, KS, USA

P1-35 Influence of Amendment Type on Persistence of *Salmonella* Newport in Soil — JUNE TEICHMANN, University of Delaware, Newark, DE, USA

P1-36 Remediation of Soil Contaminated by *Salmonella enterica* to Expedite Plant or Replant of Vegetables — MULATUA METAFERIA, University of Sydney, Sydney, Australia

P1-37 Factors That Contribute to *Salmonella* Persistence in Field Soil Samples — CLAIRE MARIK, Shani Craighead, Samantha Gartley, Adam Vanore, Thais Ramos, Manan Sharma, Gordon Johnson, Kalmia Kniel, University of Delaware, Newark, DE, USA

P1-38 The Impact of Heavy Rainfall on *Salmonella* Survival and Transport — DEBBIE LEE, Timothy Coolong, George Vellidis, Karen Levy, Emory University, Atlanta, GA, USA

P1-39 Microbial Evaluation of Preprocessed and Post-processed Tomatoes from Florida Packing Houses during 2013 to 2015 — Jaysankar De, Aswathy Sreedharan, ALAN GUTIERREZ, You Li, Jubair Mohammad, Keith Schneider, University of Florida, Gainesville, FL, USA

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P1-40 Assessment of Generic *Listeria* spp. and *Listeria monocytogenes* Occurrence in Apple and Stone Fruit Orchards — Ishani Sheth, Darina Kantsavenka, Hee jin Kwon, Dohee Kim, Jessica Palmer, Abby Gao, Anna Wooten, Kari Peter, Yi Chen, DUMITRU MACARISIN, U.S. Food and Drug Administration, College Park, MD, USA

P1-41 Isolation of *Salmonella* and *Campylobacter* Strains from Superficial Irrigation Water, Soil, and Vegetables Samples from Small Agriculture Fields around the Capital of Chile — LISETTE LAPIERRE, Constanza Vergara, Patricio Retamal, Maria Cristina Martinez, Universidad de Chile, Santiago, Chile

P1-42 Flies as Possible Vectors for Transfer of Shiga-toxigenic — Stuart Gorman, VALERIE NETTLES, Dara Smith, David Paulsen, Rebecca Trout Fryxell, Annette Wszelaki, John Buchanan, Faith Critzer, University of Tennessee, Knoxville, TN, USA

P1-43 Plant Growth-promoting *Pseudomonas* spp. Reduces the Persistence of *Salmonella* spp. on Spinach and Tomato Leaf Surfaces — CHIUN-KANG HSU, Shirley Micallef, University of Maryland, College Park, MD, USA

P1-44 Effect of Postharvest Cooling on the Microbial Quality and Storage of Florida Peaches — Jaysankar De, BRUNA BERTOLDI, Alan Gutierrez, Jubair Mohammad, Steven Sargent, Keith Schneider, University of Florida, Gainesville, FL, USA

P1-45 Comparison of Forced-air Cooling and Hydrocooling on the Microbial Quality Control of Florida Blueberries — JAYSANKAR DE, Aswathy Sreedharan, You Li, Alan Gutierrez, Steven Sargent, Keith Schneider, University of Florida, Gainesville, FL, USA

P1-46 In Silico Evaluation of a Novel Iterative Bayesian Sampling Strategy for Efficient Detection of Pathogenic Bacteria in Preharvest Produce and Environments — AIXIA XU, Robert Buchanan, University of Maryland, College Park, MD, USA

P1-47 Survival of *Listeria monocytogenes* on the Surface of Basil, Cilantro, Dill, and Parsley Plants Grown in a Greenhouse Environment — Cameron Bardsley, LAURA STRAWN, Rachel Pfuntner, Laura Truitt, Renee Boyer, Steve Rideout, Virginia Tech, Blacksburg, VA, USA

P1-48 Investigation of Microbial Contamination Sources during Production of Radish Sprout — SE-RI KIM, Hyun-mi An, Bohyun Yun, Won-Il Kim, Sanghyun Han, Hyun-Ju Kim, Byeong-Yong Park, Jae-Gee Ryu, National Institution of Agricultural Science, Rural Development Administration, Wanju, South Korea

P1-49 Investigation of Fecal Contamination Indicators and Foodborne Pathogens for Irrigation Water Used in Napa Cabbage Cultivation — SE-RI KIM, Bohyun Yun, Hyun-mi An, Won-Il Kim, Sanghyun Han, Hyun-Ju Kim, Byeong-Yong Park, Jae-Gee Ryu, National Institution of Agricultural Science, Rural Development Administration, Wanju, South Korea

P1-50 Recovery of *Salmonella* Agona and Typhimurium on Sprouting Alfalfa after Seed Sanitation — YUE DAI, Pascal Delaquis, Carmen Wakeling, Siyun Wang, University of British Columbia, Vancouver, BC, Canada

P1-51 Sunlight Exposure Reduces Viability in *Salmonella enterica* — GOVINDARAJ DEV KUMAR, Shirley Micallef, Dumitru Macarisin, University of Maryland, College Park, MD, USA

P1-52 Metabolic Profiling of Non-O157:H7 Shiga Toxin-producing *Escherichia coli* Isolated from Spinach — GOVINDARAJ DEV KUMAR, Shirley Micallef, Peter Feng, University of Maryland, College Park, MD, USA

P1-53 My *Salmonella* is Longer Than Yours: Filamentous Cell Phenotype in Response to Stress — GOVINDARAJ DEV KUMAR, Shirley Micallef, Dumitru Macarisin, University of Maryland, College Park, MD, USA

General Microbiology

P1-54 Isolation and Identification of *Listeria* spp., *Staphylococcus aureus,* and *Salmonella* during Dry Aging — HYEMIN OH, Jiyoung Lee, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P1-55 Inactivation of Norovirus during Smoked Salmon Storage — HYEMIN OH, Yewon Lee, Hyun Jung Kim, Changsun Choi, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P1-56 Microbiological Quality and Flavor Profile of Alkaline Fermented Bambara Groundnut Made into a Dawadawa-type African Food Condiment Using *Bacillus* Species Starter Cultures — GABRIEL AKANNI, Henriette de Kock, Elna Buys, University of Pretoria, Pretoria, South Africa

P1-57 Microbiological Map of Selected Caribbean Foods over the 11-year Period 2004 through 2014 — ZOE GORDON, Andre Gordon, James Kerr, Technological Solutions Limited, Kingston, Jamaica

P1-58 Synergistic Effect of Heat and Elevated Hydrostatic Pressure for Inactivation of *Listeria monocytogenes* — ABIMBOLA ALLISON, Eleonora Troyanovskaya, Shahid Chowdhury, Aliyar Fouladkhah, Public Health Microbiology Laboratory, Tennessee State University, Nashville, TN, USA

P1-59 *Listeria* Interspecies Competition during Selective Enrichment Compared Using Three Regulatory Methods — Kaitlin Cauchon, Anthony Hitchins, RONALD SMILEY, U.S. Food and Drug Administration/ORA/ Arkansas Regional Laboratory, Jefferson, AR, USA

P1-60 Biofilm Formation and Sanitizer Resistance of *Listeria monocytogenes* in Mono- and Mixed-species with Cultivable Indigenous Microorganisms in Fresh Salmon — XINYI PANG, Chun Hong Wong, Hyun-Jung Chung, Hyun-Gyun Yuk, National University of Singapore, Singapore, Singapore

P1-61 Cold Shock Domain Family Proteins Contribute to Virulence, Cellular Aggregation, and Flagella-based Motility in *Listeria monocytogenes* — Athmanya Eshwar, Roger Stephan, TAURAI TASARA, University of Zurich, Zurich, Switzerland

P1-62 Diversity of *Listeria monocytogenes* Isolated from Clinical Cases and Food in Chile — Viviana Toledo, Henk Den Bakker, Marc Allard, Martin Wiedmann, Helia Bello, Gerardo Gonzalez-Rocha, ANDREA MORENO SWITT, Universidad Andrés Bello, Santiago, Chile

P1-63 Extended Exposure to Low-temperature Stress Promotes the Formation of *Listeria monocytogenes* Variants with Enhanced Cold, Acid, and Salt Tolerance — PATRICIA HINGSTON, Lisbeth Truelstrup Hansen, Siyun Wang, University of British Columbia, Vancouver, BC, Canada

P1-64 Changes in Zones of Inhibition and Minimum Inhibitory Concentrations of Antibiotics in *Listeria monocytogenes* Strains after Exposure to Chlorine-induced Sublethal Oxidative Stress — Mohit Bansal, RAMAKRISHNA NANNAPANENI, Chander Shekhar Sharma, Mississippi State University, Mississippi State, MS, USA

P1-65 Antimicrobial Hydrogel Composed of Whey Protein or Maillard Reaction Products to Control Foodborne Pathogens — SEJEONG KIM, Hyemin Oh, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P1-66 Comparison of *Listeria* Swabbing Methods Using Residual Bacterial Method — NICOLE FAMILIARI, Delia Calderon, Paul Meighan, Hygiena, Camarillo, CA, USA

P1-67 A Shelf-life Estimation and Growth of *Listeria monocytogenes* on Thawed Catfish Stored at Refrigerated Temperature — Thao. T.H. Nguyen, VIJAY SINGH CHHETRI, Karuna Kharel, Achyut Adhikari, Louisiana State University AgCenter, Baton Rouge, LA, USA

P1-68 Presence and Distribution of *Listeria monocytogenes* in South African Meat and Meat Products — ITUMELENG MATLE, Evelyn Madoroba, Khanyisile Mbatha, Agricultural Research Council – Bacteriology Division, Pretoria, South Africa

P1-69 Hygienic Design Shortcomings of Batch Frozen Dessert Freezers: Potential for Survival of *Listeria monocytogenes* in Ice Cream Mix-based Soil — Aisha Inuwa, Ashley Lunt, Brett Andersen, Davin Marta, CHARLES CZUPRYNSKI, Scott Rankin, University of Wisconsin - Madison, Madison, WI, USA

P1-70 Characterization of *Vibrio parahaemolyticus* and *Vibrio vulnificus* Recovered from Oysters during the Salinity Relaying Process — Sara Elmahdi, Sylvia Ossai, Ligia DaSilva, John Jacobs, Michael Jahncke, SALINA PARVEEN, University of Maryland Eastern Shore, Princess Anne, MD, USA

P1-71 Virulence Assessment of *Vibrio* spp. in a *Galleria mellonella* Model — MIRA RAKIC MARTINEZ, Rohinee Paranjpye, Christopher Grim, Atin Datta, U.S. Food and Drug Administration, Laurel, MD, USA

P1-72 Fitness of *Vibrio parahaemolyticus* in Seawaters at Different Oyster Harvesting Temperatures — CHAO LIAO, Luxin Wang, Auburn University, Auburn, AL, USA

P1-73 Migration of Enterohemorrhagic *Escherichia coli* Artificially Internalized into Vegetable Seeds to Different Sections of Sprouts/Seedlings during Germination — DA LIU, Ronald R. Walcott, Jinru Chen, Yue Cui, University of Georgia, Griffin, GA, USA

P1-74 T4 Bacteriophage Insensitive Mutants of *Escherichia coli* Display Altered Antibiotic Resistance and Ability to Ferment Glucose — ZEYAN ZHONG, Anna Colavecchio, Lawrence Goodridge, McGill University, Ste-Anne-de-Bellevue, QC, Canada

P1-75 Biofilm-forming Capacity and Resistance to Sanitizers of a Range of *Escherichia coli* O26 Pathotypes from Human Clinical Cases and Cattle in Australia — Salma Lajhar, Jeremy Brownlie, ROBERT BARLOW, CSIRO Agriculture & Food, Brisbane, Australia

P1-76 The Lack of Toll-like Receptor 11 Expression in Mice Does Not Allow for Colonization by Shiga Toxin-producing *Escherichia coli* — LISA HARRISON, Prabha Kc, Monika Proszkowiec-Weglarz, Uma Babu, Andrew Do, Mohammad Alam, Kristina Williams, Kannan Balan, CFSAN, Laurel, MD, USA

P1-77 Effect of Adaptation to Sublethal Concentrations of Acetic Acid and pH on Serovar- and Strain-dependent Acid Resistance of *Salmonella* spp. — ALKMINI GAVRIIL, Adamantia Papaioannou, Nefeli Lysimachou, Panagiotis Skandamis, Agricultural University of Athens, Athens, Greece

P1-78 Evaluation of Selective and Nonselective Plating Media for Recovery of *Salmonella* Enteritidis PT 30, *Salmonella* Seftenberg 775W, and *Salmonella* Typhimurium DT 104 Colonies from Heat-treated Almonds — BUKOLA ONARINDE, Pauline Lovatt, Yunus Khatri, Gerrit Meerdink, University of Lincoln, Lincoln, United Kingdom

P1-79 Metabolomic Analysis of Electron Beam Inactivated *Salmonella* Typhimurium — SOHINI BHATIA, Suresh D. Pillai, Texas A&M University, College Station, TX, USA

P1-80 Survival and Heat Resistance of *Salmonella* during Simulated Commercial Manufacturing of Tortillas — MINTO MICHAEL, Daniel Vega, Keyla Lopez, Jennifer Acuff, Lakshmikantha Channaiah, George Milliken, Harshavardhan Thippareddi, Randall Phebus, Kansas State University, Manhattan, KS, USA

P1-81 Comparison of Heat Resistance of *Salmonella* during Simulated Commercial Baking of Hard and Soft Cookies — MINTO MICHAEL, Jennifer Acuff, Keyla Lopez, Lakshmikantha Channaiah, George Milliken, Harshavardhan Thippareddi, Randall Phebus, Kansas State University, Manhattan, KS, USA

P1-82 Validation of a Frying Process to Control *Salmonella* in Donuts — MINTO MICHAEL, Jennifer Acuff, Keyla Lopez, Daniel Vega, George Milliken, Harshavardhan Thippareddi, Randall Phebus, Lakshmikantha Channaiah, Kansas State University, Manhattan, KS, USA

P1-83 Reduction of *Salmonella* spp. and Shiga Toxin-producing *Escherichia coli* on Alfalfa Seeds and Sprouts Using an Ozone Generating System — ZAHRA MOHAMMAD, Ahmad Kalbasi, Alejandro Castillo, Texas A&M University, College Station, TX, USA

P1-84 Concentration-dependent Neutralization of Antimicrobials Used in Poultry Processing Allowing Survival of *Campylobacter* spp. — ZAHRA MOHAMMAD, Matt Taylor, Christine Alvarado, Texas A&M University, College Station, TX, USA

P1-85 Comparison of Survival and Heat Resistance of *Escherichia coli* O121 and *Salmonella* in Muffins — Minto Michael, Jennifer Acuff, DANIEL VEGA, Keyla Lopez, George Milliken, Harshavardhan Thippareddi, Randall Phebus, Kansas State University, Manhattan, KS, USA

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P1-86 Efficacy of the InnovaPrep Concentrating Pipette for Concentrating *Salmonella* spp., *Listeria* spp., and *Escherichia coli* in Ground Beef and Leafy Greens for Rapid Detection — GIANNA PRATA, Patrick Marek, Tobyn Branck, Christina Crivello, Natick Soldier Research Development & Engineering Center, Natick, MA, USA

P1-87 Improved Recovery of *Salmonella* spp. and *Cronobacter* spp. in Dry Milk Powders Enriched in Brilliant Green Water Compared to Buffered Peptone Water — Philip Feldsine, Markus Jucker, Mandeep Kaur, Amy Immermann, ANDREW LIENAU, BioControl Systems, Bellevue, WA, USA

P1-88 Effect of Ultraviolet C Light on the Reduction of *Aspergillus* and *Penicillium* Species on Moist and Dry Surfaces — HASSAN GOURAMA, Penn State University, Reading, PA, USA

P1-89 Microbiological Evaluation in Infant Formulas Powdered and Reconstituted at Home — ADRIANE NARUMI ONODERA ANDRADE, Eliezer Flavio Do Nascimento Andrade, Rosana Francisco Siqueira Dos Santos, Agueda Cleofe Marques Zaratin, Ana Valeria Ulhano Braga, Metrocamp College Devry Group, Campinas, Brazil

P1-90 Microbial Safety of Human Milk Purchased from Online Markets — DONG JOO SEO, Hyunkyung Park, Suntak Jeong, Hanseam Shin, Changsun Choi, Chung-Ang University, Food & Nutrition, Anseong, Kyounggi, South Korea

P1-91 Histamine Production by *Photobacterium* spp. — KRISTIN BJORNSDOTTIR-BUTLER, Paul V. Dunlap, Ronald A. Benner, Jr., FDA Gulf Coast Seafood Laboratory, Dauphin Island, AL, USA

P1-92 Evaluation of Composite Sterility Testing Procedures for Ready-to-Eat Pudding Products — CHRISTOPHER SHOWALTER, Balasubrahmanyam Kottapalli, Kari Sweeney, Deann Akins-Lewenthal, Conagra Brands, Omaha, NE, USA

P1-93 Persistence of Fecal Indicator Bacteria and *Bacteroidales* Universal Marker on Two Different Texture Surfaces — GILBERTO ORDAZ, Angel Merino, Santos Garcia, Norma Heredia, Universidad Autonoma de Nuevo Leon, San Nicolas, Mexico

P1-94 Independent Evaluation of Prepared Gamma Irradiated Dehydrated Culture Media to Traditional Bulk Dehydrated Culture Media from Various Manufacturers — PATRICK BIRD, Tony Gonzalez, Joe Benzinger, Erin Crowley, James Agin, David Goins, Q Laboratories, Inc., Cincinnati, OH, USA

P1-95 Molecular Characterization of Methicillin-resistant *Staphylococcus aureus* and the Discovery of Novel Spa-Types — SAEED KHAN, Kidon Sung, Jung-Whan Chon, Bernard Marasa, Mohamed Nawaz, U.S. Food and Drug Administration/NCTR, Jefferson, AR, USA

P1-96 Effects of Coffee Mucilage Extracts on the Growth of Bacteria Associated with Disease, Food Deterioration, and the Human Gut — CAROLINA CHAVES, Maria Laura Arias, César Rodriguez, Patricia Esquivel, Universidad de Costa Rica, San Jose, Costa Rica

P1-97 Isolation and Characterization of *Lactobacillus parafarraginis* KU495926 Inhibiting Multidrug-resistant Gram-negative Bacteria — RACHELLE ALLEN-MCFARLANE, Broderick Eribo, Howard University, Washington, D.C., USA

P1-98 Shedding of Foodborne Pathogens by Slaughtered Reindeer in Northern Finland — CLAUDIO ZWEIFEL, Sauli Laaksonen, Lisa Fierz, Nicole Cernela, Maria Fredriksson-Ahomaa, Roger Stephan, University of Zurich, Zurich, Switzerland

P1-99 Isolation and Characterization of *Bacillus* spp. as Potential Probiotics for Poultry — Alejandro Penaloza-Vazquez, LI MA, Brienna Mileson, Patricia Rayas-Duarte, National Institute for Microbial Forensics & Food and Agricultural Biosecurity, Stillwater, OK, USA

P1-100 *Salmonella* is Unlikely to Develop Resistance to Cold Plasma Treatment Based on RNA Sequencing Analysis — LI MA, Chris Timmons, Kedar Pai, National Institute for Microbial Forensics & Food and Agricultural Biosecurity, Oklahoma State University, Stillwater, OK, USA

P1-101 Bacterial Metabolites from Intra- and Inter-species Influencing Thermotolerance: The Case of *Bacillus cereus* and *Geobacillus stearothermophilus* — Mayra Gomez-Govea, Santos Garcia, NORMA HEREDIA, Universidad Autonoma de Nuevo Leon, San Nicolas, Mexico

P1-102 Comparison of Thermal D-Values of Nonproteolytic C*lostridium botulinum* and *Bacillus cereus* Spores — TRAVIS MORRISSEY, Viviana Loeza, Eduardo Patazca, Lindsay Halik, N. Rukma Reddy, Guy Skinner, Kristin M. Schill, U.S. Food and Drug Administration, Bedford Park, IL, USA

P1-103 Evaluation of Enzyme Effects and Characterization of Modes of Biofilm Formation in *Bacillus cereus* — EUN SEOB LIM, Joo-Sung Kim, Korea University of Science and Technology, Daejeon, South Korea

P1-104 Passage of *Campylobacter* spp. Subtypes through 0.45 and 0.65 µm Filters — MARK BERRANG, Richard Meinersmann, Nelson Cox, U.S. Department of Agriculture-ARS-USNPRC, Athens, GA, USA

P1-105 Effect of Water Activity and Temperature on Growth and Ochratoxin A Production by *Aspergillus fresenii* and *Aspergillus sulphureus* on Niger Seeds — YUNG-CHEN HSU, Dawit Gizachew, W.T. Evert Ting, Purdue University Northwest, Hammond, IN, USA

P1-106 Reducing the Thermal Resistance of *Bacillus cereus* Spores — ASWATHI SONI, Phil Bremer, Indrawati Oey, Patrick Silcock Silcock, University of Otago, Dunedin, New Zealand

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P1-107 Effect of Temperature on Mycelia Growth and Aflatoxin B1 Production of *Aspergillus flavus* and *Aspergillus parasiticus* on Niger Seeds — JUAN FRANCISCO HERNANDEZ, Francisco Hernandez, Dawit Gizachew, W.T. Evert Ting, Purdue University Northwest, Hammond, IN, USA

Food Defense

P1-108 Monitoring of Illegally Added Compounds and Drugs in Foods: Prohibited Ingredients — JUNGEUN LEE, Woogin Cho, Soyoung Won, Inseon Kim, Jaehee Hyun, Kyeongwook Kim, Jaei Kim, Wooseong Kim, Center for Food & Drug Analysis, Busan Regional Korea Food & Drug Administration, Busan, South Korea

Food Law and Regulation

P1-109 Revised EN ISO 22964: Evaluation of Granucult® and Chromocult® Culture Media for Pre-enrichment, Selective Enrichment, and Detection of *Cronobacter* spp. — Barbara Gerten, Michael Gampe, ANDREAS BUBERT, Lisa John, Merck KGaA, Darmstadt, Germany

P1-110 Does Irradiation of Half Fraser Broth, in Pre-weighed Pouches for *Listeria monocytogenes* Enrichment, Impact Growth Promotion and Stability? — ANNE PRIGGE, Andreas Bubert, Regina Petrasch, Michael Bülte, University of Giessen, Giessen, Germany

P1-111 FSMA Rules and EU Food Safety Regulations: Differences and Opportunities — CLAUDIO GALLOTTINI, Franco Rapetti, Sara Trombetti, ITA Corporation, Miami, FL, USA

Food Safety Systems

P1-112 A Survey Study of the Food Safety Management Systems of Colombian Food Exporters to the United States of America — NAYRA ALVARINO-MOLINA, Deivis Lujan-Rhenals, Universidad Pontificia Bolivariana, Monteria, Colombia

P1-113 An Overview of Food Safety Compliance and Technical Accreditation in the Welsh Food and Drink Manufacturing and Processing Industry — ELLEN W. EVANS, Leanne Ellis, Ann Marie Flinn, Jessica Lacey, Jamie Old, David Lloyd, Helen Taylor, ZERO2FIVE Food Industry Centre, Cardiff Metropolitan University, Cardiff, United Kingdom

P1-114 Assessment of Video Observation to Evaluate Hand Hygiene Practices of Food Handlers in Food and Drink Manufacturing and Processing Businesses: A Feasibility Study — ELLEN W. EVANS, Elizabeth C. Redmond, ZERO2FIVE Food Industry Centre, Cardiff Metropolitan University, Cardiff, United Kingdom

P1-115 Development and Validation of a Comprehensive Index to Evaluate Food Safety at the Household Level in India — S.G.D.N. LAKSHMI REDDI, SubbaRao M. Gavaravarapu, Naveen R. Kumar, Vishunuvardhana, Rao M. M, Sudershan R. Vemula, Food and Drug Toxicology Research Centre, National Institute of Nutrition (ICMR), Hyderabad, India

Food Processing Technologies

P1-116 Application of a Novel Supercritical Carbon Dioxide (CO_2) Drying Process to Inactivate Foodborne Pathogens on Cilantro and Strawberry — Siméon Bourdoux, Stijn De Sutter, Sara Spilimbergo, Alessandro Zambon, Filippo Michelino, Mieke Uyttendaele, Frank Devlieghere, ANDREJA RAJKOVIC, Ghent University, Ghent, Belgium

P1-117 Inactivation of Murine Norovirus and Bacteriophage MS2 on Strawberries and Blueberries by High Pressure Processing — MU YE, Yingyi Zhang, Catherine Rolfe, Alvin Lee, Illinois Institute of Technology/IFSH, Bedford Park, IL, USA

P1-118 Inactivation of *Escherichia coli*, *Listeria monocytogenes* and *Salmonella* spp. on Strawberries by Pulsed Light — MU YE, Dandan Feng, Sophie Zuber, Alvin Lee, Institute for Food Safety and Health, Illinois Institute of Technology, Bedford Park, IL, USA

P1-119 Heat Inactivation of Tulane Virus in Inoculated Spinach Contained in Vacuum Bags — Sukriti Ailavadi, Mark Morgan, DORIS D'SOUZA, University of Tennessee, Knoxville, TN, USA

P1-120 Chlorine Dioxide Gas for the Inactivation of Human Norovirus Genogroup II on Formica Coupons — Purni Wickramasinghe, Mark Morgan, DORIS D'SOUZA, University of Tennessee, Knoxville, TN, USA

P1-121 Decontamination of Whole Cantaloupe Using Chlorite and Acid in a Sequential Application — CHENG-AN HWANG, Lihan Huang, Vivian Chi-Hua Wu, U.S. Department of Agriculture-ARS-ERRC, Wyndmoor, PA, USA

P1-122 Application of High-pressure Processing on Fresh and Frozen Strawberries and Blueberries to Inactivate *Salmonella* spp. and *Enterococcus faecium* — Mu Ye, Alvin Lee, Yingyi Zhang, Mengyi Huang, CATHERINE ROLFE, Illinois Institute of Technology/IFSH, Bedford Park, IL, USA

P1-123 Surface Pasteurization of Post-harvest Raw Whole Onions to Eliminate *Listeria* Contamination Prior to Further Processing — MANISH ARYAL, Peter Muriana, Oklahoma State University, Stillwater, OK, USA

P1-124 Kinetic Inactivation of Foodborn Pathogens and Model Viruses in Milk Using UV-C Irradiation — DANIELLE GUNTER-WARD, Ankit Patras, Manreet Bhullar, Agnes Kilanzo-Nthenge, Bharat Pokharel, Michael Sasges, Tennessee State University, Nashville, TN, USA

P1-125 Study of Inactivation Effect of *Cronobacter sakazakii* on Nonfat Milk Powder — DONGJIE CHEN, University of Minnesota, St. Paul, MN, USA

P1-126 Inactivation of *Clostridium sporogenes* Spores in Buffer and Coconut Water Using UV-C Irradiation — SUDHEER KUMAR YANNAM, Ankit Patras, Yvonne Myles, Michael Sasges, Tennessee State University, Nashville, TN, USA

P1-127 Assessing the Efficacy of Microwave on the Inactivation of *Bacillus coagulans* Spores in Coconut Water — RAQUEL OM PINTO, Renata B Nascimento, Cynthia J. Kunigk, Luiz Alberto Jermolovicius, Mariza Landgraf, University of São Paulo, São Paulo, Brazil

Blue Text – Developing Scientist Competitor Green Text – Undergraduate Student Competitor

P1-128 Withdrawn

P1-129 Utilization of Bioindicators to Validate Thermal Processes: Case Study Example for Small Canning Processors — FELIX BARRON, Philip Pstrak, Clemson University, Clemson, SC, USA

P1-130 Fabrication of Nano-engineered Stainless Steel to Prevent Biofilm Formation by Foodborne Pathogens — GAHEE BAN, Jaclyn Lee, Yong Li, Soojin Jun, University of Hawaii, Honolulu, HI, USA

P1-131 Application of Elevated Hydrostatic Pressure for Inactivation of Wild-type and Rifampicin-resistant Phenotypes of *Cronobacter sakazakii* — ELEONORA TROYANOVSKAYA, Abimbola Allison, Shahid Chowdhury, Aliyar Fouladkhah, Public Health Microbiology Laboratory, Tennessee State University, Nashville, TN, USA

P1-132 Efficacy of Plasma Generated Novel Sanitizers in Egg Washing — SHRUTHI LAKSHMI NARASIMHAN, Shardul Dabir, Deepti Salvi, Donald W. Schaffner, Mukund V. Karwe, Rutgers University, New Brunswick, NJ, USA

P1-133 Antimicrobial Efficacy of Radiant Catalytic Ionization against Shiga Toxin-producing *Escherichia coli* on Inoculated Beef — XIANG YANG, Norasak Kalchayanand, Keith Belk, Tommy Wheeler, University of California-Davis, Davis, CA, USA

P1-134 Evaluation of *Enterococcus faecium* Nrrl B-2354 as Surrogate for *Salmonella* for Pasteurization Processes of Raisin — ERDOGAN CEYLAN, Yvette Avina, Joe Leon, Merieux NutriSciences, Crete, IL, USA

Modelling and Risk Assessment

P1-135 Modeling the Effect of Thermal Stress on the Lag Phase of *Bacillus cereus* Strains in Reconstituted Infant Formulae — NATHÁLIA B. SILVA, Bruno A. M. Carciofi, Gláucia M. F. Aragão, Jozsef Baranyi, Mariem Ellouze, UFSC - Universidade Federal de Santa Catarina, Florianópolis, Brazil

P1-136 Tracking Contamination through Ground Beef Production and Identifying Points of Recontamination Using a Novel Green Fluorescent Protein (GFP) Expressing, *Escherichia coli* O103, Non-pathogenic Surrogate — MICK BOSILEVAC, Brandon Luedtke, Rong Wang, Yemi Ogunrinola, U.S. Department of Agriculture–ARS, Clay Center, NE, USA

P1-137 Quantitative Microbiological Risk Assessment of *Campylobacter* spp. on Processed Ground Meat Products in S. Korea — JEEYEON LEE, Hanna Yoo, Heeyoung Lee, Ki Sun Yoon, Kun-Ho Seo, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P1-138 Mathematical Model to Describe *Campylobacter* Survival in Processed Ground Meat Products — JEEYEON LEE, Hanna Yoo, Heeyoung Lee, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P1-139 Mathematical Models to Describe Kinetic Behavior of *Campylobacter jejuni* in Dried Meat Products — JIMYEONG HA, Sejeong Kim, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P1-140 Quantitative Microbial Risk Assessment of *Campylobacter* spp. on Various Jerky — JIMYEONG HA, Sejeong Kim, Ki Sun Yoon, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P1-141 A Novel Mathematical Model to Study Antimicrobial Interactions against *Campylobacter* spp. — MOHAMMED HAKEEM, Khalid Asseri, Xiaonan Lu, University of British Columbia, Vancouver, BC, Canada

P1-142 Quantitative Risk Assessment of *Listeria monocytogenes* in Ready-to-Eat Fish Products — PETRA PASONEN, Jukka Ranta, Pirkko Tuominen, Finnish Food Safety Authority Evira, Risk Assessment Research Unit, Helsinki, Finland

P1-143 Modeling the Growth of *Listeria monocytogenes* in Cooked Deli Turkey Breast as a Function of a Clean Label Antimicrobial, Product pH, Moisture, and Salt — SUBASH SHRESTHA, Oscar Esquivel, Russ Lanzarth, Jerry Erdmann, Cargill Inc., Wichita, KS, USA

P1-144 Microbiological Survey of Not-Ready-to-Eat Frozen Foods — WEI CHEN, Loralyn Ledenbach, Joseph Meyer, Kurt Deibel, Wendy McMahon, Merieux NutriSciences, Crete, IL, USA

P1-145 Fates of *Clostridium perfringens* in Marinated Steamed Pig Trotter under Changing Temperatures — HYEMIN OH, Heeyoung Lee, Hyun Jung Kim, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P1-146 Isolation and Serotyping of *Listeria monocytogenes* from Smoked Salmon, and Developing a Dynamic Model to Predict *L. monocytogenes* Survival in Smoked Salmon — HYEMIN OH, Hyun Jung Kim, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P1-147 Kinetic Behavior of *Escherichia coli* in Steamed Pig Feet — HYEMIN OH, Soomin Lee, Hyun Jung Kim, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P1-148 Quantitative Risk Model for Predicting *Mycobacterium avium* subsp. *paratuberculosis* Contamination in Bulk Tank Milk on Dairy Farms — SURABHI RANI, Abani Pradhan, University of Maryland, Hyattsville, MD, USA

P1-149 Growth and Enterotoxin Production of *Staphylococcus aureus* on Beef Jerky as a Function of Temperature — Gun Woo Nam, Yeon Ho Kim, YUN JIN LEE, Mi jin Kwon, Soo Hwan Seo, Jeong A Han, Ki Sun Yoon, Kyung Hee University, Seoul, South Korea

P1-150 Optimal Isothermal Data Collection Practices for Estimating Microbial Thermal Inactivation Parameters — IAN HILDEBRANDT, Bradley Marks, Michigan State University, East Lansing, MI, USA

P1-151 An Alternative Risk Ranking Method Based on Log Transformation for Ranking Produce-hazard Pairs — MIN LI, Moez Sanaa, Barbara Kowalcyk, Kostas Koutsoumanis, Arie Havelaar, University of Florida, Gainesville, FL, USA

P1-152 The Health-related Economic Burden of Foodborne Illness from Meat and Poultry — ROBERT SCHARFF, The Ohio State University, Columbus, OH, USA

P1-153 A Statistical Model to Determine the Thermal Inactivation of Three Heat-resistant Salmonellae in Liquid Egg Yolk — JOSHUA GURTLER, Hans Allender, Deana Jones, U.S. Department of Agriculture-ARS, Eastern Regional Research Center, Wyndmoor, PA, USA

P1-154 Survival of 22 Avirulent Strains of *Escherichia coli* and *Salmonella* spp. in Crop Soil with 10% Fast-pyrolysis Switchgrass Biochar, to Validate Surrogate Bacteria — JOSHUA GURTLER, Akwasi Boateng, Manan Sharma, Trevor Suslow, Xuetong Fan, Tony Jin, U.S. Department of Agriculture-ARS, Eastern Regional Research Center, Wyndmoor, PA, USA

P1-155 Survival of Osmotically Adapted and Non-adapted *Salmonella* spp. in Bakery Products Containing Different Sweet Fillings — IFIGENEIA MAKARITI, Anastasia Kapetanakou, Eleftheria Nazou, Panagiotis Skandamis, Agricultural University of Athens, Athens, Greece

P1-156 Impact of Exceptional Situations Occurring Prior to Microbial Reduction Treatment on the Risk of Human Salmonellosis Arising from the Consumption of Pistachios in the United States: A Quantitative Assessment — GORDON DAVIDSON, Sofia Santillana Farakos, Regis Pouillot, Rhoma Johnson, Judith Spungen, Insook Son, Nathan Anderson, Jane Van Doren, U.S. Food and Drug Administration, College Park, MD, USA

P1-157 A Dynamic Secondary Model to Describe Survival of *Salmonella* in Low-water Activity (a_w) Foods — Steven Duret, SOFIA SANTILLANA FARAKOS, Toluwanimi Ogungbesan, Ian Hildebrandt, Susanne Keller, U.S. Food and Drug Administration, College Park, MD, USA

P1-158 Evaluation of Different Animal Feces Levels on Contamination of Leafy Greens Using Sensitivity Analyses of a Mathematical System Model — ABHINAV MISHRA, Hao Pang, Robert Buchanan, Donald W. Schaffner, Abani Pradhan, University of Maryland, College Park, MD, USA

Sanitation and Hygiene

P1-159 Reality Check for Handwashing Practices and Guidance for Its Monitoring — NIRAJ SHRESTHA, Iryna Sybirtseva, Kayla Simon, Northland Laboratories, Northbrook, IL, USA

P1-160 NaCl Upregulates *Icaa* gene of *Staphylococcus aureus*, Increasing Biofilm Formation — SOOMIN LEE, Kyoung-Hee Choi, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P1-161 In Vitro and In Vivo Efficacies of Hand Sanitizers against Human Norovirus — BLANCA ESCUDERO-ABARCA, Lee-Ann Jaykus, Rebecca Goulter, North Carolina State University, Raleigh, NC, USA

P1-162 Effect of Disinfectants on the Biofilm Formation Capacity of *Listeria monocytogenes* Isolated from Ready-to-Eat (RTE) Meat Products — MAURICIO REDONDO, María Arias-Echandi, University of Costa Rica, San José, Costa Rica

P1-163 Sanitizing Effectiveness of Electrolyzed Water on *Listeria monocytogenes* and *Listeria innocua* and the Inactivation Mechanism Elucidated by ^{1}h NMR-based Metabolomics — QIN LIU, Ji'en Wu, Zhi Yang Lim, Hongshun Yang, National University of Singapore, Singapore, Singapore

P1-164 A Benchtop Drain System to Benchmark Efficacy of Chemicals in Drain Sanitation — Griffin Jadwin, ERIN DALMATA, Charles Giambrone, Rochester Midland Corp, Rochester, NY, USA

P1-165 Inactivation of *Salmonella enterica* on Food Contact Surfaces during Log, Stationary, and Long-term Survival (LTS) Phases — DORRA DJEBBI-SIMMONS, Wenqing Xu, Louisiana State University, Baton Rouge, LA, USA

P1-166 Efficacy Evaluation of Commercial Sanitizers on the Decontamination of *Salmonella* spp., *Escherichia coli* O157:H7, and *Listeria monocytogenes* in Irrigation Well and Pond Water — GANYU GU, Steve Rideout, Virginia Tech, Painter, VA, USA

P1-167 A Comparison of the Ability of Various Collection Solutions to Neutralize Residual Sanitizers from Environmental Surface Samples — N. Robert Ward, GEOFF BRIGHT, World Bioproducts, Bothell, WA, USA

P1-168 Chlorine-based Inactivation of *Escherichia coli* O157:H7: Impact of Residual-free Chlorine Content, Organic Load, Residence Time, and pH — ZI TENG, Yaguang Luo, Solmaz Alborzi, Bin Zhou, Boce Zhang, Patricia Millner, Qin Wang, University of Maryland, College Park, MD, USA

P1-169 Hydrogen Peroxide-based Disinfectants Inactivate Human Norovirus and Its Surrogate, Tulane Virus — Naim Montazeri, ERIC MOORMAN, Jeremy Faircloth, Emma Lepri, Lee-Ann Jaykus, North Carolina State University, Raleigh, NC, USA

P1-170 Understanding the Efficacy of Sodium Hypochlorite against Norovirus Epidemic Strain GII.4 Sydney — JUSTIN BRADSHAW, Lee-Ann Jaykus, North Carolina State University, Raleigh, NC, USA

P1-171 Efficacy and Stability of Disinfectant Solutions Applied to Papaya (*Carica papaya*) at Packing Facilities in Mexico — JORGE ADRIÁN MUNIZ FLORES, Jennifer A. Chase, Edward R. Atwill, Ma. Ofelia Rodríguez-García, Elisa Cabrera-Diaz, Universidad de Guadalajara, Guadalajara, Mexico

P1-172 Efficacy of Sanitizers in Inactivating Fecal Coliforms in Cell Cultures and on Coupons Made from Blueberry Contact Surface Materials — HIMABINDU GAZULA, Jinru Chen, University of Georgia, Griffin, GA, USA

P1-173 The Combined Effects of Physical Removal, Proper Cleaner Selection and Sanitizer on the Reduction of a *Pseudomonas aeruginosa* Biofilm — Igor Ignatovich, Joshua Luedtke, Oriana Leishman, TERESA PODTBURG, Ecolab Inc., St. Paul, MN, USA

P1-174 Selection of Alternative Indicators for Monitoring the Washing Effect of Salted Cabbages — EUNSOM CHOE, Sunghyuk Bang, Seulki Byeon, Gyiae Yun, Ki-Hwan Park, Chung-Ang University, Anseong, South Korea

Blue Text – Developing Scientist Competitor Green Text – Undergraduate Student Competitor

P1-175 Evaluating Current Industry Dry Cleaning Practice Using Vacuum with Regard to Food Allergens on Processing Surfaces — CHRISTOPHER WELLS, Sanghyup Jeong, Self, St. Johns, MI, USA

P1-176 Survival of *Listeria* sp. on 3M Condensation Management Tape and Its Potential Application in the Food Industry — Jayne Stratton, BISMARCK MARTINEZ, Andreia Bianchini, Steve Swanson, David Peterson, Kurt Halverson, University of Nebraska, Lincoln, NE, USA

P1-177 Withdrawn

P1-178 Cross-contamination of Human Pathogens from Pressed Paper and Bamboo Cutting Boards to Tomato and Kale — HOLLY PADEN, Kevin Mo, Kristin Motil, Sanja Ilic, Ohio State University, Columbus, OH, USA

P1-179 Histamine-related Hygienic Quality and Adulteration with Pork or Poultry in Commercial Dried Fish Floss Products — YUNG-HSIANG TSAI, Yi-Chen Lee, Hsien-Feng Kung, Pei-Hsiang Lee, National Kaohsiung Marine University, Kaohsiung City, Taiwan

P1-180 Food Deserts and Food Safety: An Examination of the Microbial Profile of Leafy Greens from the Houston Area High-income and Low-income Grocery Stores — KRISTINA INFANTE, Sujata A. Sirsat, University of Houston, Conrad N. Hilton College of Hotel and Restaurant Management, Houston, TX, USA

Antimicrobials

P1-181 Antibacterial Efficacy of Eugenol against *Escherichia coli* O157:H7 and *Salmonella enterica* in Unpasteurized Apple Juice Produced in Juice Bars and Held at 4ºC — ARMITRA JACKSON-DAVIS, Aubrey Mendonca, Floyd Woods, Salam Khan, Alabama A&M University, Madison, AL, USA

P1-182 Effectiveness of Citric/Lactic Acid Solution Alone or Combined with Added Linoleic Acid for Inhibiting *Salmonella enterica* and *Escherichia coli* O157:H7 on Chicken Skin — Loutrina Staley, ARMITRA JACKSON-DAVIS, Aubrey Mendonca, Leopold Nyochembeng, Ernst Cebert, Alabama A&M University, Madison, AL, USA

P1-183 Molecular Characterization of Antimicrobial-resistant Non-typhoidal *Salmonella enterica* Serovars from Imported Food Products — ASHRAF KHAN, Dongryeoul Bae, U.S. Food and Drug Administration/NCTR, Jefferson, AR, USA

P1-184 Antimicrobial Resistance of *Salmonella* spp. Isolated from Retail Beef and Beef Cattle during Harvesting in Honduras — DIEGO CASAS, Brenda Inestroza, Alejandra Ramirez, Mindy Brashears, Mark Miller, Alejandro Echeverry, Texas Tech University, Lubbock, TX, USA

P1-185 Prevalence of Resistant *Salmonella* spp. Isolated from Pasteurized Cow Milk and Its Related Samples in the Tamale Metropolis of Ghana — ADZITEY FREDERICK, Patricia Asiamah, Courage Kosi Setsoafia Saba, University for Development Studies, Tamale, Ghana

P1-186 Synergistic Effect of X-Ray Irradiation and Sodium Hypochlorite or Chlorine Dioxide against *Salmonella* Typhimurium Biofilm on the Quail Eggshells — SOO-JIN JUNG, Shin Young Park, Hye-Ran Cho, Do Hyoung Kim, Sang-Do Ha, Advanced Food Safety Research Group, Brain Korea 21 Plus, Chung-Ang University, Ansung, South Korea

P1-187 Effectiveness of Yogurt and Kefir in Reducing *Salmonella* spp. Numbers on Chicken Skins — HUSNU SAHAN GURAN, Dicle University, Diyarbakir, Turkey

P1-188 Use of LED Ultraviolet (UV) Light for the Reduction of *Salmonella* sp. on Surface of Chicken and Food Contact Surfaces — M. ALEXANDRA CALLE, Ilan Arvelo, Brayan Montoya, Jon Thompson, Mindy Brashears, Texas Tech University, Lubbock, TX, USA

P1-189 Reduction of *Salmonella* on a Meat-based Pet Kibble Using *Lactobacillus salivarius* (L28) — ADAM CASTILLO, David Campos, Jorge Franco, Mindy Brashears, Texas Tech University, Lubbock, TX, USA

P1-190 Presence of *Bla*CTX-M-8 in *Salmonella* Infantis Isolated from Poultry at Slaughterhouse in Brazil — DANIEL MONTE, Quezia Moura, Andressa Mem, Nilton Lincopan, Mariza Landgraf, University of São Paulo, São Paulo, Brazil

P1-191 Antimicrobial Effectiveness of Eugenol or Geraniol Alone or Combined against *Escherichia coli* O157:H7 and *Salmonella enterica* in Pineapple Juice Held at 4°C — Aubrey Mendonca, EMALIE THOMAS-POPO, Angela Shaw, Samuel Kiprotich, Floyd Woods, Armitra Jackson-Davis, Iowa State University, Ames, IA, USA

P1-192 Effect of Essential Oils and Their Active Components on *Salmonella enterica* Serovar Newport–Inactivation or Induction into the Viable but Nonculturable (VBNC) State? — AISHWARYA RAO, University of Arizona, Tucson, AZ, USA

P1-193 Efficacy of *Jatropha curcas* Plant Extract against the Survival of *Salmonella* Enteritidis — AUTUMN WOODS, Armitra Jackson-Davis, Ernst Cebert, Arthur Hinton, Jr., Lamin Kassama, Alabama A&M University, Huntsville, AL, USA

P1-194 Cinnamaldehyde Enhances the Killing Effect of High-pressure Processing against *Escherichia coli* O157:H7 and *Salmonella enterica* in Refrigerated (4ºC) Carrot and Berry Juices — David Manu, AUBREY MENDONCA, Aura Daraba, James Dickson, Joseph Sebranek, Angela Shaw, Alan DiSpirito, Iowa State University, Ames, IA, USA

P1-195 Antibacterial Efficacy of Geraniol against *Escherichia coli* O157:H7 and *Salmonella enterica* in Carrot Juice and a Mixed Berry Juice Held at 4°C — AUBREY MENDONCA, David Manu, Fei Wang, Aura Daraba, Angela Shaw, Iowa State University, Ames, IA, USA

P1-196 Inhibition of *Salmonella* spp. and *Escherichia coli* by Lentil Protein Edible Films with Added Natural Antimicrobials — RAUL AVILA SOSA, Carlos Enrique Ochoa-Velasco, Addí Rhode Navarro-Cruz, Obdulia Vera-López, Paola Hernández-Carranza, Claudia Montalvo Paquini, Martin Alvaro Lazcano-Hernandez, Benemérita Universidad Autónoma de Puebla, Puebla, Mexico

P1-197 Antimicrobial Activity of White Mustard Essential Oil on *Salmonella* spp. in Vitro and in Ground Chicken — ADAM PORTER, Emefa Monu, Auburn University, Auburn, AL, USA

P1-198 Essential Oil Nanoemulsions as Post-harvest Wash Solutions on Snacking Peppers — Laurel Dunn, Marion Harness, Dara Smith, Stuart Gorman, ALEXIS HAMILTON, P. Michael Davidson, Qixin Zhong, Faith Critzer, University of Tennessee, Knoxville, TN, USA

P1-199 Antibiotic-resistant *Salmonella* spp. from Flies of Cattle Source — YUMIN XU, Sha Tao, Mark Harrison, Jinru Chen, University of Georgia, Griffin, GA, USA

P1-200 Slow-release Chlorine Dioxide Gas Treatment to Reduce *Salmonella* Contamination on Spices for Small-scale Processors — CHASE GOLDEN, Mark Berrang, William Kerr, Mark Harrison, University of Georgia, Athens, GA, USA

P1-201 SalmoFresh™ Effectiveness as a Bio-control Method to Eliminate *Salmonella* Prevalence on Romaine Lettuce, Mungbean Sprouts, and Mungbean Seeds — XUAN ZHANG, Yan Dong Niu, Kim Stanford, Richard Holley, Tim McAllister, Claudia Narvaez, University of Manitoba, Winnipeg, MB, Canada

P1-202 Antimicrobial Activity of Curcumin under UVA Light Radiation: Application to Fresh Produce Sanitation — ERICK FALCAO DE OLIVEIRA, Juliano Tosati, Andrea Cossu, Rohan Tikekar, Alcilene Monteiro, Nitin Nitin, University of California-Davis, Davis, CA, USA

P1-203 Inhibitory Effects of *Mentha piperita L.* Essential Oil against *Escherichia coli* O157:H7 and *Salmonella* Enteritidis PT4 in Fruit Juices — MARCIANE MAGNANI, Rayssa Juliane de Carvalho, Larissa de Fátima Romão da Silva, Maísa Gomes Chaves, Evandro Leite de Souza, Geany Targino de Souza, Federal University of Paraiba, Joao Pessoa, Brazil

P1-204 Antimicrobial Properties of High Molecular Weight, Water Soluble Chitosan in Gram Negative Foodborne Pathogens — NANCY RUBIO, Rita Quintero, Jose Fuentes, Marlene Janes, Witoon Prinyawiwatkul, Louisiana State University, Baton Rouge, LA, USA

P1-205 Determination of the State of *Escherichia coli* O157:H7 Cells Treated with Electrolyzed Oxidizing (EO) Water Using Flow Cytometry — G. KWABENA AFARI, Yen-Con Hung, University of Georgia, Griffin, GA, USA

P1-206 Development of Predictive Reduction Models for *Escherichia coli* as a Function of Sodium Dichloroisocyanurate and Chlorine Dioxide Concentration and Exposure Time — SO-JEONG YOON, Shin Young Park, Kye-Hwan Byun, Hyung-Suk Kim, Yong-Soo Kim, Sang-Do Ha, Advanced Food Safety Research Group, Brain Korea 21 Plus, Chung-Ang University, Ansung, South Korea

P1-207 Antimicrobial-resistance Patterns of Generic *Escherichia coli* Isolated from Feedlot Cattle Feces after Feeding Direct-fed Microbials in Diets with and without Tylosin During Finishing — ANDREA ENGLISH, Alejandro Echeverry, Jhones Sarturi, Kendra Nightingale, Tosha Opheim, Mark Miller, Mindy Brashears, Texas Tech University, Lubbock, TX, USA

P1-208 Polyphenolic Compounds Alter Viability, Swarming Motility and Biofilm Formation of Pathotypes of *Escherichia coli* — CAROLINA GIL, Santos Garcia, Norma Heredia, Jorge Dávila-Aviña, Luisa Solís-Soto, Universidad Autonoma de Nuevo Leon, San Nicolas, Mexico

P1-209 Effectiveness of Individual and Combined Antimicrobial Spray Interventions Commonly Used on Chilled Beef Subprimals — JENNIFER ACUFF, Matthew Krug, Daniel Vega, Nicholas Sevart, Sarah Jones, Amanda Wilder, Keyla Lopez, Minto Michael, Christopher Vahl, Gary Acuff, Harshavardhan Thippareddi, Randall Phebus, Kansas State University, Manhattan, KS, USA

P1-210 Efficacy of an Ambient Water Wash, Hot Water Wash, and Application of Three Antimicrobial Sprays Using a Three-stage Commercial Carcass Washing Cabinet for Reducing Shiga Toxin-producing *Escherichia coli* Contamination on Beef Carcasses — MATTHEW KRUG, Jennifer Acuff, Nicholas Sevart, Minto Michael, Daniel Vega, Christopher Vahl, Gary Acuff, Harshavardhan Thippareddi, Randall Phebus, Kansas State University, Manhattan, KS, USA

P1-211 Efficacy of Peracetic Acid Washes Applied at Increasing Concentrations to Control Shiga Toxin-producing *Escherichia coli* Contamination on Chilled Beef Subprimals — MATTHEW KRUG, Sarah Jones, Nicholas Sevart, Jennifer Acuff, Amanda Wilder, Minto Michael, Christopher Vahl, Randall Phebus, Kansas State University, Manhattan, KS, USA

P1-212 Efficacy of Lactic Acid Washes Applied at Increasing Concentrations to Control Shiga Toxin-producing *Escherichia coli* Contamination on Chilled Beef Subprimals — MATTHEW KRUG, Ian Patterson, Nicholas Sevart, Jennifer Acuff, Minto Michael, Christopher Vahl, Randall Phebus, Kansas State University, Manhattan, KS, USA

P1-213 Prevalence and Mechanism of Fluoroquinolone Resistance in *Escherichia coli* Isolated from Swine Feces in Korea — KUN TAEK PARK, Yoon Sung Hu, Young Kyung Park, Sook Shin, Yong Ho Park, Seoul National University, Seoul, South Korea

P1-214 Low Temperature Inactivation Kinetics to Determine Bacteriophage Shelf-life Stability — JOYJIT SAHA, Pushpinder Kaur Litt, Divya Jaroni, Oklahoma State University, Stillwater, OK, USA

P1-215 Bacteriophage Fitness Indicated by Modeled Adsorption Efficacy — JOYJIT SAHA, Pushpinder Kaur Litt, Divya Jaroni, Oklahoma State University, Stillwater, OK, USA

P1-216 Effect of pH on the Fate of Novel Bacteriophages Targeting Non-O157 Shiga-toxigenic *Escherichia coli* — JOYJIT SAHA, Pushpinder Kaur Litt, Divya Jaroni, Oklahoma State University, Stillwater, OK, USA

P1-217 Efficacy of Chlorinated Nanobubble Solutions to Control Shiga Toxin-producing *Escherichia coli*, *Salmonella* spp., and Non-pathogenic *Escherichia coli* Surrogates in Chilled Solutions — AMANDA WILDER, Austin McDaniel, Randall Phebus, Christopher Vahl, Kansas State University, Manhattan, KS, USA

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P1-218 Biocontrol of Shiga-toxigenic *Escherichia coli* Using Lytic Phages on Mung Beans and Germinated Sprouts — YIRAN DING, Yan Dong Niu, Kim Stanford, Richard Holley, Tim McAllister, Claudia Narvaez, University of Manitoba, Winnipeg, MB, Canada

P1-219 Detection Extraction and Evaluation of Phage Depolymerase Enzyme against Shiga-toxigenic *Escherichia coli* Biofilms — BEATA MACKENROTH, Pushpinder Kaur Litt, Divya Jaroni, Oklahoma State University, Stillwater, OK, USA

P1-220 A Survey of Antimicrobial Resistance among Dairy Cattle in Kosovo — SULAIMAN ALJASIR, Jeffrey Chandler, Afrim Hamidi, Driton Sylejmani, Baolin Wang, Katherine Schwam, Bledar Bisha, University of Wyoming, Laramie, WY, USA

P1-221 Extended-spectrum β-Lactamase Producing *Escherichia coli* in Feed, Manure, and Soil from the Poultry Farm Environment — AGNES KILONZO-NTHENGE, Samuel Nahashon, Siqin Liu, Tennessee State University, Nashville, TN, USA

P1-222 Antibacterial Activity of D-Tryptophan against *Salmonella enterica* and *Escherichia coli* O157:H7 under Osmotic Stress and Its Application to Oyster Preservation — JIAN CHEN, Shuso Kawamura, Shigenobu Koseki, Hokkaido University, Sapporo, Japan

P1-223 Prevalence of Antibiotic-resistant Enteric *Escherichia coli* Isolated from Fecal Samples of Food Handlers in Qatar — WALID ALALI, Nahla Eltai, Marwan Abou-Madi, Hamad Bin Khalifa University, Doha, Qatar

P1-224 Prevalence and Characterization of Antimicrobial-resistance Patterns of *Campylobacter* Associated with Poultry — MATTHEW BAILEY, Rhonda Taylor, Jagpinder Brar, Estefania Novoa Rama, Manpreet Singh, Purdue University, West Lafayette, IN, USA

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

Notes

TUESDAY POSTERS
10:00 AM – 6:00 PM

P2 **Food Chemical Hazards and Food Allergens**
Food Toxicology
Meat, Poultry and Eggs
Epidemiology
Retail and Food Service Safety
Communication Outreach and Education
Molecular Analytics Genomics and Microbiome
Laboratory and Detection Methods
Dairy
Tampa Convention Center, Exhibit Hall

P2-01 through P2-119 – Authors present
10:00 a.m. – 11:30 a.m. and 5:00 p.m. – 6:00 p.m.

P2-120 and above – Authors present
2:00 p.m. – 3:30 p.m. and 5:00 p.m. – 6:00 p.m

Food Chemical Hazards and Food Allergens

P2-01 Detection of Antibiotic Residues in Poultry Feathers and Claws by Liquid Chromatography Tandem Mass Spectrometry — JAVIERA CORNEJO, Ekaterina Pokrant, Ricardo Riquelme, Constanza Avello, Karina Yevenes, Aldo Maddaleno, Carolina Araya-Jordan, Betty San Martin, Universidad de Chile, Santiago, Chile

P2-02 Determination of Aflatoxin B1 in Vegetable Oils Using Low-temperature Clean-up Combined with Immunomagnetic Solid-phase Extraction — Xi Yu, HONGSHUN YANG, National University of Singapore, Singapore, Singapore

P2-03 Occurrence and Factors Associated with Aflatoxin M_1 Breast Milk Contamination in Lebanon — HUSSEIN F. HASSAN, Maya Bassil, Jomana El Aridi, Joelle Abi Kharma, Farah Daou, Lebanese American University, Beirut, Lebanon

P2-04 *Lactobacillus rhamnosus* GG Inhibits BID-dependent Apoptosis in Human Hepatocellular Carcinoma Cells Exposed to Patulin — BERNICE KARLTON-SENAYE, Rishipal Bansode, Priscilla Randolph, Leonard Williams, North Carolina A&T State University Center of Post-harvest Technologies (CEPHT), Kannapolis, NC, USA

P2-05 Assessment of Aflatoxin M_1 and Heavy Metals in Human Milk Samples from Pakistan — AMIR ISMAIL, Sarah Khan, Muhammad Riaz, Saeed Akhtar, Yun Yun Gong, Bahauddin Zakariya University, Multan, Pakistan

P2-06 Assessment of Selected Metal Concentrations in Shelf-stable Commercial Apple Juices and Fresh Apple Ciders in Michigan — LOAN CAO, Leslie Bourquin, Michigan State University, East Lansing, MI, USA

P2-07 Detection of Nickel, Copper and Lead in Food Using Portable XRF — CONNOR SULLIVAN, Pradeep Kurup, Andre Senecal, University of Massachusetts Lowell, Lowell, MA, USA

P2-08 Development of a Competitive ELISA Method for the Detection and Characterization of Gluten in Fermented and Hydrolyzed Food Products — RAKHI PANDA, Eric Garber, U.S. Food and Drug Administration, College Park, MD, USA

P2-09 Detection of Gluten in a Barley-Malt Beer Produced with and without a Prolyl Endopeptidase Enzyme — Magdalena Naziemiec, Wanying Cao, Liyun Zhang, Nicholas Smith, Matthew Arbuckle, Arnoldo Lopez-Hernandez, Lanlan Yin, Katherine Fiedler, BINAIFER BEDFORD, Lauren Jackson, U.S. Food and Drug Administration, Bedford Park, IL, USA

P2-10 Development of a Rapid and Nontoxic Procedure for Extraction and Detection of Gluten from Processed Foods — LeAnna Willison, Henry Grise, Ken Roux, JASON ROBOTHAM, BioFront Technologies, Tallahassee, FL, USA

P2-11 Review of Recent Advances in the Use of Proficiency Test Data from Fapas — Mark Sykes, JASON ROBOTHAM, Craig Eaton, BioFront Technologies, Tallahassee, FL, USA

P2-12 Characterization of the Monotrace Gluten Sandwich ELISA, a Specific and Sensitive Assay for the Detection of Gluten within Processed Foods and Unprocessed Ingredients — HENRY GRISE, LeAnna Willison, Ken Roux, Jason Robotham, BioFront Technologies, Tallahassee, FL, USA

P2-13 Real-time PCR for the Detection of Allergenic Peanut and Tree Nuts — ANNE EISCHEID, Caroline Puente-Lelievre, U.S. Food and Drug Administration, College Park, MD, USA

P2-14 A Sensitive and Ara h2 Specific Competitive ELISA for the Detection of Peanut in Processed Foods — SHYAMALI JAYASENA, Steve L. Taylor, Joseph Baumert, University of Nebraska-Lincoln, Lincoln, NE, USA

Food Toxicology

P2-15 Proteomic Identification of Marine Protein Toxin — TAI-YUAN CHEN, Yu-Huai Chang, Deng-Fwu Hwang, National Taiwan Ocean University, Keelung, Taiwan

P2-16 Unravelling the Impact of the Bacterial Depsipeptide Cereulide on the Mitochondrial Function of Caco-2 and HepG2 Cells — Marlies Decleer, Sarah De Saeger, ANDREJA RAJKOVIC, Ghent University, Ghent, Belgium

P2-17 Antibiotic Contaminations of Locally Formulated Cat Fish Feeds from Southwestern Nigeria — MOMODU OLORUNFEMI, Adegboyega Odebode, Ifeoluwa Adekoya, Patrick Njobeh, Rui Krause, University of Ibadan, Ibadan, Nigeria

P2-18 Mitigation of Acrylamide in Foods: An African Perspective — OLUWAFEMI ADEBO, Eugenie Kayitesi, Janet Adebiyi, Sefater Gbashi, Judith Phoku, Patrick Njobeh, University of Johannesburg, Johannesburg, South Africa

Meat, Poultry and Eggs

P2-19 Evaluation of the Microbiological Contamination Levels of Meat Markets Varying by Facility, Processing Temperature, and Market Type — IL-BYEONG KANG, Dong-Hyeon Kim, Dana Jeong, Hong-Seok Kim, Young-Ji Kim, Hyunsook Kim, Joo-Yean Lee, Kun-Ho Seo, Konkuk University, Seoul, South Korea

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P2-20 Antimicrobial-resistance Patterns of *Salmonella* Isolated from Small-ruminant Carcasses in the United States and Bahamas — KEELYN HANLON, Mark Miller, Mindy Brashears, Texas Tech University, Lubbock, TX, USA

P2-21 *Salmonella* Heidelberg Food Isolates Have Enhanced Attachment to Abiotic Surfaces under Stress Conditions — ALYSSA WEST, Andrea Ray, Haley Oliver, Purdue University, West Lafayette, IN, USA

P2-22 Effects of Boning Time on Bacterial Load of Horse Meat — BRIAN WALKER, Heather Bruce, Lynn McMullen, University of Alberta, Edmonton, AB, Canada

P2-23 Risks and Regulatory Approaches Associated with Ready-to-Eat Raw Meat Dishes: A Literature Review and Jurisdiction Scan — Naghmeh Parto, JINHEE KIM, Ray Copes, Public Health Ontario and University of Toronto, Toronto, ON, Canada

P2-24 Comparison of Neutralizing Buffered Peptone Water and Dey/Engley Broth in the Recovery of *Salmonella enterica* from Broiler Carcass Rinsates — Igor Ignatovich, TERESA PODTBURG, Oriana Leishman, Scott Steinagel, Ecolab Inc., St. Paul, MN, USA

P2-25 Validation of Lactic Acid as an Effective Antimicrobial Intervention for Beef Variety Meats — BYRON CHAVES, Siroj Pokharel, Mark Miller, Mindy Brashears, Texas Tech University, Lubbock, TX, USA

P2-26 Starter Culture to Inhibit Pore Formation by Heterofermentative Bacteria in Cooked Ham — Jeanne Margerin, Zdenek Cech, VERONIQUE ZULIANI, CHR HANSEN, Arpajon, France

P2-27 A Multiple Hurdle Carcass Washing Protocol for Inactivating Shiga Toxin-producing *Escherichia coli* on Beef — PRASHANT SINGH, Yen-Con Hung, University of Georgia, Griffin, GA, USA

P2-28 Heat Resistance of *Escherichia coli* and *Salmonella enterica* in Ground Beef — BRAD WEBSTER, Michael Gänzle, Lynn McMullen, University of Alberta, Edmonton, AB, Canada

P2-29 Evaluating the Potential Nonthermal Microwave Effects of Microwave Irradiation Treatments for Shiga Toxin-producing *Escherichia coli* Decontamination of Fresh and Frozen Beef Intended for Intact and Nonintact Beef Products — DARVIN CUELLAR, Don Stull, J. Chance Brooks, Marcos X. Sanchez-Plata, Mindy Brashears, Alejandro Echeverry, Texas Tech University, Lubbock, TX, USA

P2-30 Pathogen Reductions in Fermented Dry Sausages Using a Low-temperature Heat Treatment — SAMANTHA MCKINNEY, Catherine Cutter, Nancy Ostiguy, Jonathan Campbell, Penn State University, University Park, PA, USA

P2-31 The Effect of Dipping in Organic Acids for Short or Extended Times on Reduction of *Escherichia coli* Surrogates on Pieced Beef Clods — ASHLEY MCCOY, Dennis Burson, University of Nebraska-Lincoln, Lincoln, NE, USA

P2-32 Application of Bacteriophages to Reduce Shiga Toxin-producing *Escherichia coli* on Beef Cattle Hide Surfaces — TAMRA TOLEN, Yicheng Xie, Thomas Hairgrove, Jason Gill, Thomas Taylor, Texas A&M University, College Station, TX, USA

P2-33 Neutralization of Commercial Broiler Carcass Antimicrobials by Phosphate Buffered Saline, Buffered Peptone Water, and Neutralizing Buffered Peptone Water — JENNIFER VUIA-RISER, Christine Alvarado, Matt Taylor, Texas A&M University, College Station, TX, USA

P2-34 Validation of a Chicken Surface Methodology to Assess the Performance of Antimicrobial Interventions on Chicken Parts — ALEJANDRA RAMIREZ-HERNANDEZ, Mindy Brashears, Marcos X. Sanchez-Plata, Texas Tech University, Lubbock, TX, USA

P2-35 Validation of Fermentation, Drying, and Storage Parameters for Control of Shiga Toxin-producing *Escherichia coli*, *Salmonella* spp., and *Listeria monocytogenes* in Fuet, a Traditional Spanish Sausage — ANNA PORTO-FETT, Esteve Sargatal, Laura Shane, Lianna McGeary, Bradley Shoyer, Laura Stahler, Manuela Osoria, John Luchansky, U.S. Department of Agriculture-ARS-ERRC, Wyndmoor, PA, USA

P2-36 Biofilm Forming Capabilities of Shiga-toxigenic *Escherichia coli* Recovered from Cow/Calf Operations in Oklahoma and Louisiana — TONY KOUNTOUPIS, Pushpinder Kaur Litt, Radhika Kakani, Divya Jaroni, Oklahoma State University, Stillwater, OK, USA

P2-37 The Effect of Preharvest Feeding Strategies on the Prevalence of *Salmonella enterica* in the Feces and Trimmings of Feedlot Cattle — KATLYN HOLZER, Carla Weissend, Jennifer Martin, Kate Huebner, Ifigenia Geornaras, Paul Morley, Keith Belk, Colorado State University, Ft Collins, CO, USA

P2-38 *Salmonella* and *Campylobacter* Prevalence in Broiler Ceca and on Ready-to-Cook Carcasses Processed at a Pilot Mobile Poultry Processing Unit — KA WANG LI, Lacey Lemonakis, Brian Glover, Cangliang Shen, West Virginia University, Morgantown, WV, USA

P2-39 Isolation and Characterization of Extended-spectrum Beta-lactamase-producing *Escherichia coli* from Beef Cattle Farms — SHINYOUNG LEE, Lin Teng, JaeHyun Lim, JungHoon Park, KwangCheol Casey Jeong, University of Florida, Gainesville, FL, USA

P2-40 Near-neutral Electrolyzed Oxidizing Water Applied as Postharvest Intervention to Control *Escherichia coli* O157:H7, *Salmonella* Enteritidis and *Yersinia enterocolitica* in Fresh Pork — DONG HAN, Yen-Con Hung, Luxin Wang, Auburn University, Auburn, AL, USA

P2-41 Withdrawn

P2-42 Effect of *Salmonella* Vaccine Strains on Broiler Chicken Cecal Microbiota — SI HONG PARK, Sun Ae Kim, Peter Rubinelli, Christopher Baker, Steven Ricke, University of Arkansas, Fayetteville, AR, USA

TUESDAY

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P2-43 Effect of Sodium Chloride on the Heat Resistance of Enterohemorrhagic *Escherichia coli* in Ground Beef — ZIYI HU, Alina Rohde, Jiayue Chen, Lynn McMullen, Michael Gänzle, University of Alberta, Edmonton, AB, Canada

P2-44 Characterization of Attachment Differences of Shiga Toxin-producing *Escherichia coli* to Prechill and Postchill Beef Tissues — BENNETT UHL, Daniel Unruh, Randall Phebus, Sara Gragg, Kansas State University, Olathe, KS, USA

P2-45 Transfer of *Listeria innocua* Biofilm Cells and Regrowth in Duck Meat — Hye Ri Jeon, MIJIN KWON, Hye Jin Moon, Ki Sun Yoon, Kyung Hee University, Seoul, South Korea

P2-46 Effectiveness of Sanitizer D7™ against *Escherichia coli* O157:H7 and *Salmonella* Biofilms — RONG WANG, Norasak Kalchayanand, Dayna Brichta-Harhay, You Zhou, U.S. Department of Agriculture-ARS, Clay Center, NE, USA

P2-47 Molecular Genotyping and Biofilm Formation of Enterotoxigenic *Clostridium perfringens* — OK KYUNG KOO, Wensi Hu, Gyeongsang National University, Jinju, South Korea

P2-48 Distribution and Virulence of *Salmonella* spp. Obtained from a Pork Chain Production in Brazil — Frederico Germano Piscitelli Alvarenga Lanna, Bruna Torres Furtado Martins, Danilo Augusto Lopes Silva, Clarisse Vieira Botelho, Juliana Libero Grossi, Ricardo Seiti Yamatogi, Luciano dos Santos Bersot, LUIS NERO, Universidade Federal de Viçosa, Vicosa, Brazil

P2-49 Tracking of *Salmonella* spp. Contamination Routes in a Pork Production Chain in Brazil — Luciano dos Santos Bersot, Valéria Cavicchioli, Raquel Burin, Cibeli Viana, José Paes de Almeida Nogueira Pinto, LUIS NERO, Maria Teresa Destro, Universidade Federal de Viçosa, Vicosa, Brazil

P2-50 Isolation and Comparison of *Escherichia coli* and *Enterococcus* spp. from Two Poultry Management Systems — SHIVARAMU KEELARA, Wenhua Liu, Rebecca Jones, Megan.E. Jacob, Anna.T. Rogers, Michael.P Martin, Paula.J. Fedorka-Cray, North Carolina State University, Raleigh, NC, USA

P2-51 *Arcobacter* Isolation from Minced Beef Samples in Costa Rica — MARIA LAURA ARIAS, Mauricio Redondo, Oscar Cordoba, Evelyn Carolina Chaves Ulate, Eduardo Castro-Arias, Universidad de Costa Rica, San Jose, Costa Rica

P2-52 Prevalence and Serotyping of *Salmonella* Isolated from Fresh Ground Meats Obtained during a Year-long Surveillance Study of Retail Meat Samples Collected in Eastern South Dakota — ALAN ERICKSON, Debra Murray, Laura Ruesch, Milton Thomas, Zachary Lau, Joy Scaria, South Dakota State University, Brookings, SD, USA

P2-53 Phage-based Treatment as an Environmental Control Strategy for *Listeria* spp. in a Meat Processing Facility — AJITA SUNDARRAM, Shelby Meyer, Paul Ebner, Haley Oliver, Purdue University, West Lafayette, IN, USA

P2-54 Prevalence and Characterization of Antimicrobial-resistant *Campylobacter* Isolated from Eggshells in Different Commercial Laying Hen Housing Systems — ESTEFANIA NOVOA RAMA, Matthew Bailey, Deana Jones, Richard Gast, Kenneth Anderson, Jagpinder Brar, Rhonda Taylor, Haley Oliver, Manpreet Singh, Purdue University, West Lafayette, IN, USA

P2-55 Isolation and Characterization of Shiga Toxin-producing *Escherichia coli* in Ground Beef from Santiago, Chile — Daniel Rivera, Maria Fernanda Jimenez, Leonela Diaz, Paola Antivero, Paola Navarrete, Angelica Reyes-Jara, MAGALY TORO, INTA, University of Chile, Santiago, Chile

P2-56 Relatedness of Amylase-producing, Endospore-forming Bacteria from the Alimentary Tract of Commercially Processed Broilers — ARTHUR HINTON, JR., Kimberly Ingram, U.S. Department of Agriculture-ARS, USNPRC, Athens, GA, USA

P2-57 Multilevel Evaluation of Preharvest Interventions to Reduce *Salmonella* spp. in Broiler Farms Using a Ranking Matrix — FRANCESCA MARIE CONTADINI, Fernando Sampedro, University of Minnesota, St. Paul, MN, USA

P2-58 Intestinal Diseases Aggravate *Campylobacter jejuni* Infection Potential in Broilers — HONG WANG, Juan D.L. Cardenas, Guillermo Tellez, Billy Hargis, Xiaolun Sun, University of Arkansas, Fayetteville, AR, USA

P2-59 The Prevalence of *Salmonella* in Organically Produced Chicken Meat Parts — HUSNU SAHAN GURAN, Resat Ciftci, Dicle University, Diyarbakir, Turkey

P2-60 Spectroscopic Analysis of Meat: Detection of Species and Adulteration — ISMAIL HAKKI BOYACI, Gonca Bilge, Banu Sezer, Hacettepe University, Ankara, Turkey

Epidemiology

P2-61 Inactivation of Carbapenem-resistant *Enterobacteriaceae* and *Staphylococcus aureus* by Disinfectants Delivered as a Fog and Vapor — Janak Khatiwada, SHURRITA DAVIS, Leonard Williams, Maria Sierra, Dustin Smith, North Carolina A&T State University, Kannapolis, NC, USA

P2-62 Detection of *stx1* and *stx2* Genes in *Escherichia coli* Isolated from Minas Frescal Cheese Processing Plants in São Paulo State, Brazil — Giovana Rueda Barboza, Giovana Verginia Barancelli, Marjory Xavier Rodrigues, Rodrigo T. Hernandes, Raiza Iacuzio, NATHÁLIA CRISTINA CIRONE SILVA, University of Campinas, Campinas, Brazil

P2-63 Methicillin-resistant *Staphylococcus aureus* Isolated from the Organic and Conventional Cheese Processing Chains in São Paulo State, Brazil — Talita Junia Silva Cândido, Anderson Clayton da Silva, Marjory Xavier Rodrigues, Vera Lucia Mores Rall, Maristela da Silva do Nascimento, NATHÁLIA CRISTINA CIRONE SILVA, University of Campinas, Campinas, Brazil

P2-64 Characterization of Microbiota of Oyster Larvae and Tank Water from an Aquaculture System with High and Low Larval Survival Rates — ANDREA OTTESEN, Padmini Ramachandran, Elizabeth Reed, Angelo DePaola, Scott Rikard, U.S. Food and Drug Administration, College Park, MD, USA

P2-65 Association between Shiga Toxin-producing *Escherichia coli* Prevalence and Biosecurity Measures on Diversified California Farms — LAURA PATTERSON, Nora Navarro-Gonzalez, Peiman Aminabadi, Michele Jay-Russell, Alda Pires, University of California-Davis, Davis, CA, USA

P2-66 Commonalities of Antimicrobial-resistant Nontyphoidal *Salmonella* among Human and Retail Food Isolates, Tennessee, 2010 through 2013 — SAMIR HANNA, John Dunn, Katie Garman, Tennessee Department of Health, Nashville, TN, USA

P2-67 Integrated Food Safety Centers of Excellence: Increasing State and Local Capacity to Detect and Investigate Foodborne Disease through Peer-to-Peer Support — David Dekevich, YNES R. ORTEGA, Jamie DeMent, University of Georgia, Griffin, GA, USA

P2-68 Whole Genome SNP Analysis of *Salmonella* Enteritidis Strains Isolated between 1968 and 2016 in Brazil — FABIO CAMPIONI, George Kastanis, Guojie Cao, Maria Hoffmann, Yan Luo, Alzira Maria Morato Bergamini, Dalia dos Prazeres Rodrigues, Marc Allard, Juliana Pfrimer Falcao, University of São Paulo, School of Pharmaceutical Sciences of Ribeirao Preto, Ribeirao Preto, Brazil

P2-69 Relationship between Production System or Animal Attributes and the Counts of Pathogenic Shiga Toxin-producing *Escherichia coli* O157, O26, and O111 in Australian Beef Cattle at Slaughter — GLEN MELLOR, Narelle Fegan, Lesley Duffy, Kate McMillan, David Jordan, Robert Barlow, CSIRO Agriculture & Food, Brisbane, Australia

P2-70 Milk Contamination and Prevalence of *Escherichia coli* O157:H7 in Kwara State, Nigeria — IBRAHEEM GHALI-MOHAMMED, Ismail Odetokun, Ibrahim Raufu, Victoria Adetunji, University of Ilorin, Ilorin, Nigeria

P2-71 The Main Source of *Clostridium difficile* in the Community is Nature — CRISTINA RODRIGUEZ, Joahn Van broeck, Michel Delmée, Georges Daube, University of Liege, Liege, Belgium

P2-72 Defining a Core Genome Multilocus Sequence Typing Scheme for the Global Epidemiology of *Vibrio parahaemolyticus* Strains — NARJOL GONZALEZ-ESCALONA, Keith A. Jolley, Elizabeth Reed, Jaime Martinez-Urtaza, U.S. Food and Drug Administration, College Park, MD, USA

Retail and Food Service Safety

P2-73 Infrastructures, Sanitation, and Management Practices Impact *Listeria monocytogenes* Prevalence in Retail Grocery Produce Environments — TONGYU WU, John Burnett, Jingjin Wang, Susan Hammons, Deklin Veenhuizen, Manpreet Singh, Haley Oliver, Purdue University, West Lafayette, IN, USA

P2-74 Food Safety Practices at Various Restaurants and Hotels in Lahore, Pakistan — MUHAMMAD SHAHBAZ, Muhammad Nasir, Zubair Farooq, Muhammad Bilal, Mawarid Food Company – KSA (Pizzahut, Taco Bell), Riyadh, Saudi Arabia

P2-75 Multitoxin Production by *Bacillus cereus* and *Staphylococcus aureus* in Co-contaminated Ready-to-Reheat Lasagna as a Function of Heat Treatment, Modified Atmosphere, and Storage Temperature — ANDREJA RAJKOVIC, Mirjana Andjelkovic, Mieke Uyttendaele, Ghent University, Ghent, Belgium

P2-76 Occurrence of the Principal Mycotoxins in Food and Feed in Serbia from 2004 to 2017— ANDREJA RAJKOVIC, Bozidar Udovicki, Nikola Tomic, Ghent University, Ghent, Belgium

P2-77 Evaluating the Impact of Cooling Techniques on *Bacillus cereus* Populations in Brown Rice — Lindsay Beardall, Paola Paez, Randall Phebus, Bryan Severns, Tracee Watkins, SARA GRAGG, Kansas State University, Olathe, KS, USA

P2-78 A Survey of the Microbiome Sampled from Surfaces of Supermarket Shopping Carts and Grocery Baskets — M. ALEXANDRA CALLE, Brayan Montoya, Andrea English, Mindy Brashears, Texas Tech University, Lubbock, TX, USA

P2-79 Evaluating the Self-perception of Skills and Roles of Third-party Food Safety Auditors in Grocery Stores — NATALIE SEYMOUR, Kimberly Allen, Eric Laber, Benjamin Chapman, North Carolina State University, Raleigh, NC, USA

P2-80 A Simulation Study to Evaluate the Microbiological Safety of School Lunches Stored in Insulated Coolers during Field Trips — NICHOLAS SEVART, Sara Gragg, Paola Paez, Amanda Wilder, Tracee Watkins, Randall Phebus, Kansas State University, Manhattan, KS, USA

P2-81 Food Allergy Information Sharing and Communication Strategies in Full-service Restaurants in the United States — HAN WEN, Junehee Kwon, University of North Texas, Denton, TX, USA

P2-82 Measuring and Modeling the Influence of Temperature and Relative Humidity on the Survival of *Enterobacter aerogenes* — MATTHEW IGO, Donald W. Schaffner, Rutgers University, Medford, NJ, USA

P2-83 Trends in Food Safety in Food Trucks across Dubai — SHUGUFTA MOHAMMAD ZUBAIR, Muhammad Khalid Saeed, Ahmed Rashid Al Ani, Shelendra Singh, Dubai Municipality, Dubai, United Arab Emirates

P2-84 Aerobic Plate Counts and Contact Surface Category Correlate with the Presence of *Listeria monocytogenes* in Retail Grocery Produce Environments — DEKLIN VEENHUIZEN, John Burnett, Tongyu Wu, Susan Hammons, Manpreet Singh, Haley Oliver, Purdue University, West Lafayette, IN, USA

P2-85 Evaluation of the Survival of *Salmonella* spp. and *Escherichia coli* O157:H7 in Unpasteurized Apple Juice from Juice Bars — DON MACK, Shakaree Hale, Autumn Woods, Marciauna Daniel, Lamin Kassama, Aubrey Mendonca, Armitra Jackson-Davis, Alabama A&M University, Huntsville, AL, USA

P2-86 Understanding Consumers' Perceptions of Ethnic Restaurants: An Application of Importance-performance Analysis — PEI LIU, Eliza Tse, University of Missouri, Columbia, MO, USA

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P2-87 Food Safety at Farmers' Markets: A Knowledge Synthesis of Published Research — IAN YOUNG, Abhinand Thaivalappil, Danielle Reimer, Judy Greig, Ryerson University, Toronto, ON, Canada

P2-88 *Listeria monocytogenes* is Prevalent in Retail Grocery Produce Environments, but *Salmonella enterica* is Rare — JOHN BURNETT, Tongyu Wu, Susan Hammons, Deklin Veenhuizen, Manpreet Singh, Haley Oliver, Purdue University, West Lafayette, IN, USA

P2-89 Persistence of *Escherichia coli* O157:H7 on Commonly Used Food Packaging Materials — DULEEKA KURUWITA ARACHCHIGE, Xiuping Jiang, Angela Fraser, Duncan Darby, Julia Sharp, Clemson University, Clemson, SC, USA

P2-90 Leafy Greens: Risk Reduction and Industry-related Interventions — KRISTINA INFANTE, Sujata A. Sirsat, University of Houston, Conrad N. Hilton College of Hotel and Restaurant Management, Houston, TX, USA

P2-91 Influence of Cooling Rate on Growth of *Bacillus cereus* from Spore Inocula in Cooked Rice, Beans, Pasta, and Combination Products — VIJAY JUNEJA, Timothy Mohr, Oscar Snyder, U.S. Dept. of Agriculture–ARS, Wyndmoor, PA, USA

P2-92 Vomit and Diarrhea Clean-up Practices at Foodservice and Retail Food Establishments — CATHERINE VIATOR, Morgan Chao, Sheryl Cates, Jonathan Blitstein, Megan Clayton, Cortney Leone, Kinsey Porter, Angela Fraser, RTI International, Houma, LA, USA

P2-93 Nears and Nors Merge: A Preliminary Analysis — KRISTI-WARREN SCOTT, Centers for Disease Control and Prevention, Atlanta, GA, USA

P2-94 Removal of Human Pathogens from Surfaces Using a Novel Microfiber Towel — KEVIN MO, Victor Pool, Holly Paden, Sanja Ilic, Ohio State University, Columbus, OH, USA

Communication Outreach and Education

P2-95 pH of State Fair Entries in North Carolina — KATRINA LEVINE, Benjamin Chapman, Donald W. Schaffner, North Carolina State University, Raleigh, NC, US

P2-96 Evaluation of a Training Program for Volunteer Food Handlers — KATRINA LEVINE, Benjamin Chapman, Dara Bloom, North Carolina State University, Raleigh, NC, USA

P2-97 Assessing Food Safety Knowledge, Attitude, and Practices among Florida Master Gardener Volunteers — Jing Guo, Beth Gankofskie, Candice Stefanou, Wendy Wilber, AMY SIMONNE, Anne Mathews, University of Florida, Gainesville, FL, USA

P2-98 Comprehensive Traceability and Food Recall System Workshops in Caribbean Countries — Tejas Bhatt, JAHEON KOO, Robert Gravani, Jennie Stitzinger, Institute of Food Technologists, Washington, D.C., USA

P2-99 Lessons from the Field: Evaluation of a Vomit/Diarrhea Clean-up Intervention Targeting Foodservice and Retail Food Workers — Morgan Chao, Cortney Leone, KINSEY PORTER, Catherine Viator, Sheryl Cates, Jonathan Blitstein, Megan Clayton, Angela Fraser, Clemson University, Clemson, SC, USA

P2-100 Health Professionals' Motivators and Barriers to Food Safety Education — YAOHUA FENG, Christine Bruhn, Shelley Feist, Mary Choate, University of California-Davis, Davis, CA, USA

P2-101 Evaluation of Positive Deviance Food Safety Curriculum Among High School Students: A Pilot Study — YAOHUA FENG, Christine Bruhn, University of California-Davis, Davis, CA, USA

P2-102 Evaluation of the FightBAC Food Safety Campaign: The Story of Your Dinner — YAOHUA FENG, Christine Bruhn, Shelley Feist, Mary Choate, University of California-Davis, Davis, CA, USA

P2-103 Food Safety Knowledge of Secondary School Pupils in South Wales, UK — LEANNE ELLIS, Ellen W. Evans, ZERO2FIVE Food Industry Centre, Cardiff Metropolitan University, Cardiff, United Kingdom

P2-104 Assessment of *Potluck Panic*, an On-line Game for Post-secondary Food Safety Education — ADRIENNE SHEARER, Dallas Hoover, Jeanne Gleason, Barbara Chamberlin, David Abraham, Pamela Martinez, Jeffrey Klein, Joan Buttram, Sue Snider, Kalmia Kniel, University of Delaware, Newark, DE, USA

P2-105 Tablet PC-based Problem-solving Activities for Enhancing Students Food Safety Self Efficacy and Motivation — HEYAO YU, Juan Madera, Sujata A. Sirsat, University of Houston, Houston, TX, USA

P2-106 Investigation and Outreach to Increase Public Awareness of Campylobacteriosis — HANNAH BOLINGER, North Carolina State University, Raleigh, NC, USA

P2-107 Teaching through Tweeting: Lessons Learned through NoroCORE's Social Media Campaigns — ELIZABETH BRADSHAW, Rebecca Goulter, Katie Overbey, Catharine Gensel, Benjamin Chapman, Lee-Ann Jaykus, North Carolina State University, Raleigh, NC, USA

P2-108 How to Communicate with Consumers When Flavor Preferences and Safety Conflict — CHRISTINE BRUHN, Yaohua Feng, University of California-Davis, Davis, CA, USA

P2-109 Investigating the Role of Dietitians in the Provision of Food Safety Advice for Vulnerable Patients in the UK — ELLEN W. EVANS, Denise Parish, Elizabeth C. Redmond, ZERO2FIVE Food Industry Centre, Cardiff Metropolitan University, Cardiff, United Kingdom

P2-110 Food-Safety Experts' Perceptions of the Potential of Television Cookery Programmes to Deliver Consumer Food-safety Information — Simon Dawson, Ruth Fairchild, Nick Perham, ELLEN W. EVANS, ZERO2FIVE Food Industry Centre, Cardiff Metropolitan University, Cardiff, United Kingdom

P2-111 Assessing Recommendations Found in Recipes for Determining Doneness of Poultry: How Prevalent is Internal Temperature? — SANDRIA GODWIN, Edgar Chambers IV, Fur-Chi Chen, Terry Taylor, Tennessee State University, Nashville, TN, USA

P2-112 Impact of Poultry and Egg Education Project (PEEP) Workshops on Food Safety Knowledge, Perceptions, Attitudes, and Intentions of 4-H Youth — SANDRIA GODWIN, John Ricketts, Morgan Beaty, Tennessee State University, Nashville, TN, USA

P2-113 Determining the Presence of Pathogen Reduction Strategies at Livestock Interactions — SAVANA EVERHART, Derek Foster, Benjamin Chapman, Megan Jacob, North Carolina State University, Raleigh, NC, USA

P2-114 Animal Contact in Public Settings: Infectious Disease Risk Awareness and Hand Hygiene Behaviors — WENQING XU, Melissa Cater, Rebecca Gravois, Christine Navarre, Diana Coulon, Dorra Simmons, Louisiana State University AgCenter, Baton Rouge, LA, USA

P2-115 Identification of Prevention Efforts for Flour-associated Outbreaks Involving Shiga Toxin-producing *Escherichia coli* — Cerise Robinson, TAMI CRAIG CLOYD, India James, Marianne Fatica, Sheila Merriweather, Donald Obenhuber, Diane Gubernot, Gary Weber, FDA-CORE, College Park, MD, USA

P2-116 Development of a FSMA Preventive Controls for Human Food Rule Audit Checklist for Fruit and Vegetable Processors — JACQUES OVERDIEP III, Angela Shaw, Catherine Strohbehn, Linda Naeve, Iowa State University, Ames, IA, USA

P2-117 North Central Region Produce Needs Assessment for FSMA Produce Safety Rule — BRIDGET PERRY, Arlene Enderton, Catherine Strohbehn, Angela Shaw, Linda Naeve, Iowa State University, Ames, IA, USA

P2-118 Promoting Food Safety Research and Collaboration — JOHN JOHNSTON, Glenn Tillman, U.S. Department of Agriculture–FSIS, Fort Collins, CO, USA

P2-119 Withdrawn

Molecular Analytics, Genomics and Microbiome

P2-120 Using Whole Genome Sequencing to Provide Insight in the Epidemiology of Resistance and Virulence Genes in *Listeria monocytogenes* — Katleen Vranckx, KYLE KINGSLEY, Koen Rombouts, Katrien De Bruyne, Hannes Pouseele, Applied Maths Inc, Austin, TX, USA

P2-121 Investigating the Epidemiology of Resistance and Virulence Genes in *Listeria monocytogenes* Using Bionumerics® 7— Katleen Vranckx, KYLE KINGSLEY, Katrien De Bruyne, Hannes Pouseele, Applied Maths Inc., Austin, TX, USA

P2-122 Storage Temperature and Sanitizer Washing Influences the Bacterial Community Dynamics of Carrots — VAISHALI DHARMARHA, Natalie Pulido, Giselle Kristi Guron, Monica Ponder, Amy Pruden, Renee Boyer, Laura Strawn, Virginia Tech, Blacksburg, VA, USA

P2-123 Complete Genome Sequence of a Novel Lytic *Vibrio parahaemolyticus* Phage VPp1 and Characterization of Its Endolysin — MENGZHE LI, Jingxue Wang, Hong Lin, Xiuping Jiang, Yanqiu Jin, Ocean University of China, Qingdao, China

P2-124 Whole-genome Sequence Analysis of Poultry-associated *Salmonella* Infantis Isolates from Turkey Reveal a Distinct Phylogenetic Clade and Increased Antimicrobial Resistance Elements — Sinem Acar, Ece Bulut, Ye□im Soyer, MATTHEW J. STASIEWICZ, University of Illinois at Urbana-Champaign, Urbana, IL, USA

P2-125 Evaluation of Whole Genome Sequencing (WGS) to Molecularly Characterize, Serotype, and Predict Antibiograms of *Salmonella* spp. Isolated from Raw Chicken Products in Singapore — YE HTUT ZWE, Seow Fong Chin, Liang Yang, Hyun-Gyun Yuk, Food Science and Technology Programme, National University of Singapore, Singapore, Singapore

P2-126 Genetic and Phenotypic Characteristics Associated with *Listeria monocytogenes* Plasmids — PATRICIA HINGSTON, Jessica Chen, Chad Laing, Lisbeth Truelstrup Hansen, Siyun Wang, University of British Columbia, Vancouver, BC, Canada

P2-127 A Novel Method to Achieve Complete Low-copy Number Plasmid Sequences of *Salmonella enterica* — KUAN YAO, Narjol Gonzalez-Escalona, Julien Marquis, Marc Allard, Maria Hoffmann, U.S. Food and Drug Administration, College Park, MD, USA

P2-128 Phylogenomic Analyses of Efflux Pump Complexes in the Foodborne Pathogen *Cronobacter* spp. Using DNA Microarray Analysis Combined with Sequenced-based Bioinformatics Demonstrates the Presence of Species-Specific Orthologues — FLAVIA NEGRETE, Jayanthi Gangiredla, Samantha Finkelstein, Isha Patel, Hannah Chase, ChaeYoon Lee, HyeJin Jeong, Ben Tall, Gopal Gopinath, U.S. Food and Drug Administration, Laurel, MD, USA

P2-129 Development of a New Generation Microarray Assay for the Detection and Identification of Foodborne Pathogens — CHRISTINE YU, Mark Mammel, Jayanthi Gangiredla, Michael Kulka, U.S. Food and Drug Administration, Laurel, MD, USA

P2-130 Utility of the FDA-ECID Microarray for Comprehensive Molecular Serotyping of *Escherichia coli* — KYSON CHOU, Isha Patel, Jayanthi Gangiredla, Nelly Tran, Donna Williams-Hill, Richelle Richter, Peter Feng, Keith Lampel, Christopher Elkins, U.S. Food and Drug Administration, Irvine, CA, USA

P2-131 Phylogenomic Analyses of Type II Toxin-Antitoxin Genes in the Foodborne Pathogen *Cronobacter* spp. Using Sequenced-based Bioinformatics Combined with DNA Microarray Analysis Demonstrates an Evolutionary Shared Species-Specific Line of Evolution — SAMANTHA FINKELSTEIN, Jayanthi Gangiredla, Flavia Negrete, Hannah Chase, ChaeYoon Lee, HyeJin Jeong, Isha Patel, Gopal Gopinath, Ben Tall, U.S. Food and Drug Administration, Laurel, MD, USA

P2-132 Interlab Comparison of Community Analysis Via Next Generation Sequencing — MATTHEW MARKIEWICZ, Clyde Manuel, Stephen Lyon, Sealed Air Corporation, Sturtevant, WI, USA

P2-133 Leveraging Microbiome Analysis to Discriminate between Organic and Non-organic Produce: Apple Case Study — KENNETH HARARY, Abhishek Hegde, Hossein Namazi, James Maloney, Shadi Shokralla, Anay Campos, Ramin Khaksar, Clear Labs Inc., Menlo Park, CA, USA

Blue Text – Developing Scientist Competitor Green Text – Undergraduate Student Competitor

P2-134 Short-term Supplementation of Potato Starch and VSL# in Male C57 BL/6 Mice — MIGUEL RIVAS, Nadia Saadat, Liyanage Nirasha Perera, Smiti Gupta, Yifan Zhang, Wayne State University, Detroit, MI, USA

P2-135 Microbial Ecology Survey of Bacteria, Lactic Acid Bacteria, and Fungi in Fermented and Non-fermented Ready-to-Eat Food and Drink — MATT HUNDT, Alexandra Smith, Tom Rehberger, Agro BioSciences Inc, Wauwatosa, WI, USA

P2-136 Food Microbiomes Defined Using 16S rRNA Gene Amplicon and Shotgun Metagenomic Sequencing — KAREN JARVIS, Ninalynn Daquigan, Christopher Grim, James White, Paul Morin, Julia Mullins, Darcy Hanes, U.S. Food and Drug Administration, Laurel, MD, USA

P2-137 Microbiota of Retail Foods Available to Populations of Different Socioeconomic Status: Implications to Food Safety — DALENIECE HIGGINS, Chandan Pal, Irshad Sulaiman, Pratik Banerjee, University of Memphis, Memphis, TN, USA

P2-138 Foodborne Outbreak Detection: Florida Department of Agriculture and Consumer Services' WGS SNP Pipeline in Action — S. Brian Caudle, CARL FRANCONI, JR., Serena Giovinazzi, Amy Bryant, Jason Crowe, Florida Department of Agriculture and Consumer Services, Tallahassee, FL, USA

P2-139 Characterization of the Young Turkey Cecal Microbiome and Its Role in the Prevention of Irritable Crabby Syndrome (ICS) — MARGARET KIRCHNER, Donna Carver, Brian Badgley, Sophia Kathariou, North Carolina State University, Raleigh, NC, USA

P2-140 NGS Based Method for *Enterobacteriaceae* Discrimination and Reliability for *Cronobacter* spp. Identification — Sofia Nogueira, Fan Mingzhen, David Tomas Fornes, SANDRA CHAVES, SGS Molecular, Lisboa, Portugal

P2-141 Comparative Genomics of Diarrheagenic *Bacillus cereus* Isolates from Dried Food and Animal Feed — LAURENDA CARTER, Hannah Chase, Cynthia Stine, Charles Gieseker, Nicholas Hasbrouck, Ashraf Khan, Kyuyoung Han, Ben Tall, Gopal Gopinath, U.S. Food and Drug Administration, Laurel, MD, USA

P2-142 Extended-Spectrum Beta-Lactamase-producing *Escherichia coli* from Meconium of Newborn Calves — LIN TENG, Peixin Fan, Amber Ginn, Joseph Driver, KwangCheol Casey Jeong, University of Florida, Gainesville, FL, USA

P2-143 Roles of *Staphylococcus aureus* in Intestine — HEEYOUNG LEE, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P2-144 Patterns of Source Distribution for *Salmonella enterica* Serotype Typhimurium Revealed by Large-Scale Whole Genome Sequencing — SHAOKANG ZHANG, Dave Boxrud, Angie Taylor, Chandler Roe, Elizabeth Driebe, David Engelthaler, Paul Keim, Eija Trees, Efrain Ribot, Patricia Fields, Xiangyu Deng, University of Georgia, Center for Food Safety, Griffin, GA, USA

P2-145 Transcriptomics is a Useful Approach for Investigating the Effects of Long-term Storage on *Salmonella enterica* Serotype Montevideo Survival When Spiked on Oregano — LAURA EWING, Gopal Gopinath, Nicole Addy, Darcy Hanes, Junia Jean-Gilles Beaubrun, U.S. Food and Drug Administration, Laurel, MD, USA

P2-146 Comparative Genomics of $Bla_{ctx\text{-}M\text{-}65}$-resistant Clinical Strains of *Salmonella enterica* serovar Infantis from Peru and Resistant Strains from Chicken, Cattle and Humans — BEN TALL, Gopal Gopinath, Hannah Chase, Jayanthi Gangiredla, Isha Patel, Nicole Addy, Junia Jean-Gilles Beaubrun, Baoguang Li, Christopher Elkins, Flavia Negrete, Samantha Finkelstein, HyeJin Jeong, ChaeYoon Lee, Kyuyoung Han, Shaohua Zhao, Gregory Tyson, Heather Tate, Drake Tilley, Mark Simons, Andrea McCoy, Rina Meza, Allison Brown, Cindy Friedman, U.S. Food and Drug Administration, Laurel, MD, USA

P2-147 Transcriptome Analysis of *Salmonella enterica* Newport in-planta after Desiccation and Postharvest Sanitization — LAUREL DUNN, Dara Smith, Dean Kopsell, Faith Critzer, University of Tennessee, Knoxville, TN, USA

P2-148 *Salmonella* Newport Gene Expression Profile on Sterile Tomato Seedlings is Indicative of Mitigating Plant Stress — ANGELA FERELLI, Samantha Bolten, Shirley Micallef, University of Maryland, College Park, MD, USA

P2-149 Transcriptome Response of *Salmonella* Newport to Oxidative Antimicrobials — DARA SMITH, Laurel Dunn, Faith Critzer, University of Tennessee, Knoxville, TN, USA

P2-150 Next Generation 16S rRNA Microbiome Analyses of a Mixed Culture MPN from Chicken Breast Samples Inoculated with a *Salmonella* — SUN AE KIM, Si Hong Park, Sang In Lee, Steven Ricke, University of Arkansas, Fayetteville, AR, USA

P2-151 Comparative Genomics Confirms Persistence of *Salmonella* Serovar Newport in Environmental Waters of Southern and Central Georgia — Christopher Grim, Meimin Wang, Susan Leonard, Erin Lipp, John Maurer, Michele Ray-Russell, George Vellidis, Mark Mammel, Christopher Elkins, BAOGUANG LI, U.S. Food and Drug Administration–CFSAN, Laurel, MD, USA

P2-152 Transcriptional Profiling of *Salmonella* Montevideo Exposed to the Probiotic *Lactobacillus animalis* NP — DIANA AYALA, Mindy Brashears, Kendra Nightingale, Texas Tech University, Lubbock, TX, USA

P2-153 Identification of Putative Surface Proteins Involved in Adherence of *Listeria monocytogenes* on Abiotic Surfaces — Peter Muriana, HUNG KING TIONG, Oklahoma State University, Stillwater, OK, USA

P2-154 Whole Genome Sequencing of *Listeria monocytogenes* Strains Carrying Loss of Function Mutations in inlA Supports These Strains are Evolving Away from a Pathogenic Lifestyle — PETER COOK, Henk Den Bakker, Guy Loneragan, Kendra Nightingale, Texas Tech University, Lubbock, TX, USA

P2-155 Determining if Phylogenetic Relatedness of *Listeria monocytogenes* Isolates Corresponds to Persistence in Poultry Processing Plants Using Whole-genome Sequencing — LAUREN HUDSON, Mark Berrang, Richard Meinersmann, Xiangyu Deng, Mark Harrison, University of Georgia, Athens, GA, USA

P2-156 A Comprehensive Evaluation of the Genetic Relatedness of *Listeria monocytogenes* Serotype 4b Variant Strains — LAUREL BURALL, Christopher Grim, Mark Mammel, Atin Datta, U.S. Food and Drug Administration–CFSAN, Laurel, MD, USA

P2-157 Prevalence, Distribution, and Comparative Genomics of a Hemolysin III Gene (COG1272) and Related Hemolysin Genes among *Cronobacter* spp. — CHAEYOON LEE, HyeJin Jeong, HaNa Kwon, Kyuyoung Han, SeonJu Choi, SoHyun Kim, Jeong Woo Lee, Jung Youn Do, Samantha Finkelstein, Flavia Negrete, Hannah Chase, Isha Patel, Jayanthi Gangiredla, Gopal Gopinath, Ben Tall, U.S. Food and Drug Administration, Laurel, MD, USA

P2-158 Characterization of Australian *Escherichia coli* O111 Isolates from Human and Cattle Sources — ROBERT BARLOW, Kate McMillan, Theo Allnutt, P. Scott Chandry, Narelle Fegan, Glen Mellor, CSIRO Agriculture & Food, Brisbane, Australia

Laboratory and Detection Methods

P2-159 Comparison of Two Diagnostic Methods to Detect Five Different Bacterial Pathogens Associated with Porcine Respiratory Disease Complex (PRDC) and Investigation of Their Prevalence in Pathologic Lung Tissues in Korea — KUN TAEK PARK, Chan Hee Lee, Young Kyung Park, Chung Wung Kim, Sook Shin, Yong Ho Park, Seoul National University, Seoul, South Korea

P2-160 Impact of Temperature Dependence of Water Activity on *Salmonella* Inactivation in a Multicomponent Food System — NATHAN ANDERSON, Yuqi Luo, Elizabeth Grasso-Kelley, U.S. Food and Drug Administration, Bedford Park, IL, USA

P2-161 Development of a Real-time Food Pathogen Detection Platform Using Immunoassay Nanoparticle Technology — MIHO MATAKATSU, Kiyoshi Yamaki, Hideyuki Tanaka, Kazuo Haga, Michael Weber, John Coomes, John Bodner, Toho Technology Inc., Chicago, IL, USA

P2-162 Production and Characterization of Monoclonal Antibodies Highly Specific to Peanut Protein — JEONG SOOK KIM, Won Bo Shim, Gyeongsang National University, Jinju, South Korea

P2-163 Detection of Pork Fat in Heat-processed Beef Meat Products by ELISA Using Monoclonal Antibody Specific to Pork Fat Protein — JEONG SOOK KIM, Won Bo Shim, Gyeongsang National University, Jinju, South Korea

P2-164 ELISA Screening Assays for Florfenicol and Fluoroquinolones — RONALD SARVER, Brent Steiner, Meaghan Sherry, Douglas MacRae, Danielle Delamarter, John Heller, Neogen Corporation, Lansing, MI, USA

P2-165 ELISA Screening Assays for Tetracycline and Sulfonamides — RONALD SARVER, Brent Steiner, Meaghan Sherry, Douglas MacRae, Danielle Delamarter, John Heller, Neogen Corporation, Lansing, MI, USA

P2-166 Comparison of Manual Assurance GDS and Assurance GDS Pickpen PIPETMAX Procedures for Preparation of Challenging Food and Environmental Samples — Philip Feldsine, Khanh Soliven, Khyati Shah, Joseph Berry, TIM KELLY, BioControl Systems, Bellevue, WA, USA

P2-167 Genetic Characterization Based on Four Housekeeping Genes of Sixteen Human-pathogenic *Bacillus* Species Isolated from Foods, Cosmetics, and Environmental Surveillance Samples — IRSHAD SULAIMAN, Ying-Hsin Hsieh, Emily Jacobs, Steven Simpson, Khalil Kerdahi, U.S. Food and Drug Administration, Atlanta, GA, USA

P2-168 Real-time Monitoring of TVC Using Non-invasive Bioluminescence Growth Media — Ryan Marder, Brandon Katz, DELIA CALDERON, Paul Meighan, Hygiena, Camarillo, CA, USA

P2-169 Optimizing Methods for Recovering Heat-injured *Enterococcus faecium* and Indigenous Enterococci in Turkey Litter Compost — HONGYE WANG, Zhao Chen, Xiuping Jiang, Clemson University, Clemson, SC, USA

P2-170 Evaluation of a Novel Method for Detection of *Enterobacteriaceae* in Dairy Infant Formula Using Real-time PCR — LAURENT JAIN, André Quintanar, Jean-Philippe Tourniaire, Sophie Pierre, Jean-François Mouscadet, Bio-Rad, Marnes-la-Coquette, France

P2-171 Inhibition of Bacterial and Plant AB Toxins by Polyphenolic Compounds — BEATRIZ QUIÑONES, U.S. Department of Agriculture-ARS-WRRC-PSM Unit, Albany, CA, USA

P2-172 Assessing Biological, Chemical, and Radionuclide Detection Methods — PENNY NORQUIST, John Larkin, FPDI, Saint Paul, MN, USA

P2-173 Evaluation of Potential Temperature Abuse on Different Meat Packaging Systems during Outdoor Cooking Events — MARGARET JACKS, Luxin Wang, Thomas Taylor, Auburn University, Auburn, AL, USA

P2-174 Performance of a Rehydratable Film Medium for the Quantitative Enumeration of Lactic Acid Bacteria — MARA CELT, Adam Stanenas, Robert Jechorek, John David, Cari Lingle, 3M Food Safety, St. Paul, MN, USA

P2-175 Extended Spectra Database for Quality Indicators and Other Spoilers Identification By MALDI-TOF: A Never-Ending Story... — Marian Awad, DANIÈLE SOHIER, Simone Becker, Markus Kostrzewa, Bruker Daltonics, Bremen, Germany

P2-176 Isolation and Characterization of Wide Host Range-specific Bacteriophage for the Development of a Magnetoelastic Biosensor Method — DO HYEON PARK, Kyungpook National University, Daegu, South Korea

P2-177 A Single Laboratory Validation for the Microbial Identification of *Salmonella* spp., *Escherichia coli*, and *Listeria monocytogenes* Utilizing MALDI-TOF Technology — MICHAEL BROWN, Kristopher Stanya, Nichelle Kunecke, Lauren May, Ken Yoshitomi, Lisa Newberry, U.S. Food and Drug Administration, Bothell, WA, USA

P2-178 Evaluation of Enumeration and MPN Prediction Methods for *Staphylococcus aureus* — JENNIFER HAIT, Sandra Tallent, U.S. Food and Drug Administration, College Park, MD, USA

P2-179 Suitability of ATP Bioluminescence Compared to pH Measurement or Microbial Growth on Agar to Evaluate Commercial Sterility in UHT Milk — Cristian Morano, Marcela Smichth, Luciana Maiorano, MICHELE FONTANOT, Gabriela Stancanelli, 3M Peru SA, Lima, Peru

P2-180 Development of Loop-mediated Isothermal Amplification (LAMP) for Detection of BW10KD Allergen in Buckwheat — DONG JOO SEO, Hyunkyung Park, Suntak Jeong, Hanseam Shin, Changsun Choi, Chung-Ang University, Food & Nutrition, Anseong, Kyounggi, South Korea

P2-181 Strategy for Quantification of *Staphylococcus aureus* Enterotoxins from Foodborne Intoxication Cases by Mass Spectrometry — MIRJANA ANDJELKOVIC, Sarah Denaeyer, Nadine Botteldoorn, Andreja Rajkovic, Scientific Institute of Public Health, Brussels, Belgium

P2-182 Validation Report for the Method Comparison Evaluation of the bioMérieux TEMPO Aerobic Count (AC) to the Health Canada MFHPB-18 Determination of the Aerobic Colony Counts in Foods Reference Method for the Enumeration of Viable Mesophilic Aerobic Bacteria in a Variety of Foods — PATRICK BIRD, James Agin, Benjamin Bastin, Joe Benzinger, Erin Crowley, David Goins, Q Laboratories, Inc., Cincinnati, OH, USA

P2-183 Investigation of Resonant Mass Measurement for Physiological Analysis of Microorganisms — BYRON BREHM-STECHER, Hyun Jung Kim, Iowa State University, Ames, IA, USA

P2-184 Evaluation of the Performance of an Alternative Rapid Molecular Detection Assay Based on Loop-mediated Isothermal Amplification (LAMP), Compared to a Reference Official Mexican Method (NOM 210), in Artificially Contaminated Alkaline-treated Corn Meal (Nixtamal) — ILSE GARCÍA, Ismael Espinosa, 3M, Ciudad de Mexico, Mexico

P2-185 Rapid Detection of *Cronobacter* spp. in Powdered Infant Formula Related Products, Raw Materials, and Environmental Samples Utilizing Loop Mediated Isothermal Amplification (LAMP) and Bioluminescence Detection Technologies — Christina Barnes, Neil Percy, CYNTHIA ZOOK, Lisa Monteroso, Gabriela Lopez, Velasco, 3M Food Safety, St. Paul, MN, USA

P2-186 Evaluation of the New USDA Neutralizing Buffered Peptone Water Formulation for Poultry Verification Samples — PATRICIA RULE, Stan Bailey, Deborah Briese, Vikrant Dutta, John Mills, Ron Johnson, Jeff Papi, bioMérieux, Inc., Hazelwood, MO, USA

P2-187 Comparison of Swabbing, Rinsing, and Grinding as Sampling Methods for the Recovery of Indicator Microorganisms on Beef Trimmings — MANSOUR ALNAJRANI, Andrea English, Keelyn Hanlon, Alejandro Echeverry, Mindy Brashears, Texas Tech University, Lubbock, TX, USA

P2-188 Quantitative Fluorometric Detection of *Escherichia coli* in Ground Beef Using Genetically Engineered Bacteriophages — ANQI CHEN, Cornell University, Ithaca, NY, USA

P2-189 Thermo Scientific™ SureTect™ *Escherichia coli* O157:H7 Assay: NF Validation Using the 7500 Fast PCR Instrument — Emma Scopes, Ana-Maria Leonte, AMANDA MANOLIS, Thermo Fisher Scientific, Austin, TX, USA

P2-190 Thermo Scientific™ SureTect™ *Listeria monocytogenes* Assay: NF Validation Using the 7500 Fast PCR Instrument — Emma Scopes, Ana-Maria Leonte, AMANDA MANOLIS, Thermo Fisher Scientific, Austin, TX, USA

P2-191 Thermo Scientific™ SureTect™ *Salmonella* Species Assay: NF Validation Using the 7500 Fast PCR Instrument — Emma Scopes, Ana-Maria Leonte, AMANDA MANOLIS, Thermo Fisher Scientific, Austin, TX, USA

P2-192 Detection of *E. coli* O157:H7 and *Salmonella* in a Cannabis Simulant Using a Liquid Crystal-based Immunoassay — CURTIS STUMPF, Brian Bullard, Stephanie Kuzenko, Emily Rusnak, Gary Niehaus, Crystal Diagnostics Ltd., Rootstown, OH, USA

P2-193 Withdrawn

P2-194 Detection and Survival of Viable But Non-culturable *Escherichia coli* O157 in Soil — CALLUM HIGHMORE, Charles William Keevil, University of Southampton, Southampton, United Kingdom

P2-195 Single Marker Detection and Virulence Gene Profiling of STEC in Produce and Associated Farmscape Samples — JANNETH PINZON, Kamieko Kayoshi, Jeremy Roland, Adrian Sbodio, Bettina Groschel, William Chaney, Erin Dreyling, Michele Jay-Russell, Trevor Suslow, University of California-Davis, Davis, CA, USA

P2-196 Simultaneous Enrichment of *E. coli* O157:H7, *Salmonella* spp., and *Listeria monocytogenes* from Environmental Swabs and Detection by Multiplex-qPCR — ASHLEY QUEEN, Kirsten Hirneisen, Venugopal Sathyamoorthy, Atin Datta, Donna Williams-Hill, U.S. Food and Drug Administration, Irvine, CA, USA

P2-197 A Comparative Evaluation of the GENE-Up Assay for the Detection of *Escherichia coli* O157:H7 — VIKRANT DUTTA, Mick Bosilevac, Hari Dwivedi, John Mills, Patrice Chablain, Stan Bailey, bioMérieux, Inc., Hazelwood, MO, USA

P2-198 Development of Sample Preparation Methods to Improve Multiplex PCR Performance for Detection of *Escherichia coli* on Leafy Vegetables — YUKYUNG CHOI, Jiyoung Lee, Heeyoung Lee, Sanghyun Han, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P2-199 High-resolution Melt Curve PCR Assay for Detection of *E. coli* O157:H7 in Beef — YUEJIAO LIU, Azlin Mustapha, Prashant Singh, University of Missouri, Columbia, MO, USA

P2-200 Evaluating the Functional Properties of GFP-labeled Control Strains for Shiga Toxin-producing *Escherichia coli* (STEC) and *Salmonella enterica* Assays — MEGAN BUMANN, Ray-Yuan Chuang, Dev Mittar, ATCC, Manassas, VA, USA

TUESDAY

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P2-201 Improvement of Modified Buffered Peptone Water with Sodium Pyruvate (mBPWp) Broth by Optimization of Composition Ratio of Supplements for Rapid Detection of *Escherichia coli* O157:H7— HONG-SEOK KIM, Jung-Whan Chon, Minjung Shin, Dong-Hyeon Kim, Young-Ji Kim, Il-Byeong Kang, Dana Jeong, Jin-Hyeong Park, Ho-Seok Chang, Hyun-Woo Lim, Kwang-Young Song, Kun-Ho Seo, Konkuk University, Seoul, South Korea

P2-202 Comparing Campy-Cefex with *Campylobacter jejuni/ Campylobacter coli* Chromogenic Plating Medium for Isolating *C. jejuni* and *C. coli* from Raw Poultry — PAUL T. NGUYEN, Branislav Basaric, Bill Lionberg, Lawrence Restaino, R & F Laboratories, Downers Grove, IL, USA

P2-203 Evaluation of Selective Enrichment Media and Chromogenic Media for *Salmonella* Detection in Raw Shell Egg Contents with a Low Microbial Load — SOOKYOUNG LEE, Kwang-Young Song, Jung-Whan Chon, Dong-Hyeon Kim, Kun-Ho Seo, Konkuk University, Seoul, South Korea

P2-204 Addition of Rifampicin to Bolton Broth to Inhibit Extended-Spectrum Beta-Lactamase-producing *Escherichia coli* for the Isolation of *Campylobacter* spp. — KIDON SUNG, Jung-Whan Chon, Young Ji Kim, Young-Jo Kim, Ji Young Jung, Dongryeoul Bae, Saeed Khan, Kun-Ho Seo, U.S. Food and Drug Administration/ NCTR, Jefferson, AR, USA

P2-205 Comparison of Conventional Culture, Filtration, Real-time PCR, and Digital Droplet PCR Methods for the Isolation of *Campylobacter* spp. in Fresh Produce — JUNG-WHAN CHON, Ji Young Jung, Kidon Sung, Saeed Khan, U.S. Food and Drug Administration/NCTR, Jefferson, AR, USA

P2-206 Magnetic Nanoparticles-enhanced Biosensor for the Detection of *Campylobacter* spp. in Raw Poultry Products — FUR-CHI CHEN, Roger Bridgman, Tennessee State University, Nashville, TN, USA

P2-207 Same-Day Quantitative Detection of *Campylobacter* from Boot Swab Rinsates — BENJAMIN PASCAL, Adam Joelsson, Invisible Sentinel, Philadelphia, PA, USA

P2-208 Detecting *Listeria monocytogenes* in Mozzarella Cheese with the BAX® System Real-time PCR Assays for Genus *Listeria* and *L. monocytogenes* Using 24 LEB Complete Media — NISHA CORRIGAN, Teresa Brodeur, Julie Weller, Andrew Farnum, Pheakdey Ith, Troy Ayers, Qualicon Diagnostics, LLC, A Hygiena Company, Wilmington, DE, USA

P2-209 Detection of Shiga Toxin-producing *Escherichia coli* in 25 Gram Samples of All-purpose Flour Using the BAX® System — Julie Weller, ANDREW FARNUM, Pheakdey Ith, Laurie Post, Sue Kelly, Thomas Donohue, Holly Jaeger, Qualicon Diagnostics LLC, A Hygiena Company, Wilmington, DE, USA

P2-210 Determining Whether Phages are Good Detectives of *Salmonella* Diversity Using Different Animal Production Systems in Chile as a Model — Dacil Rivera, Christopher Hamilton West, Viviana Toledo, Fernando Dueñas, Rodolfo Tardone, Carla Salazar, Luis López, ANDREA MORENO SWITT, Universidad Andres Bello, Santiago, Chile

P2-211 Genomics of *Salmonella* Obtained from Irrigation Canals in Central Chile Provides Insights in Plasmids Distribution — ANDREA MORENO SWITT, Joaquin Escobar, Viviana Toledo, Dacil Rivera, Fernando Mardones, Aiko Adell, Magaly Toro, Narjol Gonzalez-Escalona, Jorge Fernandez, Maria Cristina Martinez, Universidad Andres Bello, Santiago, Chile

Dairy

P2-212 Reducing the Risk of *Listeria monocytogenes* in Rural Artisan Cheese in Southern Chile through Surveillance and Extension — ANDREA MORENO SWITT, Carla Barria, Randall Singer, Universidad Andres Bello, Santiago, Chile

P2-213 Prevalence and Antibiotics Resistance of *Listeria monocytogenes* Isolated from Raw and Traditionally Processed Cow Milk in Ghana — JAMES OWUSU-KWARTENG, Alhassan Wuni, Fortune Akabanda, Lene Jespersen, University for Development Studies, Navrongo, Ghana

P2-214 Microbial Contamination Levels of Milk and Cheese Produced in Two Korean Small-scale Dairy Farms — Il-Byeong Kang, Dong-Hyeon Kim, Hong-Seok Kim, Dana Jeong, Joo-Yean Lee, KUN-HO SEO, Konkuk University, Seoul, South Korea

P2-215 Population Dynamics of *Listeria monocytogenes* during Gouda Cheese Manufacture Using Artificially Inoculated, Unpasteurized Milk — JOELLE K. SALAZAR, Sartaj S. Narula, Christina K. Carstens, Arlette Shazer, Kristin M. Schill, Mary Lou Tortorello, U.S. Food and Drug Administration, Bedford Park, IL, USA

P2-216 The Role of Inter-strain Interactions on the Growth of Matrix-Adapted and Non-Adapted *L. monocytogenes* Strains on Different Types of Cheeses — MARIA GKEREKOU, Maria Georgoulia, Anastasia Kapetanakou, Eleftherios Drosinos, Panagiotis Skandamis, Agricultural University of Athens, Athens, Greece

P2-217 New Bioluminescent Alkaline Phosphatase Test for Verification of Milk Pasteurization — Delia Calderon, Paul Meighan, NICOLE FAMILIARI, Hygiena, Camarillo, CA, USA

P2-218 Bactericidal Effect of Fermented Milk with *Cudrania Tricuspidata* Leaf Extract and *Lactobacillus gasseri* Strains — SOOMIN LEE, Nam Su Oh, Kyunga Jang, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P2-219 Acidification Treatments for the Control of *Listeria monocytogenes* in Model Cheese Brines — Stephanie Barnes, NATHALIA MILLAN-BORRERO, Jeffrey Carbonella, Anthony Micheletti, Dennis D'Amico, University of Connecticut, Storrs, CT, USA

P2-220 Screening for Genetically Modified Plants (GMO) and Identification of Non-marker Events in Food and Feed — Hans-Henno Doerries, Stefanie Wendrich, OLAF DEGEN, Dr. Ivo Meier-Wiedenbach, Cordt Groenewald, Kornelia Berghof-Jager, BIOTECON Diagnostics, Potsdam, Germany

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P2-221 Psychrotolerance of *Paenibacillus odorifer* is Not Related to Phylogeny — SARAH BENO, Hannibal Brooks, Renato Orsi, David Kent, Jasna Kovac, Kathryn Boor, Martin Wiedmann, Cornell University, Ithaca, NY, USA

P2-222 Quantitative Risk Assessment for Shiga Toxin-producing *E. coli* (STEC) in Producer-Distributor Bulk Milk Sold — ELNA BUYS, Patrick Njage, Victor Ntuli, University of Pretoria, Pretoria, South Africa

P2-223 Evaluation of a Commingled Raw Milk Screening Method to Detect Tetracyclines at or below U.S. Tolerances — ROBERT SALTER, David Douglas, David Legg, Janine Schwartz, Ryan Sullivan, Charm Sciences, Inc., Lawrence, MA, USA

P2-224 Thermal Inactivation of *Staphylococcus aureus* in Liquid Whey — KORI SCHERER, Brandon Wanless, Kathleen Glass, University of Wisconsin-Madison, Madison, WI, USA

P2-225 Inhibition of *Staphylococcus aureus* in Whey Treated with Hydrogen Peroxide during Extended Non-refrigerated Storage — BRANDON WANLESS, Kathleen Glass, University of Wisconsin-Madison, Madison, WI, USA

P2-226 Revolutionary Screening of Residues in Raw Milk Using the Infiniplex for Milk Biochip Array Kit — J. Mahoney, E. Daeseleire, W. Reybroeck, L. Sibanda, M. WALSLEBEN, J. Porter, R.I. McConnell, S.P. FitzGerald, Randox Food Diagnostics, Crumlin, United Kingdom

P2-227 Modelling the Effect of Acid and Salt Stress on the Survival and Diversity of *Listeria monocytogenes* in a Lactic Soft Cheese Stored at 4°C — THULANI SIBANDA, Elna Buys, Universityof Pretoria, Pretoria, South Africa

P2-228 Growth Assessment of *Listeria monocytogenes* in Indian Cottage Cheese (Paneer) under Homemade and Industrial Scenario — VARALAKSHMI SUDAGAR, Sarah Leysen, An Vermeulen, Frank Devlieghere, Mieke Uyttendaele, Ghent University, Ghent, Belgium

P2-229 Effects of Addition of Essential Oils from *Origanum vulgare L.* and *Rosmarinus officinalis L.* during the Manufacture of Minas Frescal Cheese on Viability of Starter Bacteria — MARCIANE MAGNANI, Helena Taina Diniz Silva, Evandro Leite de Souza, Federal University of Paraiba, Joao Pessoa, Brazil

P2-230 Potential of Lactic Acid Bacteria Isolated from Tropical Fruits as Biopreservants in Minas Frescal Cheese — MARCIANE MAGNANI, Whyara Karoline Almeida Costa, Larissa Ramalho Brandão, Estefânia Fernandes Garcia, Marcos Santos Lima, Evandro Leite Souza, Federal University of Paraiba, Joao Pessoa, Brazil

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

Notes

WEDNESDAY POSTERS

10:00 AM – 6:00 PM

P3 **Low-water Activity Foods**
Packaging
Produce
Microbial Food Spoilage
Antimicrobials
Laboratory and Detection Methods
Water
Tampa Convention Center, Exhibit Hall

P3-01 through P3-109 – Authors present 9:00 a.m. – 11:00 a.m.

P3-110 and above – Authors present 1:00 p.m. – 3:00 p.m.

Low-water Activity Foods

P3-01 Fate of *Salmonella* and *Escherichia coli* O157:H7 in Cookie Dough during Storage: Comparison of Isolates from Different Origins — SHUANG WU, Shelli Laskowitz, Soohyoun Ahn, University of Florida, Gainesville, FL, USA

P3-02 Validation of *Enterococcus faecium* as a *Salmonella* Surrogate in Thermal Treatment of Almond Meal — NURUL AHMAD, Hsieh-Chin Tsai, Ian Hildebrandt, Meijun Zspu, Juming Tang, Bradley Marks, Elliot Ryser, Michigan State University, East Lansing, MI, USA

P3-03 Evaluation of Dry Transfer in the Removal of *Salmonella* from Food Contact Surfaces — SIMAN LIU, Ian Hildebrandt, Stephen Burbick, Nathan Anderson, Elizabeth Grasso-Kelley, Susanne Keller, Illinois Institute of Technology, Bedford Park, IL, USA

P3-04 Validation of Baking to Inactivate *Salmonella* in Model High-protein and High-fat Foods — WENQIAN WANG, Nathan Anderson, Shannon Pickens, Ian Hildebrandt, Elizabeth Grasso-Kelley, Institute for Food Safety and Health (IFSH), Bedford Park, IL, USA

P3-05 Multilaboratory Comparison of Thermal Resistance of *Enterococcus faecium* and *Salmonella enterica* in Peanut Butter — IAN HILDEBRANDT, Shannon Pickens, Soon Kiat Lau, Jeyamkondan Subbiah, Nathan Anderson, Bradley Marks, Elizabeth Grasso-Kelley, Michigan State University, East Lansing, MI, USA

P3-06 Inactivation of *Salmonella* spp. and Surrogate Bacteria on Cashews and Macadamia Nuts Exposed to Commercial Propylene Oxide Processing Conditions — THOMAS SAUNDERS, Monica Ponder, Robert Williams, Jian Wu, Kim Waterman, Kendall Fogler, Virginia Tech, Blacksburg, VA, USA

P3-07 *Enterococcus faecium* as a Surrogate for *Salmonella* in Thermal Treatment of Nonfat Milk Powder — SHUXIANG LIU, Nurul Ahmad, Jie Xu, Ian Hildebrandt, Elliot Ryser, Meijun Zhu, Bradley Marks, Juming Tang, Washington State University, Pullman, WA, USA

P3-08 The Effect of Process Air Velocity, Humidity, and Product Moisture on *Salmonella* Inactivation on Almonds — FRANCISCO GARCÉS-VEGA, Kaitlyn Casulli, Bradley Marks, Michigan State University, East Lansing, MI, USA

P3-09 Effect of Temperature, Water Activity, and Structure on *Salmonella* Thermal Resistance in Multiple Wheat Products — RENEE SCHWARTZ, Justine Williams, Pichamon Limcharoenchat, Nicole Hall, Michael James, Bradley Marks, Michigan State University, East Lansing, MI, USA

P3-10 Direct Comparison of the Modes of Cross-contamination Associated with *Salmonella* during Almond Processing — JOANNA CARROLL, Quincy Suehr, Philip Steinbrunner, Bradley Marks, Elliot Ryser, Sanghyup Jeong, Michigan State University, East Lansing, MI, USA

P3-11 Corn Oil Enhances the Ability to Detect *Salmonella* Montevideo in Spices — NICOLE ADDY, Laura Ewing, Darcy Hanes, Junia Jean-Gilles Beaubrun, U.S. Food and Drug Administration, Laurel, MD, USA

P3-12 Effect of Long-term Almond Storage on Survival and Resistance of *Salmonella* to Heat and X-Ray — PHILIP STEINBRUNNER, Pichamon Limcharoenchat, Bradley Marks, Sanghyup Jeong, Michigan State University, East Lansing, MI, USA

P3-13 Quantification of Adhesion Force of *Salmonella* Attached to Food Grade Surfaces in Low-moisture Environments — QUINCY SUEHR, Bradley Marks, Elliot Ryser, Sanghyup Jeong, Michigan State University, East Lansing, MI, USA

P3-14 Is *Enterococcus faecium* an Appropriate Surrogate for *Salmonella* in Thermal Process Validation of Cocoa Powder? — HSIEH-CHIN TSAI, Xia Song, Juming Tang, Bradley Marks, Meijun Zhu, Washington State University, Pullman, WA, USA

P3-15 Almond Surface Components Increase Resistance of *Salmonella* Enteritidis PT30 Under Low-moisture Environment — HSIEH-CHIN TSAI, Lina Sheng, Meijun Zhu, Washington State University, Pullman, WA, USA

P3-16 Fate of *Listeria monocytogenes* in Cocoa Powder during Isothermal Inactivation — HSIEH-CHIN TSAI, Marizela Silva, Juming Tang, Meijun Zhu, Washington State University, Pullman, WA, USA

P3-17 Assessment of Survival and Virulence of *Salmonella* in Low-moisture Foods — VICTOR JAYEOLA, Jeffrey Farber, Sophia Kathariou, North Carolina State University, Raleigh, NC, USA

P3-18 Genetic Diversity, Antimicrobial Resistance, and Virulence Profile of *Salmonella* Isolated from the Peanut Supply Chain — Aline von Hertwig, Dionisio Amorim Neto, Monique Casas, MARISTELA DA SILVA DO NASCIMENTO, University of Campinas (UNICAMP) Campinas, Brazil

P3-19 Evaluation of Choridic Acid Cross-protection in *Salmonella* Typhimurium Submitted to Long-term Desiccation Stress in Peanuts — Flávia Prestes, Karina Bosqui, Ana Paula Pereira, MARISTELA DA SILVA DO NASCIMENTO, University of Campinas (UNICAMP), Campinas, Brazil

P3-20 Retention of Viability of *Salmonella* in Sucrose as Affected by Type of Inoculum, Water Activity, and Storage Temperature — DAVID A. MANN, Larry R. Beuchat, Christine A. Kelly, Ynes R. Ortega, University of Georgia, Griffin, GA, USA

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P3-21 Validation of Extrusion Processing as an Inactivation Step for *Salmonella* in Low-moisture Food — Tushar Verma, JEYAMKONDAN SUBBIAH, Andreia Bianchini, Jayne Stratton, Xinyao Wei, Soon Kiat Lau, Harshavardhan Thippareddi, Nathan Anderson, Kent Eskridge, University of Nebraska-Lincoln, Lincoln, NE, USA

P3-22 Evaluation of Methods for Inoculating Powdered Milk and Soy Flour with *Salmonella enterica* Serovar Typhimurium LT2, *Enterococcus faecium*, and *Cronobacter sakazakii* — JUSTIN WIERTZEMA, Christian Borchardt, David Baumler, University of Minnesota, Saint Paul, MN, USA

P3-23 Survival of *Salmonella* spp. and *Listeria monocytogenes* in Hot Cocoa Drink Mix When Prepared Using Common Reconstitution Methods — ASHLEY CUNNINGHAM, Kari Sweeney, Conagra Brands, Omaha, NE, USA

P3-24 Influence of Water Activity on *Listeria monocytogenes* Growth in Brain Heart Infusion Agar — GUIOMAR DENISSE POSADA-IZQUIERDO, Arícia Possas, J.C.C.P. Costa, Fernando Pérez-Rodríguez, Antonio Valero, Rosa Maria Garcia-Gimeno, University of Cordoba, Cordoba, Spain

P3-25 Survival of Shiga-toxigenic *Escherichia coli* in Flour — Paula Bauer, VALERIE NETTLES, Stuart Gorman, Faith Critzer, University of Tennessee, Knoxville, TN, USA

P3-26 Effect of Added Water and Steam on the Heat Resistance of *Salmonella* Enteritidis Phage Type 30 Surrogate, *Enterococcus faecium*, on Blanched Peanuts, Cashews, Pumpkin Seeds, Red Skin Peanuts, and Walnuts — BUKOLA ONARINDE, Pauline Lovatt, Yunus Khatri, Gerrit Meerdink, University of Lincoln, Lincoln, United Kingdom

Packaging

P3-27 Antimicrobial Effect of Nanocomposite Films Made of Cloisite 30B-Metal Nanoparticle in Soy Burger — FARANAK BEIGMOHAMMADI, Seyed Hadi Peighambardoust, Seyed Jamaledin Peighambardoust, Islamic Azad University, Kermanshah, Iran, Kermanshah, Iran

P3-28 The Growth/Survival of *Salmonella* on Waxberry under Different Storage Temperatures and Package Materials — XINGNING XIAO, Wen Wang, Weihuan Fang, Yingchun Fu, Yanbin Li, Zhejiang University, College of Biosystems Engineering and Food Science, Hangzhou, China

P3-29 A Preliminary Report: Impact of Reusing Jute Bags on Aflatoxin Contamination of Maize — CUI WANG, Feng Xu, Xiaofeng Hu, Ali Pinjari, Jing Ren, Robert Baker, Mars Global Food Safety Center, Beijing, China

P3-30 Antimicrobial Food Packaging with Olive Leaf Extract — TONY JIN, Yanhong Liu, Lindsay McKeever, U.S. Department of Agriculture-ARS, Eastern Regional Research Center, Wyndmoor, PA, USA

P3-31 Inactivation of *Escherichia coli* O157:H7 and *Salmonella* spp. on Fresh Strawberries by Antimicrobial Washing and Coatings — TONY JIN, Mingming Guo, Joshua Gurtler, U.S. Department of Agriculture-ARS, Eastern Regional Research Center, Wyndmoor, PA, USA

P3-32 A Novel Bioactive Film Based on Pink Pepper Extract Combined with Modified Atmosphere Packaging Inhibits Spoilage Microorganisms of Atlantic Salmon Fillets — Thais Cardoso Merlo, Mariana Vieira Santana, Caio Cesar de Sousa Ribeiro, Giovana Verginia Barancelli, Patricia Santos Lopes, Cristiana Maria Pedroso Yoshida, ANNA CECILIA VENTURINI, Carmen Josefina Contreras-Castillo, Departamento de Ciências Farmacêuticas, Universidade Federal de São Paulo, Diadema, Brazil

P3-33 Ultraviolet-activated Titanium Dioxide Nanocomposite Polymer Films: Characterization and Antimicrobial Efficacy against *Escherichia coli* O157:H7 — JING XIE, Yen-Con Hung, University of Georgia, Griffin, GA, USA

Produce

P3-34 Cold Plasma Inactivation of *Salmonella* in Prepackaged, Mixed Salads is Influenced by Cross-contamination Sequence — SARAH HERTRICH, Glenn Boyd, Joseph Sites, Brendan Niemira, U.S. Department of Agriculture-ARS, Wyndmoor, PA, USA

P3-35 Cucumber Waxing Significantly Enhances the Survival of *Salmonella enterica* Serovar Newport on the Fruit Surface — MARY THERESA CALLAHAN, Shirley Micallef, University of Maryland, College Park, MD, USA

P3-36 The Effect of Pear Firmness on the Transfer of *Salmonella* during Mechanical Slicing — HAMOUD ALNUGHAYMISHI, Elliot Ryser, Michigan State University, East Lansing, MI, USA

P3-37 Reduction of *Salmonella* on the Surface of Green Skin Avocados by Antimicrobial Chemicals in a Pilot Brush Wash System — LIDIA N. VALDÉS, Michelle D. Danyluk, University of Florida, Lake Alfred, FL, USA

P3-38 Plant-microbe Factors Influencing *Salmonella* Survival and Growth on Alfalfa Sprouts and Microgreens — ELIZABETH REED, Christina Ferreira, Rebecca Bell, Eric Brown, Jie Zheng, U.S. Food and Drug Administration, College Park, MD, USA

P3-39 Fate of *Salmonella* spp. and *Listeria monocytogenes* on the Surface of Whole Mangoes Stored at Three Temperatures — LORETTA FRIEDRICH, Michelle D. Danyluk, University of Florida, Lake Alfred, FL, USA

P3-40 Characterization of a Pathogen Strain Collection to Allow for Improved Validation of Sanitizer Efficacy in the Produce Industry — ANNA SOPHIA HARRAND, Veronica Guariglia-Oropeza, Jasna Kovac, Laura Carroll, Martin Wiedmann, Cornell University, Ithaca, NY, USA

P3-41 Optimization of Time and Temperature of Hot Water Treatment as a Kill Step to Inactivate *Salmonella* spp. and *Escherichia coli* O157:H7 in Pecan Processing — KARUNA KHAREL, Achyut Adhikari, Charles Graham, Namrata Karki, Louisiana State University AgCenter, Baton Rouge, LA, USA

P3-42 Effectiveness of Hot Water and Peroxyacetic Acid Treatment on Inactivation of Inoculated *Salmonella* spp. on Alfalfa, Clover, and Radish Seeds Intended for Sprout Production — Namrata Karki, KARUNA KHAREL, Jorge Cabezas, Alejandro Arias, Achyut Adhikari, Louisiana State University AgCenter, Baton Rouge, LA, USA

P3-43 Assessing the Effectiveness of Sanitizer Spray and Brush Roller Treatment on Reducing the Population of a Five-strain *Salmonella enterica* Cocktail on Mango Surfaces — XINYUE WANG, Michelle D. Danyluk, University of Florida, Lake Alfred, FL, USA

P3-44 Effect of Curli Expression and Adhesion of *Salmonella* Newport on Bacterial Transfer during Cucumber Peeling — JIIN JUNG, Donald W. Schaffner, Rutgers University, New Brunswick, NJ, USA

P3-45 Rapid Concentration/Detection of *Escherichia coli* O157:H7 and *Listeria monocytogenes* from Lettuce Wash Waters Generated in Commercial Scale Facilities — RYANN GUSTAFSON, Sonia Magana, Elizabeth Kearns, Daniel Lim, Elliot Ryser, Michigan State University, East Lansing, MI, USA

P3-46 Prevalence, Persistence, and Transfer of Antimicrobial-resistant Microorganisms from Organic Dairy Manure to Leafy Greens — NITYA SARJAPURAM, Maria Albarracin, Siddhartha Thakur, Eduardo Gutierrez, North Carolina State University, Raleigh, NC, USA

P3-47 Visualizing Pathogen Internalization Pathways in Fresh Tomatoes Using a Confocal Laser Scanning Microscope and a Micro CT — BIN ZHOU, Yaguang Luo, Gary Bauchan, Hao Feng, John Stommel, U.S. Dept. of Agriculture–ARS, Beltsville, MD, USA

P3-48 Under Field Conditions, Distance is Significantly Associated with the Amount of *Escherichia coli* That Transfers from Wildlife Feces to Preharvest Lettuce during Foliar Irrigation — DANIEL WELLER, Jasna Kovac, David Kent, Sherry Roof, Jeffrey Tokman, Martin Wiedmann, Cornell University, Ithaca, NY, USA

P3-49 Survival of Generic *Escherichia coli* and *Listeria* spp. Populations in Dairy Compost- and Poultry Litter Compost-amended Soils in the Northeastern United States — MARIE LIMOGES, Deborah Neher, Thomas Weicht, Patricia Millner, Manan Sharma, Catherine Donnelly, University of Vermont, Burlington, VT, USA

P3-50 The Effect of Soil Management on the Persistence of *Escherichia coli* and *Listeria* spp. in Manure-amended Soils in the Northeast United States — PANAGIOTIS LEKKAS, Manan Sharma, Deborah Neher, Thomas Weicht, Patricia Millner, Catherine Donnelly, University of Vermont, Burlington, VT, USA

P3-51 Low Prevalence of Foodborne Pathogens Found in Produce Grown on Diversified Farms in California — Nora Navarro-Gonzalez, Laura Patterson, Peiman Aminabadi, Alda Pires, Shirley Micallef, Robert Buchanan, MICHELE JAY-RUSSELL, University of California-Davis, Western Center for Food Safety, Davis, CA, USA

P3-52 Microbial Attachment and Die-off Rate on Watermelon Surface in an Agricultural Setting — VIJAY SINGH CHHETRI, Kathryn Fontenot, Ronald Strahan, Karuna Kharel, Namrata Karki, Achyut Adhikari, Louisiana State University AgCenter, Baton Rouge, LA, USA

P3-53 Effect of Residual Chlorine on the Attachment and Survival of *Escherichia coli* O157:H7 on Spinach Surface — VIJAY SINGH CHHETRI, Achyut Adhikari, Louisiana State University AgCenter, Baton Rouge, LA, USA

P3-54 Interactions between *Salmonella enterica* Newport and Plant Pathogenic Fungi of the Genus Fusarium on Melons — ROBERT KORIR, Shirley Micallef, Kathryne Everts, University of Maryland College Park, Salisbury, MD, USA

P3-55 Evaluating the Recovery of *Salmonella* from Enriched Inshell Walnuts — ADAM COBERT, Linda J. Harris, University of California-Davis, Davis, CA, USA

P3-56 *Salmonella* Serovar Specific Tolerance to Nitric Oxide Stress in Vitro and in the Tomato Phyllosphere — ANGELA FERELLI, Shirley Micallef, University of Maryland, College Park, MD, USA

P3-57 Water Stress Limits the Growth of *Salmonella* on the Lettuce Leaf Surface — XINGCHEN LIU, Shirley Micallef, University of Maryland, College Park, MD, USA

P3-58 Survival of *Salmonella* spp. and *Listeria monocytogenes genes* on Pressed Card and Plastic Polyethethylene Board from the Farmers' Market and Validated Commercial Sanitizers to Decontaminate *Salmonella* spp. and *Listeria monocytogenes* — KA WANG LI, Lacey Lemonakis, Cangliang Shen, West Virginia University, Morgantown, WV, USA

P3-59 The Efficacy of Chlorine and Acidified Sodium Chlorite for Disinfection of Seeds Artificially Inoculated with *Salmonella* as Affected by Treatment Time, Concentration, and Seed Type — ZIJING ZHANG, Yingqun Lei, Mengqi Li, Tong-Jen Fu, Illinois Institute of Technology, Institute for Food Safety and Health, Bedford Park, IL, USA

P3-60 A Blend of Benzalkonium Chloride, Acetic Acid, and Methyl Paraben Effectively Reduces *Escherichia coli* O157:H7, *Salmonella* spp., and *Listeria monocytogenes* in Produce Wash Water, But Lacks Consistent Efficacy on Romaine and Iceberg Lettuce — NICHOLAS SEVART, Sara Gragg, Matthew Krug, Jacob Jenott, Randall Phebus, Kansas State University, Manhattan, KS, USA

P3-61 Transfer of Microorganisms from a Dairy Calf Operation to an Adjacent Pistachio Orchard — CHRISTOPHER THEOFEL, Thomas Williams, Eduardo Gutierrez, Gordon Davidson, Michele Jay-Russell, Linda J. Harris, University of California-Davis, Davis, CA, USA

P3-62 Comparison of Commercial Sanitizer Monitoring Strips — TIAH GHOSTLAW, Amanda Chang, Paola Martinez-Ramos, Amanda Kinchla, University of Massachusetts-Amherst, Amherst, MA, USA

Blue Text - Developing Scientist Competitor

Green Text - Undergraduate Student Competitor

P3-63 Metagenomics Analysis of Antibiotic-resistance Genes Found on Radish Taproots Grown in Soils Amended with Antibiotic-treated Cattle — GISELLE KRISTI GURON, Monica Ponder, Amy Pruden, Virginia Tech, Blacksburg, VA, USA

P3-64 Quantifying Sulfonamide-resistant Bacteria on Lettuce Grown in Soils Amended with Manure from Antibiotic-Treated Cattle — GISELLE KRISTI GURON, Monica Ponder, Amy Pruden, Virginia Tech, Blacksburg, VA, USA

P3-65 Persistence of Non-O157 Shiga-toxigenic *Escherichia coli* on Fresh Produce Surfaces — Jennifer Green, JITU PATEL, U.S. Department of Agriculture, Beltsville, MD, USA

P3-66 Serotypes, Antimicrobial Resistance, and Genetic Correlations of *Escherichia coli* Isolated from Raw Kimchi Ingredients and Fermented Kimchi — YUKYUNG CHOI, Soomin Lee, Hyun Jung Kim, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P3-67 Whole Genome Sequence Analysis of *Salmonella* Isolates from Alfalfa Seeds Implicated in Sprout Outbreaks — DEENA AWAD, Behzad Imanian, Peichen Liu, Yizhu Yan, Kristin M. Schill, Tong-Jen Fu, U.S. Food and Drug Administration, Division of Food Processing Science and Technology, Bedford Park, IL, USA

P3-68 Microbiological Profile and Incidence of S*almonella* spp. on Cherry Tomato — MARLA LEAL-CERVANTES, Sofia Arvizu-Medrano, Montserrat Hernandez-Iturriaga, Nanci E. Martínez-Gonzáles, Universidad Autónoma de Querétaro, Querétaro, Mexico

P3-69 Survival of *Salmonella enterica* on Mini Cucumbers — HUIHUI CHEN, Siyun Wang, University of British Columbia, Vancouver, BC, Canada

P3-70 *Salmonella* Transfer Potential during Field-pack Handling of Cantaloupe — RACHEL PFUNTNER, Laura Truitt, Benjamin Chapman, Michelle D. Danyluk, Laura Strawn, Virginia Tech – Eastern Shore AREC, Painter, VA, USA

P3-71 Ability of the Top Seven Shiga-toxigenic *Escherichia coli* to Form Biofilms on Polystyrene and Stainless Steel Surfaces and to Survive within Dry Biofilms — Meining Cheng, Emelia Adator, Richard Holley, Tim McAllister, CLAUDIA NARVAEZ, University of Manitoba, Winnipeg, MB, Canada

P3-72 Involvement of Surface Structures of Shiga Toxin-producing *Escherichia coli* O157:H7 and O104:H4 in Interactions with Arabidopsis thaliana — HYEIN JANG, Karl Matthews, Rutgers University, New Brunswick, NJ, USA

P3-73 Migration and Growth of Enterohemorrhagic *Escherichia coli* from Inoculated and Accompanying Contaminated Vegetable Seeds to Sprouts or Seedlings — YUE CUI, Da Liu, Ronald R. Walcott, Jinru Chen, University of Georgia, Griffin, GA, USA

P3-74 Formation of Disinfection Byproducts in Wash Water and Lettuce by Washing with Sodium Hypochlorite and Peracetic Acid Sanitizers — WAN-NING LEE, Ching-Hua Huang, Georgia Institute of Technology, Atlanta, GA, USA

P3-75 Comparison of Flume Wash and Single-pass Wash on the Formation of Disinfection Byproducts in Produce Processing — Ching-Hua Huang, WAN-NING LEE, Yaguang Luo, Dave Morris, Georgia Institute of Technology, Atlanta, GA, USA

P3-76 Efficacy of Peroxyacetic Acid and Other Sanitizers for Ensuring Produce Safety — PRASHANT SINGH, Hang Qi, Yen-Con Hung, University of Georgia, Griffin, GA, USA

P3-77 Efficacy of Peracetic Acid for Inactivation of Foodborne Pathogens in Imazalil Fungicide Solutions Used in Citrus Packinghouses — Setareh G. Shiroodi, ANNE-LAURE MOYNE, Linda J. Harris, University of California-Davis, Davis, CA, USA

P3-78 Injury and Recovery of *Salmonella* spp., *Escherichia coli* O157:H7, and *Listeria monocytogenes* on Cantaloupe Rind Surfaces after Hydrogen Peroxide and Minimal Thermal Treatment — DIKE UKUKU, Sudarsan Mukhopadhyay, Modesto Olanya, Brendan Niemira, U.S. Department of Agriculture-ARS-ERRC-FSIT, Wyndmoor, PA, USA

P3-79 Impact of Organic Practices in the Microbiological Quality and Safety of Lettuce in São Paulo, Brazil — DANIELE FERNANDA MAFFEI, Debora Andrade Moreira, Mariza Landgraf, Bernadette DGM Franco, University of São Paulo, São Paulo, Brazil

P3-80 Survival and Growth of Foodborne Pathogens in Fruit Juice — LINDSEY DEFRAIN, Hamoud Alnughaymishi, Elliot Ryser, Michigan State University, East Lansing, MI, USA

P3-81 Evaluation of Four Assessment Methods Used to Identify Foodborne Pathogens Prior to the Harvest of Fresh Produce — PAULA RIVADENEIRA, Martha Ruedas, Teresa Reyes, Elene Stefanakos, Robert Buchanan, University of Arizona, Yuma, AZ, USA

P3-82 Prevalence of Foodborne Pathogens on Small Mixed Crop-Livestock Farms in Arizona — PAULA RIVADENEIRA, Martha Ruedas, Teresa Reyes, Elene Stefanakos, Robert Buchanan, University of Arizona, Yuma, AZ, USA

P3-83 Rotational Grazing of Sheep within Organic Crop Fields: What is an Ideal Waiting Period to Minimize Food Safety Risks? — LAURA PATTERSON, Nora Navarro-Gonzalez, Peiman Aminabadi, Elizabeth Antaki, Michele Jay-Russell, Alda Pires, University of California-Davis, Department of Population Health & Reproduction, Davis, CA, USA

P3-84 Isolation of *Salmonella* and Detection of Generic *Escherichia coli* Populations from South Florida Surface Waters — TRAVIS CHAPIN, Michelle D. Danyluk, University of Florida, Lake Alfred, FL, USA

P3-85 Application of Cinnamon Oil Nanoemulsion to the Control of Foodborne Bacteria Such as *Listeria* spp. and *Salmonella* spp. on Honeydew Melon — SUMIT PAUDEL, Kanika Bhargava, Hari Kotturi, University of Central Oklahoma, Edmond, OK, USA

Blue Text - Developing SBlue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P3-86 Differential Growth of *Listeria monocytogenes* and *Salmonella enterica* Serovar Typhimurium in Sterile Juice from Fresh-cut Produce — SAMANTHA BOLTEN, Ganyu Gu, Xiangwu Nou, U.S. Department of Agriculture–ARS, Beltsville, MD, USA

P3-87 Forced Air-Ozone Reactor Combined with Sequential Advanced Oxidative Process to Inactivate *Listeria monocytogenes* on Apples Destined for Candy Apple Production — KAYLA MURRAY, Fan Wu, Keith Warriner, University of Guelph, Guelph, ON, Canada

P3-88 Reduction of *Escherichia coli* O157:H7, *Listeria monocytogenes*, or *Salmonella* spp. on Whole Yellow Onions Exposed to Hot Water or Diced Onions Exposed to Lime Juice — Vanessa Lieberman, ETHAN W. MORGAN, Linda J. Harris, University of California-Davis, Davis, CA, USA

P3-89 Cold Plasma Inactivation of *Escherichia coli and Salmonella* spp. on Golden Delicious Apples — SIQIN LIU, Agnes Kilonzo-Nthenge, Ankit Patras, Yannam Sudhear, Tennessee State University, Nashville, TN, USA

P3-90 Influence of Chemical Pretreatment on Wooden Sticks Alone and in Caramel Apples on *Listeria monocytogenes* Survival — CHRISTINA K. CARSTENS, Joelle K. Salazar, Vriddi M. Bathija, Sartaj S. Narula, Peien Wang, Mary Lou Tortorello, U.S. Food and Drug Administration, Bedford Park, IL, USA

P3-91 Disinfection of Alfalfa Sprouting Seed Using a Treatment Compliant with Organic Production Requirements — PASCAL DELAQUIS, Susan Bach, Steve Orban, Carmen Wakeling, Siyun Wang, Agriculture and Agri-Food Canada, Summerland, BC, Canada

P3-92 Practices and Conditions Which Promote Persistence of *Listeria monocytogenes* on Equipment Surfaces and Transfer to Cantaloupes in the Packing Environment — ESMOND NYARKO, Kalmia Kniel, Bin Zhou, Cheryl East, Eric Handy, Yaguang Luo, Patricia Millner, Manan Sharma, University of Delaware, Newark, DE, USA

P3-93 Evaluation of Microbiome Present in Bagged Spring Mix Salad — CHAO LIAO, Luxin Wang, Auburn University, Auburn, AL, USA

P3-94 The Effects of Relative Humidity on *Salmonella* Biofilm Production, Quorum Sensing, and Subsequent Survival on Tomatoes and Plastic Mulch — JENNIFER TODD-SEARLE, Donald W. Schaffner, Rutgers University, New Brunswick, NJ, USA

P3-95 Survival of *Escherichia coli* O157:H7, *Salmonella* spp., and *Listeria monocytogenes* on the Skin and Sliced Kiwifruit — JING YUAN, Luxin Wang, Auburn University, Auburn, AL, USA

P3-96 Evaluation of *Escherichia coli* Levels Present in Agricultural Ponds and Streams — JING YUAN, Amanda Windham, Kenneth Macklin, Stuart Price, Luxin Wang, Auburn University, Auburn, AL, USA

P3-97 Microbial Community Analysis of Field-grown Produce in Soil Amended with Manure or Compost from Antibiotic Treated Cattle — KENDALL FOGLER, Monica Ponder, Amy Pruden, Giselle Kristi Guron, Leigh Anne Krometis, Cully Hession, Lauren Wind, Kyle Jacobs, Virginia Tech, Blacksburg, VA, USA

P3-98 Dynamics of Bacterial Community on Spinach during Processing and Storage — GANYU GU, Samantha Bolten, Lan Wang, Steve Rideout, Xiangwu Nou, U.S. Department of Agriculture–ARS, Beltsville, MD, USA

P3-99 Fate of *Listeria monocytogenes* on Fresh Apples under Different Storage Temperatures — LINA SHENG, Katheryn Edwards, Hsieh-Chin Tsai, Shima Bibi, Ines Hanrahan, Meijun Zhu, Washington State University, Pullman, WA, USA

P3-100 Survival of *Listeria innocua* on Fuji Apples under Commercial Cold Storage with or without Ozone Gaseous — LINA SHENG, Ines Hanrahan, Xiaofei Sun, Michael Taylor, Glade Brosi, Meijun Zhu, Washington State University, Pullman, WA, USA

P3-101 Survival of Generic *E. coli* on Gala and Golden Delicious Apples Near Harvest with and without the Use of Overhead Cooling Water Applications — Kyu Ho Jeong, INES HANRAHAN, Lauren Walter, Meijun Zhu, Karen M. Killinger, Tree Fruit Research Commission, Wenatchee, WA, USA

P3-102 *Arcobacter* Internalization in Fresh Produce: An Emerging Food Safety Issue under Extreme Weather Events — SEUNGJUN LEE, The Ohio State University, Columbus, OH, USA

P3-103 Cross-contamination by Curli and Non-curli Producing *Escherichia coli* O157:H7 Mediated by Lettuce Inoculation Location during Washing of Leafy Greens — ANN VEGDAHL, Donald W. Schaffner, Rutgers University, New Brunswick, NJ, USA

P3-104 *E. coli*/Salad Interactions — GIANNIS KOUKKIDIS, Primrose Freestone, University of Leicester, Leicester, United Kingdom

P3-105 Microbial Analysis of Produce Purchased from Florida Farmers' Markets — LISA ROTH, Amy Simonne, Lisa House, Soohyoun Ahn, University of Florida, Gainesville, FL, USA

P3-106 Influence of Ultraviolet-C Light Intensity on Blueberries for Enhanced Food Safety and Extended Shelf Life — AROSHA LOKU UMAGILIYAGE, Ruplal Choudhary, Southern Illinois University, Carbondale, IL, USA

P3-107 Characterization of *Clostridium difficile* Isolated from Animal Manure and Manure-based Compost — MUTHU DHARMASENA, Xiuping Jiang, Clemson University, Clemson, SC, USA

P3-108 Changes in the Phyllosphere-associated Bacteria of Leafy Greens Caused by Environmental Factors Such as Solar Radiation — PILAR TRUCHADO, Maria Gil, Ana Allende, CEBAS-CSIC, Espinardo, Spain

P3-109 Microbial Quality of Irrigated Leafy Green Vegetables in Accra, Ghana — JOYCELYN K. QUANSAH, Angela P.H. Kunadu, Lydia Mosi, Firibu K. Saalia, Jinru Chen, University of Georgia, Griffin, GA, USA

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

Microbial Food Spoilage

P3-110 New Culture Media Method, Approved by AOAC and Microval for Rapid and Convenient Detection and Enumeration of Food Spoilage Microorganisms — ANKE HOSSFELD, Renaud Chollet, Lisa John, Celine Marion, Merck KGaA, Darmstadt, Germany

P3-111 Withdrawn

P3-112 Withdrawn

P3-113 Withdrawn

P3-114 A Study to Assess the Numbers and Prevalence of *Bacillus cereus* and Its Toxins in Pasteurized Fluid Milk — SALEEMA SALEH-LAKHA, Carlos Leon-Velarde, Shu Chen, Susan Lee, Kelly Shannon, Martha Fabri, Bruce Keown, Gavin Downing, University of Guelph, Guelph, ON, Canada

P3-115 Evaluation of a Highly Multiplexed, Automated Assay for the Detection of Beer Spoilage Flora — MORGAN WALLACE, Daniela Bocioaga, Kathryn Mix, Stephanie Morse, Kyleen Sorensen, Cristina McGuire, Sarah Kozak, Jessica Pecone, Katherine Sweitzer, Peter Trabold, Gwendolyn Spizz, Rheonix, Ithaca, NY, USA

P3-116 Health Canada Validation of a Chromogenic Medium for Enumaration of *E. coli* and other Non-*E. coli* Coliforms Bacteria in Selected Food Matrices — YANNICK BICHOT, Wendy Lauer, Mike Clark, Christophe Quiring, Bio-Rad, Marnes-la-Coquette, France

P3-117 Development of a Monte Carlo Model to Predict Fluid Milk Spoilage by Aerobic Psychrotolerant Sporeformers — ARIEL BUEHLER, Aljosa Trm□i□, Nicole Martin, Kathryn Boor, Martin Wiedmann, Cornell University, Ithaca, NY, USA

P3-118 Patulin Contamination and Patulin-producing *Penicillium* spp. in Decayed Apples and Patulin Reduction by Mechanical Removal of Decayed Parts — MIN JUNG, Sung Min Cho, Min Jung Choo, Kyu Ri Lee, Sung-Yong Hong, Soo-Hyun Chung, Korea University, Seoul, South Korea

P3-119 A Putative Siderophore Locus of *Pseudomonas fragi*: Solving an Iron Problem — TAMSYN STANBOROUGH, P. Scott Chandry, Shane M. Powell, Mark Tamplin, Narelle Fegan, CSIRO Agriculture & Food, Werribee, Australia

P3-120 Biodegradation of Aflatoxin B_1 by Edible Mushroom Cultures and Their Cell-free Extracts — MIN JUNG CHOO, Kyu Ri Lee, Sung Min Cho, Min Jung, Sung-Yong Hong, Soo-Hyun Chung, Korea University, Seoul, South Korea

P3-121 Effects of Various Antioxidants on Natural Spoilage Microflora, Lean Color and Sensory Characteristics of Retail Case-ready Top Sirloin Steaks — BRITTNEY BULLARD, Ifigenia Georgnaras, Jennifer Martin, Dale Woerner, Robert Delmore, Keith Belk, Colorado State University, Fort Collins, CO, USA

P3-122 Influence of Desiccation on Survival and Dry-heat Resistance of Long-term-survival Phase *Salmonella* Typhimurium and *Salmonella* PT 30 on Paper Discs and Raw Almonds — FEI WANG, Aubrey Mendonca, Aura Daraba, Yutong Zhang, David Manu, Angela Shaw, Byron Brehm-Stecher, Iowa State University, Ames, IA, USA

P3-123 Growth of Fungi in Low Oxygen and Intermediate Water Activity Model Systems — ELIZABETH BUERMAN, Randy Worobo, Olga Padilla-Zakour, Cornell University, Ithaca, NY, USA

P3-124 Detoxification of Aflatoxin B_1 by Cell-free Extract of *Aspergillus oryzae* MAO 103 — KYU RI LEE, Sung Min Cho, Sung-Yong Hong, Soo-Hyun Chung, Korea University, Seoul, South Korea

P3-125 Enumeration and Identification of Spoilage Lactic Acid Bacteria in Chilled Food Products Using 3M™ Petrifilm™ Lactic Acid Bacteria Count Plate — SITI AISHA ABD AZIZ, Su Ann Lee, Teen Teen Chin, Hui Key Lee, Chandraprasad S Rajangan, Lay Ching Chai, ALS Technichem, Shah Alam, Malaysia

P3-126 Storage-Life and Microflora of Vacuum-packaged Pork Loin Cuts in Relation to Beef from the Same Abattoir — Mohamed K Youssef, Frances Tran, PEIPEI ZHANG, Colin O Gill, Xianqin Yang, Agriculture and Agri-Food Canada, Lacombe, AB, Canada

P3-127 Variability in Growth Behavior of *Carnobacterium* Isolates in Medium with Low Initial pH — PEIPEI ZHANG, Xianqin Yang, Agriculture and Agri-Food Canada, Lacombe, AB, Canada

Antimicrobials

P3-128 Anti-listerial Activity of Lactic Acid Bacteria Isolated from Artisanal Cheeses Produced in the State of Minas Gerais (Brazil) — FERNANDA BOVO CAMPAGNOLLO, Larissa Pereira Margalho, Bruna Akie Kamimura, Verônica Ortiz Alvarenga, Vasco A.P. Cadavez, Ursula A. Gonzales-Barron, Anderson Sant'ana, University of Campinas, Campinas, Brazil

P3-129 Prevalence and Antibiotic Resistance of Bacteria Isolated from Retail Meats in Korea during the Year 2016 — YONG HOON KIM, National Institute of Food and Drug Safety Evaluation, Ministry of Food and Drug Safety, Cheongju, South Korea

P3-130 Antibacterial and Antioxidant Activity of Oregano Essential Oil on Stability of Low-acid Mayonnaise — IZABELA ALVES GOMES, Érika Fraga de Souza, Flávia dos Santos Gomes, Otniel Freitas-Silva, Janine Passos Lima da Silva, Federal University of the State of Rio de Janeiro, Rio de Janeiro, Brazil

P3-131 Prevention of Mixed-species Biofilm Formations on Nanoscale Plasma-coated Surfaces — FNU CHENGGEER, Lin Li, John Jones, Meng Chen, Qingsong Yu, Azlin Mustapha, University of Missouri, Columbia, MO, USA

P3-132 Withdrawn

P3-133 Antimicrobial Activity of Fruit Extracts and Juice against Various *Listeria monocytogenes* and *Salmonella* Strains — Jingyi Du, Yi-Cheng Su, Christina DeWitt, Chengchu (Catherine) Liu, JOVANA KOVACEVIC, Oregon State University, Portland, OR, USA

P3-134 The Synergistic Effect of the Photosensitizer Curcumin and Ascorbic Acid in Inactivating *Listeria monocytogenes* and *Escherichia coli* O157:H7 — JINGWEN GAO, Junhua Han, Karl Matthews, Rutgers University, New Brunswick, NJ, USA

P3-135 Antimicrobial Effect of Copper-based Surfaces on Environmental Foodborne Pathogens Associated with Meat and Poultry Processing Facilities — ILAN ARVELO-YAGUA, Marcos X. Sanchez-Plata, Sergio Rocha, Patricia Landaida, Luis Armijo, Texas Tech University, Lubbock, TX, USA

P3-136 Cold Pasteurization of Tender Coconut Water by a Flow through Filter Column Containing Glassbeads Coated with Curcumin Nano-Liposomes — Jim Thomson, Nathalie Becerra-Mora, Punit Kohli, Derek Fisher, Victor Rodov, RUPLAL CHOUDHARY, Southern Illinois University – Carbondale, Carbondale, IL, USA

P3-137 Antibacterial Characteristics of Anthocyanins Extracted from Wild Blueberries against Foodborne Pathogens — Yujie Zhang, Caihong Wei, Xiaohong Sun, Yingjie Pan, VIVIAN CHI-HUA WU, U.S. Department of Agriculture-ARS-WRRC, Albany, CA, USA

P3-138 The Effect of Sugar Substrates on the Efficacy of Bacteriocins to Inhibit *Listeria monocytogenes* — DANIELLE ROBOCON, Michael Gänzle, Lynn McMullen, University of Alberta, Edmonton, AB, Canada

P3-139 Reduction of Molds and *Listeria monocytogenes* on Flour Tortilla Utilizing Targeted Directional Microwave Technology — KATHLEEN FERMIN, Don Stull, Andreas Neuber, Kendra Nightingale, Mindy Brashears, Texas Tech University, Lubbock, TX, USA

P3-140 Behavior of *Listeria monocytogenes* on *Mortadella* Formulated Using a Natural, Clean Label Antimicrobial during Extended Storage at 4° or 12°C — JOHN LUCHANSKY, Stephen Campano, Marcus Rieker, Laura Stahler, Lianna McGeary, Bradley Shoyer, Laura Shane, Manuela Osoria, Anna Porto-Fett, U.S. Department of Agriculture-ARS-ERRC, Wyndmoor, PA, USA

P3-141 Efficacy of Chlorine Dioxide Gas to Decontaminate Fresh Produce Used for In-store and Vendor Juicing Operations — MIKAYLA GOODMAN, Mark Berrang, Judy Harrison, Mark Harrison, University of Georgia, Athens, GA, USA

P3-142 Development of Antimicrobial Hydrogel Patches to Control *Listeria monocytogenes* in Foods Consumed Raw — HYEMIN OH, Sejeong Kim, Yohan Yoon, Sookmyung Women's University, Seoul, South Korea

P3-143 A Cranberry Extract as a Marinade Inhibits Growth of *Listeria* on Chicken — Archana Vasanthakumar, CHAYAPA TECHATHUVANAN, Margarita Gomez, Ocean Spray Cranberries, Inc., Lakeville-Middleboro, MA, USA

P3-144 Essential Oils in the Control of Planktonic and Sessile Cells of *Staphylococcus aureus* — TENILLE RIBEIRO DE SOUZA, Letícia Andrade do Vale, Kalmia Kniel, Roberta Hilsdorf Piccoli, UFLA, Lavras, Brazil

P3-145 Antimicrobial Ability of Modified Bacterial Cellulose Film — WEI WANG, Francois Xavier Nayigiziki, Polly Liou, Azlin Mustapha, Mengshi Lin, University of Missouri, Columbia, MO, USA

P3-146 Effect of Acidified Peroxyacetic Acid on the Microbiological and Color Characteristics of Beef Tissue — BRIANNA BRITTON, Kathryn McCullough, Ifigenia Geornaras, Dale Woerner, Robert Delmore, Jennifer Martin, James Reagan, Keith Belk, Colorado State University, Fort Collins, CO, USA

P3-147 Antimicrobial Activity and Mechanism of Garlic (*Allium sativum*) Extracts against *Aeromonas hydrophila* — YOU JIN KIM, In Young Choi, Won Keun Song, Dong Wook Jang, Hae-Yeong Lee, Min-Jeong Lee, Mi-Kyung Park, Kyungpook National University, Daegu, South Korea

P3-148 Evaluation of *Psoraleae semen* Extract as a Natural Antimicrobial Agent for Food Application — SEJEONG KIM, Yohan Yoon, Kyoung-Hee Choi, Sookmyung Women's University, Seoul, South Korea

P3-149 Antioxidant Activity and Influence of Extracts of *Citrus* Byproducts on Adherence and Invasion of *Campylobacter jejuni*, as Well as on the Relative Expression of Cadf and Ciab — Norma Heredia, JORGE DÁVILA-AVIÑA, Sandra Castillo, Santos Garcia, Universidad A. de Nuevo Leon, San Nicolas, Mexico

P3-150 Gaseous Ozone and Low-temperature Treatment for Controlling Growth of *Aspergillus parasiticus* in Peanuts — JING NI TAN, Cheng-An Hwang, Hsin-I Hsiao, National Taiwan Ocean University, Keelung, Taiwan

P3-151 Inactivation of Bacteria Using Single Wavelength 405 nm Light — STEPHEN LYON, Sealed Air Corporation, Sturtevant, WI, USA

P3-152 Antibiotic Resistance of Beneficial Lactic Acid Bacteria Isolated from Smoked Salmon — LUIS NERO, Bernadette DGM Franco, Elisabetta Tome, Svetoslav Todorov, Universidade Federal de Viçosa, Vicosa, Brazil

P3-153 Development of Antimicrobial Susceptibility among Microbiota from Hospices in South Africa — JANE NKHEBENYANE, Ryk Lues, Teboho Mokoatsi, Central University of Technology, FS SA, Bloemfontein, South Africa

P3-154 Applying N-Halamine Compound to Absorbent Pad for Controlling Spoilage-related Microorganisms in Refrigerated Beef — TIAN REN, Mingyu Qiao, Tung-Shi Huang, Jean Weese, Yung-Hsiang Tsai, Auburn University, Auburn, AL, USA

P3-155 Carbon Dots' Light-activated Antimicrobial Activities against Bacterial Pathogens — Mohamad Al Awak, Ping Wang, XIULI DONG, Yongan Tang, Ya-Ping Sun, Liju Yang, North Carolina Central University, Durham, NC, USA

P3-156 Antimicrobial Activity of Kefir against *Cronobacter sakazakii* and Its Application — DONG-HYEON KIM, Dana Jeong, Il-Byeong Kang, Kwang-Young Song, Hong-Seok Kim, Young-Ji Kim, Hyunsook Kim, Kun-Ho Seo, Konkuk University, Seoul, South Korea

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P3-157 Isolation and Characterization of a Novel Antimicrobial Exopolysaccharide Produced by *Lactobacillus* Kefiranofaciens DN1 from Kefir — DANA JEONG, Dong-Hyeon Kim, Il-Byeong Kang, Hyunsook Kim, Kwang-Young Song, Hong-Seok Kim, Kun-Ho Seo, Konkuk University, Seoul, South Korea

P3-158 Decay Kinetics of Residual Peracetic Acid and Hydrogen Peroxide on Poultry and Red Meat — RICHARD WALSH, John Hilgren, Deborah Klein, Oriana Leishman, Ecolab Inc., St. Paul, MN, USA

P3-159 Four Quaternary Ammonium-based Disinfectants Show Limited Efficacy for Inactivation of Human Norovirus GII.4 Sydney — JEREMY FAIRCLOTH, Emma Lepri, Lee-Ann Jaykus, North Carolina State University, Raleigh, NC, USA

P3-160 Screening Food Microbiota for Novel Antimicrobial Compounds Suitable for Food Preservation — WALAA HUSSEIN, Ahmed Yousef, Ohio State University, Columbus, OH, USA

P3-161 Plasmid Mediated Colistin Resistance in Food Animal Intestinal Contents Detected by Selective Enrichment — KIMBERLY COOK, Richard Meinersmann, Scott Ladely, Jodie Plumblee, Rachel Whitaker, Kay Williams, Uday Dessai, Eileen Thacker, U.S. Department of Agriculture–ARS, Athens, GA, USA

P3-162 In Vitro Evaluation of Essential Oils and Plant Extracts as an Alternative to Antibiotic Used in Pork Meat Production — Carmen M. S. Ambrosio, Natalia Y. Ykeda, Severino M. Alencar, Carmen J. C. Castillo, Andrea M. Moreno, EDUARDO M. DA GLORIA, Universidade de São Paulo, Piracicaba - SP, Brazil

P3-163 Effect of Pimenta Malagueta *(Capsicum frutescens)* and Red Pepper *(Capsicum annuum)* Extracts on LuxRI-Type Quorum Sensing-regulated Phenotypes — MILAGROS LISETH CASTILLO RIVERA, Beatriz Ximena Valencia Quecan, Neuza Mariko Aymoto Hassimotto, Uelinton Manoel Pinto, Universidade de São Paulo, São Paulo, Brazil

P3-164 Antimicrobial Efficacy of *Syzygium antisepticum* Plant Extract against *Staphylococcus aureus* and Methicillin-resistant *S. aureus* and Its Application Potential with Cooked Chicken — Wenqian Yuan, HYUN GYUN YUK, Hyun-Jung Chung, Korea National University of Transportation, Chungju, South Korea

P3-165 Inhibition of Bacterial Quorum Sensing (QS) by Organic Extracts of Onion Varieties — BEATRIZ XIMENA VALENCIA QUECAN, Milagros Liseth Castillo Rivera, Neuza Mariko Aymoto Hassimotto, Uelinton Manoel Pinto, Universidade de São Paulo, São Paulo, Brazil

Laboratory and Detection Methods

P3-166 Independent Matrix Validations for the Detection of *Salmonella enterica* in 375 Gram Samples across Various Product Categories by the Atlas® *Salmonella* Sen Detection Assay — WILLIAM CHANEY, Benjamin Bastin, Patrick Bird, Joe Benzinger, Erin Dreyling, Roka Bioscience, San Diego, CA, USA

P3-167 Validation of Individual and Wet Pooled Environmental Sample Analyses in Buffered Peptone Water and Lactose Broth by the Atlas® *Salmonella* Sen Detection Assay — WILLIAM CHANEY, Benjamin Bastin, Patrick Bird, Joe Benzinger, Ali DeShields, Erin Dreyling, Roka Bioscience, San Diego, CA, USA

P3-168 Development and Validation of a Novel, Enzyme-based Sample Preparation Step as a Workflow Modification for the Atlas® *Listeria* Environmental Detection Assay to Mitigate Free Nucleic Acid Detection Originating in Phage-based Processing Aids — WILLIAM CHANEY, Brett Maroni, Tucker Lopez, Kelly Cassutt, Celina Puente, Sarah Verver, Christopher Haney, Roka Bioscience, San Diego, CA, USA

P3-169 Development of a Bead-based Flow Cytometry Immunoassay for the Simultaneous Detection of Foodborne Bacterial Pathogens in Poultry and Meat Products — CELIA SUAREZ PANTALEON, Alexandre Monteforte, Benoit Granier, Delphine Larose, Cindy Dropet, Nicolas Desroche, Patrice Arbault, Anne-Catherine Huet, Riccardo Marega, Philippe Delahaut, Nathalie Gillard, Unisensor SA, Ougree (Liege), Belgium

P3-170 Evaluation of Growth Kinetics of Diverse *Salmonella* in Modified BAM Preenrichment for Shell Eggs — MELANIE BUTLER, Anna Laasri, Thomas Hammack, Gina Ryan, U.S. Food and Drug Administration, College Park, MD, USA

P3-171 Relative Effectiveness of Lactose Broth and Selected Buffered Preenrichment Media for the Detection of *Salmonella* in Artificially Contaminated Casein-based Powdered Infant Formula — ANDREW JACOBSON, Hua Wang, James Smiley, Melanie Butler, Thomas Hammack, U.S. Food and Drug Administration, College Park, MD, USA

P3-172 Evaluation of Three Real-time PCR Methods for Detection of *Salmonella* in Allspice, Cinnamon, and Oregano — XIAOHONG DENG, Aparna Tatavarthy, Laila Ali, Lijun Hu, Thomas Hammack, Guodong Zhang, U.S. Food and Drug Administration, College Park, MD, USA P3-173 Evaluation of *Salmonella* spp., *Salmonella* Enteritidis, and *Salmonella* Typhimurium Real-time PCR Kit Performance in Co-inoculated Poultry, Pork Meat, and Environmental Surface Samples — JANI HOLOPAINEN, Katharine Evans, David Crabtree, Mikko Kauppinen, Thermo Fisher Scientific, Vantaa, Finland

P3-174 Evaluation of Molecular *Salmonella* spp., *Salmonella* Enteritidis, and *Salmonella* Typhimurium Multiplex Assays Inclusivity and Exclusivity — JANI HOLOPAINEN, Katharine Evans, David Crabtree, Mikko Kauppinen, Thermo Fisher Scientific, Vantaa, Finland

P3-175 Comparative Study Between 3M™ Molecular Detection Assay 2 – *Salmonella* and ISO 6579 in Meat and Poultry Products from Thailand — WATCHARA JANWATCHARAGAN, Phumtreemas Srilert, Panida Pisaisawat, Nongnuch Promla, Wanida Mukkana, Saengrawee Jongvanich, Wipa Kongsakul, Janejira Fuangpaiboon, Bureau of Quality Control of Livestock Products, Pathum –Thani, Thailand

Blue Text – Developing Scientist Competitor Green Text – Undergraduate Student Competitor

P3-176 Evaluation of a Rapid Isothermal Amplification Method and Two Enrichment Protocols for *Salmonella* Detection in Frozen Strawberries — JORGE ADRIÁN MUNIZ FLORES, Dalia Lorena Rodríguez Herrera, Julia Perez-Montano, Gustavo González-González, Ma. Ofelia Rodríguez-García, Universidad de Guadalajara, Guadalajara, Mexico

P3-177 Single-step Enrichment Followed by Real-time PCR Detection of Low Levels of Sub-lethally Injured *Salmonella* in Low-moisture Ready-to-Eat Foods — SERGIY OLISHEVSKYY, Cathy St-Laurent, Anne Hellmer, Melissa Buzinhani, Michael Giuffre, FoodChek Laboratories Inc., Saint-Hyacinthe, QC, Canada

P3-178 Rapid Detection of *Salmonella* in Raw Chicken Breast Using Real-time PCR Combined with Immunomagnetic Separation and Whole Genome Amplification — JI-YEON HYEON, Xiangyu (Sean-U) Deng, University of Georgia, Center for Food Safety, Griffin, GA, USA

P3-179 An Electrochemical Aptasensor for Rapid Detection of *Salmonella* Typhimurium in Poultry Based on the Bifunctional Magnetic Nanocomposites — RONGHUI WANG, Meng Xu, Jianhan Lin, Ming Liao, Michael Kidd, Yanbin Li, University of Arkansas, Fayetteville, AR, USA

P3-180 Validation of a Cultural Method for the Detection and Isolation of *Salmonella* in Allspice, Cinnamon, and Oregano — GUODONG ZHANG, Laila Ali, Xiaohong Deng, Lijun Hu, Aparna Tatavarthy, Eric Brown, Thomas Hammack, U.S. Food and Drug Administration, College Park, MD, USA

P3-181 An Impedance Biosensor for Simultaneous Detection of Low Concentration of *Salmonella* Serogroups in Turkey Ready-to-Eat (RTE) Products — IBRAHEM JASIM, Amjed Abdullah, Zhenyu Shen, Shuping Zhang, Majed El-Dweik, Mahmoud Almasri, University of Missouri Columbia, Columbia, MO, USA

P3-182 Detection of Low Levels of *Salmonella* Species in a Variety of Food Matrices Using the Rapidchek Select *Salmonella* Test Method — MEREDITH SUTZKO, Ann-Christine Allen, Romer Labs, Inc., Newark, DE, USA

P3-183 Comparative Evaluation of Two Multiplex Real-time Quantitative PCR (qPCR) for Detection of *Salmonella* spp. and *S.* Enteritidis in Pooled Egg Preenrichment Samples — GINA RYAN, Melanie Butler, Anna Laasri, Thomas Hammack, U.S. Food and Drug Administration, College Park, MD, USA

P3-184 Evaluation of Several Elements in the Environmental Sampling of *Listeria* spp. from Stainless Steel Surface — Ishani Sheth, FENGMIN LI, Hee jin Kwon, Antonie De Jesus, Thomas Hammack, Karen Jinneman, Yi Chen, U.S. Food and Drug Administration, College Park, MD, USA

P3-185 The Survival and Transmission of Aerosolized *Listeria* Species — CALVIN WALDRON, Joseph Eifert, Linsey Marr, Andrew Neilson, Robert Williams, Virginia Tech, Blacksburg, VA, USA

P3-186 Development of a Test Strip-based Method for the Detection of Group B *Salmonella* in Poultry House Environmental and Raw Poultry Samples — MARK MULDOON, Vera Gonzalez, Randy Bechard, Ann-Christine Allen, Meredith Sutzko, Romer Labs, Inc., Newark, DE, USA

P3-187 Application of RapidChek® *Listeria monocytogenes* Test System for the Detection of *Listeria monocytogenes* in a Variety of Foods and Environmental Surfaces — MARK MULDOON, Gregory Juck, Vera Gonzalez, Meredith Sutzko, Romer Labs, Inc., Newark, DE, USA

P3-188 Evaluating Alternative Methods for the Detection of *Listeria monocytogenes* from Medical Nutrition Samples — KATHARINE EVANS, Emma Scopes, David Crabtree, Thermo Fisher Scientific, Basingstoke, United Kingdom

P3-189 No Influence of Selective Growth Media on the Identification of the Foodborne Pathogens by MALDI-TOF MS — Marian Awad, DANIÈLE SOHIER, Markus Kostrzewa, Bruker Daltonics, Bremen, Germany

P3-190 Performance Evaluation of 3M™ Molecular Detection Assay 2 for Rapid Detection of *Listeria monocytogenes* in Brazilian Meat Matrices — VANESSA TSUHAKO, Sandra Heidtmann, Adriana Bovo, Analice Espeleta, 3M Brasil, Sumare, Brazil

P3-191 Detection of *Listeria* in Probiotic Cultures— JOSEPHINE D. GREVE, Benjamin S. Shannon, J. David Legan, Covance Food Solutions, Madison, WI, USA

P3-192 A Comparative Study of Enumeration Methods for *Listeria monocytogenes* on Naturally Contaminated Ready-to-Eat Foods — JEANINE BOULTER-BITZER, Ontario Ministry of Agriculture, Food and Rural Affairs, Guelph, ON, Canada

P3-193 Rapid Species-Specific Identification of *Listeria* Isolates Using Multiplex PCR — BRADLEY ZIEBELL, Kari Sweeney, Deann Akins-Lewenthal, Conagra Brands, Chicago, IL, USA

P3-194 Real-time Monitoring of *Listeria* Species and *Listeria monocytogenes* Using Non-invasive Bioluminescence Growth Media — Brandon Katz, DELIA CALDERON, Paul Meighan, Hygiena, Camarillo, CA, USA

P3-195 Enrichment Dynamics of *Listeria monocytogenes* and the Associated Microbiome from Naturally Contaminated Ice Cream Linked to a Listeriosis Outbreak — Elizabeth Reed, James White, Eric Brown, Yi Chen, Andrea Ottesen, PADMINI RAMACHANDRAN, U.S. Food and Drug Administration, College Park, MD, USA

P3-196 Evaluation of the GENE-UP® Assay for the Co-Detection of *Escherichia coli* O157:H7 and *Salmonella* spp. from Raw Ground Chicken — Vikrant Dutta, JOHN MILLS, Deborah Briese, Peter Ladell, Stan Bailey, bioMerieux, Inc., Hazelwood, MO, USA

P3-197 Evaluation of the GENE-UP® *Listeria monocytogenes* (LMO) Assay for the Detection of *Listeria monocytogenes* in Foods — JOHN MILLS, Stan Bailey, Deborah Briese, Vikrant Dutta, Hari Dwivedi, Ron Johnson, bioMerieux, Inc., Hazelwood, MO, USA

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

P3-198 EN ISO 16140-2 Validation Study of the GENE-UP® PCR Method for the Detection of *Listeria* sp. in a Variety of Food and Environmental Samples — Olivier Mathia, Louisiane Giovanetti, FABIENNE HAMON, Patrice Chablain, François Le Nestour, bioMérieux, Grenoble, France

P3-199 EN ISO 16140-2 Validation Study of the GENE-UP® *Salmonella* Method in a Variety of Food — Justine Baguet, Cécile Bernez, FABIENNE HAMON, Louisiane Giovanetti, Patrice Chablain, Maryse Ranou, bioMérieux, Grenoble, France

P3-200 Evaluation of a Method Based on Loop Mediated Isothermal Amplification and Bioluminescence Technology for the Detection of Human Pathogens on Grape Tomatoes — GUSTAVO GONZALEZ GONZALEZ, Lucila Trigueros-Díaz, María Cristina Luquin-Rosas, María del Carmen Tinajero-Arriola, 3M FSD Mexico, Guadalajara, Mexico

P3-201 Simultaneous Enrichment of *Salmonella* spp., *Escherichia coli* O157:H7, and *Listeria monocytogenes* in Spices and Seafood — KIRSTEN HIRNEISEN, Venugopal Sathyamoorthy, Atin Datta, Richelle Richter, Donna Williams-Hill, U.S. Food and Drug Administration, Irvine, CA, USA

P3-202 Independent Method Comparison Evaluation of the Biomerieux VIDAS® *Listeria monocytogenes X*press (LMX) to the Health Canada MFHPB-30 Reference Method — PATRICK BIRD, James Agin, Joe Benzinger, Erin Crowley, Alison DeShields, David Goins, Q Laboratories, Inc., Cincinnati, OH, USA

P3-203 An Independent Evaluation of the GENE-UP *Listeria* Species Assay for the Detection of *Listeria* Species in Foods and Environmental Surfaces — PATRICK BIRD, Benjamin Bastin, Joe Benzinger, Erin Crowley, James Agin, David Goins, Q Laboratories, Inc., Cincinnati, OH, USA

P3-204 An Independent Evaluation of the GENE-UP *Listeria monocytogenes* Assay for the Detection of *Listeria monocytogenes* in Foods — PATRICK BIRD, Benjamin Bastin, Joe Benzinger, Erin Crowley, James Agin, David Goins, Q Laboratories, Inc., Cincinnati, OH, USA

P3-205 An Independent Evaluation of the GENE-UP® EHEC Detection Method for the Detection of Non-O157 Shiga-toxin Producing *Escherichia coli* (STEC) and *Escherichia coli* O157:H7 in Foods — PATRICK BIRD, Benjamin Bastin, Joe Benzinger, Erin Crowley, James Agin, David Goins, Q Laboratories, Inc., Cincinnati, OH, USA

P3-206 Independent Evaluation of the Bio-Rad iQ-Check® *Salmonella* II Kit for the Detection of *Salmonella* Species in Select Foods and Environmental Surfaces — PATRICK BIRD, Benjamin Bastin, Joe Benzinger, Erin Crowley, James Agin, David Goins, Q Laboratories, Inc., Cincinnati, OH, USA

P3-207 Validation of the 375 Gram Matrix Extension to Health Canada MFLP-38 Detection of *Salmonella* Species from All Foods and Environmental Surfaces Using the Bio-Rad iQ-Check® *Salmonella* II Kit — PATRICK BIRD, Benjamin Bastin, Joe Benzinger, Erin Crowley, James Agin, David Goins, Q Laboratories, Inc., Cincinnati, OH, USA

P3-208 Comparative Study: Extraction and Detection of Enteric Viruses in Soft Fruit — RACHEL RODRIGUEZ, Katja Schilling, Jacquelina Woods, U.S. Food and Drug Administration, Dauphin Island, AL, USA

P3-209 Detection of Norovirus in Agricultural Water, Produce, and Hand-rinse Samples from Northern Mexico — JESSICA PRINCE-GUERRA, Anna M. Fabiszewski de Aceituno, Lee-Ann Jaykus, Zachary Marsh, Sharmila Talekar, Faith Bartz, Norma Heredia, Santos Garcia, Juan Leon, Emory University, Atlanta, GA, USA

P3-210 Comparison of Norovirus Surrogate Recovery Methods from Carpets — DAVID BUCKLEY, Angela Fraser, Guohui Huang, Xiuping Jiang, Clemson University, Clemson, SC, USA

P3-211 Withdrawn

P3-212 A Method for the Improved Detection of Aerosolized Influenza Viruses Using Impingers That Incorporate Anion Exchange Resin — JEFFREY CHANDLER, Joshua Schaeffer, Margaret Davidson, Sheryl Magzamen, Alma Perez-Mendez, Stephen Reynolds, Lawrence Goodridge, John Volckens, Alan Franklin, Susan Shriner, Bledar Bisha, U.S. Department of Agriculture-APHIS-WS-NWRC, Fort Collins, CO, USA

P3-213 Comparison of *Bdellovibrio bacterivorous* Viability and Predation Efficacy Following Different Delivery Methods and Storage Temperatures — DANIEL UNRUH, Sara Gragg, Kansas State University, Olathe, KS, USA

P3-214 Development of an In Vitro Assay for the Determination of Pathogenicity of *Vibrio vulnificus* — JOEY MARCHANT-TAMBONE, Jessica Jones, Paul Gulig, FDA Gulf Coast Seafood Laboratory, DAUPHIN ISLAND, AL, USA

P3-215 Withdrawn

Water

P3-216 Zero-valent Iron-Biosand Filtration is Capable of Reducing Antimicrobial and Generic *E. coli* Concentrations in Unbuffered Conventionally Treated Reclaimed Water: A CONSERVE Project — PRACHI KULKARNI, Greg Raspanti, Anthony Bui, Rhodel Bradshaw, Eric Handy, Cary Coppock, Kalmia Kniel, Manan Sharma, Amir Sapkota, Amy Sapkota, Maryland Institute for Applied Environmental Health, University of Maryland, College Park, MD, USA

P3-217 Comparison of Two Methods for Enumeration of Total Fecal Coliforms and Generic *Escherichia coli*, and Their Ability to Predict Pathogen Occurrence in Irrigation Waters — JUSTIN FALARDEAU, Roger Johnson, Siyun Wang, University of British Columbia, Vancouver, BC, Canada

P3-218 Generic *E. coli* Levels in Surface and Non-traditional Irrigation Water in the Mid-Atlantic in Relation to FSMA Water Quality Standards: A CONSERVE Study — SARAH ALLARD, Sultana Solaiman, Mary Theresa Callahan, Eric Handy, Cheryl East, Hillary Craddock

Blue Text – Developing Scientist Competitor

Green Text – Undergraduate Student Competitor

Kelbick, Rianna Murray, Anthony Bui, Joseph Haymaker, Derek Foust, Samantha Gartley, Adam Vanore, Salina Parveen, Fawzy Hashem, Maryam Taabodi, Eric May, Kalmia Kniel, Manan Sharma, S, Maryland Institute for Applied Environmental Health, University of Maryland, College Park, MD, USA

P3-219 Die-off Rates of Surrogate and Virulent EHEC-STEC Strains from the Surface of Strawberry Plants Vary with Time, Inoculum Dose and Chemical Interventions — Maria Albarracin, Christopher Gunter, Siddhartha Thakur, EDUARDO GUTIERREZ-RODRIGUEZ, North Carolina State University, Raleigh, NC, USA

P3-220 Screening of Non-traditional Irrigation Water Sources for Shiga Toxin-producing *Escherichia coli* in the Mid-Atlantic Region of the United States: A CONSERVE Study — JOSEPH HAYMAKER, Fawzy Hashem, Salina Parveen, Eric May, Manan Sharma, Chanelle White, Shirley Micallef, Maryam Taabodi, Amy Sapkota, University of Maryland Eastern Shore, Princess Anne, MD, USA

P3-221 Evaluation of *E. coli* and Other Indicators as Predictors of Foodborne Pathogens in Irrigation Water — AMY KAHLER, Candace Miller, Mia Mattioli, Moukaram Tertuliano, Karen Levy, George Vellidis, Vincent Hill, Centers for Disease Control and Prevention, Division of Foodborne, Waterborne and Environmental Diseases, Atlanta, GA, USA

P3-222 Persistence of *Escherichia coli* on Field-grown Tomatoes Inoculated with Contaminated Water Spray — CHANELLE WHITE, Fawzy Hashem, Patricia Millner, Joseph Haymaker, Annette Kenney, Lorna Graham, University of Maryland Eastern Shore, Princess Anne, MD, USA

P3-223 Diversity and Fitness of *Listeria* spp. Isolated from Two Watersheds in Nova Scotia, Canada — Amit Ross, Kara Neudorf, LISBETH TRUELSTRUP HANSEN, Technical University of Denmark, Kgs. Lyngby, Denmark

P3-224 Evaluation of *Listeria monocytogenes* Survival and Infectivity in Nontraditional Agricultural Waters — SAMANTHA GARTLEY, Adam Vanore, Shani Craighead, Manan Sharma, Kalmia Kniel, University of Delaware, Newark, DE, USA

P3-225 Removal of *Listeria monocytogenes* and *Salmonella* Typhimurium from Water Using a Filtration System with Surfactated Modified Zeolite — JOSE BRANDAO DELGADO, Ligia Fragallo, Marlene Janes, Louisiana State University, Baton Rouge, LA, USA

P3-226 Correlation of *Salmonella* spp. to Generic *Escherichia coli* in Irrigation Water — MOHAMMED ALHEJAILI, Dorra Djebbi-Simmons, Achyut Adhikari, Marlene Janes, Louisiana State University, Baton Rouge, LA, USA

P3-227 Prevalence and Concentration of *Salmonella* in Agricultural Water Used in Pre-harvest Production on the Eastern Shore of Virginia — LAURA TRUITT, Rachel Pfuntner, Jacob McClaskey, Steve Rideout, Laura Strawn, Virginia Tech – Eastern Shore AREC, Painter, VA, USA

P3-228 Seasonality, Diversity and Indicators of *Salmonella* Contamination of Environmental Surface Waters of the Virginia Eastern Shore — CHRISTINA M. FERREIRA, Elizabeth Reed, Amir Mokhtari, Yan Luo, Jie Zheng, Rebecca L. Bell, U.S. Food and Drug Administration, College Park, MD, USA

P3-229 Assessment of Indicator Bacteria and *Aeromonas* spp. in Surface and Nontraditional Irrigation Water: A Conserve Study — SULTANA SOLAIMAN, Mary Theresa Callahan, Sarah Allard, Eric Handy, Cheryl East, Eric May, Fawzy Hashem, Salina Parveen, Kalmia Kniel, Manan Sharma, Amy Sapkota, Shirley Micallef, University of Maryland, College Park, MD, USA

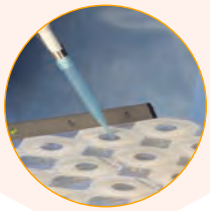
P3-230 Microbial Quality of Tail Water in the California Central Coast Salinas Valley — ANNE-LAURE MOYNE, Laura A. Murphy, Michael D. Cahn, Steven T. Koike, Linda J. Harris, University of California-Davis, Davis, CA, USA

AN ELEGANT SOLUTION TO DILUTION

01

Practical & Efficient.

Competitor vials requires seven physical touches versus three touches for Dilucup™ Elegance, effectively reducing technician labor time and cost.



02

Struggling with Space?

One pallet of Dilucup™ Elegance does the job of more than fourteen pallets of a competitor's product. Free up more space in your lab and warehouse!

03

Marvelously Ergonomic.

Never worry about the repetitive strain on your lab technicians. A built-in optic sensor allows hands-free activation of mixing between dilutions.

04

No Spill. No Fuss.

The Dilushaker III™ is an orbital shaker that vortexes each diluent the same way, every time, with no spill over!

MEET THE DILUCUP™ SERIAL DILUTION SYSTEM

The most elegant solution in serial dilution automation. The simple format puts sophisticated automation technology within reach for labs of any size!

21 cup Dilushaker™ III
Cat. no. 40DS21PRXT

42 cup Dilushaker™ III
Cat. no. 40DS42PRXT

Only from Hardy Diagnostics. Your exclusive distributor for the Dilucup Elegance™ Serial Dilution System in the United States.

EXCLUSIVE 100% Distribution EXCLUSIVE

HARDY DIAGNOSTICS
A Culture of Service™

CONTACT PRODUCT MANAGER JESSA YOUNGBLOOD
YOUNGBLOODJ@HARDYDIAGNOSTICS.COM AND DEMO TODAY
800.266.2222 | WWW.HARDYDIAGNOSTICS.COM/DILUCUP

Validate your kill step

3 Easy Steps to FSMA Compliance

1 Collect Data

2 Calculate Lethality

3 Prove Kill Step

The SCORPION® 2 *LITE* Data Logger with Temperature Interface and Product Probes simplifies the measurement of environment and internal product core temperatures. After collecting the data, the SCORPION® 2 Software (SV8) Food Safety Module makes it easy to calculate lethality and then generate a comprehensive report displaying cumulative log reduction. By combining this ease of measurement with robust data capture, the SCORPION® 2 System makes it simple to optimize your process while meeting food safety standards. To learn more visit **readingthermal.com** or call **610-678-5890**.

IAFP 2017 ANNUAL MEETING Tampa, Florida July 9 - 12, 2017

See how it works at Booth #726

SCORPION® 2

Data Logging Measurement System

READING THERMAL

A Markel Food Group Company

Affiliate Awards

C.B. SHOGREN MEMORIAL

Food Safety Consortium

Hong Kong

BEST AFFILIATE OVERALL MEETING

Mexico Association for Food Protection

AFFILIATE MEMBER EDUCATION

British Columbia Food Protection Association

AFFILIATE COMMUNICATION MATERIALS

Florida Association for Food Protection

AFFILIATE MEMBERSHIP ACHIEVEMENT

Minnesota Food Protection Association

Local Arrangements

Florida Association for Food Protection

Co-Chairs – Zeb Blanton, Michelle Danyluk and Peter Hibbard

Rick Barney
Sherrod Bostocky
Vanessa Cranford
Tony Febbraro
Jennifer Haynes
Marjorie Jones
Erik Montanez
Mike Nolan
Tom O'Brien
Tim Westbrook
Anna Wiand

Affiliate Delegates

Affiliate Council Officers

Chair	Neil Bogart, Alabama
Secretary	Alex Castillo, Texas

Affiliate Council Delegates

Africa	Peter Kennedy
Alabama	Neil Bogart
Alberta	Lynn McMullen
Argentina	Gabriela Stancanelli
Arizona	Steve Wille
Arkansas	Brian Umberson
Australia	Sandy Hume
Brazil	Mariza Landgraf
British Columbia	Siyun Wang
California/Southern	Turonda Crumpler
Capital Area	Jenny Scott
Carolinas	Linda Leake
China	Xiumei Liu
Chinese AFPNA	Zuoxing Zheng
Colombia	Nury Alvarez
Colorado	Mark Caudel
Connecticut	Frank Greene
Florida	Peter Hibbard
Georgia	Tori Stivers
Hong Kong	Terence Lau
Hungary	Laszlo Varga
Idaho	Patrick Guzzle
Illinois	Charles Mack
Indian – NA	Harshavardhan Thippareddi
Indiana	Larry Beard
Iowa	
Kansas	Guy Crabill
Korea	Kun-Ho Seo
Lebanon	
Mexico	Norma Heredia
Michigan	David Peters
Minnesota	Julie Sundgaard
Missouri	James O'Donnell
Nebraska	
New Jersey	Susan Algeo
New York	Steven Murphy
New Zealand	Roger Cook
Ohio	Christina Ritchey Wilson
Oklahoma	Li Maria Ma
Ontario	Katherine Di Tommaso
Pennsylvania	Peggy Good
Portugal	Laurentina Pedroso
Quebec	Julie Jean
South Dakota	LuAnn Ford
Southeast Asia	
Spain	
Taiwan	Chia-Yang Chen
Texas	Alex Castillo
Turkey	Samim Saner
United Arab Emirates	Bobby Krishna
United Kingdom	David Lloyd
Upper Midwest	Tom Berry
Washington	Stephanie Olmsted
Wisconsin	Adam Borger

Affiliate Officers

AFRICA ASSOCIATION FOR FOOD PROTECTION

President: Charles Muyanja
Vice President: Peter Kennedy
Treasurer: Joseph Odumeru
Delegate: Peter Kennedy
Contact: Peter Kennedy
E-mail: pkennedy@qualityflow.com

ALABAMA ASSOCIATION FOR FOOD PROTECTION

President: Phyllis Fenn
President-Elect: Patricia West
Vice President: Steve Adams
Past President: Neil Bogart
Secretary/Treasurer: Karen Crawford
Delegate: Neil Bogart
Contact: G. M. Gallaspy
E-mail: gm.gallaspy@adph.state.al.us

ALBERTA ASSOCIATION FOR FOOD PROTECTION

President: open
Past President: Kevin Webster
Secretary: Barb Tomik
Treasurer: Gary Gensler
Delegate: Lynn M. McMullen
Contact: Lynn M. McMullen
E-mail: lynn.mcmullen@ualberta.ca

ARGENTINE FOOD SAFETY COMMISSION

President: Fabiana Guglielmone
Vice President: Fernando Gallegos Sola
Secretary: Marta Rivas
Treasurer: Diego Romulo
Delegate: Gabriela Stancanelli
Contact: Fabiana Guglielmone
E-mail: fabiana.guglielmone@unilever.com

ARIZONA ENVIRONMENTAL HEALTH ASSOCIATION

President: Steve Wille
President-Elect: Cheri Dale
Past President: Michelle Chester
Secretary: Danny Chhun
Treasurer: Norman Barnett
Delegate: Steve Wille
Contact: Steve Wille
E-mail: swille@mail.maricopa.gov

ARKANSAS ASSOCIATION FOR FOOD PROTECTION

President: Conny Byler
Vice President: Brian Umberson
Past President: Peggy Cook
Secretary: Nancy Gushing
Treasurer: Keith Day
Delegate: Brian Umberson
Contact: Brian Umberson
E-mail: brian.umberson1024@outlook.com

AUSTRALIAN ASSOCIATION FOR FOOD PROTECTION

President: Duncan Craig
Past President: Jeremy Chenu
Secretary: Deon Mahoney
Delegate: Sandy Hume
Contact: Deon Mahoney
E-mail: deonm54@gmail.com

BRAZIL ASSOCIATION FOR FOOD PROTECTION

President: Mariza Landgraf
Vice President: Ivone Delazari
Past President: Laercio Goularte
Secretary: Juliana De Mello Macedo
Treasurer: Bernadette D.G.M. Franco
Delegate: Mariza Landgraf
Contact: Mariza Landgraf
E-mail: landgraf@usp.br

BRITISH COLUMBIA FOOD PROTECTION ASSOCIATION

President: Stephanie Nadya
Vice President: Justin Falardeau
Past President: Theresa Almonte
Secretary: Yaxi Hu
Treasurer: Peter Taylor
Delegate: Siyun Wang
Contact: Siyun Wang
E-mail: siyun.wang@ubc.ca

CAPITAL AREA FOOD PROTECTION ASSOCIATION

President: Ai Kataoka
Vice President: Sanjay Gummalla
Past President: John Allan
Secretary: Hua Wang
Treasurer: Tracy DuVernoy
Delegate: Jenny Scott
Contact: Hua Wang
E-mail: hua.wang@fda.hhs.gov

CAROLINAS ASSOCIATION FOR FOOD PROTECTION

President: Ben Chapman
Past President: Angela Fraser
Secretary/Treasurer: Linda Leake
Delegate: Linda Leake
Contact: Ben Chapman
E-mail: benjamin_chapman@ncsu.edu

CHINA ASSOCIATION FOR FOOD PROTECTION

President: Xiumei Liu
Vice President: Xianming Shi
Secretary: Jie Wei
Treasurer: Patrick Luo
Delegate: Xiumei Liu
Contact: Xiumei Liu
E-mail: liuxiumei@cfsa.net.cn

Affiliate Officers

CHINESE ASSOCIATION FOR FOOD PROTECTION IN NORTH AMERICA

President: Xuiping Jiang
President-Elect: Luxin Wang
Past President: Zuoxing Zheng
Secretary: Zengxin Li
Treasurer: Wen Zou
Delegate: Zuoxing Zheng
Contact: Zuoxing Zheng
E-mail: zachary.zheng@valentbiosciences.com

COLOMBIA ASSOCIATION OF FOOD SCIENCE AND TECHNOLOGY

President: Adriana Coral Durango
Vice President: Pedro Posada
Past President: Juan Carlos Cruz Medina
Secretary: Marta Bahamon
Delegate: Nury Alvarez
Contact: Nury Alvarez
E-mail: info@nulab.com.co

COLORADO ASSOCIATION FOR FOOD PROTECTION

President: Juliany Rivera Calo
Vice President: Laurel Weilage
Secretary: Megan Kelly
Treasurer: Rachel Halphen
Delegate: Mark Caudel
Contact: Mark Caudel
E-mail: mcaudel@atkins.com

CONNECTICUT ASSOCIATION FOR FOOD PROTECTION

President: Barbara Bucknam
Secretary: Frank Greene
Treasurer: Karen Rotella
Delegate: Frank Greene
Contact: Frank Greene
E-mail: frank.greene@ct.gov

FLORIDA ASSOCIATION FOR FOOD PROTECTION

President: Sherrod Bostocky
President-Elect: Thomas O'Brien
Past President: Tony Febbraro
Secretary: Michelle Danyluk
Treasurer: Rick Barney
Delegate: Peter Hibbard
Contact: Sherrod Bostocky
E-mail: sbostocky@redrobin.com

GEORGIA ASSOCIATION FOR FOOD PROTECTION

President: Krissa Jones
President-Elect: Jairo de Jesus
Vice President: Cheryl Brown
Past President: John Szymanski
Secretary: Katie Satchwell
Treasurer: Mark Norton
Delegate: Tori Stivers
Contact: Katie Satchwell
E-mail: ksatchwell@coca-cola.com

HONG KONG FOOD SAFETY CONSORTIUM

President: Terence Lau
Vice President: Sheng Chen
Secretary: Nelly Lam
Delegate: Terence Lau
Contact: Terence Lau
E-mail: terence.lt.lau@polyu.edu.hk

HUNGARIAN ASSOCIATION FOR FOOD PROTECTION

President: Csilla Mohácsi-Farkas
Vice President: Gabriella Kiskó
Secretary/Treasurer: Tekla Engelhardt
Delegate: László Varga
Contact: Csilla Mohácsi-Farkas
E-mail: farkas.csilla.@etk.szie.hu.

IDAHO ENVIRONMENTAL HEALTH ASSOCIATION

President: Tyler Fortunati
President-Elect: Sherise Jurries
Past President: Patrick Guzzle
Secretary/Treasurer: Kevin Blanch
Delegate: Patrick Guzzle
Contact: Patrick Guzzle
E-mail: patrick.guzzle@dhw.idaho.gov

ASSOCIATED ILLINOIS MILK, FOOD AND ENVIRONMENTAL SANITARIANS

President: Charles Mack
President-Elect: Marla Behrends
1st Vice President: Merle Bontrager
2nd Vice President: Brad Suhling
Secretary: Steve DiVincenzo
Treasurer: Rich Schmitt
Delegate: Charles Mack
Contact: Stephen DiVincenzo
E-mail: Steve.DiVincenzo@illinois.gov

INDIAN ASSOCIATION FOR FOOD PROTECTION IN NORTH AMERICA

President: Vijay Juneja
Vice President: Abani Pradhan
Past President: Purnendu Vasavada
Treasurer: Sadhana Ravishankar
Secretary: Anika Bansal
Delegate: Harshavardhan Thippareddi
Contact: Harshavardhan Thippareddi
E-mail: harsha.thippareddi@uga.edu

INDIANA ENVIRONMENTAL HEALTH ASSOCIATION

President: Patty Nocek
President-Elect: Jason Ravenscroft
Vice President: JoAnn Xiong-Mercado
Past President: Mike Sutton
Treasurer: Gretchen Quirk
Secretary: Kelli Whiting
Delegate: Larry Beard
Contact: Tami Barrett
E-mail: tlbarrett4898@sbcglobal.net

Affiliate Officers

IOWA ASSOCIATION FOR FOOD PROTECTION

President: Kevin Steffens
Vice President: Terry Hopper
Past President: Kevin Hanger
1st Vice President: Greg Rohmiller
2nd Vice President: Deb Wehde
Secretary/Treasurer: Lynne Melchert
Contact: Lynne Melchert
E-mail: lynne.melchert@swissvalley.com

KANSAS ENVIRONMENTAL HEALTH ASSOCIATION

President: Guy Crabill
1st Vice President: Shawn Esterl
2nd Vice President: Keena Privat
Past President: Ann Mayo
Secretary: Lisa Davies
Treasurer: Beth Rowlands
Delegate: Guy Crabill
Contact: Lisa Davies
E-mail: ldavies@gcphd.org

KOREA ASSOCIATION OF FOOD PROTECTION

President: Kun-Ho Seo
Past President: Sang-Do Ha
Secretary: Yohan Yoon
Delegate: Kun-Ho Seo
Contact: Sang-Do Ha
E-mail: sangdoha@cau.ac.kr

LEBANESE ASSOCIATION FOR FOOD SAFETY

President: Zeina Kassaify
Vice President: Nadera Hamdar
Secretary: Maya El Mokdad
Treasurer: Reem Hamzeh
Delegate: Zeina Kassaify
Contact: Zeina Kassaify
E-mail: zeina.kassaify@effem.com

MEXICO ASSOCIATION FOR FOOD PROTECTION

President: Virginia Nevarez
Vice President: Nydia Azenedh Orue
Past President: Santos Garcia
Secretary: Raul Avila Sosa
Treasurer: Luisa Solis
Delegate: Norma Heredia
Contact: Virginia Nevarez
E-mail: vnevare@uach.mx

MICHIGAN ENVIRONMENTAL HEALTH ASSOCIATION

President: Mary Farmer
President-Elect: Sara Simmonds
Past President: Christine Daley
Treasurer: John Texter
Secretary: Amanda Smith
Delegate: David Peters
Contact: David Peters
E-mail: dpeters@umich.edu

MINNESOTA FOOD PROTECTION ASSOCIATION

President: Pam Wilger
Past President: Dave Blomquist
Vice President: Kelly Stevens
Secretary: David Baumler
Treasurer: Kevin Habas
Delegate: Julie Sundgaard
Contact: Pam Wilger
E-mail: pamela_wilger@cargill.com

MISSOURI MILK, FOOD AND ENVIRONMENTAL HEALTH ASSOCIATION

President: Roxanne Sharp
President-Elect: Brian Keller
Vice President: Brandy Sheehan
Past President: James O'Donnell
Secretary: Craig Parsons
Treasurer: Nancy Beyer
Delegate: James O'Donnell
Contact: Craig Parsons
E-mail: parsoc1@randolphcountyhealth.gov

NEBRASKA ASSOCIATION FOR FOOD PROTECTION

Past President: Beth Burmester
Secretary: Amy Kerby
Treasurer: Penny Mack

NEW JERSEY ASSOCIATION FOR FOOD PROTECTION

President: Susan Algeo
1st Vice President: open
2nd Vice President: open
Past President: Virginia Wheatley
Secretary/Treasurer: Virginia Wheatley
Delegate: Susan Algeo
Contact: Virginia Wheatley
E-mail: info@njfoodprotection.org

NEW YORK STATE ASSOCIATION FOR FOOD PROTECTION

President: James Baldwin
President-Elect: Amy Rhodes
Past President: Robert Kuhn
Secretary: Janene Lucia
Delegate: Steve Murphy
Contact: Janene Lucia
E-mail: jgg3@cornell.edu

NEW ZEALAND ASSOCIATION FOR FOOD PROTECTION

President: Phillip Bremer
Past President: Sally Hasell
Secretary: John Fam
Delegate: Roger Cook
Contact: Phillip Bremer
E-mail: phil.bremer@otago.ac.nz

Affiliate Officers

OHIO ASSOCIATION FOR FOOD PROTECTION

President: Mike Tedrick
1st Vice President: Whitney Baker
2nd Vice President: Adam Gilbert
Past President: Tyler Pigman
Treasurer: Carrie Kamm
Delegate: Christina Wilson
Contact: Christina Wilson
E-mail: christinaw@columbus.gov

OKLAHOMA ASSOCIATION FOR FOOD PROTECTION

President: Li Maria Ma
Vice President: Divya Jaroni
Secretary: Ravirajsinh Jadeja
Treasurer: Peter Muriana
Delegate: Li Maria Ma
Contact: Li Maria Ma
E-mail: li.ma@okstate.edu

ONTARIO FOOD PROTECTION ASSOCIATION

President: Katherine Di Tommaso
Vice President: Ananth Kasic
Past President: Moustapha Oke
Secretary/Treasurer: Shirley May Chalouh
Delegate: Katherine Di Tommaso
Contact: Shirley May Chalouh
E-mail: info@ofpa.on.ca

PENNSYLVANIA ASSOCIATION OF MILK, FOOD AND ENVIRONMENTAL SANITARIANS

President: Jacob Thompson
President-Elect: Wilbur Wheeler
Past President: Randy Fox
Vice President: Jim Fleck
Secretary: Peggy Good
Treasurer: Keith Hay
Delegate: Peggy Good
Contact: Peggy Good
E-mail: peggy.good@turkeyhill.com

PORTUGAL ASSOCIATION FOR FOOD PROTECTION

President: Laurentina M.R. Pedroso
Secretary: Alexandra Sanfins
Treasurer: Ricardo Assuncao
Delegate: Laurentina M.R. Pedroso
Contact: Laurentina M.R. Pedroso
E-mail: lrpedroso@netcabo.pt

QUEBEC FOOD PROTECTION ASSOCIATION

President: Julie Jean
Past President: Gisele LaPointe
Vice President: Ismail Fliss
Secretary: Benoit Gagnon
Treasurer: Anne-Marie Beaulieu
Delegate: Julie Jean
Contact: Julie Jean
E-mail: julie.jean@fsaa.ulaval.ca

SOUTH DAKOTA ENVIRONMENTAL HEALTH ASSOCIATION

President: Scott Hipple
Past President: John Osburn
Secretary: Dominic Miller
Treasurer: Jordan Dorneman
Delegate: LuAnn Ford
Contact: Dominic Miller
E-mail: nmiller@siouxfalls.org

SOUTHEAST ASIA ASSOCIATION FOR FOOD PROTECTION

President: Hyun-Gyun Yuk
Vice President: Ratih Dewanti
Secretary: Keng Ngee Teoh
Treasurer: Alvin Lee
Delegate: Matthew Turner
Contact: Hyun-Gyun Yuk
E-mail: yukhg@ut.ac.kr

SOUTHERN CALIFORNIA ASSOCIATION FOR FOOD PROTECTION

President: Fernando Mora
Vice President: Kelli Cavaliero
Past President: Craig Overlock
Secretary: Daniel Wing
Treasurer: Sherman Mah
Delegate: Turonda Crumpler
Contact: Turonda Crumpler
E-mail: turonda47@cox.net

SPAIN ASSOCIATION FOR FOOD PROTECTION

President: Emiliano Quinto
President-Elect: David Rodriguez-Lazaro
Vice President: Marta Hernandez-Perez
Secretary/Treasurer: Rosa Capita
Delegate: David Rodriguez-Lazaro
Contact: Emiliano J. Quinto
E-mail: ejquinto@gmail.com

TAIWAN ASSOCIATION FOR FOOD PROTECTION

President: Chia-Yang Chen
Past President: Lee-Yan Sheen
Secretary: Tsung-Yu Tsai
Treasurer: Tsui-Ping Huang
Delegate: Chia-Yang Chen
Contact: Chia-Yang Chen
E-mail: dbms@ntu.edu.tw

TEXAS ASSOCIATION FOR FOOD PROTECTION

President: Melissa Schlabs
Past President: Brian Miller
Vice President: Brian Miller
Secretary/Treasurer: Alejandro Castillo
Delegate: Alejandro Castillo
Contact: Alejandro Castillo
E-mail: a-castillo@tamu.edu

Affiliate Officers

TURKISH FOOD SAFETY ASSOCIATION

President: Samim Saner
Vice President: Edip Sincer
Secretary: Muhteber Ersin
Treasurer: Nerma Gokce
Delegate: Samim Saner
Contact: Muhteber Ersin
E-mail: muhteber.ersin@ggd.org.tr

UNITED ARAB EMIRATES ASSOCIATION FOR FOOD PROTECTION

President: Khalid Mohammed Sharif Alawadhi
President-Elect: Amina Ahmed Mohammed
Vice President: Asia Abdulwahab AlRaeesi
Secretary: Bashir Hassan Yousif
Delegate: Bobby Krishna
Contact: Bobby Krishna
E-mail: bobbykrishna@gmail.com

UNITED KINGDOM ASSOCIATION FOR FOOD PROTECTION

President: Helen Taylor
Vice President: Ellen Evans
Secretary: Derrick Blunden
Treasurer: Leanne Ellis
Delegate: David Lloyd
Contact: David Lloyd
E-mail: dclloyd@cardiffmet.ac.uk

UPPER MIDWEST DAIRY INDUSTRY ASSOCIATION

President: Tom Berry
Vice President: Jim Klein
Past President: Jeff Johnson
Treasurer: Elaine Santi
Secretary: Dawn Raymond
Delegate: Tom Berry
Contact: Doris Mold
E-mail: manager@umdia.org

WASHINGTON ASSOCIATION FOR FOOD PROTECTION

President: Helena Barton
President-Elect: Bruce Odegaard
Past President: James White
Treasurer: James White
Secretary: Stephanie Olmsted
Delegate: Stephanie Olmsted
Contact: Stephanie Olmsted
E-mail: stephanie.olmsted@safeway.com

WISCONSIN ASSOCIATION FOR FOOD PROTECTION

President: Linda Olson
President Elect: Adam Borger
1st Vice President: James Myrick
2nd Vice President: Jean Finger
Past President: Gina Mode
Secretary/Treasurer: Robert Wills
Delegate: Adam Borger
Contact: Robert Wills
E-mail: bob@cedargrovecheese.com

Start Where You Are!

Make a difference! Unite with other food safety professionals by joining or forming an IAFP Affiliate in your area. IAFP currently has over fifty Affiliates on six continents whose objectives are consistent with those of our Association. If you are an IAFP Member or an IAFP Annual Meeting attendee, your knowledge of and dedication to food safety will contribute toward the many opportunities your local Affiliate can offer.

Start now by getting involved today!

International Association for Food Protection®

Find IAFP Affiliate opportunities and contacts at www.foodprotection.org

Your Partners in Hygiene

Remco and Vikan will host a series of short talks from industry leaders at IAFP 2017 in booth #321 during extended breaks.

Our hygiene centric talks will feature:

Edyta Margas, Bühler AG
– *Hygienic Design of Equipment*

Duane Grassmann, Nestle
– *Validation of Cleaning* Processes

John Holah, Holchem
– *Principles of Hygienic Design*

Deb Smith, Vikan
– *Hygienic Design of Food Industry Brushware*
– *Minimizing the Spread of Contamination*
– *Metal Detectable Brush Bristles*

Amit Kheradia, Remco
– *HACCP vs. HARPC*
– *Food Safety Culture and Allergen Control*

Stine Lønnerup Bislev, Vikan
– *Listeria and Food Safety*

Bill Bremmer, Kestrel Management
– *FSMA and Sanitary Transportation*

Tom Kirby, Accuform
– *Trends in Safety, 5S Organization*

For more topic information and presentation times, visit www.remcoproducts.com/IAFP2017

REMCO PRODUCTS

Vikan® ADVANCING HYGIENIC CLEANING

THE Black Pearl AWARD

RECOGNITION FOR CORPORATE EXCELLENCE IN FOOD SAFETY AND QUALITY

The Black Pearl Award is presented annually to a company for its efforts in advancing food safety and quality through consumer program, employee relations, educational activities, adherence to standards and support of the goals and objectives of the International Association for Food Protection. We invite you to nominate your company for this prestigious recognition. Contact the Association office for nomination information.

Presented by

The International Association for Food Protection

Proudly sponsored by

F&H Food Equipment Company

Black Pearl Recipients

2017 Panda Restaurant Group, Inc.
Rosemead, California

2016 Meijer
Grand Rapids, Michigan

2015 Tyson Foods, Inc.
Springdale, Arkansas

2014 Sodexo, Inc.
Gaithersburg, Maryland

2013 Publix Super Markets, Inc.
Lakeland, Florida

2012 The Kroger Co.
Cincinnati, Ohio

2011 bioMérieux, Inc.
Hazelwood, Missouri

2010 Fresh Express, Inc.
Salinas, California

2009 Schnuck Markets, Inc.
St. Louis, Missouri

2008 3M Microbiology
St. Paul, Minnesota

2007 Beef Products, Inc.
Dakota Dunes, South Dakota

2006 Ecolab Inc.
St. Paul, Minnesota

2005 DuPont
Wilmington, Delaware

2004 Jack in the Box Inc.
San Diego, California

2003 Wegmans Food Markets Inc.
Rochester, New York

2002 Darden Restaurants
Orlando, Florida

2001 Walt Disney World Company
Lake Buena Vista, Florida

2000 Zep Manufacturing Company
Atlanta, Georgia

1999 Caravelle Foods
Brampton, Ontario, Canada

1998 Kraft Foods, Inc.
Northfield, Illinois

1997 Papetti's of Iowa Food Products, Inc.
Lenox, Iowa

1996 Silliker, Inc.
Homewood, Illinois

1995 Albertson's Inc.
Boise, Idaho

1994 H-E-B Grocery Company
San Antonio, Texas

Award Recipients

BLACK PEARL
Sponsored by F&H Food Equipment Company

Panda Restaurant Group, Inc.

FELLOW

Judy Greig
Dale Grinstead
Vijay Juneja
Jeffrey Kornacki
Don Schaffner

PRESIDENT'S LIFETIME ACHIEVEMENT

Christine Bruhn

HONORARY LIFE MEMBERSHIP

David Blomquist
Maria Teresa Destro
Marilyn Lee
John Sofos
Katie Swanson

HARRY HAVERLAND CITATION
Sponsored by 3M Food Safety

Santos Garcia

FOOD SAFETY INNOVATION
Sponsored by Walmart

Novolyze

INTERNATIONAL LEADERSHIP
Sponsored by Cargill, Inc.

George-John Nychas

GMA FOOD SAFETY
Sponsored by Grocery Manufacturers Association

Center for Food Safety Engineering and
Department of Food Science
Purdue University

FROZEN FOOD FOUNDATION FREEZING RESEARCH
Sponsored by the Frozen Food Foundation

Mark Harrison

FOOD SAFETY MAGAZINE DISTINGUISHED SERVICE
Sponsored by Food Safety Magazine

Reginald Bennett
Dane Bernard

MAURICE WEBER LABORATORIAN
Sponsored by Weber Scientific

Arun Bhunia

LARRY BEUCHAT YOUNG RESEARCHER
Sponsored by bioMérieux

Xiaonan Lu

EWEN C.D. TODD CONTROL OF FOODBORNE ILLNESS
Sponsored by Marler Clark

Frank Bryan

SANITARIAN
Sponsored by Ecolab Inc.

Candace Jacobs

ELMER MARTH EDUCATOR
Sponsored by Nelson-Jameson, Inc.

Judy Harrison

HAROLD BARNUM INDUSTRY
Sponsored by Roka Bioscience, Inc.

Michael Roberson

TRAVEL AWARD FOR A FOOD SAFETY PROFESSIONAL IN A COUNTRY WITH A DEVELOPING ECONOMY
Sponsored by IAFP and the IAFP Foundation

Frederick Adzitey
Alonzo Gabriel
Patrick Njage

TRAVEL AWARD FOR STATE OR PROVINCIAL HEALTH OR AGRICULTURAL DEPARTMENT EMPLOYEES
Sponsored by IAFP and the IAFP Foundation

Ted Gatesy
Michael Perry

STUDENT TRAVEL SCHOLARSHIP
Sponsored by IAFP and the IAFP Foundation

Makala Bach
Stephanie Barnes
Sarah Beno
Sarah Cope
Dorothy Dupree
Hillary Kelbick
Giannis Koukkidis
Shuxiang Liu
Itumeleng Matle
Rianna Murray
Eugene Niyonzima
Rodney Owusu-Darko
Hao Pang
Laura Patterson
Kristen Saniga
Nicholas Sevart
Aswathi Soni
Constanza Vergara
Sophie Tongyu Wu
Xingning Xiao

PEANUT PROUD STUDENT SCHOLARSHIP
Sponsored by Peanut Proud

Yagmur Yegin

J. MAC GEOPFERT DEVELOPING SCIENTISTS
Sponsored by the IAFP Foundation

To be determined

UNDERGRADUATE STUDENT COMPETITION
Sponsored by the IAFP Foundation

To be determined

SAMUEL J. CRUMBINE
Sponsored by the Conference for Food Protection, in cooperation with American Academy of Sanitarians, American Public Health Association, Association of Food & Drug Officials, Food Marketing Institute, Foodservice Packaging Institute, International Association for Food Protection, National Association of County and City Health Officials, National Environmental Health Association, and NSF International

Boulder County Public Health
Boulder, Colorado

Kansas City Health Department
Kansas City, Missouri

About the Award Recipients

Black Pearl Award

Panda Restaurant Group, Inc.

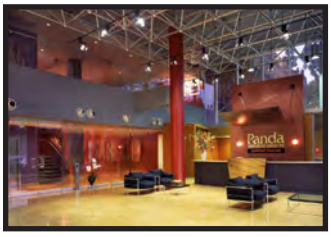
Rosemead, California

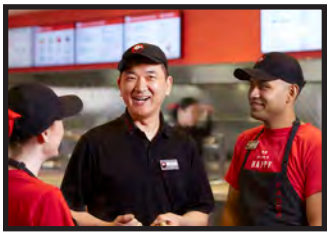
Panda Restaurant Group, Inc. (PRG), the world leader in Asian dining experiences and parent company of Panda Inn, Panda Express and Hibachi-San, is dedicated to becoming a world leader in people development. Whether through sharing good food with guests or providing opportunities for professional and personal growth with associates, all are embraced in a genuine family environment that is uniquely Panda.

Panda's culture is guided by our mission and values with Food Safety as our number one priority. Panda's Food Safety and Quality Assurance team mission is: *To Deliver Peace of Mind by Maintaining Exceptional Food Safety and Quality Standards in Support of our People, Guest and Financial Goals.*

Through the leadership of its founders, Andrew and Peggy Cherng, Panda has elevated the standards and expectations of restaurant operations by bringing food safety to the forefront of our values. Today, Panda is proud to be America's largest family-owned Chinese restaurant, with more than 30,000 associates and serving countless guests in more than 1,900 restaurants around the world.

Sponsored by F&H FOOD EQUIPMENT COMPANY





Fellow Award

Judy D. Greig
Guelph, Ontario, Canada

Judy D. Greig is a recipient of the 2017 IAFP Fellow Award. Ms. Greig is an Epidemiologist with the Public Health Agency of Canada, National Microbiology Laboratory, at Guelph, Ontario, where her projects include attribution of foodborne disease, systematic and scoping reviews of public health issues and knowledge translation.

Since joining IAFP in 2000, Ms. Greig has served on the Black Pearl Selection Committee; both the *Food Protection Trends (FPT)* and the *Journal of Food Protection (JFP)* Management Committees; the Foundation Committee; and currently serves on the *FPT* Editorial Board. She joined the Committee on the Control of Foodborne Illness in 2000, and has served as Vice-Chair since 2007. During her tenure, the Committee has authored eleven papers describing the role of the infected food handler; updated both the *Procedures to Investigate Foodborne Illness* and *Procedures to Investigate Waterborne Illness* manuals; and organized multiple symposia. She received the IAFP Harry Haverland Citation Award in 2012.

While a member of the IAFP Affiliate, the Ontario Food Protection Association (OFPA), from 2000–2011, Ms. Greig served on the Student Awards Committee; as Co-Editor of the OFPA award-winning newsletter (2001–2006); organized numerous technical sessions; and served as President in 2010. She received the OFPA Award of Merit in 2002 and the IAFP Award of Merit in 2005.

Ms. Greig has given more than 70 oral or poster presentations and has authored numerous peer-reviewed publications. She has guest lectured at the University of Guelph in its Master's in Food Safety and Quality Assurance Program and at Ryerson University in its School of Occupational and Public Health in Toronto. Ms. Greig is a registered nurse and, over 19 years, has practiced in three Canadian provinces. She received her B.Sc., specializing in Microbiology, from the University of Waterloo in Ontario, and her M.Sc. in Epidemiology from the University of Guelph.

Vijay K. Juneja
Wyndmoor, Pennsylvania

Dr. Vijay Juneja is a recipient of the 2017 IAFP Fellow Award. Dr. Juneja is a Lead Scientist of a research project on Predictive Microbiology at the Eastern Regional Research Center at the U.S. Department of Agriculture's (USDA) Agricultural Research Service (ARS) in Wyndmoor, Pennsylvania. He is among the world's leading authorities in food safety research, developing a nationally and internationally recognized research program on foodborne pathogens, with emphasis on microbiological safety of minimally processed foods and predictive microbiology. His research program has been highly productive, generating more than 300 publications with more than 170 peer-reviewed journal articles; nine books; and 45 book chapters, with ten included in the *Encyclopedia of Food Microbiology*.

An IAFP Member since 2000, Dr. Juneja currently serves on the Editorial Board for the *Journal of Food Protection (JFP)*. He is also Chair of the *JFP* Management Committee and President of the IAFP Affiliate, the Indian Association for Food Protection in North America. Dr. Juneja also served on the IAFP Program Committee. He is the recipient of the Harry Haverland Citation Award, the GMA Food Safety Award, and the Maurice Weber Laboratorian Award.

Dr. Juneja also serves on the editorial boards for *Foodborne Pathogens & Disease*, *International Journal of Food Microbiology*, and *Frontiers in Microbiology*. He served as a Co-Editor of the *International Journal of Food Microbiology* until December 2011 and as an Associate Editor for both the *Food Microbiology Section* and the *Journal of Food Science* from 2002–2007. He currently serves as an Editor of *LWT-Food Science and Technology*.

Dr. Juneja received his Ph.D. in Food Technology and Science from the University of Tennessee in Knoxville.

Fellow Award

Dale A. Grinstead
Racine, Wisconsin

Dr. Dale A. Grinstead is a recipient of the 2017 IAFP Fellow Award. Dr. Grinstead is a Senior Food Safety Technology Fellow in the Sealed Air Core Research & Development (R&D) group in Racine, Wisconsin. His responsibilities include providing technical input and guidance on Sealed Air's global food safety programs; new product development; representing Sealed Air in the area of food safety to technical societies and trade associations; and assisting customers with food safety issues and microbiological concerns. Dr. Grinstead also leads the Sealed Air Microbiology Technical Center of Excellence.

A Food Microbiologist (who usually just introduces himself as a "Food Safety Nerd") with 23 years of industrial R&D experience, Dr. Grinstead joined Unilever Research in 1994, where he led the group doing clinical testing for antimicrobial hand washes. While there, he also worked extensively with the FDA CEDR on the monograph to regulate antimicrobial personal care products. In 1998, Dr. Grinstead joined DiverseyLever R&D, developing hygiene products and systems for food processing facilities. In 2005, he began working on hygiene and food safety systems focused on the food service and food retail industries.

Dr. Grinstead has been an active Member of IAFP for nearly 24 years. Throughout his Membership, he has served as Chair of the Hygiene and Sanitation PDG, was a member of the Nominating Committee and various award committees, and a member of the Program Committee from 2014–2017. He currently serves on the Editorial Board for *Food Protection Trends*.
Dr. Grinstead is also very active in the Conference for Food Protection, where he has served on Council III several times and as a committee member or co-chair continuously since 2008.

Dr. Grinstead received his B.S. in Microbiology and M.S. in Food Science from Iowa State University and his Ph.D. in Food Technology from Clemson University. He also conducted a post-doctoral study at the University of Tennessee in Knoxville.

Jeffrey L. Kornacki
Madison, Wisconsin

Dr. Jeffrey L. Kornacki is a recipient of the 2017 IAFP Fellow Award. Dr. Kornacki is President and Senior Technical Director of Kornacki Microbiology Solutions, Inc. in Madison, Wisconsin. Prior to this, he was a faculty member at the University of Georgia, Athens, in the Department of Food Science.

Throughout his extensive career, Dr. Kornacki has assisted numerous companies in the midst of U.S. FDA and USDA product recalls and conducted more than 850 troubleshooting-related plant visits across a vast assortment of food processing industries. He remains an adjunct faculty member at the University of Georgia.

Dr. Kornacki has been solving food microbiology issues since obtaining his B.S. in Bacteriology from the University of Wisconsin – Madison. His M.S. and Ph.D. thesis research addressed contamination concerns with dairy product manufacturing. He has co-authored a patent on ultra-filtered milk cheese production during the four years he worked for Schreiber Foods as a research scientist. Twelve subsequent years were spent at Silliker Laboratories (now Merieux NutriSciences) as a microbiological troubleshooter, conducting technical writing/editing, and in laboratory management.

An active Member of IAFP since 1979, Dr. Kornacki received the IAFP Sanitarian Award in 2010, has served as Chair of the Food and Hygiene Professional Development Group (PDG), and has been a member on numerous PDGs. He has published on a wide variety of food microbiology topics and is Editor/Co-Editor and co-author of several books, including *Principles of Microbiological Troubleshooting in the Industrial Food Processing Environment* (Springer, 2010); *The Microbiological Safety of Low Water Activity Foods and Spices* (Springer, 2014); and *Foodborne Pathogens: Virulence Factors and Host Susceptibility* (Springer, 2017).

Dr. Kornacki also served as co-chair of the NACMCF subcommittee on Microbiological Criteria as Indicators of Process Control or Insanitary Conditions from 2013–2015 and is current Co-Editor and Chief of the 18th edition of *Standard Methods for the Examination of Dairy Products*, presently under development.

Dr. Kornacki remains an active microbiological troubleshooter in the food industry.

Fellow Award

Donald W. Schaffner
New Brunswick, New Jersey

Dr. Donald W. Schaffner is a recipient of the 2017 IAFP Fellow Award. Dr. Schaffner is Distinguished Professor and Extension Specialist in Food Science at Rutgers University – The State University of New Jersey in New Brunswick, New Jersey. His research interests include quantitative microbial risk assessment and predictive food microbiology, having published more than 150 peer-reviewed papers on these and other topics.

Dr. Schaffner has served on a variety of national and international expert committees, including service to the U.S. National Academy of Sciences, the World Health Organization, and the Food and Agriculture Organization of the United Nations. He is active in several scientific associations, including the Institute of Food Technologists (IFT), the Society for Risk Analysis (SRA), and the American Society for Microbiology (ASM). Dr. Schaffner was elected a Fellow of IFT in 2010, a Fellow of the American Academy of Microbiology in 2014, and is an Editor for the ASM journal, *Applied and Environmental Microbiology*.

Dr. Schaffner has been an active Member of IAFP for 16 years, serving as President in 2013–2014. He currently serves on the Editorial Boards for both the *Journal of Food Protection* and *Food Protection Trends*. Throughout his IAFP career, he has also been a member on numerous award selection committees, and is a member of several Professional Development Groups. He was Delegate for the IAFP Affiliate, the Metropolitan Association for Food Protection (now the New Jersey Association for Food Protection). He received the IAFP Elmer Marth Educator Award in 2009.

Dr. Schaffner holds a B.S. in Food Science from Cornell University and an M.S. and Ph.D. in Food Science and Technology from the University of Georgia. He co-hosts "Food Safety Talk," a podcast on microbial food safety for professionals and the public.

President's Lifetime Achievement Award

Christine M. Bruhn
Davis, California

Dr. Christine M. Bruhn is the recipient of the 2017 IAFP President's Lifetime Achievement Award. This award is given at the discretion of the Association President to recognize an individual who has made a lasting impact on "Advancing Food Safety Worldwide" through a lifetime of professional achievement in food protection. Dr. Bruhn is retired from the University of California – Davis, where she was Director for the Center of Consumer Research.

Throughout her professional career, Dr. Bruhn developed an internationally recognized and influential food safety program. She pioneered research on consumer attitudes toward new technologies such as food irradiation, high-pressure processing, and genetic engineering. Her work revealed consumers' handling practices related to meat, poultry, produce, and nuts. She developed educational programs that documented changes in knowledge and behavior, and helped develop a physician's educational program on food allergies, as well as a booklet for the food-allergic individual.

Science communication has been a priority in Dr. Bruhn's career. She has appeared on network TV, including CBS, NBC, ABC, CNN and Fox programs; has been heard on National Public Radio; and is an information source for *USA Today, Associated Press, Wall Street Journal*, and others. Dr. Bruhn served as a food safety and risk communication expert on the first U.S. Food and Drug Administration (U.S. FDA) Risk Communication Advisory Committee where, based on the committee's recommendations, the Administration developed a Strategic Plan for Risk Communications and a template to communicate during a food recall.

Dr. Bruhn has been an IAFP Member since 1995. She presented the Ivan Parkin lecture at the 1998 IAFP Annual Meeting and received the Elmer Marth Educator Award in 2005, the Fellow Award in 2012, and Honorary Life Membership in 2015. Dr. Bruhn was also the first recipient of the IAFP J. Mac Geopfert Developing Scientist Award in 1986. Her accomplishments have also been recognized by the University of California with the Award of Distinction. In addition, she is a Fellow of both IFT and the Institute of Food Science and Technology in the United Kingdom.

Dr. Bruhn's career of research and science-based communication is a model of professional leadership. Her research was cited when the USDA Dietary Guidelines first included food safety. She has also consulted with the World Health Organization, Pan American Health Organization, and others.

Honorary Life Membership Award

David Blomquist
Hastings, Minnesota

Mr. David Blomquist is a recipient of the 2017 IAFP Honorary Life Membership Award. Mr. Blomquist joined the Klenzade Division of Ecolab as a Quality Management Consultant in 1989. He worked for Ecolab for nearly 27 years, retiring at the end of 2016. He traveled to nearly 1,000 plants helping to resolve cleaning and sanitation issues. In addition, he provided support to the North American Ecolab Sales force, answering questions for thousands of dairy, food and beverage plants every year.

Mr. Blomquist grew up on a dairy farm near Almelund, Minnesota, north of the Minneapolis/St. Paul metro. He graduated from the University of Minnesota in the Department of Food Science and Industries in St. Paul in 1972.

After graduation, Mr. Blomquist and his new wife, Cindy, worked in the Peace Corps in Casablanca, Morocco at *le Laboratoire d'Analyses et de Recherches Chimique,* where he served as a chemist for the Moroccan equivalent of the U.S. Food and Drug Administration (FDA) testing lab. Upon his return to the U.S., he worked as a quality control supervisor at Dalbo Cheese in Dalbo, Minnesota, and as a microbiologist at Tony's Pizza Service in Salina, Kansas. Mr. Blomquist also held other positions at Tony's (part of Schwan's Sales Enterprises), including Quality Assurance (QA) Director and QA Manager of the Marshall Operations. He was also Vice President of QA and Research & Development at Sunstate Dairy in Tampa, Florida.

Mr. Blomquist joined IAFP in 1992. He was a member and past chair of the Dairy Professional Development Group (PDG) and the Sanitation and Hygiene PDG, and is currently a member other PDGs, including the Sanitary Design PDG. He is a frequent presenter at IAFP and other technical symposia. Mr. Blomquist received the IAFP Sanitarian Award in 2013. In 2014, he was one of several Members who established the IAFP Affiliate, the Minnesota Food Protection Association. He served as its first president and watched the organization grow to more than 100 members in its first few years. Mr. Blomquist remains an active member of the Affiliate.

Maria Teresa Destro
São Paulo, Brazil

Dr. Maria Teresa Destro is a recipient of the 2017 IAFP Honorary Life Membership Award. Dr. Destro serves as Scientific Affairs Director for bioMérieux in São Paulo, Brazil, after more than 25 years as a researcher and professor of Food Microbiology in the Department of Food and Experimental Nutrition at the University of São Paulo (USP), Brazil. In her current position, she continues to educate people in food safety and works with various Latin American countries, helping spread food safety awareness.

Dr. Destro joined IAFP in 1994 and has served on various committees and Professional Development Groups (PDGs), including as a current member of both the Meat and Poultry Safety and Quality PDG and the International Food Protection Issues PDG. Together with Dr. Mariza Landgraf, Dr. Destro helped establish the Brazil Association for Food Protection (BAFP), IAFP's first South American Affiliate, serving as its Delegate for several terms. As Delegate, she also served as Affiliate Council Secretary and Chair (2005–2007), where she was provided the opportunity to join the IAFP Executive Board as the first non-North American Member.

In 2011, Dr. Destro served as one of the original organizers for the first IAFP Latin American Symposium on Food Safety and has since been involved in IAFP's Local Arrangements Steering Committee for this highly successful meeting. Dr. Destro has also acted as an ambassador for IAFP in various Latin American countries, always committed to spreading the IAFP objective: *Advancing Food Safety Worldwide*®.

Honorary Life Membership Award

Marilyn B. Lee
Toronto, Canada

Professor Emeritus Marilyn B. Lee is a recipient of the 2017 IAFP Honorary Life Membership Award. Now retired, Dr. Lee taught public health in the School of Occupational and Public Health at Ryerson University in Toronto, Canada for more than 25 years, training a generation of Canadian Public Health Inspectors with her enthusiastic, informative, and practical lectures.

Dr. Lee obtained a degree in Zoology from the University of Massachusetts and an M.S. in Pathobiology from Johns Hopkins University, School of Hygiene and Public Health, specializing in Parasitology. She pursued her interest in Public Health by attending Ryerson University, receiving a Certificate in Public Health Inspection.

Dr. Lee's professional experience includes working for six years in the field as a Certified Public Health Inspector in Guelph, Ontario, in a generalized program of food and water safety, public health education, and infection control. Throughout her career, she has served on numerous committees in Canada and the U.S., including the Advisory Council on Drinking Water Quality and Treatment Standards (appointed by the Minister of the Environment, Ontario), and the Joint Committee on Drinking Water Treatment Devices of the National Sanitation Foundation. In 2003, Dr. Lee chaired the Advisory Committee to evaluate the "Dine-Safe" program (Food Premises Inspection and Disclosure Program) for Toronto Public Health.

Dr. Lee has conducted and published research throughout her career, with an interest in preventing foodborne outbreaks in institutional settings such as schools, daycare centers, hospitals, and nursing homes. In addition, she coordinated the preparation of the third edition of *Procedures to Investigate Waterborne Illness*, which was published in 2016 by IAFP.

An IAFP Member for 25 years, Dr. Lee served on the Board of Directors of the IAFP Affiliate, the Ontario Food Protection Association, for eight years and was the membership director for a term.

John N. Sofos
Fort Collins, Colorado

Dr. John N. Sofos is a recipient of the 2017 IAFP Honorary Life Membership Award. Dr. Sofos is a University Distinguished Professor Emeritus at Colorado State University (CSU) in Ft. Collins, Colorado, retiring in 2015, after 35 years of service. During his tenure, he served on 103 graduate committees (65 M.S.; 38 Ph.D.; 48 international; 61 as Chair or Co-Chair). Dr. Sofos worked with 38 Research Associates and Visiting Scholars. He taught courses in Food Processing, Food Microbiology, Food Fermentations, Food Biotechnology, Meat Safety, HACCP, and Advanced Food Science. His research interests include ecology, detection, resistance, and control of bacterial pathogens.

Dr. Sofos has authored/co-authored 324 refereed papers, 10 books, 72 book chapters, 462 abstracts, and 380 miscellaneous publications, and has presented 210 invited lectures worldwide. An IAFP Member since 1975, Dr. Sofos served as scientific Co-Editor for the *Journal of Food Protection* for nearly 18 years. Throughout his distinguished career, he has received the IAFP Fellow Award, the Elmer Marth Educator Award, the GMA Food Safety Award, the Harry Haverland Citation Award, the President's Lifetime Achievement Award, the Maurice Weber Laboratorian Award, and the President's Recognition Award.

Dr. Sofos is also a Fellow of the American Academy of Microbiology; the Institute of Food Technologists; the American Society of Animal Science (ASAS); and the American Meat Science Association (AMSA). He has received Distinguished Research Awards from AMSA and ASAS. Other honors received include the USDA Secretary's Superior Service Award; the NAMPA (North American Meat Processors Association) Educator Award; the CSU Alumni Distinguished Faculty Award; and the College of Agricultural Sciences Distinguished Career Award.

In addition, Dr. Sofos has served on the U.S. National Advisory Committee on Microbiological Criteria for Foods (NACMCF); the Biological Hazards Panel (Chair) of the European Food Safety Authority; and as President of the Council of the Agricultural University of Athens, Greece.

Honorary Life Membership Award

Katherine M.J. Swanson
Mendota Heights, Minnesota

Katherine M.J. Swanson (Katie) is a recipient of the 2017 IAFP Honorary Life Membership Award. Dr. Swanson is a food safety consultant with more than 40 years of food safety experience.

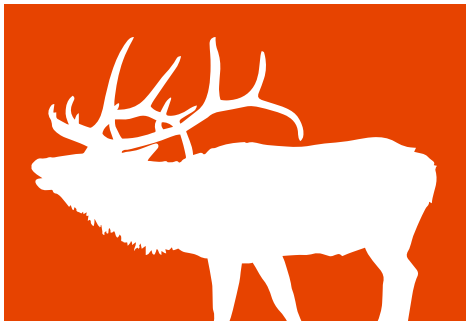
Dr. Swanson has delivered more than 150 invited presentations around the globe, many at IAFP affiliated meetings. She is currently Curriculum Development Program Manager for the Food Safety Preventive Controls Alliance, which developed the FDA-recognized standardized curriculum for Preventive Controls for Human Food regulations. Dr. Swanson also served as Executive Editor for the 2nd edition of the Sprout Safety Alliance's FDA-recognized training curriculum.

Dr. Swanson served as IAFP President 2012–2013, joining IAFP in 1979 as a Student Member and in 1980 as a Member. She served on the *Journal of Food Protection* Editorial Board for 12 years, on the *Food Protection Trends* Editorial Board for three years, and on numerous IAFP Award Selection Committees and organizing committees for meetings outside the U.S. Dr. Swanson received the IAFP Fellow Award in 2015 and the GMA Food Safety Award in 2003.

Most of Dr. Swanson's career was in industry, working for The Pillsbury Company, General Mills, Ecolab, and briefly for 3M and Cornell University. She is secretary of the International Commission on Microbiological Specifications for Foods (ICMSF), an IFT Fellow, and served on the National Advisory Committee on Microbiological Criteria for Foods (NACMCF) and the National Academies of Science Committees.

Dr. Swanson earned her B.S. in dietetics at the University of Delaware in Newark, her M.S. and Ph.D. in food science at the University of Minnesota in Minneapolis/St. Paul, and enjoys eating safe food around the globe.





Harry Haverland Citation Award

J. Santos Garcia A.
Neuvo Leon, Mexico

Sponsored by

3M

Dr. J. Santos Garcia A. is this year's recipient of the Harry Haverland Citation Award. This award honors Dr. Garcia for his many years of dedication and devotion to the Association's ideals and objectives. Dr. Garcia is Professor at the Universidad Autonoma de Nuevo Leon in Mexico, where he received his bachelor's in Microbiology and a D.Sc. in Medical Microbiology. He has also been a visiting scientist at the University of Massachusetts and at the National Animal Disease Center with the U.S. Department of Agriculture (USDA).

For more than two decades, Dr. Garcia has conducted annual workshops on rapid diagnostic methods of foodborne pathogens and developed training programs in food protection. Since 1993, he has organized the Annual International Congress on Food Safety in various cities around Mexico, including the 5th IAFP Latin American Symposium on Food Safety in Cancun in 2016, which was attended by delegates from 22 countries, contributing significantly to the improvement of food protection and international networking. Many experts in different countries from academic institutions or the industry have recognized Dr. Garcia's international influence and have collaborated with him to address emerging food safety issues resulting from the globalization of the food supply.

Dr. Garcia served as President of the Mexican Association of Food Science from 2013–2015. He has served on committees and editorial boards of *Food Biotechnology, Microbiological Discovery*, and other journals. As a member of the Strategy Group of the Institute of Food Technologists, the Mexican Academy of Sciences, the Advisory Committee of the International Foundation for Science and other organizations, Dr. Garcia has promoted food safety at international levels. He has co-authored or co-edited seven books for food safety professionals, in addition to serving as advisor for 12 doctoral, 31 master's and 21 bachelor's of science students.

Dr. Garcia has been an active IAFP Member since 1994. He is the Past President of the IAFP Affiliate, the Mexico Association for Food Protection. He served on the *Journal of Food Protection (JFP)* Management Committee and currently serves on the Editorial Board of *JFP*.

Dr. Garcia was awarded the IAFP International Leadership Award in 2013.

Food Safety Innovation Award

Novolyze
Orliénas, France

Sponsored by

Walmart

Novolyze is the recipient of the 2017 Food Safety Innovation Award for its development and commercialization of pre-packaged bacterial surrogate inocula that significantly streamline and decrease uncertainty during process/intervention validation work.

Headquartered in Orliénas, France, Novolyze designs and supplies disruptive products and services for the food safety industry. SurroNov™ is its range of dry-stabilized and ready-to-use surrogate microorganism preparations for process validations. SurroNov™ products are non-pathogenic microorganisms that mimic the behavior of a target pathogen like *Salmonella*. In-plant process validations using SurroNov™ surrogates is one of the easiest, safest, and fastest ways to validate a kill step and ensure compliance with FSMA Preventive Controls for Human Food. SurroNov™ surrogates are produced in industrial quantities following strict procedures that ensure the homogeneity and quality of its products. Subsequently, SurroNov™ surrogates are formulated with food grade ingredients to stabilize them, while ensuring initial inoculation levels and their thermal behaviors remain the same.

Novolyze specializes in the qualification and production of stabilized, ready-to-use surrogate microorganisms and validation kits. Its team of experts assists at multiple stages of a validation project, from the microbiological risk assessment of a food product; complete TDT studies to determine the heat resistance of a bacteria in a product for a food process; and temperature distribution studies to the production of proprietary surrogates for preventive control validations.

International Leadership Award

George-John Nychas
Athens, Greece

Sponsored by

Cargill™

The 2017 International Leadership Award goes to Dr. George-John Nychas for his dedication to the high ideals and objectives of IAFP and his promotion of the Association's mission in countries outside of the U.S. and Canada. Dr. Nychas is Director of the Laboratory of Microbiology and Biotechnology of Foods at the Agricultural University in Athens, Greece, where he has taught Food Microbiology and Food Safety since 1994.

Dr. Nychas has been actively involved with food safety and consumer protection issues throughout his food safety career, serving as President of the Greek Food Authority; as a member of the Biohazard group of the European Food Safety Authority (EFSA); as an expert in Predictive Modelling/Quantitative Risk Assessment (QRA); as a member of the Advisory Forum of EFSA; and as a member of the "Food Safety Panel – Prevention & Control of BSE/TSE & other Biological Hazards" of the European Parliament.

Dr. Nychas is a member of the pool of scientific advisors on risk assessment for the Directorate–General for Health and Food Safety (DG SANTE), and was nominated Chairman of the Scientific Working Group in Food Safety of the European Technological Platform. He has been involved in a wide range of activities, with a focus on fostering international collaboration, including transatlantic collaboration between the EU and U.S. in food safety achieved through European Research programs in which he coordinated and/or participated that dealt with microbial physiology of pathogenic and spoilage organisms in different biotic or abiotic environments.

Dr. Nychas has authored 217 publications and has approximately 8,400 citations.

GMA Food Safety Award

Center for Food Safety Engineering and the Department of Food Science
Purdue University
West Lafayette, Indiana

Sponsored by

GMA
The Association of Food, Beverage and Consumer Products Companies

The recipient of the 2017 GMA Food Safety Award is the Center for Food Safety Engineering (CFSE) and the Department of Food Science at Purdue University in West Lafayette, Indiana. The faculty members of CFSE and the Department of Food Science have an impressive history of outstanding contributions to the field of food safety, encompassing significant advances in technologies for sample preparation and detection of foodborne pathogens, top undergraduate and graduate educational and research programs, and impactful far-reaching educational and outreach activities in food protection.

CFSE was established in 2000 as a partnership between Purdue University and USDA–ARS for developing new knowledge, technologies, and systems for detection and prevention of chemical and microbial contamination of foods while training the next generation of food safety scientists and engineers. CFSE technologies have been widely published and presented (with more than 250 peer-reviewed publications and more than 1,000 presentations taking place at national and international scientific meetings), and have been licensed and/or have led to startup companies.

Dr. Lisa Mauer has been Center Director since 2011. While CFSE is a research-focused center, CFSE investigators have a much greater role in the university and in food safety. Dr. Mauer and four other CFSE lead investigators (Drs. Bruce Applegate, Arun Bhunia, Amanda Deering, and Haley Oliver) are faculty members in the Department of Food Science and responsible for a variety of food safety-related courses, workshops, and other outreach programs and international programs, including capacity building for under-developed countries.

Since 2000, more than 550 undergraduates, 142 M.S. students, and 117 Ph.D. students have matriculated from the Purdue Department of Food Science.

Frozen Food Foundation Freezing Research Award

Mark A. Harrison
Athens, Georgia

Sponsored by

Frozen Food Foundation

Dr. Mark A. Harrison is the recipient of the 2017 Frozen Food Foundation Freezing Research Award. This award honors an individual, group or organization for pre-eminence and outstanding contributions to research that impacts food safety attributes of freezing.

Dr. Harrison is a Josiah Meigs Distinguished Teaching Professor, Graduate Coordinator, and Researcher in the Department of Food Science and Technology at the University of Georgia in Athens. His research involves investigations into the occurrence and survival of bacterial pathogens in fresh and processed food and the shelf-life extension of these foods. Current projects include investigations on factors contributing to *Listeria monocytogenes* persistence in processing facilities focusing on ready-to-eat frozen food facilities.

In addition to his research, Dr. Harrison teaches courses in Food Microbiology, Foodborne Pathogens and Toxins; Governmental Regulations of Food Safety and Quality; Advanced Food Microbiology; and several courses in the UGA Online Master of Food Technology Program. He has been recognized repeatedly by the university and professional societies for his teaching efforts. Dr. Harrison has directed 19 Ph.D. students and 39 M.S. students and is currently the major professor of two M.S. students and one Ph.D. student. He has more than 120 journal publications, eight book chapters, and has made more than 190 presentations at professional meetings. His involvement in externally funded research grants has exceeded $7 million.

Dr. Harrison has been a member of the Scientific Advisory Council of the American Frozen Food Institute (AFFI) since 2007. In this role, he has provided input on the development of funding proposals put forth by the institute and has reviewed projects supported by the institute. He has also participated in discussions related to scientific issues of interest to the institute and has co-taught an AFFI-sponsored webinar on *Microbial Spoilage of Foods,* focused on issues related to food spoilage and the role freezing can play in reducing spoilage problems while enhancing the food supply.

An IAFP Member since 1978, Dr. Harrison currently serves on the *Journal of Food Protection (JFP)* Editorial Board. He is a past member of the *JFP* Management Committee. He received the Elmer Marth Educator Award in 2012.

Food Safety Magazine Distinguished Service Award

Reginald Bennett
College Park, Maryland

Reginald Bennett is a recipient of the 2017 Food Safety Magazine Distinguished Service Award. This award honors individuals who best exemplify the characteristics of a dedicated food safety professional who has made a significant impact on food safety. The honored are recognized by members of the profession for their collective works in promoting and advancing science-based solutions for food safety issues.

Mr. Bennett is Senior Policy Analyst in the Office of Regulatory Science of CFSAN at the U.S. Food and Drug Administration (FDA) in College Park, Maryland. His career in microbiological research and policy has spanned more than 54 years. He began his career in 1956 as a medical bacteriologist at Presbyterian Hospital in Pittsburgh, Pennsylvania. Mr. Bennett joined the FDA in 1960 as a microbiologist in the Microbiology Division. From this point, he rose through the ranks as Acting Chief in the Food and Cosmetic Microbiology Branch, to Chief in the Microbial Methods, Development Branch, and to his current position in the Office of Regulatory Science.

Foremost among Mr. Bennett's scientific contributions are his "methods development for the serological identification of heat-altered staphylococcal enterotoxin in canned foods" and "for development of methods to detect heat-altered staphylococcal enterotoxin and their use in assuring food safety of canned foods."

Mr. Bennett has received numerous awards throughout his career, including the International Association for Food Protection's (IAFP) President's Lifetime Achievement Award in 2004. He is a Fellow of the American Academy of Microbiology, Fellow of the AOAC International, and a member of the American Society for Microbiology, the Institute of Food Technologists, and IAFP.

Mr. Bennett received his M.Sc. in Microbiology from the University of Pittsburgh.

Dane Bernard
Arnold, Maryland

Dane Bernard is a recipient of the 2017 Food Safety Magazine Distinguished Service Award. Mr. Bernard is currently the Managing Director of Bold Bear Safety in Arnold, Maryland. Until 2014, Mr. Bernard served as Vice President of Food Safety and Quality Assurance at Keystone Foods, where he was responsible for global programs on Hazard Analysis Critical Control Points (HACCP) and food safety. Prior to joining Keystone, he was Vice President of Food Safety for the National Food Processors Association, where he had worked since 1973.

A registered specialist in food, dairy and sanitation microbiology with the American Academy of Microbiology, Mr. Bernard has done extensive testing of food processing systems, supervised research in many areas of food safety, and has authored/co-authored several technical articles. He has been an instructor and lecturer on principles and applications of HACCP and has assisted in formulating HACCP plans for the U.S. food industry.

Mr. Bernard has been an invited expert to five International Consultations sponsored by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO), dealing with certain aspects of HACCP, risk analysis and other food safety issues. A 44-year Member of IAFP, Mr. Bernard presented the John H. Silliker Lecture at IAFP 2013. He received the IAFP Honorary Life Membership Award in 2015 and the IAFP Harold Barnum Industry Award in 1996.

Mr. Bernard received his M.Sc. in Food Microbiology from the University of Maryland – College Park.

Sponsored by

FoodSafety magazine

Maurice Weber Laboratorian Award

Arun K. Bhunia
West Lafayette, Indiana

Sponsored by

WEBER SCIENTIFIC

Dr. Arun K. Bhunia is the 2017 recipient of the Maurice Weber Laboratorian Award. This award recognizes an IAFP Member for dedicated and exceptional contributions in the laboratory, and commitment to the development and/or application of innovative and practical analytical approaches in support of food safety.

Dr. Bhunia is Professor of Food Microbiology in the Department of Food Science at Purdue University in West Lafayette, Indiana, which is also affiliated with the Department of Comparative Pathobiology and the Microbiology Training Group of Purdue's Life Sciences Program.

Dr. Bhunia's research contributions include the development of biosensor-based platforms for rapid foodborne pathogen detection; understanding the mechanism of pathogen interaction with the host gut; and probiotic vaccine against enteric pathogens. He has co-authored more than 166 research publications and two text books (*Fundamental Food Microbiology* and *Foodborne Microbial Pathogens*). Over his 22-year academic career, he has mentored 32 graduate students and 16 postdoctoral scientists. Their professional and personal success brings him the greatest joy and reward that is unparalleled to any recognitions received.

Dr. Bhunia's professional activities include service on the National Advisory Committee on Microbiological Criteria for Foods (2013–2017); the Fulbright Specialist Roster (2016–2021), and as an advisory member for the NASA Forum on Next Generation Microbiology Food Requirements for Spaceflight (2012). Dr. Bhunia received the 2003 Purdue Agriculture Research Award; the 2009 Institute of Food Technologist's Research & Development Award; and the 2013 Purdue University College of Agriculture Outstanding Graduate Educator Award.

An IAFP Member since 2008, Dr. Bhunia currently serves on the *Journal of Food Protection (JFP)* Editorial Board. He received his B.V.Sc. in India, his Ph.D. from the University of Wyoming in Laramie, and conducted postdoctoral training at the University of Arkansas in Fayetteville.

Larry Beuchat Young Researcher Award

Xiaonan Lu
Vancouver, British Columbia, Canada

Sponsored by

BIOMÉRIEUX INDUSTRY
PIONEERING DIAGNOSTICS

Dr. Xiaonan Lu is the 2017 recipient of the Larry Beuchat Young Researcher Award, which recognizes a young researcher who has shown outstanding ability and professional promise in the early years of their career.

Dr. Lu is Associate Professor of Food Science on the faculty of Land and Food Systems at the University of British Columbia (UBC) in Vancouver. His university lab works on developing innovative and rapid sensing, instrumentation systems and molecular-based detection and sequencing methods for ensuring food safety and preventing food bioterrorism. He received his B.S. in Food Science from Ocean University of China and his Ph.D. in Food Science from Washington State University. He was a Postdoctoral Fellow in the College of Veterinary Medicine at Washington State University before joining UBC in 2013 as Assistant Professor and Director of the UBC Food Safety Engineering Centre.

Among the awards Dr. Lu has received are the UBC Peter Wall Scholar, the Young Scientist Excellence Award from the International Union of Food Science and Technology, and the Young Scientist Travel Award from the Agricultural and Food Chemistry Division of the American Chemical Society.

Dr. Lu currently serves on several journal editorial boards, including *Applied and Environmental Microbiology; Journal of Food Science;* and *Food and Agricultural Immunology.* He is the author of more than 70 papers published in peer-reviewed journals as well as one book, *Sensing Techniques for Food Safety and Quality Control* (Royal Society of Chemistry), and several book chapters.

Dr. Lu joined IAFP in 2011.

Ewen C.D. Todd Control of Foodborne Illness Award

Frank L. Bryan
Lithonia, Georgia

Sponsored by

MARLER CLARK
THE FOOD SAFETY LAW FIRM

Dr. Frank L. Bryan is the recipient of the Ewen C.D. Todd Control of Foodborne Illness Award. New this year, this award recognizes an individual for dedicated and exceptional contributions to the reduction of risks of foodborne illness. Now retired, Dr. Bryan was President of Food Safety Consultation and Training, conducting hazard analyses and developing Hazard Analysis Critical Control Point (HACCP) systems for foodservice chains and food establishments. He has participated in several expert committees of the World Health Organization and conducted hazard analyses of street-vended foods, foods prepared in food establishments and in homes with babies and children with diarrhea in developing countries.

Dr. Bryan was a scientist director and Captain in the Commissioned Corps of the U.S. Public Health Service (PHS) at the Centers for Disease Control and Prevention and received the PHS Meritorious Service Medal for "significant contributions to prevention and control of foodborne diseases through applied research and through the training of health professionals around the world."

Dr. Bryan has conducted research on *Salmonella* associated with turkeys and turkey products, and hazard analyses of various types of foods and foodservice establishments. He was a member and Secretary of the International Commission on Microbiological Specifications for Foods; Chair of the IAFP Committee on Communicable Diseases Affecting Man; Vice President of the World Association of Veterinary Food Hygienists, and a member of two National Research Council committees on food concerns. Throughout his extensive career, he taught, developed and/or directed more than 500 training courses and has authored more than 270 professional publications.

Dr. Bryan has been an IAFP Member since 1952. He received the IAFP Fellow Award in 1998, Honorary Life Membership Award in 1997, and the Harry Haverland Citation Award in 1991. He has a Ph.D. in Bacteriology and Food Science from Iowa State University and served in the Medical Service Corps of the U.S. Army.

Sanitarian Award

Candace A. Jacobs
Olympia, Washington

Sponsored by

ECOLAB

The 2017 Sanitarian Award goes to Dr. Candace A. Jacobs. The Sanitarian Award honors an IAFP Member for dedication and exceptional service to the profession of the sanitarian, serving the public and the food industry. Dr. Jacobs is the Assistant Director of the Food Safety and Consumer Services Division of the Washington Department of Agriculture (WSDA) in Olympia, a position she has held since April 2015, as well as from 1994–2000. During the interim, she worked in food safety/regulatory/environmental affairs/quality assurance positions in the food industry.

Throughout her extensive career, Dr. Jacobs has worked for The Coca-Cola Company, H-E-B Grocery, Campbell Soup, Niagara Bottling, Starbucks, and Chobani Yogurt. She also held positions as a policy analyst for WSDA, as the State Toxicologist for the Nebraska Department of Health, and as a clinical veterinarian in Wyoming and California. Her Air Force career includes active duty as a research veterinarian for the U.S. Navy, and reserve duty as a public health officer for the U.S. Air Force. She retired as a Colonel in the Biomedical Services Corp.

Dr. Jacobs joined IAFP in 2014. She received her D.V.M. from Oklahoma State University, her M.P.H. from San Diego State University, and her B.S. from the University of Arkansas. She is board certified in Veterinary Preventive Medicine.

Elmer Marth Educator Award

Judy A. Harrison
Athens, Georgia

Sponsored by

NELSON JAMESON INC.

Dr. Judy A. Harrison is the 2017 recipient of the IAFP Elmer Marth Educator Award, which recognizes an IAFP Member for dedicated and exceptional contributions to the profession of educator.

Dr. Harrison is a Professor in the Department of Foods and Nutrition at the University of Georgia (UGA) in Athens. She obtained her B.S. in Secondary Education – Biology from Tennessee Technological University in Cookeville; her M.S. in Food Science and Technology from the University of Tennessee in Knoxville; and her Ph.D. in Nutrition from the University of Georgia.

Dr. Harrison's appointment is 100% outreach at the University of Georgia, where she was named a Walter Bernard Hill Fellow for distinguished achievement in public service and outreach. As a food safety specialist for UGA Cooperative Extension, she has provided 25 years of food safety education for a variety of audiences across the food system. She has developed, implemented, and evaluated food safety education for child care providers; school nutrition and restaurant personnel; food business personnel; farmers; farmers' market managers; adult consumers; and youth audiences from kindergarteners to high schoolers.

Dr. Harrison has developed educational curriculum packages that have been used nationally and internationally. Her educational programs have been recognized with awards from the media industry, three food safety awards from the National Extension Association for Family and Consumer Sciences, and the 2016 NSF International Food Safety Leadership Award for Training and Education. Dr. Harrison has served as a major professor and on committees for graduate students, and has supervised food safety experiences for dietetic interns and practicum students. She serves on the Board of Directors for the Partnership for Food Safety Education, which has provided her the opportunity to be involved in helping develop food safety education materials for audiences nationwide.

Dr. Harrison has been a Member of IAFP since 1992 and currently serves on the Editorial Boards for the *Journal of Food Protection* and *Food Protection Trends*. She is also a Member of the IAFP Affiliate, the Georgia Association for Food Protection.

Harold Barnum Industry Award

Michael Roberson
Lakeland, Florida

Sponsored by

Roka BIOSCIENCE

As the recipient of the 2017 Harold Barnum Industry Award, Michael Roberson is being honored for his dedication and exceptional service to IAFP, the public, and the food industry. Mr. Roberson is Director of Corporate Quality Assurance for Publix Super Markets, Inc. in Lakeland, Florida, where he started in 2005, and currently manages a team that leads food safety, brand integrity, and compliance programs for the company. In 2009, he testified before Congress at a hearing entitled, "Keeping America's Families Safe: Reforming the Food Safety System." In 2016, Mr. Roberson helped develop "The Story of Your Dinner" with the Partnership for Food Safety Education.

Mr. Roberson has been an IAFP Member since 2001, and is an active member of the Association of Food and Drug Officials and the Food Marketing Institute. He is a Certified Food Scientist with the Institute of Food Technologists and serves on the Executive Board with the Conference for Food Protection. Mr. Roberson chairs the Board of Advisors for the Center for Food Safety at the University of Georgia in Athens, and is a lead instructor for Preventive Controls for Human Foods and the Foreign Supplier Verification Program.

A native of Memphis, Tennessee, Mr. Roberson received his bachelor's degree in Microbiology from Mississippi State University and his master's degree in Food Safety from Michigan State University.

Travel Award for a Food Safety Professional in a Country with a Developing Economy

Frederick Adzitey
Tamale, Ghana

Dr. Frederick Adzitey is a recipient of the 2017 IAFP Travel Award. Dr. Adzitey is a senior lecturer with the Department of Animal Science at the University for Development Studies (UDS) in Tamale, Ghana. He holds a B.Sc. in Agriculture Technology, an M.Sc. in Meat Science and Technology, and a Ph.D. in Food Safety.

Dr. Adzitey's research focuses on isolation, antibiotic resistance, and molecular characterization of foodborne and waterborne pathogens. He also researches the use of local plant resources to control foodborne and waterborne pathogens and to develop healthy meat products. He has more than 50 peer-reviewed publications in national and international journals.

Dr. Adzitey is a current member of TWAS (The World Academy of Sciences) Young Affiliate and the Ghana Young Academy. Throughout his career, he has received numerous awards, including the Early Career Researcher Award from The Royal Society to attend the Commonwealth Science Conference (2017); a grant from the International Committee for Food Microbiology and Hygiene to attend its 25th International Conference on One Health Meets Food Microbiology (2016); a bursary from EU FP7 Project Animal Change to attend a training workshop on Livestock and Climatic Change (2015); a bursary from Wellcome Trust to attend a training workshop on Molecular Approaches to Clinical Microbiology in Africa (2014); and a Travel Fellowship from The Wellcome Trust and H3ABioNet to attend the International Society for Computational Biology African Society for Bioinformatics and Computational Biology Conference on Bioinformatics (2013). Other awards received include the Maurice Ingram Award as the best student on the M.Sc. Meat Science and Technology Course (2007/2008) and the Sanggar Sanjung Award for excellent achievement in category of journal publication for 2012 and 2013 during his Ph.D.

Dr. Adzitey was a recipient of the IAFP Student Travel Scholarship in 2012.

Sponsored by IAFP FOUNDATION

Travel Award for a Food Safety Professional in a Country with a Developing Economy

Alonzo A. Gabriel
Quezon City,
The Philippines

Dr. Alonzo A. Gabriel is the recipient of the 2017 Travel Award. Dr. Gabriel is a Professor of Food Science and Technology and the Principal Investigator of the Laboratory of Food Microbiology and Hygiene in the Department of Food Science and Nutrition at the College of Home Economics at the University of the Philippines Diliman Campus in Quezon City. Dr. Gabriel teaches undergraduate and graduate courses in General and Food Microbiology, Sterilization Processes, and Fruits and Vegetable Processing. His research interests include Hurdle Food Technology, microbial stress exposures and stress adaptation to food and processing environments, and traditional and emerging food processing technologies. Dr. Gabriel's recent works in predictive model building involve the simultaneous estimation of pathogen inactivation, and nutritional and color degradation in heat-treated fruit juices, for a more comprehensive control of safety and quality.

Aside from his teaching and research activities, Dr. Gabriel actively works with local and national government offices in the Philippines, non-government organizations, consumer groups, and food industry stakeholders for Food Security and Protection information dissemination. He served as a co-leader of the Philippine Food Defense Team under the direct order of the Philippine Department of Agriculture, which drafted the Philippine National Standard on Food Defense Guidance for Food Industry. He is currently working with the Philippine Department of Science and Technology for the harmonization of nationwide Food Safety Training Materials.

Dr. Gabriel holds a Ph.D. in Biofunctional Science and Technology with specialization in Food Microbiology and Hygiene from Hiroshima University in Japan. For his contributions to Food Science and Technology, Dr. Gabriel received the International Life Sciences Institute (ILSI) Malaspina International Scholar Travel Grant (2017); the Japan International Award for Young Agricultural Researchers (2016); the International Union of Food Science and Technology (IUFoST) Young Scientist Excellence Award (2013); and the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) Professorial Chair (2012).

Patrick Njage
Nairobi, Kenya

Dr. Patrick Njage is a recipient of the 2017 IAFP Travel Award. Dr. Njage is a lecturer at the University of Nairobi in Kenya and is currently on research stay at the Technical University of Denmark. His research interests include quantitative microbial risk analysis, molecular epidemiology of foodborne pathogens focusing on pathogenicity, antimicrobial resistance genetic elements and antimicrobial resistance gene flow in foods. His current research focuses on the use of next generation sequencing data for microbial risk assessment.

Dr. Njage completed his Ph.D. from the Swiss Federal Institute of Technology in Zurich (ETH–Zurich) and the University of Nairobi (2007–2010) in food microbiology and biotechnology under the Swiss Government Excellence Scholarships for Foreign Scholars. He completed a Post-doctoral Fellowship at ETH–Zurich and subsequently at the University of Pretoria under funding by Vice-Chancellor's Grant-University of Pretoria, National Research Foundation (South Africa), Global Academy of Science (TWAS) (2013–2015). Dr. Njage has also completed several non-degree specialized courses in food microbiology, food safety, quality management and risk analysis from various institutions including ETH–Zurich; Ghent University (Belgium); Technical University of Denmark; the University of Glasgow; the Chinese Academy of Sciences; the University of Hasselt; and Wageningen UR (Netherlands).

Dr. Njage received the 2014 International Union of Food Science and Technology (IUFoST) Young Scientist award during the 17th IUFoST Congress in Montreal, Canada. He was also inducted as an inaugural member of the International Academy of Food Science and Technology's Early Career Scientists Section during IUFoST 2016 Congress in Dublin, Ireland.

Sponsored by IAFP FOUNDATION

Travel Award for State or Provincial Health or Agricultural Department Employees

Ted Gatesy
East Lansing, Michigan

Ted Gatesy is a recipient of the 2017 IAFP Travel Award. Mr. Gatesy is the Microbiology Section Manager for the Michigan Department of Agriculture and Rural Development's (MDARD) Geagley Laboratory in East Lansing, Michigan. He earned both his B.S. in Microbiology and Public Health and M.S. in Food Safety from Michigan State University in East Lansing.

Mr. Gatesy oversees ISO17025 accreditation for the Food Safety Microbiology Laboratory and the FDA Certified Dairy Laboratory. He serves as a laboratory representative on the MDARD Rapid Response Team and as a laboratory liaison for MDARD's Emergency Management Team. He is also the Principle Investigator for the Food and Drug Administration (FDA) Food Emergency Response Network (FERN) Cooperative Agreement Program.

Mr. Gatesy works closely with the FDA Genome Trakr program to implement Whole Genome Sequencing of foodborne pathogens. He also works with MDARD regulatory officials, environmental health staff, and epidemiologists on foodborne outbreaks and surveillance sample testing. He leads the MDARD Food Assurance Program, Michigan's continuation of the former U.S. Department of Agriculture Microbiological Data Program, testing fresh produce for pathogens.

Mr. Gatesy received the IAFP Travel Award in 2014. He is grateful and excited to attend IAFP 2017 in Tampa, Florida.

Michael Perry
Saratoga Springs, New York

Michael Perry is a recipient of the 2017 IAFP Travel Award. Mr. Perry is the Supervisor of the Biodefense Laboratory (BDL) at the New York State Department of Health (NYSDOH) – Wadsworth Center in Saratoga. He earned his B.S. in Chemistry from Siena College in 2006, an M.S. in Chemistry and Chemical Biology from Rensselaer Polytechnic Institute in 2008, and an M.S. in Education from the University at Albany in 2010.

Mr. Perry began his career at the NYSDOH in 2009 as a Research Scientist. His time is dedicated to public health laboratory service, training, and advancing food testing capabilities. Mr. Perry is the lead scientist on several collaborations with federal agencies, including CDC, FDA, DHS, and USDA. As the Wadsworth Center's lead scientist for the Food Emergency Response Network (FERN), he has focused his efforts on assay development for bacterial and toxin identification in foods where he has submitted several multi-laboratory validations for the detection of biothreat agents. Most recently, he optimized/transitioned a CDC-developed assay capable of detecting *Clostridium botulinum* neurotoxin to the Bruker MALDI Biotyper. This transition has greatly increased testing capabilities while reducing testing costs and reporting times.

During his tenure with NYSDOH and FERN, Mr. Perry has taught courses focused on foodborne pathogens/toxins, food defense, agroterrorism, spectrometry/emerging technologies, and dissemination.

Mr. Perry is grateful for the opportunity to attend and present at IAFP 2017.

Student Travel Scholarship Award

Makala Bach
University of Wisconsin – Madison
Madison, Wisconsin

Makala Bach is an undergraduate pursuing a bachelor's in Food Science at the University of Wisconsin — Madison. Starting out a psychology major, she eventually discovered her path to food science and eventually to food safety.

Spending part of the summer as a student in the Summer Scholar Program at the university's Food Research Institute, Ms. Bach had the opportunity to do a solo research project studying the growth of *Staphylococcus aureus* on the surface of bone-in ham and its potential to produce toxin. Albeit a lengthy sampling schedule, she quickly fell in love with research and its ability to help others.

Summer ended with a month-long solo experience on an organic farm in Ecuador. At Ms. Bach's suggestion, the volunteers from the farm toured a local, small-scale yogurt company that had been damaged by an earthquake — a vastly different experience from the massive modern dairy production plants she was used to seeing. This was enough to convince her to apply her newfound food safety passion by working in developing countries, helping to set up and establish food safety protocols in areas that are often overlooked. She plans to pursue a master's degree in Microbiology after graduation next spring.

Ms. Bach is incredibly honored to be a recipient of the 2017 Student Travel Scholarship Award. She hopes get the most out of her time at IAFP 2017, seeing it as an invaluable learning experience that cannot be replicated in a classroom setting. From first-hand information on up-and-coming food safety issues to networking with food microbiologists from six continents, the experiences at IAFP 2017 align with everything she wishes to accomplish in her future career.

Stephanie Barnes
University of Connecticut
Storrs, Connecticut

Stephanie Barnes is a Ph.D. candidate in the Department of Animal Science at the University of Connecticut in Storrs, working under the direction of Dr. Dennis D'Amico. Ms. Barnes received her bachelor of science in Agriculture in Food Science from the University of Georgia (UGA) in 2013.

Her undergraduate research investigated the efficacy of several produce washes against *Salmonella* and *Listeria* on fruits and vegetables, as well as *Salmonella* survival in low-water activity systems. Ms. Barnes continued her work in low-water activity foods during her master's research under the direction of Dr. Joseph Frank by investigating the influence of sugar on *Salmonella* survival in whey protein powders. She earned her M.S. in Food Science from UGA in 2015. Through her work with whey protein, she became interested in dairy product quality and safety. Her dissertation research focuses on identifying and developing antimicrobial strategies, including clean label approaches, to control pathogens and spoilage microorganisms in milk and fresh cheese. This work includes investigating the impact of antimicrobial controls on pathogen virulence.

Ms. Barnes plans to continue pursuing her passion in food microbiology and fermentation through research, teaching, and public engagement. She hopes to work closely with community members and producers in geographically restricted areas to develop effective strategies and educational programs to improve food safety.

Ms. Barnes is very humbled and honored to be chosen as a recipient of the IAFP Student Travel Scholarship. She looks forward to using this opportunity to learn about current food safety research, share her work with the IAFP community, and develop professional relationships with new colleagues.

Sponsored by IAFP FOUNDATION

Student Travel Scholarship Award

Sarah Beno
Cornell University
Ithaca, New York

Sarah Beno is a Ph.D. candidate at Cornell University in Ithaca, New York, working with Dr. Martin Wiedmann. Ms. Beno studies Gram-positive bacteria that impact the dairy industry and partners with Cornell Dairy Extension to provide workshops to industry members. Partnering with the Dairy Extension team has given her extensive practice in science communication.

In addition to presentations, Ms. Beno developed and validated environmental pathogen monitoring programs for nine small cheese processing facilities. Other research includes the analysis of spoilage organisms' abilities to survive and grow at refrigeration temperatures in fluid milk, using skim milk broth as a model.

Ms. Beno received a B.S. in Biology and a B.A. in Chemistry from Meredith College in Raleigh, North Carolina, in 2013. As an undergraduate, she studied *Tylosema esculentum*, an African legume, which inspired her to complete international food safety work in East Africa as a graduate student. In Kenya and Rwanda, she assisted orange-fleshed sweet potato processors to implement food safety measures in their facilities.

Ms. Beno is honored to receive an IAFP Student Travel Scholarship to attend IAFP 2017 in Tampa, Florida. She has enjoyed attending past IAFP Annual Meetings and looks forward to presenting her research to other food safety professionals and learning the most recent developments in food protection.

Sarah Cope
East Carolina University
Greenville, North Carolina

Sarah Cope is a recent graduate of East Carolina University in Greenville, North Carolina. She received her B.S. in Family and Consumer Sciences Secondary Education, where she completed her student teaching internship and received her teaching license. Ms. Cope currently works for Dr. Benjamin Chapman at North Carolina State University in Raleigh in the Department of Agriculture and Human Sciences, where she also conducted research during the past three years as an undergraduate. Her current research interests are food safety and human behavior and their ties to Cooperative Extension education and outreach.

During her time at North Carolina State University, Ms. Cope created and implemented surveys, conducted research, assisted with graduate student projects, designed and produced Extension fact sheets, and assisted with training and education for Extension outreach programs. Her most recent research project consisted of a review of mug cake recipes on social media (i.e., Pinterest) and research objectives on the safety of various recipes related to recent bacterial outbreaks from ingredients (flour, eggs, and peanut butter) and the variables associated with preparation and cooking.

Ms. Cope plans to pursue her master's degree at North Carolina State University in Agriculture and Extension Education, with a focus on food safety and human behavior. She hopes to obtain a position as an Extension Agent, positively impacting people's lives and their communities. Her goal is to improve their well-being and lifestyles through her knowledge about food safety, agriculture, farming, risk assessment, behavior analysis, and other related topics.

Ms. Cope is extremely honored and grateful to be a recipient of the IAFP Student Travel Scholarship Award. She looks forward to presenting the results of her recent research at this distinguished conference and is appreciative of the opportunity to network with professionals and fellow students in the field, gain knowledge on a variety of topics surrounding food safety, and build her future career in food safety.

Sponsored by IAFP FOUNDATION

Student Travel Scholarship Award

Dorothy Dupree
University of Georgia
Athens, Georgia

Dorothy Dupree is an M.S. candidate at the University of Georgia (UGA), Athens, in the Department of Foods and Nutrition. Ms. Dupree's interest in food safety piqued when she took a food safety and sanitation class taught by Dr. Elizabeth L. Andress during her last semester of undergraduate coursework. Thus, Ms. Dupree decided to continue at UGA to complete her graduate degree under Dr. Andress. As part of her graduate program, she has also had the opportunity to conduct thesis research at North Carolina State University under the direction of Dr. Fred Breidt in the Food Safety and Foodborne Disease Prevention research program. Specifically, she assessed survival of *E. coli* O157:H7 and *Lactobacillus* species in cucumber juice with varied salt treatments.

In addition to her research endeavors, Ms. Dupree is also completing supervised practice as part of UGA's dietetic internship program. Upon program completion, she will be eligible to sit for the registration examination for dietitians. She believes dietitians play a critical role in consumer education, not just for nutrition but food safety as well. One of her professional mantras is, "A food can't be nutritious if it is not first safe." This commitment to educating consumers and other nutrition professionals stems from her supervised practice under Dr. Judy A. Harrison, Extension Foods Specialist at UGA, who has developed multiple food safety education campaigns ranging from handwashing to produce safety for farmers.

Ms. Dupree plans to pursue a career in the foodservice industry, as she enjoys quality assurance and regulatory compliance avenues, but is also open to serving as director or coordinator in a K–12 foodservice setting. She is grateful to have been awarded a Student Travel Scholarship to attend IAFP 2017 and looks forward to discussing her research and internship experiences with the attendees.

Hillary Kelbick
University of Maryland
College Park, Maryland

Hillary A.C. Kelbick is a Ph.D. candidate in Toxicology and Environmental Health Science at the University of Maryland in College Park, working under the direction of Dr. Amy Sapkota and Dr. Paul Turner. She completed her B.S. in Biology at Pennsylvania State University and her M.P.H. in Epidemiology at the University of Michigan.

For her doctoral research, Ms. Kelbick is investigating the microbial quality of non-traditional irrigation water sources, specifically surface water and treated wastewater, and the persistence of antibiotics in small-scale wastewater treatment setups. Understanding the quality of these water sources contributes to determining their suitability for agricultural usage and an overall understanding of environmental conditions. Her work, which will take place in the U.S. and Israel, is relevant to water-stressed or isolated communities around the world.

Additionally, Ms. Kelbick engages in food safety work through her capacity as a graduate mentor for an undergraduate public health outreach team that works in Ethiopia. Through her collaborative efforts with both Ethiopian and American colleagues, she contributes to helping reduce diarrhea and malnutrition by encouraging urban agriculture practices that take into account food safety principles such as composting manure before use as fertilizer.

Ms. Kelbick is honored to be a recipient of the IAFP Student Travel Scholarship. She hopes to use this experience to learn about cutting-edge research in food safety, discuss current research with others in the field, and build her professional network in food safety.

Sponsored by IAFP FOUNDATION

Student Travel Scholarship Award

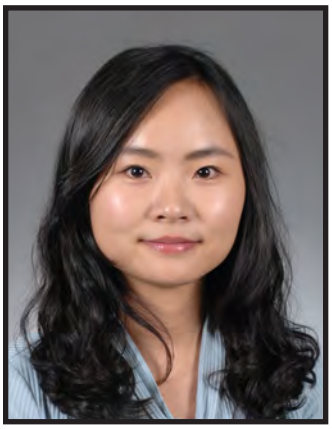
Giannis Koukkidis
University of Leicester
Leicester, United Kingdom

Giannis Koukkidis is a Ph.D. candidate in the Department of Infection, Immunity and Inflammation at the University of Leicester in the United Kingdom, working with Dr. Primrose Freestone. After completion of his undergraduate degree in Biological Sciences, Mr. Koukkidis continued his master's degree in Infection and Immunity, where he began examining the interactions of salad leaf tissues with enteropathogens, the topic that became his Ph.D. subject.

Throughout his doctoral studies, Mr. Koukkidis has attended several conferences across Europe on fresh produce and food safety. His research results about *Salmonella* and salad interactions were published by a leading food microbiology journal. Its importance on food safety and fresh produce were also covered by major news agencies all over the world, including the BBC, Reuters, and CBS.

After completing his Ph.D., Mr. Koukkidis wishes to expand his portfolio with a post-doctoral placement in his current area, examining foodborne pathogens' relationship with fresh produce. He hopes to work directly with the agricultural industries involved in salad growing and packaging and novel treatments which are capable of preventing pathogen attachment to fresh produce. Ultimately, his goal is to follow a career in improving food quality.

Mr. Koukkidis is extremely grateful to receive the 2017 Student Travel Scholarship. He believes this opportunity will help him develop future collaborations, as well as strengthen those which formed at IAFP's European Symposium on Food Safety in both Cardiff, Wales and Athens, Greece. This incredible experience will certainly broaden his horizons in research by coming in contact with so many different ideas, opinions, and useful suggestions about his Ph.D. project and food safety in general.



Shuxiang Liu
Washington State University
Pullman, Washington

Shuxiang Liu is a doctoral candidate in the Department of Biological Systems Engineering at Washington State University in Pullman, working under the direction of Dr. Juming Tang. Ms. Liu received her B.Eng. in Food Quality and Safety, and M.Eng. in Food Science and Engineering from Sichuan Agricultural University in Ya'an, China, where she researched a non-destructive method to quantify edible oil quality in the deep frying process using dielectric properties. She received a four-year doctoral fellowship from China Scholarship Council and joined Dr. Tang's group in the fall of 2013.

Ms. Liu's current research is part of a five-year USDA-NIFA CAP project in collaboration with universities, institutes and the U.S. FDA to provide scientific data for enhancing low-moisture food safety. Her thesis involves evaluating *Salmonella* surrogate microorganisms in various food matrices for thermal pasteurization. She is also studying how water activity at treatment temperature influences thermal resistances of microorganisms in various low-moisture foods. Ms. Liu's goal is to improve the understanding of *Salmonella* in low-moisture foods, and benefit the industry through developing and validating efficient thermal pasteurization technologies for low-moisture foods.

Ms. Liu is honored to be one of the recipients of the 2017 Student Travel Scholarship Award. She will be presenting results from her most recent findings to the IAFP community in both a technical presentation and poster session. She looks forward to networking with food safety professionals at this meeting and gaining knowledge from researchers in various fields for food protection.

Sponsored by IAFP FOUNDATION

Student Travel Scholarship Award

Itumeleng Matle
University of South Africa
Pretoria, Gauteng,
South Africa

Itumeleng Matle is a Ph.D. candidate in the Food Safety Program at the University of South Africa in Pretoria under the direction of Professor Khanyisile Mbatha and Dr. Evelyn Madoroba. Mr. Matle received his master's of technology in Environmental Health from Central University of Technology in South Africa in 2016 and his bachelor's of technology in Veterinary Technology from Tshwane University of Technology in South Africa in 2012.

Mr. Matle's current research is based on molecular characterization and antimicrobial resistance profiles of *Listeria monocytogenes* isolated from meat and meat products in South Africa, a novel project in the area that will help determine national prevalence of *L. monocytogenes* in meat and meat products from abattoirs, processing plants, and retail outlets using whole genome sequencing. The aspect of the study will contribute to additional skills for young researchers and create a database of whole genome sequences of *L. monocytogenes* from food products in South Africa.

Throughout his doctoral studies, Mr. Matle has attended several national and international conferences on food safety and food microbiology. He is extremely grateful to receive the Student Travel Scholarship to attend IAFP 2017 and is excited to have the opportunity to share his current research work while gaining additional knowledge on microbiological food safety.

Rianna Murray
University of Maryland
College Park, Maryland

Rianna Murray is a Ph.D. candidate in the Environmental Health and Toxicology Program at the Maryland Institute for Applied Environmental Health, located in the School of Public Health at the University of Maryland in College Park. After completing her B.Sc. with a double major in Biochemistry and Chemistry at the University of the West Indies in Jamaica, Ms. Murray discovered her passion for food and water safety while working in quality assurance at a beverage manufacturing company in her home country of Trinidad and Tobago. She then pursued an M.P.H. at the University of Maryland and, upon completion, transitioned into the Ph.D. program.

Ms. Murray's role at the intersection between public health and food safety provides a unique lens for her research. Her current research combines her interests in both food and water safety and investigates potential associations between private wells as drinking water sources and the incidence of foodborne illness in Maryland. She hopes to develop a comprehensive understanding of the role that animal agriculture may play in the water quality of private wells, including the prevalence of foodborne pathogens, using water sampled from private homeowner wells. Ms. Murray is also part of a multi-state collaborative effort, Project CONSERVE, which seeks to determine the sustainable on-farm solutions needed to enable agricultural producers to conserve groundwater through the safe use of emerging nontraditional water sources.

Ms. Murray is very honored to receive the IAFP Student Travel Scholarship and is excited to interact with colleagues in food safety, as well as share her research with leading experts in the field. She believes that IAFP 2017 will provide her with invaluable professional development opportunities, and that the experiences gained at this meeting will be instrumental in helping her to embark upon a successful career in food safety.

Sponsored by IAFP FOUNDATION

Student Travel Scholarship Award

Eugène Niyonzima
University of Liège – Gembloux Agro Bio-Tech
Gembloux, Belgium

Eugène Niyonzima is a Ph.D candidate in the laboratory of Agro-food Quality and Safety at the University of Liège – Gembloux Agro Bio-Tech in Gembloux, Belgium, under the supervision of Professor Marianne Sindic and Professor Anastase Kimonyo. Mr. Niyonzima holds an M.Sc. in Food Quality and Safety from Cheikh Anta Diop University in Dakar, Senegar, and a bachelor's in Veterinary Medicine from the International School of Sciences and Veterinary Medicine in Dakar, Senegal.

Mr. Niyonzima's current research work is aimed at assessing the risk of human salmonellosis associated with the consumption of meat-based meals in Rwanda and the determination of the efficacy of different mitigation scenarios along the meat chain through a quantitative microbiological risk assessment model. The findings from this research will contribute to reducing the prevalence of *Salmonella* in Rwandan meat products and the burden of human salmonellosis in the population.

Mr. Niyonzima is extremely honored and grateful to receive the IAFP Student Travel Scholarship. He hopes to use the experience gained at IAFP 2017 to enhance his knowledge in the current and emerging issues in food safety and to establish research networks with food safety professionals in order to grow his research career in food safety.

Rodney Owusu-Darko
University of Pretoria
Pretoria, South Africa

Rodney Owusu-Darko is a Ph.D. candidate in the Department of Food Science at the University of Pretoria in South Africa, under the supervision of Professor Elna Buys at the University of Pretoria and Professor Silvia Dias de Oliveira from Pontifícia Universidade Católica in Brazil. He received his B.Sc. (with honors) in Nutrition and Food Science from the University of Ghana, Legon, and his M.Sc. in Food Biotechnology from the University of Strathclyde in Glasgow, Scotland.

Mr. Owusu-Darko's current research focuses on using Next-Generation Sequencing to identify and characterize spore-forming *Bacillus* species, especially of importance to the dairy industry. His specific interest is in heat resistance and the various mobile genetic elements that confer heat resistance to spore formers. Mr. Owusu-Darko's research also focuses on the thermal inactivation of these spore formers, and he hopes to shed light on the emergence of sub-species heat resistance among spore-forming *Bacillus* species. He is also interested in the use of interdisciplinary approaches in solving the emerging issues of heat and antimicrobial resistance in the food industry.

As part of his Ph.D. studies, Mr. Owusu-Darko has delivered several oral and poster presentations at conferences and is involved in teaching introductory food science and advanced microbiology courses at the undergraduate level.

Mr. Owusu-Darko is extremely honored to receive an IAFP Student Travel Scholarship. He looks forward to presenting his work, networking with scientists, and networking with potential international collaborators, all of which will help him embark on a successful research career in food safety and quality.

Sponsored by IAFP FOUNDATION

Student Travel Scholarship Award

Hao Pang
University of Maryland
College Park, Maryland

Hao Pang is a Ph.D. candidate in the Department of Nutrition and Food Science at the University of Maryland in College Park, under the guidance of Dr. Abani Pradhan.

Prior to his doctoral studies, Mr. Pang completed his B.S. in Food Science and Engineering at Nanjing Agricultural University in China and received his M.S. in Food Science from the University of Maryland. His master's research focused on the development of quantitative microbial risk assessment for *E. coli* O157:H7 in fresh-cut lettuce.

Mr. Pang is very interested in the application of different statistical and mathematical approaches for food safety research. His dissertation research focuses on the development of predictive models to identify risk factors and predict the presence and population dynamics of pathogens in produce during pre-harvest production under different weather conditions, geographic regions, and farming systems. Results of his research will provide growers information and data to make informed food safety decisions to reduce the risk of produce pre-harvest contamination.

Mr. Pang has been attending and presenting his research at every IAFP Annual Meeting since 2013. He is extremely honored to receive this year's Student Travel Scholarship and is excited to share his research. He looks forward to networking with food safety professionals from around the globe and expanding his understanding on emerging and recurring food safety issues.

Laura Patterson
University of California – Davis
Davis, California

Laura Patterson is a Ph.D. Epidemiology candidate at the University of California – Davis (UC – Davis) in Davis. She works under the guidance of Dr. Alda Pires, Assistant Specialist in Cooperative Extension, Urban Agriculture & Food Safety; and Dr. Michele Jay-Russell, Western Center for Food Safety, UC – Davis. She received her undergraduate degree from Grinnell College in Grinnell, Iowa.

Ms. Patterson's former career positions range from small-scale farmer to non-profit database administrator, and her interest in zoonotic diseases coalesced while managing a goat dairy during a Q fever outbreak. As a former farmer, she brings a unique perspective to the field of food safety. Her background in agriculture informs her projects and career goals, including her aspiration to work as a cooperative extension specialist, providing science-based information to farmers to keep food safe in a pre-harvest environment.

Ms. Patterson's current research focuses on evaluating risk factors, farm management practices, and surveillance methods to detect and prevent the transmission of foodborne pathogens and zoonotic diseases on small-scale diversified farms. Her thesis involves assessing the prevalence of foodborne pathogens, risk factors, and contamination indicators on diversified farms that integrate livestock and crop production. An additional thesis project focuses on the wildlife-livestock interface and its impacts on small-scale farms in California.

Along with her IAFP Membership, Ms. Patterson is also a member of the Center for Animal Disease Modeling and Surveillance (CADMS) at UC – Davis. She is extremely honored to receive the 2017 IAFP Student Travel Scholarship and is hoping to connect with other food safety researchers to receive feedback and share her work.

Sponsored by IAFP FOUNDATION

Student Travel Scholarship Award

Kristen Saniga
North Carolina State University
Raleigh, North Carolina

Kristen Saniga is a master's candidate in Food Science at North Carolina State University in Raleigh, working under the direction of Dr. Clint Stevenson. Ms. Saniga's research interests include improving food safety education and behavior within the food industry. She completed her undergraduate degree in Food Science with a minor in Microbiology from North Carolina State University in 2016, during which time she served as an undergraduate research assistant for three years studying food safety education and recruitment.

During her undergraduate studies, Ms. Saniga became interested in food safety education and behaviors through her work developing foodborne illness outbreak case studies for an introductory food safety class and performing an ethnographic study to assess the food safety culture of a nationwide processing company. Her thesis involves assessing food safety training interventions within the food industry and studying the relationship between food safety culture and training. Her goal is to develop a tool that can be used by industry to assess their food safety culture and training programs.

Ms. Saniga is grateful to be a recipient of the Student Travel Scholarship Award and is excited to have the opportunity to share her current research with the Annual Meeting attendees. She hopes to use this experience to interact with food safety professionals, learn more about current issues and progress in the field, and continue to grow her professional network.

Nicholas Sevart
Kansas State University
Manhattan, Kansas

Nicholas J. Sevart is a Ph.D. candidate studying food safety at Kansas State University (K-State) in Manhattan. He first enrolled at K-State in 2007 as a Food Science major, where he learned how basic science and technology concepts converge to address applied science issues. He finished his undergraduate studies in 2011 and decided to continue his graduate degree in Food Science at the university.

Mr. Sevart was awarded an assistantship from Dr. Randall Phebus under a U.S. Department of Agriculture – National Institute of Food and Agriculture (USDA–NIFA) Coordinated Agricultural Project (CAP) grant. This grant is focused on Shiga toxin-producing *Escherichia coli* (STEC) in the beef system. Mr. Sevart serves as the student representative on the Stakeholder Advisory Board for the grant, which is comprised of beef safety executives from large beef processors, feed cattle producers, technology companies, and regulatory officials.

Mr. Sevart's research for his dissertation involves evaluating the efficacy of antimicrobials applied electrostatically to control STEC in beef, which could provide the beef industry with several impactful advantages compared to commonly used intervention strategies. His research is conducted at the K-State Biosecurity Research Institute utilizing commercial size beef processing equipment, which provides the advantage of conducting large-scale studies that represent the entire carcass to retail product conversion process – making findings directly applicable to the industry.

While his dissertation research is directly related to beef safety, Mr. Sevart has been assigned leadership roles investigating pathogen control strategies in produce, bakery products, seeds and grains, and pet foods. He has also had the opportunity to teach, develop, and implement HACCP programs for large and small food processors.

Mr. Sevart is honored to receive a 2017 IAFP Student Travel Scholarship. He looks forward to presenting his recently completed research, while interacting with top food safety professionals from around the world.

Sponsored by IAFP FOUNDATION

Student Travel Scholarship Award

Aswathi Soni
University of Otago
Dunedin, Otago,
New Zealand

Aswathi Soni is a Ph.D. candidate in the Department of Food Science at the University of Otago in Dunedin, Otago, New Zealand, working under the supervision of Professor Phil Bremer, Professor Indrawati Oey and Mr. Pat Silcock. Ms. Soni's research interests are food safety and the use of pulse electric field processing (PEF) for the inactivation of foodborne spore-forming pathogenic bacteria.

Ms. Soni's research involves understanding the use of different hurdles for reducing the resistance of *Bacillus* spores to inactivation by PEF. She intends to use new insights gained with her doctorate toward developing regimes for longer shelf stability in food products. She has a great passion for teaching and intends to continue her career in food safety along with teaching. To date, she has published a review paper and submitted a research paper from her doctoral work and is working toward improvising teaching, as well as research-based skills.

Ms. Soni completed her bachelor's and master's in Biotechnology from Annamalai University in India in 2008 and worked as a lecturer at Barkatullah University in India for three years. She also served as an International English Language Testing System (IELTS) trainer and as an independent lead for online content development (Biotechnology) with MRCC solutions, a software company in India, for three years.

Ms. Soni is extremely grateful to receive the IAFP Student Travel Scholarship, which she believes is a great opportunity to share her research findings and receive feedback to expand her research path in applied food safety.

Constanza Vergara
University of Chile
Santiago, Chile

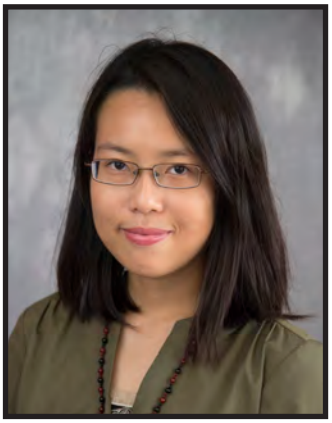
Constanza Vergara is a Ph.D. candidate in the Veterinary and Agricultural Science Program at the University of Chile in Santiago. Her current research is focused on foodborne disease and antimicrobial resistance and its weight on public health using quantitative risk assessment as an approach to the development of better public policies in her native country of Chile.

After completing her undergraduate degree in veterinary medicine (with honors) from the University of Chile, Ms. Vergara became attracted to the field of food microbiology and quality assurance standards, earning several diplomas in this area. She worked with small agricultural and food producers to help enhance the quality and safety of their products and programs. She served as a research assistant in the Bromatology Department on the Veterinary Faculty of Complutense University in Spain, working with biofilms formation related to the food industry process. Ms. Vergara currently works at the Chilean Food Safety Agency as a veterinary advisor and in the technical international cooperation area, where she participates in projects related to food safety and antimicrobial resistance.

Ms. Vergara is truly pleased that IAFP has opened the door for students outside of the U.S. to experience the Association's Annual Meeting. This doorway allows students to gain immediate knowledge, establish relationships, and further their careers in the food safety field. She is grateful to the Selection Committee for this scholarship and extremely honored to have been selected.

Sponsored by IAFP FOUNDATION

Student Travel Scholarship Award



Sophie Tongyu Wu
Purdue University
West Lafayette, Indiana

Sophie Tongyu Wu is a Ph.D. candidate in the Food Science Program at Purdue University in West Lafayette, Indiana. Ms. Wu works with Dr. Haley F. Oliver on facility designs, management practices, cleaning, and sanitizing frequency in retail produce environments affecting *Listeria monocytogenes* prevalence. She has developed and implemented a comprehensive 111-question survey in 30 retail produce departments across seven U.S. states that participated in concurrent monthly environmental sampling. The results of her study will shed light on potential intervention strategies for effective *L. monocytogenes* control.

Ms. Wu has been looking for daily life application of science. After graduating from the University of Wisconsin – Madison with a B.S. in Biology, she decided to combine her interests in social study and humanity with scientific research. Science and literature have always been inseparable twins for Ms. Wu. She has published one poem and one essay in the literary journal *Illumination* in 2013 and 2014, respectively. In 2015, her published poem was adapted into a short film, she being the playwright. Currently, she is working as a fiction reviewer at *Sycamore Review*. To contemplate and study humanity, both scientifically and literally, has given Ms. Wu unique vision.

IAFP 2017 is the first major food safety conference attended by Ms. Wu, made possible by receiving this travel scholarship. She looks forward to presenting her work, as well as meeting with fellow colleagues to explore resources and opportunities.

Xingning Xiao
Zhejiang University
Hangzhou, China

Xingning Xiao is a Ph.D. candidate in Biosystems Engineering at Zhejiang University in Hangzhou, China, working under the guidance of Professor Yanbin Li. Ms. Xiao received her B.S. in Agricultural Engineering from Sichuan Agricultural University in 2014. Her current research focuses on microbial cross-contamination and quantitative microbial risk assessment for food safety.

During her doctoral studies, Ms. Xiao has been involved in several research projects, including modeling the cross-contamination of *Vibrio parahaemolyticus* in the shrimp peeling process, investigating the growth/survival of *Salmonella* on waxberry under different storage temperatures and package materials, and conducting a quantitative microbial risk assessment of *Salmonella* throughout the poultry supply chain. She has not only conducted laboratory experiments, but also visited several seafood and poultry processing plants to learn the real practices in industries and collect samples.

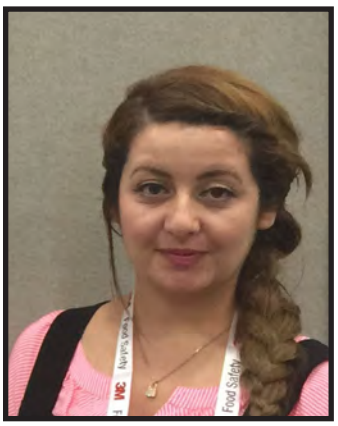
Ms. Xiao has presented the results of her research at food safety meetings, including IAFP 2016 and the Microrisk 2016 Workshop in China; submitted a manuscript to Food Research International for publication; and filed a Chinese innovation patent application. In addition, she has participated in many food safety activities in China, including conferences on food science and workshops on risk analysis.

Ms. Xiao is extremely grateful to receive the IAFP Student Travel Scholarship. She is excited to have this opportunity to present her current research to attendees and communicate directly with scientists, researchers, industry professionals, and government regulators, who can help further her success throughout her food safety career.

Sponsored by IAFP FOUNDATION

Peanut Proud Student Scholarship Award

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 – and 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.



Yagmur Yegin
Texas A&M University
College Station, Texas

Sponsored by

Peanut Proud

Yagmur Yegin is currently working towards her Ph.D. in the Department of Nutrition and Food Science at Texas A&M University in College Station, Texas. Mrs. Yegin is also a Manufacturing Reliability Engineering Intern at Kellogg Company in Cincinnati, Ohio. Her research interests are focused on various fields, including nanotechnology applications in food safety, controlled release of active ingredients in food systems, synthesis and characterization of antimicrobial nanoparticles, effect of surface chemistry and topography on bacterial attachment, and ease of removal of biofilms from surfaces.

Mrs. Yegin has been conducting experimental research to obtain fundamental understanding of attachment mechanisms of foodborne pathogens onto abiotic and biotic surfaces. She has been developing materials to prevent attachment of foodborne pathogens via hydrophobic modification of surfaces. This work will be beneficial in the prevention of diseases originating from the attachment and contamination of pathogens on surfaces such as gloves, kitchen utensils, and food-contact surfaces, with a great potential to be used on peanut and related food products. In addition to working on the attachment mechanisms, Mrs. Yegin has synthesized essential oil-loaded polymeric nanoparticles to inhibit pathogen growth over a prolonged time by using the controlled release properties of nanoparticles.

Mrs. Yegin holds a B.S. in Food Engineering from Celal Bayar University in Turkey, and an M.S. in Biological and Agricultural Engineering from Texas A&M University. A passionate Ph.D. student, she is focused on public health and the safety of consumer products, leading to her decision to pursue a career in an interdisciplinary field on food safety and helping solving issues related to bacterial contamination on food surfaces.

Mrs. Yegin is honored to be the recipient of the 2017 Peanut Proud Student Scholarship Award.

IAFP2018
ANNUAL MEETING
Salt Lake City, Utah
JULY 8-11

Students:

Apply to Attend IAFP 2018

(Deadline Date: Feb. 20, 2018)

Watch our Web site later this year to apply for the IAFP Student Travel Scholarship Award. Don't miss this opportunity to take part in the world's leading food safety conference.

For more details, visit the IAFP Web site at
www.foodprotection.org

IAFP'S EUROPEAN SYMPOSIUM 2018 CALL FOR SUBMISSIONS

October 3 – Symposia and Workshops

January 16 – Technical and Poster Abstract Submissions

Questions regarding submissions can be directed to Tamara Ford
Phone: +1 515.276.3344 or +1 800.369.6337
E-mail: tford@foodprotection.org

Notes

FOOD SOLUTIONS

EXCELLENCE IN SAFETY, QUALITY AND SUSTAINABILITY

Recognized as the global benchmark for quality and integrity, with more than 90,000 employees, SGS operates a network of over 2,000 offices and laboratories around the world. Our food solutions include:

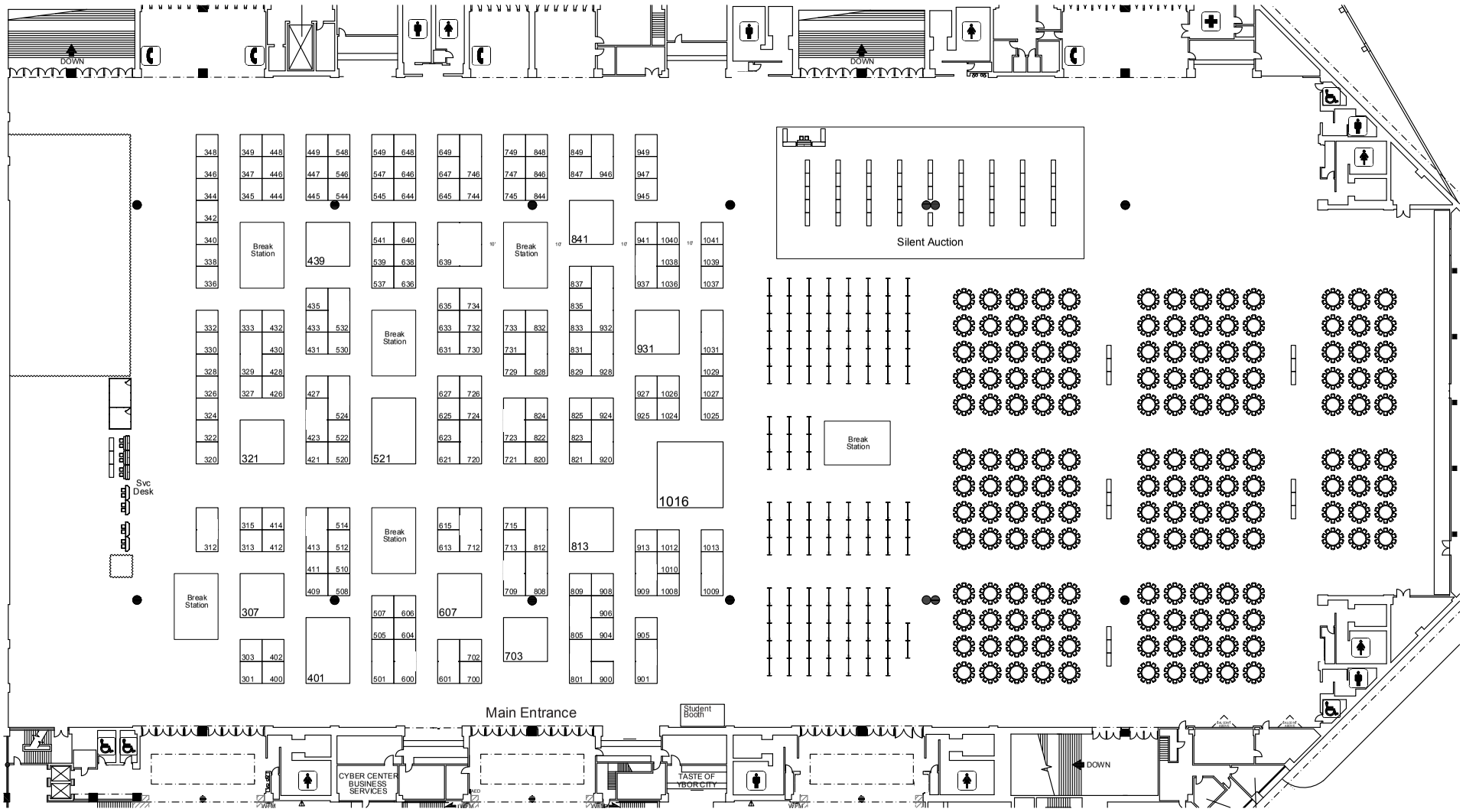
- Full Range of Physical, Chemical and Microbiological Testing Services
- Authenticity:
  - Gluten-free, Halal and Kosher Audits
  - DNA-NGS Testing for Food Fraud and Key Contaminants
- Food Certification including GFSI Schemes
- Customized Food Audit Programs:
  - Food Defense Audits
  - FSMA Training, Audit and Consulting Services
- Social, Ethical and Sustainability Audits
- Supply Chain Management Platform, Transparency-One
- Risk Mitigation Advisory Services
- Support & Systems for Regulatory Compliance
- Inspection Services
- Food Technical Training & Development

Email: food@sgs.com
Web: www.foodsafety.sgs.com
SGS AGRICULTURE AND FOOD

MEET OUR EXPERTS AT BOOTH #640

WHEN YOU NEED TO BE SURE

SGS


DOWN
DOWN
Silent Auction
Break Station
Break Station
Break Station
Break Station
Break Station
Break Station
Svc Desk
439
321
521
841
931
1016
813
307
607
703
401
Main Entrance
Student Booth
CYBER CENTER BUSINESS SERVICES
TASTE OF YBOR CITY
DOWN

Exhibitors – Alphabetical Listing

(As of June 6, 2017)

Exhibitors by Booth Number

(As of June 6, 2017)

Check Points	301
BCN Research Laboratories, Inc.	303
Food Safety Net Services	307
Chemstar Corporation	312
Michigan State University Online Master of Science in Food Safety	313
Eppendorf	315
Donaldson Company, Inc.	320
Remco Products Corp.	321
EMSL Analytical, Inc.	322
Crystal Diagnostics	324
A2LA	326
RGF Enivronmental Group, Inc., Food Safety Division	327
PRESTODIAG	328
STEC CAP Grant	329
Feel Good, Inc.	330
Grocery Manufacturers Association	332
Shenzhen Bioeasy Biotechnology Co., Ltd.	333
VM Products	336
Selective Micro Technologies, LLC	338
Maxxam Analytics	340
Chihon Biotechnology Co., Ltd.	342
Synbiosis	344
Bioscience International, Inc.	345
Detectamet Detectable Products Inc.	400
3M Food Safety	401
Atlantium Technologies	402
Ocean Optics, Inc.	409
Springer Nature	411
NSF International	412
IEH Laboratories and Consulting Group	413
Microbiologique (formerly Pi Biologique)	414
Bioionix, Inc.	421
Hardy Diagnostics	423
Microbac Laboratories, Inc.	426
Boekel Scientific	427
QualiTru Sampling Systems	428
STOP Foodborne Illness	430
OCEASOFT	431
Royalty Roofing	432
InnovaPrep	433
TandD US, LLC.	435
Thermo Fisher Scientific	439
PolySkope Labs	444
Bird • B • Gone	445
Midland Scientific, Inc.	446
Sani Station	447
Nelson-Jameson, Inc.	501
Sample6	505
Sealed Air Diversey Care	507
R & F Products	508
Whirl-Pak	510
The Industrial Fumigant Company, LLC.	512
MXNS Digital Solutions	514
Rochester Midland Corporation–Food Safety Division	520
Roka Bioscience	521
Bia Diagnostics	522
Food Safety Magazine	524
GMA Science and Education Foundation	530
Covance Inc.	532
Deibel Laboratories of FL Inc.	537
Food Quality & Safety Magazine	539
Seward Limited	541
PrimusLabs	544
Clean-Logix	545
Copesan Specialists in Pest Solutions	546
Wyss Institute at Harvard	547
FoodChek Systems Inc.	549
Romer Labs	600
Sterilex Corporation	601
Cooper–Atkins Corporation	604
QA Line, LLC	606
Hygiena	607
Sika Industrial Flooring	613
Log10, LLC	615
NSI Lab Solutions	621
Food Protection and Defense Institute	623
Northland Laboratories	625
World Bioproducts	627
Invisible Sentinel	631
Autoscribe Informatics Inc.	633
Microbiologics	635
Corning Incorporated	636
3-A Sanitary Standards, Inc.	638
Pall Corporation	639
SGS	640
Charles River	644
ITW Pro Brands	645
Safe Food Alliance	646
Bioo Scientific, a PerkinElmer Company	647
LexaGene	648
Procter & Gamble Professional	649
PureLine	700
American Proficiency Institute	702
Bio-Rad Laboratories	703
Meritech	709
BIOLYPH LLC	712
CosmosID	713
Art's Way Scientific, Inc.	715
Alpha Biosciences, Inc.	720
RizePoint	721
Neogen Corporation	723
Quality Assurance & Food Safety Magazine	724
Reading Thermal	726
Global ID Group	729
Varcode	730
Eurofins GeneScan Technologies	731
Emport LLC	732
Cherney Microbiological Services, Ltd.	733
SQFI (Safe Quality Food Institute)	734
Puritan Medical Products Company, LLC	744
SafetyChain Software	745
Hollison	746
Pittcon 2018	747
Cold Jet	749
ClorDiSys Solutions, Inc.	801
Charm Sciences Inc.	805
Novolyze	808
U.S. Pharmacopeia	809
Weber Scientific	812
METER Group, Inc., USA	813
AEMTEK, Inc.	820
NoroCORE (USDA-NIFA Food Virology Collaborative)	821
USDA National Agricultural Library Food Safety Research Information Office	822
Kikkoman Biochemifa Company	823
Heateflex Corporation	824
CultureMediaConcepts	825
Eurofins Scientific	828
NatureSeal, Inc.	829
HiMedia Laboratories Pvt. Ltd.	831
GFSI–The Consumer Goods Forum	832
Xema	833
International Food & Meat Topics	835
Decon7 Systems	837
MilliporeSigma	841
CRC Press, Taylor & Francis Group	844
Intelex	846
Timestrip	847
BluLine Solutions	848
Food Safety Summit	849
ASI Food Safety	900
Interscience Laboratories Inc.	901
Q Laboratories, Inc.	904
Orkin	905
Randox Food Diagnostics	906
Micro Essential Laboratory	908
Solus Scientific Solutions Ltd.	909
Labplas	913
Microbiology International	920
MediaBox by Microbiology International	924
ReposiTrak	925
BioFront Technologies	927
CERTUS	928
Mérieux Nutrisciences	931
Bruker Corporation	932
AirClean Systems	937
Cedarlane	941
Guardian Ozone	945
Extreme Microbial Technologies	946
Partnership for Food Safety Education	947
Eagle Protect PBC	949
Alchemy Systems	1008
Rheonix Food & Beverage	1009
Rentokil Steritech	1010
FlexXray	1012
Applied Maths, Inc.	1013
bioMerieux, Inc.	1016
RQA, Inc.	1024
Association of Food and Drug Officials	1025
Contec, Inc.	1026
Institute for Food Safety and Health (IFSH) FSPCA	1027
IFPTI	1029
COPAN Diagnostics, Inc.	1031
Alliance Bio Expertise	1036
Arizona/California Leafy Greens Marketing Agreement	1037
National Registry of Food Safety Professionals	1038
Food Safety News	1039
Ecolab	1040
Micrology Laboratories LLC	1041
International Association for Food Protection	Foyer
International Association for Food Protection–Student PDG	Exhibit Hall

2017 Exhibitors

3-A Sanitary Standards, Inc. **638**
6888 Elm St., Suite 2D
McLean, VA 22101-3829, USA
Phone: +1 703.790.0295 **Fax: +1 703.761.6284**
www.3-a.org

3-A SSI is dedicated to 'Promoting Food Safety Through Hygienic Design.' 3-A SSI has a long and respected record of developing criteria for the design of equipment and systems used to produce, process and package milk and dairy products, other foods, and beverages. 3-A SSI also oversees the 3-A Symbol authorization program to help identify equipment built in conformance to 3-A design criteria and evaluated through a rigorous Third Party Verification inspection program. Today's 3-A SSI is a respected education resource on hygienic design and a trusted worldwide partner in helping to assure food safety through hygienic design.

3M Food Safety **401**
3M Center, Bldg. 275-5 SW-05
St. Paul, MN 55144-1000, USA
Phone: +1 800.328.6553 **Fax: +1 651.737.1994**
www.3M.com/foodsafety

3M brings food safety innovation and expertise to food and beverage processors around the world. Our trusted solutions, backed by global validations, include a full line of sample collection and preparation products, quality indicators, pathogen tests, and hygiene monitoring solutions — all designed to work together to help mitigate risk, enhance productivity, and improve operations. It's about protecting our customer's brand, as well as their bottom line, to keep their business moving forward. Learn more: www.3M.com/foodsafety.

A2LA **326**
5202 Presidents Court, Suite 220
Frederick, MD 21703-8398, USA
Phone: +1 301.644.3248 **Fax: +1 240.454.9449**
www.A2LA.org

A2LA is a multi-discipline accreditation body with almost 40 years of experience providing accreditation services. A2LA offers internationally recognized ISO/IEC 17025 accreditation of food testing laboratories. The ISO/IEC 17025 accreditation criteria, together with optional discipline-specific quality and technical requirements, provide critical assurance to governments, commercial customers, and the public that the testing performed in accredited laboratories has been held to the highest standards. A2LA also offers a variety of training courses designed to help organizations achieve and maintain accreditation to international standards. Public training courses as well as on-site training are offered upon request.

AEMTEK, Inc. **820**
46309 Warm Springs Blvd.
Fremont, CA 94539, USA
Phone: +1 510.979.1979 **Fax: +1 510.668.1980**
www.aemtek.com

AEMTEK, Inc. is an accredited laboratory that provides microbiological and chemical testing, research, training, consulting services, and sampling products for the food, environmental, water, supplement, and pharmaceutical industries. We deliver science-based and practical solutions for clients in areas including food safety, product quality, shelf-life determination, process validation, and environmental monitoring.

AirClean Systems **937**
2179 E Lyon Station Road
Creedmoor, NC 27522, USA
Phone: +1 919.255.3220 **Fax: +1 919.528.0015**
www.aircleansystems.com

Manufactures a complete range of ductless fume hoods and laminar flow hoods designed to protect the operator, the process, or both from toxic vapors, fumes, gases, and particulate. In addition to standard hoods, AirClean® Systems manufactures numerous application-oriented products such as PowderSafe™ balance enclosures, PCR workstations, and microscope enclosures. Please visit our website to learn more at www.aircleansystems.com.

Alchemy Systems **1008**
5301 Riata Park Court, Bldg. F
Austin, TX 78727, USA
Phone: +1 512.637.5100
www.alchemysystems.com

Alchemy is the global leader for innovative solutions that help food companies engage with their frontline workforces to drive safety and productivity. More than two million food workers at 20,000 locations use Alchemy's tailored learning, communications, and performance programs to reduce workplace injuries, safeguard food, and improve operations. From farm to fork, Alchemy works with food growers, manufacturers, processors, packagers, distributors, retailers, and restaurants of all sizes to help build a culture of safety, efficiency, and excellence.

Alliance Bio Expertise **1036**
Za de Courbouton, Le Tremplin
Guipry, 35480, France
Phone: +33 645.6021.71
www.alliance-bio-expertise.com

Alliance Bio Expertise is your partner for Food, Pharma, Cosmetics, Veterinary and Clinical Microbiology laboratories. A.B.E. has developed along the years, state of the art solutions for thousands of laboratories around the world. A.B.E. solutions meet with your request for Productivity, Accuracy and Traceability.

Come and discover our brand new Automated Media Preparation systems, Food Sample Preparation units, Air Samplers and wide ranges of Culture Media. "Our International team is at your service to introduce more of our Innovative solutions! We speak Spanish, Portuguese, Italian, French, German and English (Welcome on board)."

Alpha Biosciences, Inc. **720**
3651 Clipper Mill Road
Baltimore, MD 21211-1935, USA
Phone: +1 410.467.9983 **Fax: +1 410.467.5088**
www.alphabiosciences.com

Alpha Biosciences, Inc., located near historic Meadow Mill in Baltimore, MD, was founded in 2000 and is a leading manufacturer of dehydrated culture media. Alpha distributes its products, designed for the detection and enumeration of bacteria, around the world through both direct sale and distribution. We at Alpha Biosciences are committed to operating a company that constantly exceeds the service level expected by our customers. This is achieved by supplying products that are of the highest quality, consistent from lot to lot, and delivered in a timely manner.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

American Proficiency Institute **702**
1159 Business Park Drive
Traverse City, MI 49686, USA
Phone: +1 855.366.3781 **Fax: +1 877.779.5984**
www.foodpt.com

American Proficiency Institute (API), now part of the LGC Group, offers independent, third-party proficiency testing programs for food microbiology and chemistry laboratories. Laboratories can monitor their test performance and compare results to others performing the same test. The use of lyophilized organisms provides superior sample stability. Together with LGC, API offers the most comprehensive catalog of proficiency testing schemes available to the food and beverage industry. API is accredited by A2LA to ISO/IEC 17043:2010.

Applied Maths, Inc. **1013**
11940 Jollyville Road, Suite 115N
Austin, TX 78759, USA
Phone: +1 512.482.9700 **Fax: +1 512.482.9708**
www.applied-maths.com

BioNumerics: the one universal bioinformatics solution to store and analyze all of your biological data. BioNumerics offers unparalleled options for gel analysis, sequence analysis including next generation sequencing, wgMLST, wgSNP analysis, metagenomics, and more. Powerful databasing, integrated networking, visualization, and decision-making tools including data mining, querying, clustering, identification, and statistics all in one user-friendly software program.

Arizona/California Leafy Greens Marketing Agreement **1037**
1688 W Adams St.
Phoenix, AZ 85007, USA
Phone: +1 602.542.0945 **Fax: +1 602.542.0898**
www.arizonaleafygreens.org

The Arizona Leafy Greens Food Safety Committee is dedicated to preserving the integrity of Arizona's lettuce industry through rigorous food safety handling practices, innovative training and audits conducted by government-certified inspectors. Our award-winning training program continues to evolve, setting a new standard for safe food-handling practices in produce industry.

A model program, the California Leafy Greens Marketing Agreement (LGMA) incorporates science-based food safety practices and mandatory government inspections by USDA-trained auditors. These audits, both scheduled and unannounced, are truly independent third-party inspection. LGMA members are committed to protecting public health through this un-precedented program and are working hard every day to provide products that are healthy and safe.

Art's Way Scientific, Inc. **715**
P.O. Box 878, 203 Oak St.
Monona, IA 52159, USA
Phone: +1 563.539.2336 **Fax: +1 563.539.2789**
www.buildingsforscience.com

When time, quality, safety, and cost are critical, an Art's Way Scientific modular laboratory is the only way to go. It's a brilliantly designed, quickly built, green, and operational ready modular building for food safety, bio-containment, laboratory animal science, public health, biomedical and biosafety requirements. You can bring the lab to the sample. Visit us at our lab at booth #715.

ASI Food Safety **900**
7625 Page Ave.
St. Louis, MO 63133, USA
Phone: +1 800.477.0778 **Fax: +1 314.727.2513**
www.asifood.com

ASI Food Safety is your food safety accredited auditing company. ASI Food Safety is accredited by the American National Standard Institute (ANSI.org) and the International HACCP Alliance (haccpalliance.org). Our customized food safety and quality solutions include; HACCP Accreditations, Training and Consulting, GFSI covering SQF, BRC, FSSC 22000, GMPs and Global Market Program. Additionally, we offer Food Safety and Quality Education training by webinar and on-site, providing our partners quality solutions and education, from long established experience. As the leader in Food Safety, ASI is dedicated to providing the highest level of technical knowledge to ensure complete compliance.

Association of Food and Drug Officials **1025**
2550 Kingston Road, Suite 311
York, PA 17402, USA
Phone: +1 717.757.2888 **Fax: +1 717.650.3650**
www.afdo.org

The Association of Food and Drug Officials (AFDO), established is 1896, successfully fosters uniformity in the adoption and enforcement of food, drug, medical devices, cosmetics and product safety laws, rules, and regulations. AFDO is an international, non-profit professional organization consisting of state, federal and local regulatory officials as members, with industry representatives participating as associate members. AFDO is a mechanism for advancing regulatory program standards that will help to advance a national integrated food safety system.

Atlantium Technologies **402**
11 HaMelacha St.
Har Tuv Industrial Park, 99100, Israel
Phone: +972 2.992.5001 **Fax: +972 2.992.5005**
www.atlantium.com

Atlantium Technologies makes water safe with non-chemical ultraviolet (UV) water disinfection that meets latest FSMA water biosecurity criteria.

Atlantium UV is validated to EPA 4-log virus disinfection credit and meets FDA criteria for pasteurized equivalent water. It can replace chemicals and heat for safer and more sustainable disinfection.

Innovative fiber optic technology enables significant savings in energy and water consumption. Integrated software enables real-time tracking and documentation, and push-of-a-button regulatory reports.

Autoscribe Informatics Inc. **633**
29 Simpson Lane
Falmouth, MA 02540, USA
Phone: +1 508.457.7911 **Fax: +1 508.457.7993**
www.autoscribeinformatics.com

Autoscribe Informatics is a software provider of database management applications including Matrix LIMS and Quality Management Systems. Matrix solutions are used by leading laboratories worldwide to manage the flow of work and access to records such as tracking, auditing and reporting of data.

Our systems feature unique configuration capabilities to completely tailor the interface, with no custom coding, to ensure an exact fit to customer requirements. Matrix ensures fast implementation, ease of use, and robust information retrieval. Because of its design, the customer enjoys a system whose long life and flexibility result in reduced cost of ownership and longer-term effectiveness.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

BCN Research Laboratories, Inc. **303**
2491 Stock Creek Blvd.
Rockford, TN 37853-3056, USA
Phone: +1 865.573.7511 **Fax: +1 865.573.7298**
www.bcnlabs.com

BCN Research Labs is a full-service microbiology laboratory. It offers an extensive selection of microbiological and mycological tests, training and auditing programs. It specializes in food and beverage spoilage with a strong background in heat-resistant molds (HRM), *Alicyclobacillus* (ACB), preservative resistant and xerophilic yeast and molds as well as in pathogen contamination, shelf-life, and challenge studies. BCN Labs' staff is proficient in bacteria, yeast, and mold identifications using molecular and traditional identification techniques. BCN Labs is certified by the U.S. EPA for microbiological testing of drinking water, is ISO 17025 accredited, and is a WBENC certified women-owned company.

Bia Diagnostics **522**
480 Hercules Drive
Colchester, VT 05446, USA
Phone: +1 802.540.0296 **Fax: +1 802.540.0147**
www.biadiagnostics.com

Bia Diagnostics is an ISO 17025 certified food diagnostics facility that is GLP, GMP, and AOAC compliant. Using state-of-the-art technology combined with our over 30 years of laboratory and food allergen testing experience, we are dedicated to providing the most reliable, highest quality results possible. All samples arriving by 12:00 noon will be run the same day and customers will receive Certificates of Analysis for each sample by 6:00 p.m. EST at no extra cost. Bia Diagnostics provides validation services for your specific matrix and consults regarding all results, including the possibility of further diagnostics.

BioFront Technologies **927**
3000 Commonwealth Blvd., Suite 2
Tallahassee, FL 32303, USA
Phone: +1 850.727.8107
www.biofronttech.com

BioFront Technologies is a leading manufacturer of food allergen detection kits and the authorized U.S. agent for FAPAS proficiency tests and QC/reference materials. BioFront's MonoTrace® ELISA kits represent the first comprehensive line of monoclonal antibody-based assays that accurately detect and quantify trace amounts of food allergens in complex matrices. Our new MonoTrace Gluten ELISA kit utilizes a novel non-toxic extraction for faster detection of gluten within processed foods and unprocessed ingredients. BioFront now offers over 20 unique assays targeting peanut, tree nuts, milk, egg, soy, lupine, seeds, shellfish, and gluten.

Bioionix, Inc. **421**
4603 Triangle St.
McFarland, WI 53558, USA
Phone: +1 608.838.0300 **Fax: +1 608.838.0301**
www.bioionix.com

Bioionix provides their customers with Food Safety Solutions by the use of an electrochemical system for disinfection of food and food processing waters. It is 100% effective against pathogens and spoilage organisms. Since it uses no chemicals, it is safe and environmentally friendly. It eliminates the cost and handling of chemicals, disposal fees and allows plants to reuse their processing water/brine that is treated by Bioionix. It provides cost-effective processing solutions to alternative treatments like ozone, ultraviolet and filtration while providing additional benefits like residual disinfection, data capturing (HACCP) and full automation. The systems come with performance guarantees to ensure customer satisfaction.

BIOLYPH LLC **712**
4275 Norex Drive
Chaska, MN 55318, USA
Phone: +1 952.936.0990 **Fax: +1 952.936.0880**
www.biolyph.com

BIOLYPH stabilizes Food Pathogen Diagnostics as LyoSpheres™ and packages them inside any consumable device. LyoSpheres™ are nanoliter and microliter aliquots of reagents lyophilized and packaged inside 8 tube strips, screw cap tubes, snap top tubes, 96 well plates, etc. Detection tests produced as LyoSpheres™ include but are not limited to: *E. coli*, STEC, *Vibrio*, *Shigella*, *Salmonella*, *Listeria monocytogenes*, *Listeria* spp., *Campylobacter*, etc. LyoSpheres™ maximize the Quality and Value of your diagnostic reagents by providing years of shelf life, instant rehydration and work flow simplification. Visit our booth to discuss how BIOLYPH can serve you.

bioMérieux Industry **1016**
595 Anglum Road
Hazelwood, MO 63042, USA
Phone: +1 800.634.7656
www.biomerieux-usa.com

bioMérieux Industry offers a full range of microbiology solutions for Food and Pharmaceutical companies worldwide. Visit our booth to learn about the latest solutions for Media and Sample Preparation including Masterclave®, APS One™, Dilumat™, and Smasher™; Pathogen Testing with VIDAS® and GENE-UP®; Food Culture Media; Quality Indicator testing with TEMPO®; In-process control and release testing using BactiFlow®, D\Count®, and BacT/ALERT®; Pathogen Identification/ Confirmation using VITEK® and API® Systems and chromID® media. Be sure to inquire about our Laboratory Services for Workflow Optimization and Temperature Monitoring with Labguard® 3D. bioMérieux brings confidence to the table by meeting all of your microbial analysis needs.

Bioo Scientific, a PerkinElmer Company **647**
7050 Burleson Road
Austin, TX 78744, USA
Phone: +1 512.707.8993
www.biooscientific.com

Bioo Scientific develops, manufactures and markets a wide range of rapid food and feed testing kits for the detection of mycotoxins, antibiotics, microbial and industrial contaminants, natural toxins, constituents, hormones, and a variety of other veterinary drug residues.

Bio-Rad Laboratories **703**
255 Linus Pauling Drive
Hercules, CA 94547, USA
Phone: +1 800.4BIO.RAD **Fax: +1 510.741.5630**
www.bio-rad.com

Bio-Rad Laboratories has played a leading role in the advancement of scientific discovery for over 60 years. We manufacture tests for food safety with a complete line of solutions for food pathogen testing. We offer a full menu of real-time PCR test kits for the detection of key pathogens, culture media for nutritive enrichment and RAPID chromogenic media with easy colony identification for detection of pathogens and enumeration of quality indicators. As an instrument manufacturer, Bio-Rad also provides instrument options for both low and high volume users, including our iQ-Check® Prep automation system.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Bioscience International, Inc. **345**
11333 Woodgien Drive
Rockville, MD 20852, USA
Phone: +1 301.231.7400 **Fax: +1 301.231.7277**
www.biosci-intl.com

Bird•B•Gone, Inc. **445**
15375 Barranca Pkwy., Bldg. D
Irvine, CA 92618, USA
Phone: +1 949.472.3122
www.birdbgone.com

Bird•B•Gone®, Inc. is the world's largest manufacturer of professional bird control products. Since 1992, our products have helped solve pest bird problems in commercial, industrial, recreational, government and residential settings across the globe. Bird•B•Gone® products are made in the USA and carry industry leading guarantees. Our team of bird control experts can help you choose the right product and give installation advice for your specific situation.

BluLine Solutions **848**
310 Canterbury Court
Oakmont, PA 15139, USA
Phone: +1 800.240.7193
www.blulinesolutions.com

BluLine makes LIVE and on-demand wireless temperature and temperature/humidity monitoring, recording and reporting a reality. Utilizing the innovative blulog temperature data loggers, monitoring and recording systems are available for reefer transport, cold storage, retail refrigeration, refrigerated totes and more. Full history time and temperature data storage and reports are accessible through the complimentary, cloud based BluConsole dashboard software that is accessible to all parties within the cold chain. Learn more at www.blulinesolutions.com.

Boekel Scientific **427**
855 Pennsylvania Blvd.
Feasterville, PA 19053, USA
Phone: 267.872.9689 **Fax: 267.989.1106**
www.boekelsci.com

Boekel Scientific is dedicated to manufacturing high-quality microbiology equipment, supporting the Food Safety Industry. We are a USA-based manufacturer of benchtop equipment, such as incubators, shakers, ovens, and rockers/rotators.

Bruker Corporation **932**
40 Manning Road
Billerica, MA 01821, USA
Phone: +1 978.663.3660
www.bruker.com

Bruker Corporation is a leading provider of analytical systems for diagnostic applications. Led by innovative, easy-to-use and cost-effective systems for microbial identification, the industry leading MALDI Biotyper CA System produces identifications in minutes with minimal reagents from primary culture.

Cedarlane **941**
1210 Turrentine St.
Burlington, NC 27215, USA
Phone: +1 800.721.1644 **Fax: +1 336.513.5138**
www.cedarlanelabs.com

Providing today's food safety professionals with products of the highest quality, Cedarlane is "Your One-Stop Reagent Shop." Our customers take advantage of access to kits and reagents from over 1,000 top global supplier brands. Open six days a week, customers save money via order consolidation and timely, affordable delivery throughout North America. Featured products include water, dairy, and food testing kits (toxins, chemicals, hormones, drug residues, allergens, nutritional profile, etc.), PCR kits, antisera, microbiological media and DNA/RNA isolation/purification kits. Our shipping supplies division provides a complete line of climate control products for the transportation and storage of perishable goods.

CERTUS **928**
4809 N Ravenswood Ave., Suite 113
Chicago, IL 60640, USA
Phone: +1 773.583.7183 **Fax: +1 773.583.7185**
www.certusfoodsafety.com

CERTUS™ delivers new tools for food-safety testing. Empowering food producers of all sizes to proactively achieve FSMA and HACCP compliance with confidence, CERTUS changes the game with simple rapid pathogen tests. Introducing patented SERS technology that combines enrichment and high sensitivity detection in a homogenous no wash format for real-time monitoring, CERTUS provides accurate results. The CERTUS technology, applied to environmental monitoring and food testing, will eliminate complex workflow enabling any food processor to conduct safe and easy on-site testing, receive instant alerts, and take action to remediate. CERTUS allows companies to get ahead of potential problems, make informed decisions and take definitive action based on accurate and timely information—at the source.

Charles River **644**
251 Ballardvale St.
Wilmington, MA 01887, USA
Phone: +1 877.CRIVER.1
www.criver.com

As a proven innovator in the development of dependable, robust testing solutions, Charles River continues to set the standard for managing microbial quality control. We've purposefully built our portfolio to deliver the most comprehensive and flexible set of microbial solutions available from a single provider. Our three industry-leading brands – Endosafe®, Accugenix® and Celsis® – create an expansive, unified set of core competencies that meet the diverse testing needs of the biopharmaceutical, medical device, compound pharmacy, home, beauty, dairy, beverage and food industries. We are committed to being our clients' partner of choice for managing microbial risk. Learn more at www.criver.com/microbialsolutions.

Charm Sciences Inc. **805**
659 Andover St.
Lawrence, MA 01843, USA
Phone: 978.687.9200
www.charm.com

Charm Sciences is a world leader in food safety diagnostics. Charm's two-pronged Sanitation Monitoring Program ensures the highest level of food safety, quality control, and audit compliance using the novaLUM® II ATP Detection System and Charm Peel Plate® Microbial Tests with Colony Counter. Charm offers simplified diagnostics and data management solutions to track and trend results with integration to LIMS system. Rely on Charm Sciences for excellence in quality, innovation, and sensitivity to protect your brand! Booth #805

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Check Points **301**
Binnenhaven 5
Wageningen, 6709 PD, Netherlands
Phone: +31.0.3.17.45.39.08 **Fax: +31.0.3.17.21.01.47**
www.check-points.com

Check Points is a pioneer in innovative DNA testing methods in the industry and health sector since its foundation in 2002. Deoxyribonucleic acid, short for DNA, is a molecule that carries the genetic instructions used in the growth, development, functioning and reproduction of all known living organisms and many viruses.

Check Points has used the specific characteristics of DNA to develop a range of rapid molecular assays which support commercial organizations and hospitals in identifying and serotyping *Salmonella* using molecular diagnostics. Check Points has also developed molecular assays to detect beta-lactam resistance in the form of carbapenemases, ESBLs and AmpCs within *Enterobacteriaceae*.

Chemstar Corporation **312**
120 West Interstate Pkwy., Suite 100
Lithia Springs, GA 30122, USA
Phone: +1 770.732.0700
www.chemstarcorp.com

Chemstar Corporation is an industry-leading provider of innovative food safety and sanitation products and world-class services to retail grocery stores, convenience stores, quick service restaurants, and food plants across North America. We compete principally by providing superior customer support and differentiated products that help our customers protect their brand, associates, and customers. This is made possible by our on-going investments in research, training, technology, and dedication to cost-saving processes that mitigate food safety and sanitation risks.

Cherney Microbiological Services, Ltd. **733**
1110 S Huron Road
Green Bay, WI 54311, USA
Phone: +1 920.406.8300 **Fax: +1 920.407.0070**
www.cherneymicro.com

Cherney Microbiological Services, Ltd. is an ISO 17025 and 17043 accredited testing laboratory and proficiency program provider that provides partnerships for companies by mitigating risk through proactive testing approaches, continual improvement and focus on quality. The greatest asset we provide to customers is the expertise to support their testing programs. Microbiological & Analytical Testing, Nutritional Analysis, Training Programs and Consulting are all a part of our capabilities to deliver solutions for you. Headquartered in Green Bay, Wisconsin, Cherney has a second ISO 17025 accredited facility in Clovis, New Mexico.

Chihon Biotechnology Co., Ltd. **342**
P.O. Box 9514
Naperville, IL 60567, USA
Phone: +1 630.670.5701
www.chihonbio.com

Chihon Biotechnology was founded in 2003. It is a leading manufacturer of natural food preservatives of Nisin and Natamycin. Our facility is Kosher and Halal certified. We have an office and distribution in Chicago, Illinois, and provide technical assistance.

Clean-Logix, LLC **545**
5000 W. Greenbrooke Drive SE
Grand Rapids, MI 49512, USA
Phone: +1 616.438.9200 **Fax: +1 616.588.6242**
www.clean-logix.com

Clean-Logix and Innovative Cleaning Equipment are sharing booth space for this year's IAFP meeting. Clean-Logix is a manufacturer of chemical allocation and employee hygiene equipment, and Innovative manufactures a full line of foam sprayers, wall/doorway foamers, and foggers. Both companies are located in Grand Rapids, Michigan and have excellent customer/technical service teams ready to meet all of your application needs and add value to customers.

ClorDiSys Solutions, Inc. **801**
P.O. Box 549
Lebanon, NJ 08833, USA
Phone: +1 908.236.4100 **Fax: +1 908.236.2222**
www.clordisys.com

ClorDiSys Solutions, Inc. is a worldwide leader in contamination control and decontamination. ClorDiSys provides decontamination services for contamination mitigation as well as preventive control, utilizing chlorine dioxide gas to leave your facility cleaner and safer than ever before by eliminating the persistent pathogens from the hardest-to-reach areas. Portable and fixed CD gas generators are also available for the in-house decontamination of rooms, tanks, chambers, and processing areas, both large and small.

Cold Jet **749**
455 Wards Corner Road, Suite 100
Loveland, OH 45140, USA
Phone: +1 513.831.3211 **Fax: +1 513.831.3211**
www.coldjet.com

Cold Jet® is a leader in developing innovative, environmentally responsible dry ice cleaning solutions that help companies reduce maintenance costs, enhance product quality, prolong equipment life and improve productivity. Cold Jet's dry ice cleaning systems are used in a variety of industries, making productive use of recycled carbon dioxide while eliminating chemicals and water. The company's dry ice production equipment is used by every major gas company to produce the highest density dry ice available. Cold Jet headquarters are in Ohio with international operations in Europe, Asia, Canada and Mexico. Visit www.coldjet.com or call +1 800.337.9423 or +1 513.831.3211 (International).

Contec, Inc. **1026**
525 Locust Grove
Spartanburg, SC 29303, USA
Phone: +1 864.503.8333
www.contecinc.com

Contec, Inc. is the global leader in the design and manufacture of cleaning products for critical environments. The company has succeeded and grown because we have developed innovative new products in response to customer needs. As the food industry adapts to FSMA, our team of certified PCQI's work to ensure the highest quality science based cleaning products for food manufacturing facilities. Our engineers and technical team are available to work with customers to tackle your difficult sanitation challenges.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Cooper-Atkins Corporation **604**
33 Reeds Gap Road
Middlefield, CT 06455, USA
Phone: +1 860.349.3473 **Fax: +1 860.349.8994**
www.cooper-atkins.com

Cooper-Atkins Corporation is a leading manufacturer and provider of high quality temperature, time, and humidity instruments and extensive wireless solutions, dedicated to providing the highest level of customer service and expert advice.

COPAN Diagnostics, Inc. **1031**
26055 Jefferson Ave.
Murrieta, CA 92562, USA
Phone: +1 951.473.4774 **Fax: +1 951.600.1832**
www.copanusa.com

With a reputation for innovation in pre-analytics, COPAN is the leading manufacturer of collection and transport systems in the world, including products like innovative FLOQSwabs™ which recover 90% of the specimen. COPAN's line of SRK (Swab Rinse Kits) offers comprehensive sampling systems for the bio-pharmaceutical industry, the food hygiene and cosmetics industries and for biological sample collection. COPAN offers a wide selection of products including Buffered Peptone Water, Letheen Broth, Butterfields, and COPAN SRK Neutralizing Solution which are available with different fill volumes and come with a choice of different swab lengths to suit a wide range of industries and applications.

Copesan Specialists in Pest Solutions **546**
W175 N5711 Technology Drive
Menomonee Falls, WI 53051, USA
Phone: +1.800.COPESAN **Fax: +1 262.783.6267**
www.copesan.com

National Coverage. Local Expertise. Copesan is an alliance of regional pest management providers serving national accounts, offering the benefits of centralized account management and local service expertise.

We place a priority on food safety with a risk-based program designed to protect your brand, supported by our RapidTrax® eLogbook – paperless electronic recording and reporting designed with third-party audit agency feedback, meeting all regulatory requirements including FSMA. Copesan Specialists in Pest Solutions, +1 800.COPESAN, www.copesan.com.

Corning Life Sciences **636**
836 North St., Bldg. 300, Suite 3401
Tewksbury MA 01876, USA
Phone: +1 978.442.2200
www.corning.com

Corning, which has long been recognized by scientists as a supplier of high quality laboratory products, introduces a new line of sample preparation equipment and disposable labware optimized for food and beverage testing. Manufactured to the most rigorous standards, Corning's beginning-to-end test solutions balance superior quality with unsurpassed value. From petri dishes to reusable PYREX® glassware, look to Corning for your microbiology testing needs.

CosmosID **713**
155 Gibbs St.
Rockville, MD 20850, USA
Phone: +1 703.995.9879
www.cosmosid.com

CosmosID is a genomic big data company focused on rapid identification of microorganisms for food safety inspections, infectious disease diagnostics, public health surveillance, pharmaceutical discovery, and microbiome analysis for health and wellness. Our software platform offers unrivaled sensitivity and specificity in microbial identification and characterization. From a single universal test, we provide precise identification of bacteria, viruses, fungi, and parasites at strain level with individual relative abundance and comprehensively characterize their antibiotic resistance genes and virulence factors.

Covance Inc. **532**
3301 Kinsman Blvd.
Madison, WI 53704, USA
Phone: +1.608.395.3777
www.covance.com/foodsolutions.html

Covance now offers integrated solutions that span the life cycle of your product. As your full-continuum partner of choice, our experts offer you insights and services from concept to commercialization, including product and process development, nutritional and contaminant analysis and food safety consulting and training. Covance can work with you to help ensure the protection of your brand and unique perspectives shaped by decades of experience. We provide custom, precision delivery and a passion for breakthrough products and science at our locations in North America, Europe and Asia. Together we'll build the program you need. Visit Covance.com/foodsolutions for more information.

CRC Press, Taylor & Francis Group **844**
6000 Broken Sound Pkwy. NW, Suite 300
Boca Raton, FL 33487, USA
Phone: +1 561.994.0555 **Fax: +1 561.998.2559**
www.crcpress.com

CRC Press is a premier publisher of scientific and technical content, reaching around the globe to collect essential reference material and the latest advances in food quality and safety to make them available to researchers, academics, professionals, and students. CRC Press products include world-class references, handbooks, and textbooks as well as the award-winning netBASE eBook collections. Visit our booth and get limited-time convention discounts of 20% on all titles. CRC Press is a member of Taylor & Francis Group, an informa business.

Crystal Diagnostic **324**
510 Compton St., Suite 106
Broomfield, CO 80020, USA
Phone: +1 720.351.4855 **Fax: +1 720.351.4910**
www.crystaldiagnostics.com

Crystal Diagnostics is a food pathogen platform company. Our CDx platform is among the fastest, most accurate, and least expensive food testing platforms commercially available. Our unique detection methods utilize liquid crystal biosensors to amplify the targeted signal and reduce background noise. The CDx holds AOAC accreditations for *E. coli* O157, STECs, *Salmonella*, and *Listeria* for numerous matrices. New targets are being developed on a regular basis. Stop by our booth and see how Crystal Diagnostics can support your food safety efforts.

CultureMediaConcepts **825**
970 E Orangethorpe Ave.
Anaheim, CA 92801, USA
Phone: +1 714.773.1726 **Fax: +1 714.773.1793**
www.culturemediaconcepts.com

CultureMediaConcepts® is an independent manufacturer of culture media and reagents utilized in Microbiological testing. Screening for indicator organisms, environmental monitoring, or testing for foodborne

Blue Text - IAFP Sustaining Member

pathogens require specified culture media formulations recommended by the methodology used, the manufacturer of the testing platform, or a governing agency. We specialize in formatting culture media formulations for your specific needs. Our SampleReady™ line of Prepared Dehydrated Culture Media, offers a RTU format that will eliminate steps of preparing your media and save you hours to results.

Decon7 Systems **837**
8541 E Anderson Drive, Suite 106
Scottsdale, AZ 85255, USA
Phone: +1 480.339.2858 **Fax: +1 480.339.2859**
www.decon7.com

D7 is a proprietary blend of ordinary household substances that aggressively hunts and destroys bacteria and viruses in agricultural live harvest and food processing facilities. Validated by multiple third party organizations, D7 is a proven antimicrobial disinfectant that will enhance and maximize the effectiveness of your biosecurity program.

Ordinary Substances • Patented Formula • Unrivaled Results
Once blended, the D7 solution becomes an unrivaled antimicrobial disinfectant of bacteria and viruses, delivering a seven log kill rate, the highest rate measurable. We partner with our customers and focus on the food processing and related verticals; including, Protein, Seafood, Fruits and Vegetables and Dairy. Visit us to learn more about our extraordinary solutions.

Deibel Laboratories of FL Inc. **537**
P.O. Box 1056
Osprey, FL 34229-1056, USA
Phone: +1 224.465.5515 **Fax: +1 941.924.6541**
www.deibellabs.com

Deibel Laboratories was founded by Dr. Robert H. Deibel, a former Dean of the Bacteriology Department at the University of Wisconsin and published author of over 80 scientific publications, over forty years ago. Since its inception, Deibel Labs has continually grown with the ever changing scientific community and has become an integral part of the global food safety industry. With a network of ISO 17025 Laboratories throughout the United States and Canada, Deibel Labs is able to provide exceptional service while controlling test prices in order to create the perfect combination of value and quality for any sized clientele.

Detectamet Detectable Products Inc. **400**
5111 Glen Alden Drive
Richmond, VA 23231, USA
Phone: +1 804.303.1983 **Fax: +1 804.303.6971**
www.detectamet.com

Detectamet Inc. is now the North American distribution centre in Richmond, actively delivering the world's leading range of products that are fully metal and X-ray detectable and are magnetically extractable. They reduce the risks of physical contamination of food. The company's special plastic is 'visible' to detection systems used in the food industry. It has been approved for contact with food in compliance with U.S. and EU standards. Products range from pens to ear plugs, to gloves and hair nets, to scrapers and mixer blades and much more. Auditors, inspectors and grocery retailers recognize that Detectamet products make an important contribution to successful HACCP management systems.

Donaldson Company, Inc. **320**
P.O. Box 1299
Minneapolis, MN 55440, USA
Phone: +1 800.543.3634 **Fax: +1 952.885.4791**
www.donaldsonprocessfilters.com

The Process Filtration Division of Donaldson Company, Inc. is a leading worldwide provider of process filtration, providing filtration for sterile air, liquids, and steam used in the food and beverage processing and aseptic packaging, inks, paints, coatings, pharmaceuticals, and other processing industries. Donaldson is committed to protecting people and processes using leading filtration technology, providing quality products and prompt customer service.

Eagle Protect PBC **949**
3079 Harrison Ave., Suite 214
South Lake Tahoe, CA 96150, USA
Phone: +1 510.205.0623
www.eagleprotect.com

You know what is in your food – but do you know what is touching it? Eagle Protect PBC, a Certified BCorp, supplies responsibly sourced and sustainable focused Disposable Gloves and clothing to the U.S. food sector – manufacturing, processing, and food service. Brand reputation assurance through regular audits carried out by Eagle Staff (not third party) and Child Labor Free Certification provide a transparent and public supply chain. Eagle works with companies that care enough about their products, staff, and customers to make sure they are using safe, reliable, and clean disposable supplies. Protection for a Busy, Dirty World!

Ecolab **1040**
1 Ecolab Place
St. Paul, MN 55102, USA
Phone: +1 651.250.4469
www.ecolab.com

A trusted partner at more than one million customer locations, Ecolab (ECL) is the global leader in water, hygiene, and energy technologies and services that protect people and vital resources. With 2016 sales of $13 billion and 48,000 associates, Ecolab delivers comprehensive solutions and on-site service to promote safe food, maintain clean environments, optimize water and energy use, and improve operational efficiencies for customers in the food, healthcare, energy, hospitality, and industrial markets in more than 170 countries around the world.

Emport LLC **732**
4327 Butler St., Floor 2
Pittsburgh, PA 15201, USA
Phone: +1 412.447.1888
www.emportllc.com

Emport LLC specializes in food safety and quality assurance kits that combine user-friendly design with rigorous scientific standards. Our core focus is rapid tests for detecting traces of gluten and other allergens. Kits include GlutenTox Pro, AOAC-PTM certified for detecting as little as 5 ppm gluten in foods and environments; and AlerTox Sticks, for checking foods and surfaces for trace amounts of peanut, almond, hazelnut, soy, fish, casein, egg, and more. Friendly, fast service and leading technology help us live up to our motto: More safe food, more happy people.

EMSL Analytical, Inc. **322**
200 Route 130 North
Cinnaminson, NJ 08077, USA
Phone: +1 800.220.3675 **Fax: +1 856.786.5974**
www.emsl.com

EMSL Analytical's network of over 40 laboratories and service centers has been providing quality analytical services since 1981. Our food laboratory capabilities include: microbiology analysis, nutritional analysis, various food chemistry analysis, allergens, toxins, and adulteration analysis. EMSL's Food Testing Division laboratories are located in over 13 of our locations conveniently located across North America. Our Food Chemistry and Nutritional Analysis testing is done at our National Headquarters in Cinnaminson, New Jersey.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Eppendorf **315**
102 Motor Pkwy.
Hauppauge, NY 11788, USA
Phone: +1 800.645.3050
www.eppendorf.com

Eppendorf is a leading life science company that develops and sells instruments, consumables, and services for liquid, sample, and cell handling in laboratories worldwide. The brand Eppendorf stands for premium products and services, comprehensive solutions and sincere advice and support. The broad portfolio covers a variety of applications and biological materials ensuring efficient laboratory processes and reliable results. Eppendorf sets laboratory standards in research but also for laboratories performing process analysis, production and quality assurance including the field of food and beverage. Eppendorf offers pipettes, centrifuges, thermal cyclers, mixers, shakers, automated liquid handlers, spectrophotometers, consumables and services such as calibration.

Eurofins GeneScan Technologies **731**
Engesserstrasse 4
Freiburg, D-79108, Germany

Eurofins Scientific **828**
2200 Rittenhouse St., #175
Des Moines, IA 50321, USA
Phone: +1 515.265.1461
www.eurofinsus.com/food

Eurofins Scientific is an international group of laboratories operating 310 sites in 39 countries and providing a comprehensive range of analytical testing services drawing on the latest developments in biotechnology. The Eurofins Group specializes in delivering analytical testing and advisory services to clients from a wide range of industries including the pharmaceutical, food and environmental sectors. With a portfolio of over 130,000 reliable analytical methods and performing more than 150 million assays per year to establish the safety, composition, authenticity, origin, traceability, identity and purity of biological substances, the Eurofins Group is now the leading global provider of bioanalytical services.

Extreme Microbial Technologies **946**
11125 Yankee, Suite B
Dayton, OH 45458, USA
Phone: +1 844.885.0088
www.extrememicrobial.com

Extreme Microbial Technologies is the innovative air and surface purification company. Using our patented 6 Step Total Solution we are able to clean and sanitize EVERY surface and the air CONTINUOUSLY. We can also monitor living bacteria and mold in real time, giving instant results. No wait! We can reduce up to 99.9% of bacteria, mold, and viruses ensuring your indoor space is always clean, even when occupied.

Feel Good, Inc. **330**
1460 Gemini Blvd., #8
Orlando, FL 32837, USA
Phone: +1 407.986.3351
www.feelgoodinc.org

Feel Good, Inc. provides portable TENS (transcutaneous electrical nerve stimulation) units offering wide variety of benefits, including alleviating back, nerve and diabetic pain and migraines. Our units can also improve circulation, sleep patterns and have been shown to decrease the use of pain relievers that can cause negative side effects.

FlexXray **1012**
3751 New York Ave., #130
Arlington, TX 76014, USA
Phone: +1 817.453.3539
www.flexxray.com

FlexXray is the leader in Inspection and Recovery Services dedicated to serving food companies. We X-Ray finished food products for all types of contaminants, which we can see down to 0.8 mm or even smaller. We are able to achieve this by using medical grade X-Ray technology, developed in house, running at very slow speeds. Metal, plastic, gasket material, glass, stones, and bone are a few of the items our customers ask us to inspect for.

Currently, we are helping over 360 customers salvage product instead of simply throwing it away. This helps save some larger companies millions of dollars a year.

Food Protection and Defense Institute **623**
1954 Buford Ave., Suite R285, LES Bldg.
St. Paul, MN 55108, USA
Phone: +1 612.626.6406 **Fax: +1 612.624.3229**
www.foodprotection.umn.edu

The Food Protection and Defense Institute (FPDI), was officially launched as a Homeland Security Center of Excellence in July 2004 at the University of Minnesota. Developed as a multidisciplinary and action-oriented research consortium, FPDI addresses the vulnerability of the nation's food system. FPDI takes a comprehensive, farm-to-table view of the food system, encompassing all aspects from primary production through transportation and food processing to retail and food service.

Food Quality & Safety Magazine **539**
111 River St.
Hoboken, NJ 07030-5774, USA
Phone: +1 480.419.1851
www.foodqualityandsafety.com

Food Quality & Safety's mission is to advise all levels of quality and safety decision makers in food manufacturing, food service/retail, and regulatory and research institutions on strategic and tactical approaches required in a rapidly changing food market by examining current products, technologies, and philosophies.

Food Safety Magazine **524**
1945 W Mountain St.
Glendale, CA 91201, USA
Phone: +1 818.842.4777 **Fax: +1 818.955.9504**
www.foodsafetymagazine.com

Food Safety Magazine is a bimonthly publication that serves the informational needs of food safety/quality professionals worldwide. Issues feature contributions from food and beverage industry leaders who discuss the regulatory environment, technologies, trends, and management strategies essential when applying science-based solutions to assure food safety and quality. Food Safety Magazine also produces Food Safety Connect – an online marketplace for food safety solutions (www.foodsafetyconnect.com). Food Safety Connect presents reliable, useful information in an easy-to-use interactive format that helps users find products and services. Visit our booth to begin your free subscription and learn about Food Safety Connect.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Food Safety Net Services **307**
199 W Rhapsody
San Antonio, TX 78216, USA
Phone: +1 210.308.0675 **Fax: +1 210.525.1702**
www.fsns.com

Food Safety Net Services (FSNS), headquartered in San Antonio, Texas, is a national network of ISO 17025 accredited testing laboratories open 24/7, 365 days a year. FSNS provides expert technical resources that assist companies with implementing food safety and quality programs that deliver critical information needed to continually improve process controls. Additional services include GFSI, SQF and PAACO, approved auditing and certification capabilities. For more information, visit FSNS.com.

Food Safety News **1039**
14117 West 61st St.
Shawnee, KS 66216, USA
Phone: +1 913.205.3791
www.foodsafetynews.com

Food Safety News is the only daily publication that reports exclusively on food safety issues. We are the first to talk with the most important people behind breaking news. We bring our readers the kind of old-fashioned, in-depth journalism that many people thought didn't exist anymore.

As a result, our readers trust our reporting and actively respond to the marketing messages they see in our publication. Our advertisers tell us that we are their #1 source of solid sales leads, month-after-month. Talk with us now about how an ad schedule can help you increase your sales and your brand recognition.

Food Safety Summit **849**
155 N Pfingsten Road, Suite 205
Deerfield, IL 60015, USA
Phone: +1 847.405.4000
www.foodsafetysummit.com

The Food Safety Summit is a solutions-based conference and expo designed to meet the educational and informational needs of the entire food industry including growers, processors, retailers, distributors, foodservice operators, regulators and academia. The Summit provides 4 days of comprehensive education, certification and training courses, to learn from subject matter experts and exchange ideas; an expansive Exhibit Hall packed with leading industry solutions providers; and exclusive networking events to help you make meaningful industry connections. Join us for a celebration of our 20th year of the Annual Food Safety Summit, May 7–10, 2018 at the Donald E. Stephens Convention Center in Rosemont, IL.

GFSI – The Consumer Goods Forum **832**
22-24-Rue du Gouverneur General Eboue
Issy les Moulineaux, 92130, France
Phone: +33 182.00.9577
www.theconsumergoodsforum.com

The Global Food Safety Initiative (GFSI) brings together key actors of the food ecosystem to collaboratively drive continuous improvement in food safety management systems around the world. With a vision of safe food for consumers everywhere, food industry leaders created GFSI in 2000 to reduce food safety risks and inefficiencies while building trust throughout the supply chain. The GFSI community is composed of experts from the full stakeholder spectrum, across industry and international organizations to governments and academia. GFSI is powered by The Consumer Goods Forum (CGF), a global industry network working to support *Better Lives Through Better Business*.

Global ID Group **729**
504 North 4th St.
Fairfield, IA 52556, USA
Phone: +1 641.209.4500
www.global-id.group.com

Global ID Group serves the food industry with a market-leading portfolio of testing, training, certification and software services. At this year's IAFP show we will be showcasing HorizonScan, a powerful online database that contains over 85,000 records of global food safety and authenticity incidents affecting over 530 commodities from nearly 16,000 suppliers in over 180 countries. Customizable e-alerts and a user-friendly interface allow food safety professionals to identify and prioritize potential supply chain threats and research supplier histories as part of their food safety and FSMA compliance programs. Global ID is the exclusive North American distributor for HorizonScan. www.globalhorizonscan.com.

GMA Science and Education Foundation **530**
1350 I St. NW, Suite 300
Washington, D.C. 20005, USA
Phone: +1 202.639.5900 **Fax: +1 202.639.5932**
www.gmaonline.org/sef

The GMA Science and Education Foundation (SEF) is a 501(c)(3) non-profit foundation that supports and funds cutting-edge research, best-in-class education and state-of-the-art technical training programs in support of the food and CPG industries both domestically and internationally. Through the SEF, the global food industry is able to leverage technologies and processes with the technical expertise provided by GMA scientist and expert consultants to achieve timely results and solutions.

Grocery Manufacturers Association **332**
1350 I St. NW, Suite 300
Washington, D.C. 20005, USA
Phone: +1 202.639.5977
www.gmaonline.org

Grocery Manufacturers Association (GMA) is the trade organization representing the world's leading food, beverage and consumer products companies and associated partners. The U.S. food, beverage and consumer packaged goods industry has facilities in 30,000 communities, generates $1 trillion in sales annually, contributes $415 billion in added value to the economy every year and is the single largest U.S. manufacturing industry with 1.7 million manufacturing workers. Founded in 1908, GMA has a primary focus on product safety, science-based public policies and industry initiatives that seek to empower people with the tools and information they need to make informed choices and lead healthier lives.

Economically motivated adulteration (EMA) is an established threat to grocery manufacturers. GMA and Battelle have partnered to provide EMAlert, a secure, comprehensive and intuitive software tool that enables food manufacturers to rapidly analyze and understand EMA vulnerabilities. EMAlert produces quantitative vulnerability results, allowing for the prioritization of mitigation efforts associated with EMA threats.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Guardian Ozone **945**
2971 Oxbow Circle, Suite A
Cocoa, FL 32926, USA
Phone: +1 321.631.4580
www.guardianozone.com

Guardian Ozone's science and engineering approach is revolutionizing food safety and sanitation for the food industry. As an ISO9001 registered manufacturer and UL 508A listed panel shop, all Guardian systems are designed and built entirely in the USA to the highest industrial standards. Guardian Ozone is confident in its ability to meet or exceed our customers' expectations for their most challenging ozone process needs. Contact us to learn more about our capabilities and solutions.

Hardy Diagnostics **423**
1430 W McCoy Lane
Santa Maria, CA 93455, USA
Phone: +1 800.266.2222
www.hardydiagnostics.com

You can choose from a complete selection of over 8,000 microbiology and laboratory products including Crystal Diagnostics' AOAC approved CDx Xpress Reader, Compact Dry, Dilu-Loks, and many more. Shipments are delivered quickly, usually the next day due to Hardy Diagnostics' extensive network of nine distribution centers across the U.S. You can also be rest assured knowing that your supplies are manufactured in an ISO-certified factory.

Heateflex Corporation **824**
405 E Santa Clara St.
Arcadia, CA 91006, USA
Phone: +1 626.599.8566 **Fax: +1 626.599.9567**
www.heateflex.com

Since 1974, Heateflex Corporation has led the way in providing ultra-pure heating equipment to the semiconductor, life science, food and beverage, and other industries requiring precision heating. Offering a broad range of customizable, high-purity equipment for heating and cooling fluids, including chemical heaters, deionized water heaters, gas heaters, steam heaters, and heat exchangers.

The company's recently-introduced Demeter™ media preparation system is used for pathogens testing in food labs, and can increase lab throughput in the media preparation process by up to 7 times. Demeter is engineered for accuracy, traceability, and sterility, and with a LIMS interface, improves recordkeeping for regulatory compliance.

HiMedia Laboratories Pvt. Ltd. **831**
A-516 Swastik Disha Business Park, via adhani Industrial Estate
Mumbai, 400 086, India
Phone: 484.734.4401 **Fax: 484.734.4402**
www.himedialabs.com

Founded 40 years ago, HiMedia, a leader in Bacteriological Culture Media formulations, now spans over 130 countries. Comprehensive identification kits for various food spoilage organisms as well as conventional and animal free culture media are part of the HiMedia repertoire. Conforming to WHO-GMP standards and ISO updated protocols, HiMedia's world class facilities bring to you reliable products. Our tech-service team is available to assist you wherever you are, to match our products to your precise needs. Products available in North America from HiMedia Laboratories LLC, infous@himedialabs.com, www.himediastore.com.

Hollison, LLC **746**
2800 Warehouse Road
Owensboro, KY 42301, USA
Phone: +1 270.713.0274
www.hollison.com

Hollison is a high-tech food safety company focused on the detection of and protection from pathogens in human and pet food, ingredient sources and environments.

Hollison's proprietary technology – the TrueSampler™ and DuraSampler™ – has mastered the accuracy of continuous food sampling to ensure no pathogens are present in the product and environment. Hollison has also developed and distributes natural and safe probiotic blends – one that can be applied to food, and PROTECT™, which is used in office and industrial spaces to protect against pathogens.

Hygiena **607**
941 Avenida Acaso
Camarillo, CA 93012, USA
Phone: +1 805.388.8007
www.hygiena.com

Hygiena delivers rapid microbial detection and monitoring solutions to improve food safety. Hygiena's EnSURE™ monitoring system collects, analyzes, and reports data from multiple quality indicators, including ATP, and indicator organisms like TVC, Coliform, *E. coli* and *Listeria*. The company's BAX® System, previously from DuPont Diagnostics, uses PCR technology to identify pathogens in food ingredients, finished products, and production environments. Hygiena utilizes advanced technologies and patented designs to provide industry-leading microorganism detection, allergen tests, environmental collection devices, and more. Hygiena is committed to providing customers with high-quality innovative technologies that are easy-to-use and reliable, backed by excellent customer service and support.

IEH Laboratories and Consulting Group **413**
15300 Bothell Way NE
Lake Forest Park, WA 98155, USA
Phone: +1 800.491.7745 **Fax: +1 206.306.8883**
www.iehinc.com

IEH Laboratories and Consulting Group delivers comprehensive laboratory support services, encompassing all aspects of microbiology and chemistry analysis, process validation, HACCP development and recall/outbreak assistance. Our national network of over 100 ISO/IEC-17025-accredited laboratories addresses quality and safety concerns throughout production and processing, enabling food, nutriceutical and pharmaceutical manufacturers to release products with confidence.

IFPTI **1029**
49 W Michigan Ave., Suite 300
Battle Creek, MI 49017, USA
Phone: +1 269.441.4504 **Fax: +1 269.441.2996**
www.ifpti.org

IFPTI builds competency-based solutions for public- and private-sector food protection professionals. This translates to custom-designed learning organized around curriculum frameworks aligned with specific workforce competencies. Simply put, for any food protection or safety challenge anywhere in the world, IFPTI has the expertise, leadership, and systems in place to help solve them.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

The Industrial Fumigant Company, LLC. **512**
13420 W. 99th St.
Lenexa, KS 66215, USA
Phone: +1 913.782.7600 **Fax: +1 913.782.6299**
www.indfumco.com

IFC is a national provider of pest management and sanitation solutions exclusive to the food industry. The knowledge and expertise we have gained comes from working directly with the food and commodity industries since 1937. IFC has developed a market-leading reputation for providing consistent, reliable and high quality service to our clients. We maintain this reputation by focusing our efforts on sustaining the highest standards of quality, safety, honesty and integrity in all areas of our business.

InnovaPrep **433**
132 East Main St.
Drexel, MO 64742, USA
Phone: +1 816.619.3375 **Fax: +1 816.619.3375**
www.innovaprep.com

InnovaPrep provides tools for highly efficient collection, concentration, and recovery of biological particles from air and liquid samples. These technologies have application with any analysis method where increased sensitivity is needed. InnovaPrep's flagship product, the Concentrating Pipette, is a rapid automated bio concentrator – enabling effortless sample prep and concentration of biological particles from liquid samples. Fields of application include, but are not limited to, food, drug, and water safety; biodefense; diagnostic research; and industrial and environmental monitoring.

Institute for Food Safety and Health (IFSH) FSPCA **1027**
6502 S. Archer Road
Bedford Park, IL 60501, USA
Phone: +1 708.563.8152
www.iit.edu/ifsh

Illinois Institute of Technology's Institute for Food Safety and Health (IFSH) is an applied research institute that provides stakeholders the opportunity to develop and exchange knowledge, experience, and expertise to address issues in food safety, food defense, and nutrition. IFSH's collaborative research model helps stakeholders define and design innovative and practical approaches to solving challenges in food industry operations. IFSH is also home to the FDA CFSAN Division of Food Processing Science and Technology.

Intelex **846**
70 University Ave.
Toronto, ON M5J 2M4, Canada
Phone: +1 416.646.2716 **Fax: +1 416.640.2227**
www.intelex.com

With more than 1,000 clients and one million users, Intelex Technologies is a global leader in Environmental, Health, Safety, and Quality (EHSQ) management software. Since 1992, our scalable web-based software has helped clients around the world and across all industries improve operational performance, mitigate organization-wide risk, and ensure sustained compliance with internationally accepted standards and regulatory requirements. We do this by providing a user-friendly experience that simplifies and centralizes EHSQ data collection and processes, while making it easier than ever before to identify and report on the insights and metrics that generate meaningful business results.

International Association for Food Protection **Foyer**
6200 Aurora Ave., Suite 200W
Des Moines, IA 50322-2864, USA
Phone: +1 800.369.6337 **Fax: +1 515.276.8655**
www.foodprotection.org

IAFP provides food safety professionals worldwide with a forum to exchange information on protecting the food supply. This is achieved through two monthly journals; the *Journal of Food Protection* and *Food Protection Trends*, an online newsletter titled the *IAFP Report* and through an Annual Meeting in North America where research topics on food safety issues are presented. IAFP also holds a three-day symposium in Europe each year and a separate, annual international symposium in addition to supporting food safety events in Dubai and China. Membership information can be obtained at our booth or visit our Web site at www.foodprotection.org.

International Association for Food Protection — Student PDG **Exhibit Hall**
6200 Aurora Ave., Suite 200W
Des Moines, IA 50322-2864, USA
Phone: +1 800.369.6337 **Fax: +1 515.276.8655**
www.foodprotection.org

Welcome, students, to IAFP 2017! If you wish to take control of your career and enrich your IAFP experience by interacting with other students and networking with professionals, get involved with the IAFP Student Group. We are an organization of undergraduate and graduate students who wish to enhance food safety through active participation in IAFP. Stop by our booth to meet your colleagues, exchange ideas, and become involved in future student group activities.

International Food & Meat Topics **835**
P.O. Box 4
Driffield, East Yorkshire YO25 9DJ, United Kingdom
Phone: +44.1377.241724 **Fax: +44.1377.253640**
www.positiveaction.co.uk

International Food & Meat Topics is a global magazine that focuses on all aspects of food and meat safety in production and processing. It carries regular features on laboratory testing and relevant research. Its editorial covers subjects as diverse as *Campylobacter*, HACCP, food safety, labelling and shelf life, and foreign body detection. Its targeted readership is QA/QC managers in food and meat production and processing plants, food testing laboratories, and responsible food safety professionals.

Interscience Laboratories Inc. **901**
32 Cummings Park
Woburn, MA 01801, USA
Phone: +1 781.937.0007 **Fax: +1 781.937.0017**
www.interscience.com

Interscience has been a global designer, manufacturer, and supplier of solutions for quick and safe microbiological analyses for more than 30 years. Please stop by our booth to view our complete product line, including the DiluFlow® gravimetric dilutor, the FlexiPump® dispensing pump, the silent BagMixer® 400 SW lab blender, the easy Spiral Dilute dilutor and spiral plater, and the new Scan 4000 automatic colony counter.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Invisible Sentinel **631**
3711 Market St., Suite 910
Philadelphia, PA 19104, USA
Phone: +1 267.969.6004 **Fax: +1 267.969.6004**
www.invisiblesentinel.com

Invisible Sentinel, a global molecular solutions company, is dedicated to providing first-in-class microbial detection tools. The Company's core technology, Veriflow®, is a patented, game-changing platform that integrates molecular diagnostics, antibody design, and immunoassays. Veriflow® technology is currently applied across multiple industries including food safety and beverage quality. The Company is exploring solutions in other industries, such as healthcare, veterinary services, biodefense, and environmental testing. Each solution requires specific design elements, but retains the inherent advantages of Veriflow®, technology: simplicity, accessibility, and affordability. For more information, visit www.invisiblesentinel.com.

ITW Pro Brands **645**
4647 Hugh Howell Road
Tucker, GA 30084, USA
Phone: +1 770.243.8800 **Fax: +1 770.243.8961**
www.itwprofessionalbrands.com

ITW Pro Brands manufactures LPS, the leading food-grade MRO chemical brand that developed the innovative technology, DETEX. All DETEX components are metal detectable to help reduce the risk of foreign object contamination during food and beverage processing. With a wide range of NSF certified cleaners/degreasers, lubricants, and penetrants, ITW Pro Brands has solutions for all of your food processing needs.

Kikkoman Biochemifa Company **823**
2-1-1, Nishi-Shinbashi, Minato-ku
Tokyo, 105-0003, Japan
Phone: +81 3.5521.5492 **Fax: +81 3.5521.5498**
biochemifa.kikkoman.co.jp/e/

Kikkoman Biochemifa Company, one of the subsidiaries of the Kikkoman Corporation, has been developing innovative enzymes and functional materials which are currently used in various industries. Moreover, we offer a broad range of hygiene-related assay and detection instruments, including ATP+ADP+AMP (A3 Method) rapid hygiene monitoring system which is an ADP detectable new product and also offer Histamine Test kit which is a rapid colorimetric enzyme assay system for its quantitative analysis in raw fish, frozen fish or canned tuna.
With an emphasis on "Speed, Safety, and Simplicity," these products satisfy a wide range of needs for assuring food product safety.

Labplas **913**
1951 Nobel
Sainte-Julie, QC J3E 1Z6, Canada
Phone: +1 450.649.7343 **Fax: +1 450.649.3113**
www.labplas.com

Labplas offers high precision sampling innovations to your industry. TWIRL'EM sampling bags provide a sterile, secure, contaminant-free container that ensures dependable analysis results.

Labplas is the sampling bag specialist! Our different brands of products are an economical and efficient way to collect, contain, and carry samples with confidence. Our sterile bags are used for environmental sampling, pharmaceutical research, quality assurance procedures (QA/QC), food industry applications, and veterinary medicine.

LexaGene **648**
100 Cummings Center, Suite P-207
Beverly, MA 01915, USA
Phone: +1 650.200.8771
www.lexagene.com

LexaGene is developing an instrument that makes pathogen detection super easy. It is designed for use in food packaging plants by individuals with no knowledge of microbiology. The instrument purifies the DNA and RNA from liquid samples and performs 22 PCR tests for pathogens and indicator species – all within ~ 1 hr. Such a quick turnaround time will provide food safety officers with the necessary information to determine whether their products can be shipped immediately or may be contaminated. In addition, the instrument is well suited for finding the source of a contamination within a single work shift.

Log10, LLC **615**
2402 Sykes Blvd.
Ponca City, OK 74601, USA
Phone: +1 580.304.7953
www.log10.com

The mission of Log10, LLC is to support the food industry with comprehensive services pertaining to microbial safety and quality of food. Our focus is on microorganisms that cause human illness or food spoilage, and competing beneficial bacteria that prevent, reduce or eliminate these hazards. Log10® manufactures the Pre-Liminate™ brand of dry probiotic powders that are proven to prevent or eliminate *Salmonella*, *Listeria* and *Clostridium* from food and environmental surfaces. Other services include expert professional consulting, research, testing, and training support to the food industry relative to the manufacture and delivery of safe, high-quality food products.

Maxxam Analytics **340**
6660 Campobello Road
Mississauga, ON L5N 2L9, Canada
Phone: +1 416.389.3032
www.maxxam.ca

Founded over 40 years ago, Maxxam Analytics is a market leader in analytical services and solutions to the energy, environmental, food, and DNA industries and a member of the Bureau Veritas Group of companies – a world leader in testing, inspection, and certification services. We provide unparalleled depth of technical and scientific expertise and serve customers through a national network of laboratories. Maxxam skillfully combines efficiency and customer service with rigorous science and uncompromising quality management.

MediaBox by Microbiology International **924**
5350 Partners Court
Frederick, MD 21703, USA
Phone: +1 301.662.6835 **Fax: +1 301.662.8096**
www.800ezmicro.com

Microbiology International will be demonstrating MediaBox™ Sterile Liquid Solutions, our revolutionary new product for ready-to-use liquid culture media. MediaBox™ Sterile Liquids are easy to use and store, conveniently packaged in a stackable box. Available in BPW, mTSB, modified UVM, sterile water, Butterfields, lactose broth, and more. Custom formulations upon request! MediaBox™ Sterile Liquids connect directly to the EZ-Flow gravimetric diluters or EZ-Dispense peristaltic pump for a completely closed system during sample preparation. Stop by our booth for a demonstration and make your lab's sample prep EZ!

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Mérieux NutriSciences **931**
111 E Wacker Drive, Suite 2300
Chicago, IL 60601, USA
Phone: +1 312.938.5151
www.merieuxnutrisciences.com/us

Mérieux NutriSciences is a global food safety and quality partner — offering chemistry and microbiology testing, labeling, auditing, consulting, sensory testing, customized training, and research services to the food and nutrition industry. Focused on customer excellence, we protect consumers' health through nutritional research, scientific excellence, and innovation. We customize our services to meet the needs of individual manufacturers, food processors, caterers, restaurants, and retailers.

Headquartered in Chicago, Mérieux NutriSciences has grown from a single laboratory founded in Chicago Heights, Illinois, in 1967 (Silliker) to have a global presence. Present in 21 countries, Mérieux NutriSciences employs 6,500 people worldwide working in just under 100 laboratories.

Meritech **709**
720 Corporate Circle, Suite K
Golden, CO 80401, USA
Phone: +1 800.932.7707 **Fax: +1 303.790.4859**
www.meritech.com

Meritech is the world leader in automated handwashing and footwear scrubbing and sanitizing. CleanTech® systems are used in food processing, agriculture, food service, and other industries. CleanTech hand hygiene systems perform a fully automated 12-second hand wash, sanitize and rinse cycle, removing over 99.98% of dangerous pathogens. The systems use 75% less water and produce 75% less waste than manual handwashing. By making handwashing quick, easy and enjoyable, Meritech increases hand hygiene compliance up to 400%.

METER Group, Inc. USA **813**
2365 NE Hopkins Court
Pullman WA 99163, USA
Phone: +1 509.332.2756 **Fax: +1 509.332.5158**
www.metergroup.com

Demo the quality lab of the future, where the instruments you already own deliver data directly to permanent, verified digital records in Skala. Skala makes the data available in real time so food companies can use it to increase profitability, comply with regulatory requirements and improve customer satisfaction. No transcription errors. Records reviewed and approved in five minutes a day. Generate certificates of analysis with one click. Connects to our industry-leading AquaLab water-activity meters.

Michigan State University Online Master of Science in Food Safety **313**
1129 Farm Lane, Rm B-51, Food Safety & Toxicology Bldg.
East Lansing, MI 48824, USA
Phone: +1 517.884.2080
foodsafety.msu.edu

Michigan State University's Online Master of Science in Food Safety meets the ever-changing educational demands of food safety leaders in industry, government, and public health by providing an environment that allows professionals to pursue their graduate level education while maintaining personal and professional lives. Visit us at: foodsafety.msu.edu.

Micro Essential Laboratory **908**
4224 Ave. H
Brooklyn, NY 11210-3518, USA
Phone: +1 781.388.3618 **Fax: +1 718.692.4491**
www.microessentiallab.com

Our company has been a market leader in pH and sanitizer testing technologies, serving the food service industry since 1934. Customer service and product quality are the company focus, and critical factors for success. Our goal is to develop lasting relationships.

Microbac Laboratories, Inc. **426**
One Allegheny Square, Suite 400
Pittsburgh, PA 15212, USA
Phone: +1 412.459.1060
www.microbac.com

From farm to fork, Microbac helps you proactively manage food quality while staying ahead of safety risks. As a single-source supplier, our team and laboratory network provides accredited chemical and microbiological testing solutions to meet all unique product testing and environmental monitoring needs.

Microbiologics **635**
200 Cooper Ave. North
St. Cloud, MN 56303, USA
Phone: +1 320.253.1640 **Fax: +1 320.253.6250**
www.microbiologics.com

Microbiologics is the leading provider of ready-to-use QC microorganisms for quality control testing in food laboratories. With over 900 strains available, we offer the largest and most diverse line of QC microorganisms including qualitative, quantitative, CRM, inactivated pathogens, synthetic molecular standards, and more. Visit booth (TBD) to learn how our QC microorganism products can save your laboratory time and money.

Microbiologique **414**
15300 Bothell Way NE
Lake Forest Park, WA 98155, USA
Phone: +1 888.998.4115
www.microbiologique.com

Microbiologique manufactures and distributes the most sensitive test kits for the detection of food allergens, mycotoxins, meat speciation, microbial pathogens, and spoilage organisms. We will validate client's products at no charge for regulatory compliance. Visit us to learn about our new non-dairy milk allergen detection kits.

Microbiology International **920**
5350 Partners Court
Frederick, MD 21703, USA
Phone: +1 301.662.6835 **Fax: +1 301.662.8096**
www.800ezmicro.com

Microbiology International will be exhibiting everything your lab needs for in-house media preparation, sample preparation, enumeration, confirmation, and destruction. Stop by our booth for demonstrations of our spiral plater, colony counter, media preparators/plate pourers, laboratory autoclaves, innovative sample preparation instruments, and a comprehensive line of rapid bacterial screening and identification kits for common food pathogens. We can help make your lab processes EZ!

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Micrology Laboratories LLC **1041**
1301 Eisenhower Drive S
Goshen, IN 46526, USA
Phone: +1 574.533.3351 **Fax: +1 574.533.3370**
www.micrologylabs.com

Micrology Labs is a leader in chromogenic and fluorogenic microbiological media. Easygel™ technology has created simple, easy-to-use, accurate testing kits for varieties of microorganisms (coliforms, *E. coli*, *Salmonella*, mold/yeast, and total counts, etc.). They are ready-to-use for testing your products for microbiological quality in-house. Our products allow analysis of more samples and obtain better results, while keeping costs down. Our new invention, KwikCount™ rapidly detects *E. coli*/coliforms within 8–10 hours, and the Easygel Card™ is an alternative to Petrifilm™ for detecting coliforms, *E. coli*, *Enterococci*, and other microbes.

Midland Scientific, Inc. **446**
1202 S 11th St.
Omaha, NE 68108, USA
Phone: +1 800.642.5263 **Fax: +1 402.346.7694**
www.midlandsci.com

MilliporeSigma **841**
290 Concord Road
Billerica, MA 01821, USA
Phone: +1 800.645.5476
www.sigmaalrdich.com/food

MilliporeSigma is the U.S. life science business of Merck KGaA, Darmstadt, Germany. With 19,000 employees and 72 manufacturing sites worldwide, MilliporeSigma's portfolio spans more than 300,000 products enabling scientific discovery. MilliporeSigma has customers in food and beverage manufacturing, processing, and contract testing industries. The latest acquisition of BioControl Systems Inc., complements Merck's existing products in food pathogen testing, enabling customers access to complete workflow solutions for their testing needs.

MXNS Digital Solutions **514**
111 E Wacker Drive, Suite 2300
Chicago, IL 60601, USA
Phone: +1 312.938.5151
www.merieuxnutrisciences.com

Digital Solutions, powered by Meriéux NutriSciences, offers a dynamic software suite to manage safety, quality, and environmental programs through its QualMap and EnviroMap services. Qualmap is a data-driven software platform targeting the need for multi-system integration, transparency, and visualization. With its flexible and interactive dashboard, users can monitor, interpret, and plan programs around their food safety and quality data. EnviroMap is a comprehensive solution for environmental sampling, covering the entire cycle from historical data analysis to collection scheduling. This secure cloud-based system provides users with effortless systematic tracking and traceability, bringing accountability to your business processes. By going beyond the spreadsheet, Meriéux NutriSciences Digital Solutions can help you manage your supply chain, improve your safety and quality programs, and protect your brand.

National Registry of Food Safety Professionals **1038**
7680 Universal Blvd.
Orlando, FL 32819, USA
Phone: +1 800.446.0257
www.nrfsp.com

National Registry of Food Safety Professionals (NRFSP) offers comprehensive certification programs for managers, both in food safety and HACCP. Nationally accredited by ANSI using CFP standards in the U.S. and ISO 17024 standards globally, NRFSP provides many options for the training and certification of managers and certificate programs for food handlers, as well as diagnostic reporting and tracking of data. Learn more at www.nrfsp.com or call 1.800.446.0257.

NatureSeal, Inc. **829**
1175 Post Road East
Westport, CT 06880, USA
Phone: +1 203.454.1800 **Fax: +1 203.454.0254**
www.natureseal.com

NatureSeal, Inc. is a world leader in fresh produce extension technology. NatureSeal's vitamin/mineral blends maintain the quality of fresh-cut fruit and vegetables, maintaining texture and color, for up to 28 days. Our newest product, FirstStep+10 is a patent-pending produce wash additive for use on fresh-cut produce and produce to be further processed. Developed in cooperation with the USDA, ARS, Food Safety Intervention Technologies Unit, this new technology is highly effective in killing pathogens including *E. coli*, *Listeria* and *Salmonella*. It is FDA approved in the U.S. and approved for use in Canada.

Nelson-Jameson, Inc. **501**
2400 E 5th St.
Marshfield, WI 54449, USA
Phone: +1 800.826.8302 **Fax: +1 715.387.8746**
www.nelsonjameson.com

Nelson-Jameson has been a trusted source of food processing supplies since 1947. Our Buyers Guide for the Food Industry features thousands of items used daily in food plants and includes hard-to-find specialty items. Products include safety and personnel, production and material handling, sanitation and janitorial, processing and flow control, laboratory and QA/QC, bulk packaging and ingredients. The catalog also features a wide assortment of color-coded and metal detectable items to keep your product safe. Headquarters in Marshfield, Wisconsin, other locations in California, Idaho, Pennsylvania, Texas, and Illinois. Call 800.826.8302 or visit: www.nelsonjameson.com to request your FREE copy of our Buyers Guide today!

Neogen Corporation **723**
620 Lesher Place
Lansing, MI 48912, USA
Phone: +1 800.234.5333 **Fax: +1 517.372.0108**
www.foodsafety.neogen.com

Neogen's comprehensive line of rapid food safety products includes ANSR® for *Salmonella*, *Listeria*, *Listeria monocytogenes* and *E. coli* O157:H7 — ANSR is a novel pathogen detection methodology that provides DNA-definitive results in as little as 10 minutes of reaction time; simple and accurate tests for food allergens, including milk, egg and peanut; dairy antibiotics, including the BetaStar® receptor-based lateral

Blue Text - IAFP Sustaining Member

2017 Exhibitors

flow assay for the rapid detection of beta-lactam residuals in milk; spoilage organisms (e.g., yeast and mold), including the Soleris® and BioLumix® optical microbial systems; mycotoxins; and sanitation, including the AccuPoint® Advanced ATP system.

NoroCORE (USDA-NIFA Food Virology Collaborative) **821**
1017 Main Campus Drive, Suite 1500
Raleigh, NC 27695-7407, USA
Phone: +1 919.515.1222 **Fax: +1 919.515.3023**
norocore.ncsu.edu

The USDA-NIFA Food Virology Collaborative, or NoroCORE, is a food safety initiative that focuses on outreach, research, and education in the field of food virology. NoroCORE's ultimate goal is to reduce the burden of foodborne disease associated with viruses, particularly norovirus. NoroCORE is a large, multi-disciplinary team of researchers, with numerous stakeholders from industry, academia, and the government. We are working in an integrated manner to develop improved tools, skills, and capacity to understand and control foodborne virus risks. NoroCORE's not just about research – it includes extensive outreach and education components.

Northland Laboratories **625**
1061 Feehanville Drive
Mount Prospect, IL 60056, USA
Phone: +1 847.272.8700 **Fax: +1 847.272.2348**
www.northlandlabs.com

See how at Northland Laboratories, your matters are what matter most to us. Our state-of-the-art laboratories deliver reliable, fast, and accurate microbiology, chemistry, sensory, process validation, and specialty testing to help you verify food quality and food safety.

With Northland Laboratories, you can rely on quality testing and responsive service that make your food quality and food safety tests a priority every time. ISO 17025 Accredited.

Novolyze **808**
185 Alewife Brook Parkway
Cambridge, MA 02138, USA
Phone: +1 617.500.8536
www.novolyze.com

Novolyze is a biotechnology company specializing in solutions for the control of microbiological hazards. We have developed dry, ready-to-use surrogate microorganisms to perform in-plant preventive control validation studies. Our surrogates have been validated to have greater thermal resistance than *Salmonella*, *Cronobacter sakazakii*, and other pathogens in a wide variety of low-water activity foods. Since they are not pathogenic, they can be safely used in-plant to validate the efficacy of a process, a cornerstone requirement of FSMA. Our team is able to support each stage of a validation project with offices in the U.S. and Europe.

NSF International **412**
789 N Dixboro Road
Ann Arbor, MI 48105, USA
Phone: +1 734.769.8010
www.nsf.org

Known as The Most Trusted Name in Food Safety™, NSF International has been helping businesses in the agriculture, processing, food equipment, restaurant, and retail industries navigate the food safety, quality, and regulatory environment for 70 years. The NSF Applied Research Center (ARC) is NSF International's research and development arm, providing custom R&D services. Services include expert testing, method development, product validation/commercialization, and risk assessment. The ARC furthers NSF's mission of public health and safety by supporting scientific innovation and leadership.

ARC provides an independent AOAC accredited laboratory and consulting services. For more information, go to www.NSFresearch.org.

NSI Lab Solutions **621**
7212 ACC Blvd.
Raleigh, NC 27617, USA
Phone: +1 800.234.7837 **Fax: +1 919.789.3019**
www.nsilabsolutions.com

Manufacturer of Certified Reference Materials: Microbe Cocktails for Indicators, Pathogens and Food Matrix Microbiology CRMs. NSI Lab Solutions is an accredited PT provider too! Accredited to ISO Guide 34, ISO Guide 17025, ISO 9001, and ISO Guide 17043. www.nsilabsolutions.com. +1 800.234.7837.

Ocean Optics, Inc. **409**
830 Douglas Ave.
Dunedin, FL 34698, USA
Phone: +1 727.902.5294 **Fax: +1 727.733.3962**
www.oceanoptics.com

Ocean Optics is helping to take a bite out of food fraud with a full menu of spectrometers, sensors and accessories for applications involving food and beverage processing, authentication and packaging. Our miniature spectrometers are compact, portable and flexible, with systems available for the lab, field and line.

With food fraud now a global problem, authenticating goods – from fruit and honey to spices and spirits – requires robust equipment based on sound science. Modular spectroscopy fills that role, with absorbance, reflectance, fluorescence and Raman spectroscopy systems used effectively for authentication and safety testing of foods.

OCEASOFT Inc. **431**
250 Philips Blvd., Suite 200
Ewing, NJ 08618, USA
Phone: +1 609.589.1668 **Fax: +1 609.589.1669**
www.oceasoft.com

OCEASOFT develops wireless connected solutions for monitoring and tracking critical physical parameters such as temperature, humidity… to ensure the integrity and compliance of perishable goods during storage, production, and transportation in food, life sciences, and transport industries. OCEASOFT provides a full vertical offering from sensors to data integration in customer information systems. OCEASOFT has invested heavily in R&D for many years by integrating new technologies and networks, including Sigfox™ and LoRaWAN™ technologies. With ISO 9001 certification and ISO/IEC 17025 COFRAC accreditation of its in-house laboratory, and its FSMA & EN 12830 Compliances, OCEASOFT applies quality as its everyday guiding principle.

Orkin **905**
2170 Piedmont Road NE
Atlanta, GA 30324, USA
Phone: +1 800.ORKIN.NOW
www.orkincommercial.com

Orkin Food Safety Precision Protection™: Pest control down to a science™. Orkin's Food Safety Precision Protection™ program is designed specifically for the highly regulated food processing industry. It comes complete with Orkin Gold Medal QA™, a system of comprehensive documentation and audit support anytime you need it. To learn more or to request a free consultation, call 1.800.ORKIN NOW or visit us at www.orkincommercial.com.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Pall Corporation **639**
25 Harbor Park Drive
Port Washington, NY 11050, USA
Phone: +1 866.905.7255
www.pall.com/foodandbev

Pall Corporation is a global filtration, separation and purification leader providing solutions to meet the critical fluid management needs of customers across the broad spectrum of life sciences and industry. We work with our customers to advance health, safety and environmentally responsible technologies.

Pall Food and Beverage provides products and services to ensure product quality and maintain process reliability in beverage and food production. Our solutions also assist in consumer protection, the reduction of operating costs and waste minimization.

Partnership for Food Safety Education **947**
2345 Crystal Drive, Suite 800
Arlington, VA 22202-4813, USA
Phone: +1 202.220.0651
www.fightbac.org

The non-profit Partnership develops and promotes effective education programs to reduce foodborne illness risk for consumers. We support health and food safety educators with the tools they need to stay strong on the front lines of food safety. www.fightbac.org.

Pittcon 2018 **747**
300 Penn Center Blvd., Suite 332
Pittsburgh, PA 15205, USA
Phone: +1 412.825.3220 **Fax: +1 412.825.3224**
www.pittcon.org

Pittcon, the leading conference and exposition for laboratory science, shines light on new technology and scientific research in a variety of applications, including food science. This event offers a robust Technical Program, skill-building Short Courses, a hands-on Exposition and more. Pittcon 2018 takes place Feb 26–Mar 1 in Orlando, FL at the Orange County Convention Center. Visit the Pittcon website to learn more: www.pittcon.org.

PolySkope Labs **444**
755 Research Pkwy., Suite 460
Oklahoma City, OK 73104, USA
Phone: +1 805.443.0725
www.polyskopelabs.com

Prestodiag **328**
1 Mail du Professeur Georges Mathe
Villejuif, 94800, France
Phone: +33 68.770.0023
www.prestodiag.com

Prestodiag is a French SME specialized in the conception and development of highly innovative solutions for the rapid detection and identification of pathogenic bacteria. Prestodiag targets the large-scale commercialization of a unique, patented product, PrestoRT which will allow In-Shift (less than 8 hours) pathogenic bacteria detection in food products and environment, directly at the food processing plants. Thanks to its ability to continuously monitor bacteria growth directly inside the enrichment bag, PrestoRT will enable plant managers to make quick decisions and avoid costly hold inventory, product recalls and raw product waste.

Procter & Gamble Professional **649**
2 P&G Plaza, TE-6
Cincinnati, OH 45202, USA
Phone: +1 513.983.6301
www.pgpro.com

P&G Professional is the away-from-home division of Procter & Gamble, serving the foodservice, building cleaning and maintenance, healthcare, hospitality, and grocery/retail industries. P&G Professional offers complete solutions utilizing its parent company's scale, with trusted brands such as Dawn® Professional, Mr. Clean® Professional, Tide® Professional, Swiffer® Professional, Comet®, Spic and Span®, Febreze®, and P&G Pro Line®. www.pgpro.com.

PrimusLabs **544**
2810 Industrial Pkwy.
Santa Maria, CA 93455-1812, USA
Phone: +1 805.922.0055 **Fax: +1 805.922.2462**
www.PrimusLabs.com

For 30 years, Primus Group has remained the single point of contact in food safety for microbiological and pesticide residue testing, data management/analytics, consulting, and audit scheme ownership. PrimusLabs utilizes state-of-the-art technology, degreed technical staff, and QA oversight to raise your results to an actionable level. Azzule Systems offers data management solutions through the Azzule Supply Chain Program (SCP). By blending audit and laboratory data with analytics, the SCP's tools enhance the buyer's confidence in their suppliers and overall food safety program. Turn to PrimusLabs and Azzule for all your FSMA compliance and food safety needs.

PureLine **700**
1241 N Ellis St.
Bensenville, IL 60106, USA
Phone: +1 847.732.7253
www.pureline.com

PureLine specializes in the generation and application of chlorine dioxide. PureLine understands that food safety is paramount for any food processor. For 20 years, PureLine has been providing both large and small food processors with customized chlorine dioxide sanitation solutions. PureLine offers a full-line of chlorine dioxide products and services, including generators, Pure3000(ppm) solution, PureVista, MobileClean and pHlor-San services. In addition, PureLine will thoroughly train your facility personnel on all aspects of safe and effective chlorine dioxide treatments.

Puritan Medical Products Company, LLC **744**
P.O. Box 149
31 School St.
Dover Foxcrofty, ME 04443, USA
Phone: +1 207.876.3311
www.puritanmedproducts.com

Puritan Medical Products Co., LLC is known worldwide as the most trusted manufacturer from food production to cosmetics to pharmaceuticals, since 1919. This fact has resulted in an ever-expanding line of products that takes advantage of the most up-to-date materials and manufacturing processes to deliver innovative solutions for even the most demanding applications.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Q Laboratories, Inc. **904**
1400 Harrison Ave.
Cincinnati, OH 45214-1606, USA
Phone: +1 513.471.1300 **Fax: +1 513.471.5600**
www.qlaboratories.com

Q Laboratories, Inc. has served the food and beverage industries since 1966, offering comprehensive microbiology and chemistry laboratory, and research and development services. An ISO/IEC 17025 Accredited, GMP/GLP compliant laboratory, Q Laboratories, Inc. can provide services to meet all of your testing and quality assurance needs. Capabilities include: Pathogen Detection, Microbial Identification (MALDI-TOF), Nutritional Analysis, Allergen Screening, Challenge Studies, Shelf-Life Studies, Environmental Monitoring Programs, and Method Validation/Verification studies to help test kit manufacturers demonstrate proficiency of proprietary methods. Please contact Q Laboratories, Inc. to discover how we can help you continue to produce safe, high quality products.

QA Line, LLC **606**
9369 W Pandion Court
Boise, ID 83714, USA
Phone: +1 559.217.8909 **Fax: +1 559.217.8909**
www.qaline.net

QA Line, LLC specializes in lab design, development, equipment, supplies and consumables for industrial (Food) Microbiology and Chemistry labs. We have built labs from 400 to 20,000+ sq ft for a wide variety of food producers and reference labs. QA Line, LLC is unique in our ability to help with all aspects of lab design, lab development, construction, custom equipment, unique media solutions, lab procedures, and ISO 17025 preparation. Talk to us about how we can save you significant $$ while improving your QA data by building/utilizing your in-house lab. Come by for a free ROI on your current lab usage compared to in-house lab costs.

QualiTru Sampling Systems **428**
471 Hayward Ave. North
Oakdale, MN 55128, USA
Phone: +1 651.501.2337
www.qualitru.com

QualiTru Sampling Systems is the most trusted brand when it comes to aseptic sampling of your most critical fluid products. We have an ongoing commitment to the industry by providing an accurate sampling system for all your fluid sampling needs. Our patented products and processes allow for multiple sterile sampling channels into sterile sampling containers, thus eliminating the risk of sampling contamination and ensures the most accurate sampling techniques on the market today.

Quality Assurance & Food Safety Magazine **724**
5811 Canal Road
Valley View, OH 44125, USA
Phone: +1 216.393.0300 **Fax: +1 215.525.0515**
www.qualityassurancemag.com

QA Magazine, a bi-monthly publication from GIE Media, provides digital and print publications for managers and professionals in the food and beverage processing industry with a specific focus on food safety, quality, and defense. Filled with practical insights and analysis of plant processes, practices, regulation, and current issues, the QA Media family—including our print publication, Website, and e-newsletters—addresses the growing market need for targeted information in these key areas. For more information, visit www.qualityassurancemag.com.

R & F Products **508**
2725 Curtiss St.
Downers Grove, IL 60515-4002, USA
Phone: +1 630.969.5300 **Fax: +1 630.969.5303**
www.rf-products.net

R & F Products is the developer/producer of chromogenic media in the forms of powdered and prepared plates and enrichment broths for food, environmental and clinical pathogens. R & F Products' mission is to produce unique and innovative chromogenic plating media and enrichment broths that will enhance and improve laboratory efficiency, accuracy, sensitivity and specificity for pathogen isolation. R & F Products has 13 media patent/patent applications for chromogenic media isolating the following pathogens: *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Salmonella*, *Bacillus cereus/Bacillus thuringiensis*, *Enterobacter sakazakii* (*Cronobacter* sp.), *Bacillus anthracis*, *Listeria* sp./*Listeria monocytogenes*, *Listeria* sp., *Shigella* sp., *Campylobacter jejuni/C. coli*, *Yersinia pestis*, and non-O157 STEC.

Randox Food Diagnostics **906**
515 Industrial Blvd., Bardane Industrial Park
Kearnysville, WV 25430, USA
Phone: +1 304.728.2890
www.randoxfood.com

Randox Food Diagnostics is an international supplier of food safety analysers and reagents for the detection of mycotoxins, antimicrobials, growth promoting hormones and drugs of abuse in animals and produce.

The Randox product range includes the Biochip Array Technology (BAT) analyser, the Evidence Investigator and a range of ELISAs. BAT allows simultaneous screening of multiple analytes from a single sample, offering major efficiencies in comparison to traditional ELISA. This technology is proven to be applicable in a wide range of settings including; drug residue screening, private/public research applications, clinical laboratories, and veterinary laboratories.

Reading Thermal **726**
7 Corporate Blvd.
Sinking Spring, PA 19608, USA
Phone: +1 610.678.5890
www.readingthermal.com

The SCORPION® 2 Profiling System has become a standard in the baking industry providing a complete measurement system to capture the four key baking parameters: Temperature, Air Velocity, Heat Flux and Humidity. With the SCORPION® 2 System, you can measure and analyze baking, drying and cooling thermal processes. The SCORPION® 2 enables you to monitor real-time in-process conditions giving you the critical information you need to correct problems and maintain optimum process conditions.

Remco Products Corp. **321**
4735 W 106th St.
Zionsville, IN 46077, USA
Phone: +1 317.876.9856 **Fax: +1 317.876.9858**
www.remcoproducts.com

Remco Products has been playing a supportive role in improving food safety through manufacturing and distributing top quality, color-coded, cleaning and material handling tools to food processing environments and retail food facilities, through distributors in the United States for 30 years.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

Remco helps those who use color-coded tools navigate the ever-changing landscape of regulations, guidance and standards, as well as supporting those who have never used color-coding as a tool before. We provide support in the form of food safety educational articles, online and in white paper form, as well as providing on-site complimentary consultation. Our goal – color-coded tools made simple.

Rentokil Steritech **1010**
1125 Bershire Blvd., Suite 150
Reading, PA 19610, USA
Phone: +1 610.372.9700 **Fax: +1 610.375.3808**
www.rentokil-steritech.com

Rentokil Steritech is the North American brand of Rentokil Initial, the world's largest commercial pest control company, operating in more than 60 countries globally. In the United States, Rentokil Steritech's three regional brands, Ehrlich, Presto-X, and Western Exterminator, have served pest control customers for over 90 years. By utilizing Integrated Pest Management (IPM) practices and proven methods, we are able to guarantee early detection, accurate monitoring and precise product application to get eliminate and prevent your pest problems. Our team of professionally trained experts provides a full range of pest management solutions to our customers, delivered with world class service.

ReposiTrak **925**
299 S Main St., Suite 2370
Salt Lake City, UT 84111, USA
Phone: +1 435.645.2324
www.repositrak.com

ReposiTrak® provides food retailers and suppliers with a robust solution to help them protect their brands and remain in compliance with regulatory requirements. Additionally, ReposiTrak enables traceability as products and their ingredients move between trading partners and now helps customers source new compliant suppliers and drive sales through MarketPlace. More information is available at www.repositrak.com.

RGF Enivronmental Group, Inc., Food Sanitation Division **327**
1101 West 13th St.
Riviera Beach, FL 33404, USA
Phone: +1 561.848.1826 **Fax: +1 561.848.9454**
www.rgf.com/food-sanitation

RGF's chemical free, very effective and safe advanced oxidation technology is getting lots of attention and reaching more markets every day, including Chipotle and its suppliers and the U.S. Embassy in Baghdad. Our patented oxidation gas called Photohydroionization® is used to treat microbial contamination in the air, equipment surfaces and the direct treatment of product. It has proven to be a potent method of pathogen control for a host of applications, including beef, pork, poultry, seafood, fruits and vegetables, as well as bakery goods. Change the way you think about food safety. Contact RGF today.

Rheonix Food & Beverage **1009**
10 Brown Road, Suite 103
Ithaca, NY 14850, USA
Phone: +1 607.257.1242
www.rheonix.com

The Rheonix Encompass *Optimum*™ workstation is a fully automated system that provides sample-to-answer, multiplexed testing of food, beverage and environmental samples. The system can detect up to 22 targets per sample with a single pipette step, enabling technicians to place 24 enriched samples on the workstation, press "go," and walk away. Rheonix' Beer SpoilerAlert™ Assay detects a range of bacterial, yeast and hop-resistance targets in beer samples. Additional Rheonix multiplexed food pathogen and spoilage assays are available for evaluation, as well as a pan-avian influenza assay developed by the Canadian Food Inspection Agency for use on the Encompass *Optimum*.

RizePoint **721**
2890 E Cottonwood Pkwy., #250
Salt Lake City, UT 84121, USA
Phone: +1 801.285.9803 **Fax: +1 801.401.7168**
www.rizepoint.com

Only RizePoint provides the tools, technology, and expertise to proactively safeguard enterprise compliance. RizePoint mobile and cloud-based software helps organizations improve the quality, safety, and sustainability of their products, services and facilities. RizePoint's software is used by 5 of the top 8 hospitality brands and 5 of the top 8 food service brands. Considered the industry standard for food service, hospitality, and retail, RizePoint mobile and cloud-based solutions serve nearly 2 million audits with 200 million questions answered annually. Visit www.rizepoint.com.

Rochester Midland Corporation – Food Safety Division **520**
155 Paragon Drive
Rochester, NY 14624, USA
Phone: +1 585.336.2200 **Fax: +1 585.336.2357**
www.rochestermidland.com

Rochester Midland Corporation provides a HACCP-based food safety program that offers sanitation solutions to food and beverage manufacturers. Our BrandGuard Program® is made up of seven steps which are all critical components of a consultative and effective food safety program. Built into each step are the environmental, social and financial legs of sustainability. With our 120+ years of experience, we have formed long-term partnerships with our customers to provide them with the integrated solutions that will protect their business financially.

Roka Bioscience **521**
20 Independence Ave., 4th Floor
Warren, NJ 07059, USA
Phone: +1 855.765.2246 **Fax: +1 908.604.2008**
www.rokabio.com

Roka Bioscience is a molecular diagnostics company focused on developing and commercializing advanced testing solutions for the food safety testing market. Our Atlas Detection Assays incorporate our advanced molecular technologies and are performed on our "sample-in, result-out" Atlas System that automates all aspects of molecular diagnostic testing on a single, integrated platform. The Atlas System and Detection Assays are designed to provide our customers with accurate and rapid test results with reduced labor costs and improved laboratory efficiencies. For more information, visit www.rokabio.com.

Romer Labs **600**
130 Sandy Drive
Newark, DE 19713, USA
Phone: +1 302.650.9217 **Fax: +1 302.781.6378**
www.romerlabs.com

Romer Labs® is a leading provider of diagnostic test solutions for the food industry. We specialize in Analytical Services and Rapid Test Kits for the detection of food pathogens, food allergens, mycotoxins, drug residues, and GMOs. Our broad range of innovative tests and services

Blue Text - IAFP Sustaining Member

2017 Exhibitors

play a pivotal role in integrated food safety management programs. Our fundamental objective at Romer Labs® is to provide cost-effective, validated products and services for "Making the World's Food Safer."

Royalty Roofing **432**
2099 E Tipton St.
Seymour, IN 47274, USA
Phone: +1 812.523.8392 **Fax: +1 812.523.7553**
www.royaltyroofing.com

Established in 1986, Royalty Roofing is a full-service commercial, industrial and institutional roofing company that specializes in providing prompt service, watertight roofing systems, and the strongest warranties for the Food Industry.

Services include roof maintenance programs, leak detection/repair and roof installations. Additional information may be found on our website at www.royaltyroofing.com and/or you may contact Dale Sventeck, Vice President at +1 800.303.8392.

RQA, Inc. **1024**
10608 W 163rd Place
Orland Park, IL 60467, USA
Phone: +1 630.512.0011
www.rqa-inc.com

RQA is the global leader in providing quality assurance and food safety solutions to the food industry, including Retail Quality Audits, Counterfeit Investigation, Consumer Complaint Retrieval, Product Retrieval and Recall Services. With our Crisis Planning & Management and RQA's Food Forensics™ contaminant investigation services, we offer the most comprehensive quality and risk management support available. Whether you need to assess your product quality and market conditions at retail, retrieve consumer complaint or competitive samples, perform vulnerability assessments as part of your Food Defense Plan development, optimize your Crisis Management capabilities, or even execute a product recall, RQA can help.

Safe Food Alliance **646**
710 Striker Ave.
Sacramento, CA 95834, USA
Phone: +1 916.561.5900
www.safefoodalliance.com

Safe Food Alliance is a technical service organization focused on addressing the needs of the food industry with a special emphasis on California's specialty crops. With rapidly growing expectations from regulators, consumers, and retail outlets, we help companies become more proactive in their approach to food safety practices. Safe Food Alliance offers technical services to growers, packers, processors and food manufacturers to aid in their efforts to maintain the highest standards in food safety.

SafetyChain Software **745**
711 Grand Ave., Suite 290
San Rafael, CA 94901, USA
Phone: +1 888.235.7540
www.safetychain.com

SafetyChain Software is the leading provider of food safety and quality management solutions that help companies reduce risk and control costs, while ensuring compliance and audit readiness. SafetyChain's suite of management solutions – Supplier Compliance, Food Safety, Food Quality, CIP Sanitization & Materials Loss – help our customers throughout the supply chain gain the program visibility and data intelligence needed to improve performance across their operations. www.safetychain.com.

Sample6 **505**
12 Gill St, Suite 4200
Woburn, MA 01801, USA
Phone: +1 617.393.7600
www.sample6.com

Sample6 is making food safer by delivering two powerful tools to the food industry, Sample6 DETECT™ and Sample6 CONTROL™. Sample6 DETECT is an enrichment-free, on-site, in-shift pathogen diagnostic. This advancement paired with powerful analytics from Sample6 CONTROL will shift food safety from reaction to prevention, which is the primary goal of the FSMA and HACCP initiatives in the U.S. Food processors from meat, seafood, dairy, produce, and dry goods have already partnered with Sample6 in order to integrate these revolutionary products into their plants. For more information, please visit www.sample6.com.

Sealed Air Diversey Care **507**
1410 N Newman Road
Racine, WI 53406, USA
Phone: +1 262.497.9681
www.sealedair.com

Diversey Care: The well-being of people everywhere depends on a sustainable world. Sealed Air's Diversey Caredivision offers solutions for infection prevention, kitchen hygiene, fabric care, building care, and consulting. Our solutions protect brands, deliver efficiency, and improve performance for our partners in health care, food service, retail, hospitality and facility services. Our leading expertise integrates product systems, equipment, tools and services into innovative solutions that reduce water and energy usage and increase productivity. By delivering superior results, we help create profitable, sustainable enterprises for a cleaner, healthier future.

Selective Micro Technologies, LLC **338**
6200 Avery Road, Suite A
Dublin, OH 43016, USA
Phone: +1 855.256.8299 **Fax: +1 614.467.3559**
www.selectivemicro.com

Selective Micro Technologies provides 99.9% pure chlorine dioxide for your food safety needs. Our patented membrane technology allows you to simply add water, generate, and use on site. Our products are EPA-registered food contact sanitizers, disinfectants, and deodorizers, as well as FDA-approved food contact notifications 445, 645, and 1578 which allows direct applications of antimicrobial rinse to most products without need for a potable rinse. So, our product can be used to sanitizer/disinfect food processing equipment/facilities, or applied directly to the food itself. Plus, our products are OMRI registered, and NSF certified!

Seward Limited **541**
155 Keyland Court
Bohemia, NY 11716, USA
Phone: +1 44 1903.524.617
www.seward.co.uk

Seward manufactures the world's leading range of Stomacher® paddle blenders used in sample preparation for microbiological analysis. For accurate results, choose the best in sample preparation.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

SGS **640**
201 Route 17 North
Rutherford, NJ 07070, USA
Phone: +1 201.508.3000
www.sgs.com/foodsafety

SGS is the world's leading inspection, verification, testing, and certification company. We are recognized as the global benchmark for quality and integrity. With more than 90,000 employees, we operate a network of more than 2,000 offices and laboratories around the world. SGS offers a wide range of solutions covering the entire food supply chain from primary production and manufacturing to retailing and hospitality. With a comprehensive range of independent inspection, testing, training, certification, and consultancy services specific for the food sector, we help companies worldwide to monitor and validate safety, quality, and sustainability. Recognized as the global benchmark for quality and integrity, we provide competitive advantage, drive sustainability, and deliver trust.

Shenzhen Bioeasy Biotechnology Co., Ltd. **333**
NO. 2-1, 1st Liuxian St., Xin'an Road Baoan
Shenzhen, Guangdong Province 518101, China
Phone: + 86 755.2794.8546 **Fax: +86 755.2794.8417**
www.bioeasy.com

Bioeasy-as members of IAFP and AOAC, we are dedicated to the supply of food safety rapid test solution, offering reliable, accurate, fast and affordable detection solutions to the global food industry, assist the food company and enforcement department improve their food safety control! The products we offer include the drug residues rapid test for milk/beef/pork/poultry/seafood; Quantitative/Qualitative rapid test kit for Mycotoxins; illegal additive and pesticides rapid test kits, etc.; Thanks to our strong R&D capabilities, we also supply customized solutions for our clients. Most of our tests have been validated in EU or by AOAC-RI.

Sika Industrial Flooring **613**
201 Polito Ave.
Lyndhurst, NJ 07041, USA
Phone: +1 800.933.7452 **Fax: +1 800.294.6408**
www.sikafloorusa.com

Sika's high performance, FSMA-compliant floor and wall systems are trusted and relied upon by designers and facility managers for their outstanding performance, durability, easy maintenance, and aesthetic enhancement in the food and beverage.

Sikafloor is a hygienic and durable polymer product line specifically formulated to create sturdy, seamless floor surfaces that are long-lasting and exhibit unparalleled resistance to hazards in industrial settings. Aesthetic and functional benefits include excellent chemical, mechanical and slip resistance, and fast-cure options for quick turnarounds. Sika also offers a diverse selection of epoxy and urethane floor coatings and resurfacers that comply with air quality mandates.

Solus Scientific Solutions Ltd. **909**
9 Mansfield Network Centre, Millenium Business Park
Concorde Way
Mansfield, NG19 7J2, United Kingdom
Phone: +44 1623.429701 **Fax: +44 1623.620977**
www.solusscientific.com

Solus provides tools which protect the reputation of thousands and the health of millions all over the world, by the production of pathogen detection systems designed specifically for the food safety industry. Our products have been developed in our state-of-the-art laboratory and are manufactured in our UK production facility. These tests, when used in conjunction with automation, provide an extremely productive method for the detection of *Salmonella* or *Listeria*. They have AOAC and AFNOR approval and are implemented by testing laboratories worldwide.

Coming soon – Solus One, providing all the benefits of our existing products and additionally producing next-day results.

Springer Nature **411**
233 Spring St.
New York, NY 10013, USA
Phone: +1 212.460.1500
www.springernature.com

Springer Nature is one of the world's leading global research, educational and professional publishers, home to an array of respected and trusted brands providing quality content through a range of innovative products and services. Springer Nature is the world's largest academic book publisher and numbers almost 13,000 staff in over 50 countries. www.springernature.com.

SQFI (Safe Quality Food Institute) **734**
2345 Crystal Drive, Suite 800
Arlington, VA 22202, USA
Phone: +1 202.220.0660
www.sqfi.com

The Safe Quality Food (SQF) program is recognized by retailers and foodservice providers around the world as a rigorous, credible food safety management system. It is the only certification system recognized by the Global Food Safety Initiative (GFSI) that offers certificates for primary production, food manufacturing, distribution and agent/broker management. This enables suppliers to assure their customers that food has been produced, processed, prepared and handled according to the highest possible standards, at all levels of the supply chain. Additionally as a division of the Food Marketing Institute (FMI), the SQF program incorporates continual retailer feedback about consumer concerns. This information is passed on to SQF certified suppliers, keeping them a step ahead of their competitors.

STEC CAP Grant **329**
1880 N 42nd St., University of Nebraska
Lincoln, NE 68583, USA
Phone: +1 402.472.8564 **Fax: +1 402.472.8564**
www.stecbeefsafety.org

Shiga-toxin producing *Escherichia coli* (STEC) are a serious threat to the food supply and to public health. Most outbreaks are caused by ingestion of contaminated food or direct contact with fecal material from cattle or water and other ruminants. A $25 million grant coordinated through USDA NIFA was awarded to the University of Nebraska, with a team of 50+ investigators from some 15+ institutions/research partners. The team will share their findings on how STEC contamination and outbreaks occur and spread through the beef production/processing chain, and how science/technology and education/outreach can best be used to better inform food safety professionals and consumers and mitigate STEC risks.

Sterilex Corporation **601**
111 Lake Front Drive
Hunt Valley, MD 21030, USA
Phone: +1 443.541.8800 **Fax: +1 443.541.8803**
www.sterilex.com

Sterilex develops proprietary, sanitation technologies designed to remove biofilm, provide high level disinfection, and enhance sanitation. Sterilex award-winning products are considered a best practice for the control of harmful organisms such as *Listeria*, *E. coli* and *Salmonella* on a wide variety of food contact and environmental surfaces. Sterilex products are used in a variety of sanitation applications including foaming

Blue Text - IAFP Sustaining Member

and soaking programs, drain treatment, spiral freezer sanitization, and microbial threat detection. Sterilex technologies have proven to eliminate environmental sanitation challenges and increase shelf life, resulting in an enhanced sanitation program. Visit us to learn more about innovative solutions for microbial control.

STOP Foodborne Illness **430**
4809 N Ravenswood Ave., Suite 214
Chicago, IL 60640, USA
Phone: +1 773.269.6555 **Fax: +1 773.883.3098**
www.stopfoodborneillness.org

STOP Foodborne Illness is a national nonprofit public health organization dedicated to the prevention of illness and death from foodborne pathogens by:

- Advocating for sound public policy
- Building public awareness
- Assisting those impacted by foodborne illness

Synbiosis **344**
5103 Pegasus Court, Suite L
Frederick, MD 21704, USA
Phone: +1 800.686.4407 **Fax: +1 301.631.3977**
http://synbiosis.com

TandD US, LLC. **435**
534 N Guadalupe St., #32886
Santa Fe, NM 87501, USA
Phone: +1 518.669.9227
www.tandd.com

T&D Corporation manufactures a comprehensive line of wireless and stand-alone data loggers with innovative web-based data collection, remote monitoring and notification features, included in the product lineup are models that incorporate Wi-Fi connectivity for automatic uploading of data to the company's free WebStorage Service, where customers can view, share and archive their recorded data without paying monthly fees. T&D Corporation, the world's leading supplier of wireless data loggers, and has been engaged in the design, development and manufacture of high reliability, high quality electronic measurement systems since 1986.

Thermo Fisher Scientific **439**
12076 Santa Fe Trail Drive
Lenexa, KS 66215, USA
Phone: +1 800.255.6730 **Fax: +1 800.864.4739**
www.thermofisher.com

Thermo Fisher Scientific is the world leader in serving science. Our mission is to enable our customers to make the world healthier, cleaner and safer. Through our Thermo Scientific and Applied Biosystems brands, we offer complete solutions for each step of your microbiological food-safety testing workflow with market-leading molecular instrumentation, sample preparation capability, and PCR technology for food pathogen detection, meat speciation and GMOs. Positioned to meet your changing needs, we can help you to remain adaptive, responsive, and competitive. To find out more stop by Booth #439, visit www.thermofisher.com/food microsolutions or join our blog at www.thermofisher.com/examiningfood.

Timestrip **847**
Sheraton House, Castle Park
Cambridge, CB3 0AX, United Kingdom
Phone: +44 1223.911863
www.timestrip.com

Timestrip produces high-tech, low cost visual indicators of time and temperature. Timestrip temperature monitoring labels make tracking temperature breaches across a multitude of cold chain food industry applications a simple, cost-effective process. In fact, we offer the most cost-effective solution of our type in food standard and food safety monitoring, which is why our technology has already been adopted by a number of innovative businesses. Our precise, efficient, user-friendly temperature indicator labels are helping to ensure effective cold chain management around the world. Timestrip® – the smart way to measure time and temperature™

U.S. Pharmacopeia **809**
12601 Twinbrook Pkwy.
Rockville, MD 20852, USA
Phone: +1 301.816.8559
www.usp.org

USP improves global health through public standards and related programs to help ensure the quality and safety of medicines and foods. USP's Food Program is a global resource for food integrity and safety solutions including science-based standards, tools, and services, such as the Food Chemicals Codex, reference materials, the Food Fraud Database and food fraud mitigation consulting to improve confidence in the global food supply chain.

USDA National Agricultural Library Food Safety Research Information Office **822**
10301 Baltimore Ave., Room 108-H
Beltsville, MD 20705, USA
Phone: +1 301.504.5515
www.nal.usda.gov/fsrio

The Food Safety Research Information Office (FSRIO) supports the research community by collecting, organizing & disseminating food safety information in accordance with the Agricultural Research, Extension, and Education Reform Act of 1998. Our mission is to provide the food safety research community and general public with information on publicly and privately funded food safety research. FSRIO works to assist the federal government and private research entities in the assessment of food safety research needs and priorities, and to prevent unintended duplication of food safety research.

Varcode **730**
396 Washington St., Suite 122
Wellesley, MA 02481, USA
Phone: +1 888.234.2012 **Fax: +1 781.507.9483**
www.varcode.com

Varcode is a global cold chain innovator. Our FreshCode™ technology is a low cost and easy-to-implement solution that revolutionizes cold chain monitoring. FreshCode combines patented labels with software for smartphones/barcode scanners plus a cloud-based management and reporting system. The result is a new and cost-effective way to ensure the safety of meats, seafood, produce, vaccines, and many other temperature-sensitive products.

FreshCode solution Features and Benefits:

- Gap-Free Monitoring – Monitors across hand-offs and re-palletization, and can be utilized at the case or box level.
- Simple to Use – Scannable by anyone in your supply chain, without subjective interpretation.
- Actionable Results – Instant feedback and instructions, configurable to anyone in the supply chain.
- Easy to Deploy – Immediately deployable by partners/suppliers without purchasing new equipment.
- Configurable to Your Cold Chain – Meets the requirements of almost any cold chain requirements.
- Low cost – Complete cold chain monitoring at a fraction of the cost of other systems.

Blue Text - IAFP Sustaining Member

2017 Exhibitors

VM Products **336**
P.O. Box 211385
Bedford, TX 76095, USA
Phone: +1 888.758.9513 **Fax: +1 817.479.2471**
www.vmproducts.com

VM Products has developed and manufactured high quality, innovative products for the professional pest management industry since 2003. We are continually developing new and more advanced products to stay ahead of the ever-changing market conditions and to utilize the very latest in technology.

Our newest product, VM Now® is an electronic monitoring system that works 24/7. It enables tracking and trending of data to provide early warning of the risk of pest hazards or changing conditions fitting into FSMA's requirement for Hazard Analysis and Risk-based Preventive Controls.

Stop by our booth to learn more about this state-of-the-art technology.

Weber Scientific **812**
2732 Kuser Road
Hamilton, NJ 08691, USA
Phone: +1 800.328.8378 **Fax: +1 609.584.8388**
www.weberscientific.com

On display is the revolutionary new 3–4 hour foodproof® yeast and mold quantification PCR LyoKit for dairy products. Finally you get results in hours instead of days. Also new are the Peel Plate® microbial tests, including Aerobic Plate Count (AC), Coliform and *E. coli* (EC), Coliform (CC), *Enterobacteriaceae* (EB) and Yeast and Molds (YM). The AC and EC Plates are AOAC-RI and PMO approved. Plates are ready-to-use – just add sample. No spreading device is needed. The sample wicks rapidly to cover entire surface. The interlocking thin plates stack readily during incubation. Colony development is easily quantified by color.

And NEW: AllergenControl™ Lateral Flow Device (LFD) Detection Kits. These kits have many unique benefits, including kits that are available for either environmental surface tests or food product tests. Buy only what you need. Available in packs of 10 or 25. Added security of Competitive line to prevent false negatives. Wide range of kits available for specificity. Overall, 44 kits are available. Many other products are on display.

Whirl-Pak **510**
901 Janesville Ave.
Fort Atkinson, WI 53538, USA
Phone: +1 800.558.9595
www.whirl-pak.com

Manufacturer of Whirl-Pak sterile laboratory sample bags for transporting and processing samples for QA testing, product analysis, and other laboratory applications. Manufactured in the USA since 1959, Whirl-Pak is the global leader sterile laboratory sampling bags.

World Bioproducts **627**
P.O. Box 947
Bothell, WA 98041-0947, USA
Phone: +1 877.260.6441 **Fax: +1 888.714.6777**
www.worldbioproducts.com

World Bioproducts is dedicated to producing innovative, high quality environmental sample collection products to support food safety testing while providing world class service and support to our customers. The EZ Reach™ Sponge Sampler and PUR-Blue™ Swab Sampler are designed to address the specific challenges of recovering microorganisms from the food processing environment. Both are available with our D/E Neutralizing Broth as specified by FDA BAM and USDA FSIS as well as our proprietary HiCap™ Neutralizing Broth, proven to more effectively neutralize residual sanitizers than traditional media such, as Letheen broth and Neutralizing Buffer, to provide a more accurate assessment of surface quality. Visit our booth to learn what's new in the world of environmental sampling.

Xema Co. Ltd. **833**
48, 9th Parkovaya Str.
Moscow, 105264, Russia
Phone: + 7 495.737.3936 **Fax: +7 95.737.0040**
www.xema-medica.com

The Xema Corporate Group is providing antibodies and immunoassays for food, agriculture and environmental testing.

Our major products include Xema line of rapid tests for water quality, and detection of traces of human blood and urine, alcohol in beverage, pork meat and fat, and most important food allergens (fish, egg, milk, nut, soy, nuts, spices). Xema also manufactures ELISA kits for laboratory use for detection of food constituents, allergens, contaminants, and control of environment. At IAFP 2017, Xema shows innovative tests for detection of rat tissue components and fungal antigens applicable for sanitary control in food storage and catering premises.

Blue Text - IAFP Sustaining Member

SCIENCE + SERVICE

A PARTNERSHIP for FOOD SAFETY

Along the **entire supply chain,** Ecolab is your food safety expert.

When you partner with Ecolab, we work with you onsite to create a food safety program that protects your customers and your business.

Visit booth #1040

ecolab.com

1.800.392.3392

ECOLAB®

Everywhere It Matters.™

IAFP2018
ANNUAL MEETING
Salt Lake City, Utah
JULY 8-11

2018 CALL FOR SUBMISSIONS

October 3 – Symposia and Workshops

January 16 – Technical and Poster Abstract Submissions

Questions regarding submissions can be directed to Tamara Ford
Phone: +1 515.276.3344 or +1 800.369.6337
E-mail: tford@foodprotection.org

INTERNATIONAL FOOD SAFETY V SUMMIT & IV EXPO

INOFOOD 2017

October 23 - 24

CasaPiedra, Santiago de Chile

Since 2009 a meeting place for the food industry

Organizer

eurofins | GCL

More than **50 distinguished international speakers.** Presentations that open new frontiers

Building **Food Safety Culture** and presenting **Innovations** in the food sector

The place to **build professional networks and agreements** in the food industry

Diamond Sponsors

ACHIPIA · PF · BIOMÉRIEUX · AGROSUPER · 3M Ciencia. Aplicada a la vida.™

Citrexchile · Walmart Chile · HANNA instruments · ARQUIMED INNOVACION · TRANSFORMA Alimentos

Silver Sponsors

Comercial Cerrillos S.A. · tecnigen

Supporting Organizations

International Association for Food Protection

Associated Centers

CONA · Fraunhofer CHILE

Media Partners

Revista Inocalimentos · RedALIMENTARIA · SOLOAVES & PORCINOS · AmeriCarne · FIFRA

Technical Production

ASVID

www.inofood.cl

CONTACT US: Phone +56 2 2793 7156 / Mobile +56 9 6617 2349
expo@inofood.cl · contacto@inofood.cl

Policy on Commercialism
for Annual Meeting Presentations

1. INTRODUCTION

No printed media, technical sessions, symposia, posters, seminars, short courses, and/or other related types of forums and discussions offered under the auspices of the International Association for Food Protection (hereafter referred to as to Association forums) are to be used as platforms for commercial sales or presentations by authors and/or presenters (hereafter referred to as authors) without the express permission of the staff or Executive Board. The Association enforces this policy in order to restrict commercialism in technical manuscripts, graphics, oral presentations, poster presentations, panel discussions, symposia papers, and all other type submissions and presentations (here-after referred to as submissions and presentations), so that scientific merit is not diluted by proprietary secrecy.

Excessive use of brand names, product names or logos, failure to substantiate performance claims, and failure to objectively discuss alternative methods, processes, and equipment are indicators of sales pitches. Restricting commercialism benefits both the authors and recipients of submissions and presentations.

This policy has been written to serve as the basis for identifying commercialism in submissions and presentations prepared for the Association forums.

2. TECHNICAL CONTENT OF SUBMISSIONS AND PRESENTATIONS

2.1 Original Work

The presentation of new technical information is to be encouraged. In addition to the commercialism evaluation, all submissions and presentations will be individually evaluated by the Program Committee chairperson, technical reviewers selected by the Program Committee chairperson, session convenor, and/or staff on the basis of originality before inclusion in the program.

2.2 Substantiating Data

Submissions and presentations should present technical conclusions derived from technical data. If products or services are described, all reported capabilities, features or benefits, and performance parameters must be substantiated by data or by an acceptable explanation as to why the data are unavailable (e.g., incomplete, not collected, etc.) and, if it will become available, when. The explanation for unavailable data will be considered by the Program Committee chairperson and/or technical reviewers selected by the Program Committee chairperson to ascertain if the presentation is acceptable without the data. Serious consideration should be given to withholding submissions and presentations until the data are available, as only those conclusions that might be reasonably drawn from the data may be presented. Claims of benefit and/or technical conclusions not supported by the presented data are prohibited.

2.3 Trade Names

Excessive use of brand names, product names, trade names, and/or trademarks is forbidden. A general guideline is to use proprietary names once and thereafter to use generic descriptors or neutral designations. Where this would make the submission or presentation significantly more difficult to understand, the Program Committee chairperson, technical reviewers selected by the Program Committee chairperson, session convenor, and/or staff, will judge whether the use of trade names, etc., is necessary and acceptable.

2.4 "Industry Practice" Statements

It may be useful to report the extent of application of technologies, products, or services; however, such statements should review the extent of application of all generically similar technologies, products, or services in the field. Specific commercial installations may be cited to the extent that their data are discussed in the submission or presentation.

2.5 Ranking

Although general comparisons of products and services are prohibited, specific generic comparisons that are substantiated by the reported data are allowed.

2.6 Proprietary Information (See also 2.2.)

Some information about products or services may not be publishable because it is proprietary to the author's agency or company or to the user. However, the scientific principles and validation of performance parameters must be described for such products or services. Conclusions and/or comparisons may be made only on the basis of reported data.

2.7 Capabilities

Discussion of corporate capabilities or experiences are prohibited unless they pertain to the specific presented data.

3. GRAPHICS

3.1 Purpose

Slides, photographs, videos, illustrations, art work, and any other type visual aids appearing with the printed text in submissions or used in presentations (hereafter referred to as graphics) should be included only to clarify technical points. Graphics which primarily promote a product or service will not be allowed. (See also 4.6.)

3.2 Source

Graphics should relate specifically to the technical presentation. General graphics regularly shown in, or intended for, sales presentations cannot be used.

3.3 Company Identification

Names or logos of agencies or companies supplying goods or services must not be the focal point of the slide. Names or logos may be shown on each slide so long as they are not distracting from the overall presentation.

3.4 Copies

Graphics that are not included in the preprint may be shown during the presentation only if they have been reviewed in advance by the Program Committee chairperson, session convenor, and/or staff, and have been determined to comply with this policy. Copies of these additional graphics must be available from the author on request by individual attendees. It is the responsibility of the session convenor to verify that all graphics to be shown have been cleared by Program Committee chairperson, session convenor, staff, or other reviewers designated by the Program Committee chairperson.

4. INTERPRETATION AND ENFORCEMENT

4.1 Distribution

This policy will be sent to all authors of submissions and presentations in the Association forums.

4.2 Assessment Process

Reviewers of submissions and presentations will accept only those that comply with this policy. Drafts of submissions and presentations will be reviewed for commercialism concurrently by both staff and technical reviewers selected by the Program Committee chairperson. All reviewer comments shall be sent to and coordinated by either the Program Committee chairperson or the designated staff. If any submissions are found to violate this policy, authors will be informed and invited to resubmit their materials in revised form before the designated deadline.

4.3 Author Awareness

In addition to receiving a printed copy of this policy, all authors presenting in a forum will be reminded of this policy by the Program Committee chairperson, their session convenor, or the staff, whichever is appropriate.

4.4 Monitoring

Session convenors are responsible for ensuring that presentations comply with this policy. If it is determined by the session convenor that a violation or violations have occurred or are occurring, he or she will publicly request that the author immediately discontinue any and all presentations (oral, visual, audio, etc.) and will notify the Program Committee chairperson and staff of the action taken.

4.5 Enforcement

While technical reviewers, session convenors, and/or staff may all check submissions and presentations for commercialism, ultimately it is the responsibility of the Program Committee chairperson to enforce this policy through the session convenors and staff.

4.6 Penalties

If the author of a submission or presentation violates this policy, the Program Committee chairperson will notify the author and the author's agency or company of the violation in writing. If an additional violation or violations occur after a written warning has been issued to an author and his agency or company, the Association reserves the right to ban the author and the author's agency or company from making presentations in the Association forums for a period of up to two (2) years following the violation or violations.

IAFP Workshops

Friday, July 7, 2017

Validating Pasteurization Processes for Low-moisture Products

Workshop Instructors

Nathan Anderson, U.S. Food and Drug Administration, Bedford Park, IL
Elizabeth Grasso-Kelley, Illinois Institute of Technology, Bedford Park, IL
Susanne Keller, U.S. Food and Drug Administration, Bedford Park, IL
Lisa Lucore, Shearer's Snacks, Massillon, OH
Bradley Marks, Michigan State University, East Lansing, MI
Harshavardhan Thippareddi, University of Georgia, Athens, GA

Workshop Organizers

Nathan Anderson, U.S. Food and Drug Administration, Bedford Park, IL
Bradley Marks, Michigan State University, East Lansing, MI

FSMA Preventive Controls Rules ultimately will require all food processors to validate processes for the reduction of *Salmonella* in low-moisture food ingredients/products. However, very few programs educate, train, or prepare individuals to deal with the unique challenges associated with pasteurizing low-moisture products, such as dynamic water activity during processing, and the resulting impact on *Salmonella* heat resistance. Individuals being assigned these responsibilities in the industry typically have educational backgrounds that include training in traditional thermal processing (e.g., in low-acid canned foods). However, such training/background has significant gaps, relative to unique attributes of low-moisture foods, in terms of both engineering and microbiological principles.

This workshop is designed to fill that gap, at a very critical time for the industry. Experts from industry, academia, and government will lead participants through a systematic approach to preparing for, designing, and carrying out a low-moisture process validation. The workshop will include interactive case studies and hands-on participation. Upon completion of this workshop, participants should be able to: describe regulatory expectations for process validations, explain critical factors affecting *Salmonella* resistance to lethal treatments, outline a general process for conducting a low-moisture pasteurization validation, identify key variables to measure/control/report, and evaluate process efficacy based on the use of non-pathogenic surrogate data and/or inactivation models applied to product time-temperature-moisture data.

Friday, July 7 and Saturday, July 8, 2017

Characterization and Identification of Spoilage-causing Fungi: A Hands-on Workshop

Workshop Instructors

Emilia Rico-Munoz, BCN Research Laboratories, Inc., Rockford, TN
Rob Samson, CBS-KNAW Fungal Biodiversity Centre, Utrecht, The Netherlands
David Pincus, bioMerieux, Inc., Chesterfield, MO
Frank Burns, DuPont Central Research & Development, Media, PA

Workshop Organizer

Emilia Rico-Munoz, BCN Research Laboratories, Inc., Rockford, TN

Mitigating the risks of yeasts and mold contamination remains a constant battle within certain segments of the food and beverage industry. Molds and yeasts cause significant food spoilage losses and mycotoxigenic molds pose significant food safety/regulatory hazards. Fungal identification is a scientific challenge requiring both art and technical expertise. There are a limited number of scientists who understand and have developed the art of fungal identification to a sound science. This workshop provides attendees a unique opportunity to interact first-hand with a group of experts, learning the best practices for isolating different fungi as well as the basics of classical identification methods. This workshop will also cover current molecular methods that are used to identify yeast and mold.

Developing Environmental Monitoring Programs for Small and Midsize Processors

Workshop Instructors

Jeremy Adler, Ecolab, Ault, CO
James Dickson, Iowa State University Food Microbiology Group, Ames, IA
Douglas Marshall, Eurofins Scientific Inc., Fort Collins, CO
Gregory Siragusa, Eurofins Microbiology, New Berlin, WI
Purnendu Vasavada, University of Wisconsin-River Falls, River Falls, WI

Workshop Organizer

Douglas Marshall, Eurofins Scientific Inc., Fort Collins, CO

This previously well-subscribed workshop using established academic and industrial experts will give small and midsize produce, spice, condiment, bakery, and ingredient suppliers the tools necessary to address four food safety issues in the processing environment: (1) finding spoilage microorganisms in the environment

before they affect product, (2) finding allergens in the environment before they affect product, (3) finding pathogens in the environment before they contaminate product, and (4) assessing effectiveness of cleaning, sanitation, and employee hygiene practices. The first speaker will discuss regulatory perspectives, customer expectations, and characteristics of microbial and chemical contaminants. The second will present an analytical methods overview. The third will discuss data interpretation and source tracking. The last presenter will address remedial sanitation practices. A practical breakout session will include information on how to collect samples, tools for collection, and sample handling. The workshop will conclude with another breakout session where attendees will work through a case study. Attendees will receive a workbook and two easy-to-use Environmental Monitoring Program guides, one on pathogens and one on allergens.

Saturday, July 8, 2017

Next Generation Sequencing – A Tutorial and Hands-on Workshop to Help Understand This Emerging Technology

Workshop Instructors

Peter Cook, Texas Tech University, Lubbock, TX
Henk den bakker, Texas Tech University, Lubbock, TX
Zachary Geurin, NSF International, Ann Arbor, MI
Maria Hoffmann, U.S. Food and Drug Administration, College Park, MD
Jesse Miller, NSF International, Ann Arbor, MI
Eric Stevens, FDA-CFSAN-ORS-DM, College Park, MD

Workshop Organizer

Jesse Miller, NSF International, Ann Arbor, MI

Next Generation Sequencing (NGS) has taken the Front Stage as a tool to understand the environment around us. It is being used globally to track outbreak strains of bacteria, monitor microbial communities and understand changes in populations of organisms based on temporal and forced stimuli. NGS is more complex than past methodologies (such as PFGE) and has more components that need to be understood. What IS NGS? What is the science behind the technology? How do I perform an experiment? How do I analyze my data? What do the data mean? This workshop seeks to shed light on NGS so that the newest person to this field can understand what NGS is and what it can be. We will provide sessions on the technology, data analysis and using the data to make strain comparisons. We will also provide an introductory sample data set for attendees to work on in-session and then discuss the results from the hands-on session.

Saturday, July 8, 2017

Drying Technologies: Strategies for Managing Pathogen and Allergen Risks

Workshop Instructors

Tim Adams, The Kellogg Company, Battle Creek, MI
Cynthia Apodaca, Mercer Processing, Inc., Modesto, CA
John Brandquist, PGP International, Woodland, CA
Rocelle Clavero, The Kellogg Company, Battle Creek, MI
Tim Frier, Merieux NutriSciences, Maple Grove, MN
Bradley Marks, Michigan State University, East Lansing, MI
Kevin Lovett, Mercer Processing, Modesto, CA

Workshop Organizer

Rocelle Clavero, The Kellogg Company, Battle Creek, MI

Drying is the most widely employed process operation that extends the shelf life of a product for long periods of time. Dried materials/dry ingredients are microbiologically shelf stable due to its low-moisture content/low-water activity. A number of foodborne outbreaks however, have implicated low moisture foods as a vector of salmonellosis. Root cause analyses have generally pointed towards possible recontamination after a lethal step due to faulty equipment design/facility layout, failure to identify high risk areas and practices during production, and inadequate sanitation procedures and practices. This workshop is designed to provide a better understanding of major drying technologies employed in the food industry – spray drying, freeze drying, vacuum drying, solar drying, etc. Effectiveness of microbial inactivation and influence of food matrix to deliver the target lethality will be discussed. Instructors will present equipment design challenges that can influence cleaning efficacy and contribute to the risk of microbial and allergen contamination. A key learning in this workshop will be identification of areas interior and exterior to the equipment that will require inspection and monitoring to prevent/avoid occurrence of potential microbial and chemical hazards. Knowledge in cleaning processes used in dry environments is suggested.

50-Year Members

John R. Bartell
Harold Bengsch
Frank L. Bryan
Warren S. Clark, Jr.
Roy E. Ginn
Archie C. Holliday
William S. LaGrange
Robert T. Marshall
Gale Prince
Robert L. Sanders
Richard C. Swanson
Leon Townsend
Edmund A. Zottola

40-Year Members

Kenneth Anderson
David Barbano
Dane T. Bernard
Larry R. Beuchat
William Brewer
Michael H. Brodsky
John C. Bruhn
Lloyd B. Bullerman
Francis F. Busta
Joseph Disch
Michael P. Doyle
F. Ann Draughon
Russell S. Flowers
Joseph Frank
Constantin Genigeorgis
Andrew M. Gould
Robert B. Gravani
John J. Guzewich
Mark A. Harrison
Michael G. Johnson
Loren Johnson
Thomas A. McCaskey
Lucy M. McProud
David Z. McSwane
Martin W. Mitchell
Irving J. Pflug
Charles Price
Mary L. Sandford
A. J. Scheidenhelm
F. Tracy Schonrock
Oscar Peter Snyder
John N. Sofos
Grace E. Steinke
Allan J. Ver Voort

30-Year Members

Gary R. Acuff
Elizabeth L. Andress
Matthew Andrews
Tom Angstadt
Bennett H. Armstrong
James N. Bacus
J. Stan Bailey
David A. Baker
Charles A. Bartleson
Darrell Bigalke
Kathryn J. Boor
Lyle Boucher
Robert E. Brackett
Roger L. Brown
Mary M. Bulthaus
John N. Butts
Diana C. Casas
Frederick K. Cook
Catherine N. Cutter
Randall Daggs
Richard L. Daise
P. Michael Davidson
Jef M. De Smedt
Pascal Delaquis
James S. Dickson
Catherine W. Donnelly
Stephanie Doores
Karl F. Eckner
Ruth F. Eden
Brian P. Emanuel
Alfred R. Fain, Jr.
Joellen Feirtag
Bruce W. Ferree
Cary Frye
Pam Gane
James E. Gordon
Thomas R. Graumlich
Paul A. Hall
Randy Hanson
Linda J. Harris
Charles W. Henry
Peter W. Hibbard
Lynn S. Hinckley
Anthony D. Hitchins
Richard A. Holley
Dallas G. Hoover
Kim W. Hutchinson
Steve Ingham
Kenji Isshiki
L. Stephen Jay
Jennifer L. Johnson
Joan Kasprzycki-Strauss
Jimmy T. Keeton
Ellen Koenig
Jeffrey L. Kornacki
Jeffrey A. Kuehm
Anna M. Lammerding
Loralyn Ledenbach
Frank P. Leonardo
Thomas E. Mackie, IV
Douglas L. Marshall
Ricardo Molins
Thomas J. Montville
Mark A. Mozola
Barbara A. Munce
Steven C. Murphy
John Nason
Kathleen O'Donnell
Mickey E. Parish
John A. Partridge
Ruth L. Petran
Mark D. Pratt
Kailash S. Purohit
Lawrence Restaino
E. Jeffery Rhodehamel
Edward R. Richter
David J. Robbins
Elliot T. Ryser
Michael Sanna
Allen R. Sayler
Ronald H. Schmidt
Thomas L. Schwarz
Jenny Scott
Patrick M. Sheridan
Peter J. Slade
James L. Smith
William H. Sperber
D. Wayne Sprung
Richard F. Stier
Katherine M.J. Swanson
Agnes G. Tan
Rodrigo Tarte
Steve L. Taylor
Donald W. Thayer
Hamsa Thota
Ewen C. D. Todd
R. Bruce Tompkin
Purnendu C. Vasavada
Fred Weber
Terry B. Willis
Charlie Wind

If your name is not listed under the 30, 40, or 50-year Member listing and it should be, please contact the IAFP office.

Past Presidents

1912 — Charles J. Steffen
1913 — Charles J. Steffen
1914 — Charles J. Steffen
1915 — A. N. Henderson
1916 — Claude F. Bessio
1917 — Wm. H. Price
1918 — Alfred W. Lombard
1919 — James O. Jordan
1920 — Ernest Kelly
1921 — C. L. Roadhouse
1922 — Herbert E. Bowman
1923 — George E. Bolling
1924 — J. B. Hollingsworth
1925 — Thomas J. Strauch
1926 — George C. Supplee
1927 — W. A. Shoults
1928 — Ira V. Hiscock
1929 — Howard R. Estes
1930 — Ralph E. Irwin
1931 — A. R. B. Richmond
1932 — William B. Palmer
1933 — Horato N. Parker
1934 — Paul F. Krueger
1935 — C. K. Johns
1936 — George W. Grim
1937 — John C. Hardenbergh
1938 — Alexander R. Tolland
1939 — Victor M. Ehlers
1940 — Paul D. Brooks
1941 — Leslie C. Frank
1942 — Frederick W. Fabian
1943 — Charles A. Abele
1944 — Charles A. Abele
1945 — Russell R. Palmer
1946 — Russell R. Palmer
1947 — R. G. Ross
1948 — Walter D. Tiedeman
1949 — Abraham W. Fuchs
1950 — Milton R. Fisher
1951 — Ken G. Weckel
1952 — H. L. "Red" Thomasson
1953 — Harold J. Barnum
1954 — John D. Faulkner
1955 — Ivan E. Parkin
1956 — Harold S. Adams
1957 — Paul Corash
1958 — Harold Robinson
1959 — Franklin Barber
1960 — William V. Hickey
1961 — John Sheuring
1962 — Charles E. Walton
1963 — Ray Belknap
1964 — John H. Fritz
1965 — Wallace C. Lawton
1966 — Fred E. Uetz
1967 — Paul R. Elliker
1968 — Al N. Myhr
1969 — Samuel O. Noles
1970 — Milton E. Held
1971 — Dick B. Whitehead
1972 — Orlowe M. Osten
1973 — Walter F. Wilson
1974 — Earl O. Wright
1975 — P. J. Skulborstad
1976 — H. E. Thompson, Jr.
1977 — Henry V. Atherton
1978 — David D. Fry
1979 — Howard Hutchings
1980 — Bill Kempa
1981 — William Arledge
1982 — Harry Haverland
1983 — Robert Marshall
1984 — A. Richard Brazis
1985 — Archie Holliday
1986 — Sid Barnard
1987 — Roy Ginn
1988 — Leon Townsend
1989 — Robert Gravani
1990 — Ronald Case
1991 — Bob Sanders
1992 — Damien A. Gabis
1993 — Michael P. Doyle
1994 — Harold Bengsch
1995 — C. Dee Clingman
1996 — F. Ann Draughon
1997 — Michael H. Brodsky
1998 — Gale Prince
1999 — Robert E. Brackett
2000 — Jack Guzewich
2001 — Jenny Scott
2002 — James S. Dickson
2003 — Anna M. Lammerding
2004 — Paul A. Hall
2005 — Kathleen A. Glass
2006 — Jeffrey M. Farber
2007 — Frank Yiannas
2008 — Gary R. Acuff
2009 — J. Stan Bailey
2010 — Vickie Lewandowski
2011 — Lee-Ann Jaykus
2012 — Isabel Walls
2013 — Katherine M.J. Swanson
2014 — Donald W. Schaffner
2015 — Donald L. Zink
2016 — Alejandro Mazzotta

Past Annual Meetings and Locations

1912 Milwaukee, WI
1913 Chicago, IL
1914 Chicago, IL
1915 Washington, D.C.
1916 Springfield, MA
1917 Washington, D.C.
1918 Chicago, IL
1919 New York, NY
1920 Chicago, IL
1921 New York, NY
1922 St. Paul, MN
1923 Washington, D.C.
1924 Detroit, MI
1925 Indianapolis, IN
1926 Philadelphia, PA
1927 Toronto, Ontario
1928 Chicago, IL
1929 Memphis, TN
1930 Cleveland, OH
1931 Montreal, Quebec
1932 Detroit, MI
1933 Indianapolis, IN
1934 Boston, MA
1935 Milwaukee, WI
1936 Atlantic City, NJ
1937 Louisville, KY
1938 Cleveland, OH
1939 Jacksonville, FL
1940 New York, NY
1941 Tulsa, OK
1942 St. Louis, MO
1943 Cancelled
1944 Chicago, IL
1945 Cancelled
1946 Atlantic City, NJ
1947 Milwaukee, WI
1948 Philadelphia, PA
1949 Columbus, OH
1950 Atlantic City, NJ
1951 Glenwood Springs, CO
1952 Milwaukee, WI
1953 East Lansing, MI
1954 Atlantic City, NJ
1955 Augusta, GA
1956 Seattle, WA
1957 Louisville, KY
1958 New York, NY
1959 Glenwood Springs, CO
1960 Chicago, IL
1961 Des Moines, IA
1962 Philadelphia, PA
1963 Toronto, Ontario
1964 Portland, OR
1965 Hartford, CT
1966 Minneapolis, MN
1967 Miami Beach, FL
1968 St. Louis, MO
1969 Louisville, KY
1970 Cedar Rapids, IA
1971 San Diego, CA
1972 Milwaukee, WI
1973 Rochester, NY
1974 St. Petersburg, FL
1975 Toronto, Ontario
1976 Arlington Heights, IL
1977 Sioux City, IA
1978 Kansas City, MO
1979 Orlando, FL
1980 Milwaukee, WI
1981 Spokane, WA
1982 Louisville, KY
1983 St. Louis, MO
1984 Edmonton, Alberta
1985 Nashville, TN
1986 Minneapolis, MN
1987 Anaheim, CA
1988 Tampa, FL
1989 Kansas City, MO
1990 Arlington Heights, IL
1991 Louisville, KY
1992 Toronto, Ontario
1993 Atlanta, GA
1994 San Antonio, TX
1995 Pittsburgh, PA
1996 Seattle, WA
1997 Orlando, FL
1998 Nashville, TN
1999 Dearborn, MI
2000 Atlanta, GA
2001 Minneapolis, MN
2002 San Diego, CA
2003 New Orleans, LA
2004 Phoenix, AZ
2005 Baltimore, MD
2006 Calgary, Alberta
2007 Lake Buena Vista, FL
2008 Columbus, OH
2009 Grapevine, TX
2010 Anaheim, CA
2011 Milwaukee, WI
2012 Providence, RI
2013 Charlotte, NC
2014 Indianapolis, IN
2015 Portland, OR
2016 St. Louis, MO

Future Annual Meetings

July 8–11, 2018
Salt Palace Convention Center
Salt Lake City, Utah

July 21–24, 2019
Kentucky International Convention Center
Louisville, Kentucky

August 2–5, 2020
Huntington Convention Center
of Cleveland
Cleveland, Ohio

2017 *Journal of Food Protection*® Awards

2017 John N. Sofos Most-cited *JFP* Research and Review Publication Awards

These awards were established to recognize top researchers and high-quality research publications and reviews that contribute to the impact of *JFP* and the field of food safety. The awards are based upon the number of citations of a work by others for papers published five years prior.

Most-cited Research Publication Award

1st Place

Economic Burden from Health Losses Due to Foodborne Illness in the United States
Robert L. Scharff
Published January 2012

2nd Place

Annual Cost of Illness and Quality-Adjusted Life Year Losses in the United States Due to 14 Foodborne Pathogens
Sandra Hoffmann, Michael B. Batz and J. Glenn Morris, Jr.
Published July 2012

3rd Place

Ranking the Disease Burden of 14 Pathogens in Food Sources in the United States Using Attribution Data from Outbreak Investigations and Expert Elicitation
Michael B. Batz, Sandra Hoffmann and J. Glenn Morris, Jr.
Published July 2012

Most-cited Review Publication Award

1st Place

Outbreak of Shiga Toxin-producing *Escherichia coli* (STEC) O104:H4 Infection in Germany Causes a Paradigm Shift with Regard to Human Pathogenicity of STEC Strains
Lothar Beutin and Annett Martin
Published February 2012

2017 *Journal of Food Protection* Most-downloaded Publication Award

This award recognizes the *JFP* publication that was the most-downloaded in 2016 based upon data from the *Journal of Food Protection* Web site.

1st Place

Low-water Activity Foods: Increased Concern as Vehicles of Foodborne Pathogens
Larry R. Beuchat, Evangelia Komitopoulou, Harry Beckers, Roy P. Betts, François Bourdichon, Séamus Fanning, Han M. Joosten and Benno H. Ter Kuile
Published January 2013

The awards will be presented by the *JFP* Scientific Co-Editors at the IAFP 2017 Editorial Board Reception.

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Developing Scientist Competitors

Limcharoenchat, Pichamon, *Michigan State University* (P3-09, P3-12)
Limoges, Marie, *University of Vermont* (P3-49*)
Lin, Hong, *Ocean University of China* (P2-123)
Lin, Jianhan, *China Agricultural University* (P3-179)
Lin, Mengshi, *University of Missouri* (P3-145)
Lin, Yulin, *Centers for Disease Control and Prevention* (P1-29)
Lincopan, Nilton, *University of São Paulo* (P1-190)
Lingle, Cari, *3M Food Safety* (P2-174)
Lionberg, Bill, *R & F Laboratories* (P2-202)
Liou, Polly, *University of Missouri* (P3-145)
Lipchin, Clive, *Arava Institute for Environmental Studies* (S38*)
Lipp, Erin, *University of Georgia* (P2-151)
Lissaur, Quincy, *SSAFE* (S22*)
Litt, Pushpinder Kaur, *Oklahoma State University* (P1-215, T5-07*, P1-214, P1-219, P1-216, P2-36)
Liu, Chengchu (Catherine), *University of Maryland Extension* (P3-133)
Liu, Da, *University of Georgia* (P3-73, P1-73*)
Liu, Jia, *Purdue University* (T5-06)
Liu, Pei, *University of Missouri* (P2-86*)
Liu, Peichen, *Illinois Institute of Technology, Institute for Food Safety and Health* (P3-67)
Liu, Qin, *National University of Singapore* (P1-163*)
Liu, Shuxiang, *Washington State University* (T9-11, T6-12, T6-08*, P3-07*)
Liu, Siman, *Illinois Institute of Technology* (P3-03*)
Liu, Siqin, *Tennessee State University* (P1-221, P3-89*)
Liu, Wenhua, *Qingdao Agricultural University* (P2-50)
Liu, Xingchen, *University of Maryland* (P3-57*)
Liu, Xuming, *Kansas State University* (T4-10)
Liu, Yanhong, *U.S. Department of Agriculture-ARS, Eastern Regional Research Center* (P3-30)
Liu, Yuejiao, *University of Missouri* (P2-199*)
Lloyd, David, *ZERO2FIVE Food Industry Centre, Cardiff Metropolitan University* (P1-113)
Loeza, Viviana, *Institute for Food Safety and Health* (P1-102)
Loku Umagiliyage, Arosha, *Southern Illinois University* (P3-106*)
Loneragan, Guy, *Texas Tech University* (P2-154)
Lopes, Patricia Santos, *Universidade Federal de São Paulo* (P3-32)
Lopez, Keyla, *Kansas State University* (P1-82, P1-209, P1-85, P1-81, P1-80)
López, Luis, *University of Chile* (P2-210)
Lopez, Tucker, *Roka Bioscience* (P3-168)
Lopez Velasco, Gabriela, *3M Food Safety* (P2-185)
Lopez-Hernandez, Arnoldo, *University of Wisconsin* (P2-09)
Lovatt, Pauline, *University of Lincoln* (P1-78, P3-26)
Lovelace-Johnson, Maria, *Food and Drug Authority* (S69*)
Lu, Xiaonan, *University of British Columbia* (P1-141)
Luchansky, John, *U.S. Department of Agriculture-ARS-ERRC* (P3-140*, T3-10, T5-12, T3-03, P2-35)
Lucore, Lisa, *Shearer's Snacks* (,)
Ludwig, Justin, *Kansas State University* (T7-10*)
Luedtke, Brandon, *University of Nebraska at Kearney* (P1-136)
Luedtke, Joshua, *Ecolab Inc.* (P1-173)
Lues, Ryk, *Central University of Technology, FS* (P3-153)
Lujan-Rhenals, Deivis, *non-member* (P1-112)
Lunt, Ashley, *University of Wisconsin - Madison* (P1-69)
Luo, Yaguang, *U.S. Department of Agriculture–ARS* (P1-168, P3-75, T1-04*, P3-92, P3-47)
Luo, Yan, *U.S. Food and Drug Administration* (S32*, P3-228, P2-68)
Luo, Yuqi, *Illinois Institute of Technology* (P2-160)
Luque-Sastre, Laura, *University College Dublin* (T2-09*)
Luquin-Rosas, María Cristina, *Grupo Cencon* (P3-200)
Lyon, Stephen, *Sealed Air Corporation* (P2-132, P3-151*)
Lysimachou, Nefeli, *Technological Educational Institute of Athens* (P1-77)
M, Vishunuvardhana, Rao M., *National Institute of Nutrition (ICMR), Division of Biostatistics* (P1-115)
Ma, Li, *National Institute for Microbial Forensics & Food and Agricultural Biosecurity, Oklahoma State University* (P1-99*, P1-100*)
Macarisin, Dumitru, *U.S. Food and Drug Administration* (P1-51, P1-40*, P1-53)
Mack, Don, *Alabama A&M University* (P2-85*)
Mackay, Anna, *Canadian Food Inspection Agency* (T10-09)
Mackenroth, Beata, *Oklahoma State University* (P1-219*)
Macklin, Kenneth, *Auburn University* (P3-96)
MacRae, Douglas, *Neogen Corporation* (P2-165, P2-164)
Maddaleno, Aldo, *Universidad de Chile* (P2-01)
Madera, Juan, *University of Houston* (P2-105)
Madoroba, Evelyn, *Agricultural Research Council - Bacteriology Division* (P1-68)
Maes, Flor, *University of Ghent* (P1-04)
Maffei, Daniele Fernanda, *University of São Paulo* (P3-79*)
Mafiz, Abdullah Ibn, *Wayne State University* (T11-08, T2-02*)
Magan, Naresh, *Cranfield University* (S04*)
Magana, Sonia, *University of South Florida* (P3-45)
Magnani, Marciane, *Federal University of Paraiba* (P2-229*, P2-230*, P1-203*)
Magossi, Gabriela, *Kansas State University, Food Science Institute* (P1-34*)
Magzamen, Sheryl, *Colorado State University* (P3-212, T2-04)
Mahoney, Deon, *Dairy Food Safety Victoria* (S13*)
Mahoney, J., *Randox Food Diagnostics* (P2-226)
Maiorano, Luciana, *3M Argentina* (P2-179)
Majowicz, Shannon, *University of Waterloo* (T3-02, T3-01)
Makariti, Ifigeneia, *Agricultural University of Athens* (P1-155*)
Malekmohammadi, Sahar, *North Dakota State University* (T6-09*)
Maloney, James, *Clear Labs Inc.* (P2-133)
Mammel, Mark, *U.S. Food and Drug Administration–CFSAN* (P2-129, P2-151, P2-156)
Mangalam, Geoffrey, *Western Center for Food Safety, University of California-Davis* (T1-03)
Mann, David A., *University of Georgia* (P3-20*)
Manolis, Amanda, *Thermo Fisher Scientific* (P2-190*, P2-191*, P2-189*)
Manu, David, *Iowa State University* (P1-194, P1-195, P3-122)
Manuel, Clyde, *Sealed Air Corporation* (P2-132)
Marasa, Bernard, *U.S. Food and Drug Administration, CDER* (P1-95)
Marasteanu, Ioana (Julia), *U.S. Food and Drug Administration* (T10-12*)
Marchant-Tambone, Joey, *U.S. Food and Drug Administration, Gulf Coast Seafood Laboratory* (P3-214*)
Marder, Ryan, *Hygiena* (P2-168)
Mardones, Fernando, *Universidad Andres Bello* (P2-211)
Marega, Riccardo, *CER Groupe, Health Department* (P3-169)
Marek, Patrick, *Natick Soldier Research Development & Engineering Center* (P1-86)
Margerin, Jeanne, *CHR HANSEN* (P2-26)
Marik, Claire, *University of Delaware* (P1-37*, T7-06)
Marion, Celine, *Millipore SAS* (P3-110)
Markiewicz, Matthew, *Sealed Air Corporation* (P2-132*)
Marks, Bradley, *Michigan State University* (S45*, P3-09, P1-150, P3-14, P3-08, T6-06, P3-07, T6-12, P3-12, P3-02, *, P3-05, P3-13, P3-10)
Marks, Danielle, *Purdue University* (T5-06)
Markwell, Peter, *Mars Global Food Safety Center* (T4-07)
Marler, Bill, *Marler Clark, The Food Safety Law Firm* (D1*)
Maroni, Brett, *Roka Bioscience* (P3-168)
Marques Zaratin, Agueda Cleofe, *Metrocamp College Devry Group* (P1-89)
Marquis, Julien, *Nestlé Institute of Health Sciences* (P2-127)
Marr, Linsey, *Virginia Tech* (P3-185)
Marsh, Zachary, *Center for Global Safe Water, Hubert Department of Global Health, Rollins School of Public Health, Emory University* (P3-209)
Marshall, Douglas, *Eurofins Scientific Inc.* (S65*, RT10*)
Marta, Davin, *University of Wisconsin - Madison* (P1-69)
Martin, David, *University of Maryland Extension, Baltimore County* (T3-06)
Martin, Jennifer, *Colorado State University* (P3-121, P3-146, P2-37)
Martin, Michael.P, *Department of Population Health and Pathobiology, CVM, NCSU* (P2-50)
Martin, Nicole, *Cornell University* (P3-117)
Martinez, Bismarck, *University of Nebraska* (P1-176*)
Martinez, Maria Cristina, *Instituto de Salud Publica* (P1-41, P2-211)
Martinez, Pamela, *New Mexico State University* (P2-104)
Martínez López, Beatriz, *University of California-Davis* (T1-03)
Martínez-Gonzáles, Nanci E., *Universidad de Guadalajara* (P3-68)
Martinez-Ramos, Paola, *University of Massachusetts-Amherst* (P3-62)
Martinez-Urtaza, Jaime, *University of Bath* (P2-72, S33*)
Martins, Bruna Torres Furtado, *Universidade Federal de Viçosa* (P2-48)
Matakatsu, Miho, *Toho Technology Inc.* (P2-161*)
Mathew, Elza Neelima, *University of Connecticut* (T1-05*)
Mathews, Anne, *University of Florida* (P2-97)
Mathia, Olivier, *ISHA groupe Alpa* (P3-198)
Matle, Itumeleng, *Agricultural Research Council - Bacteriology Division* (P1-68*)
Mattar, Salim, *Universidad de Córdoba* (T2-07)
Matthews, Karl, *Rutgers University* (P3-134, P3-72)
Mattioli, Mia, *Centers for Disease Control and Prevention, Division of Foodborne, Waterborne and Environmental Diseases* (P3-221, P1-16)
Matzen, Chelsea, *National Farmer's Union* (RT7*)
Mauer, John, *University of Georgia* (S42*)
Maurer, John, *University of Georgia* (P2-151)
May, Eric, *University of Maryland Eastern Shore* (T7-04, P3-220, P3-229, P3-218)
May, Lauren, *U.S. Food and Drug Administration* (P2-177)
Mbatha, Khanyisile, *University of South Africa* (P1-68)

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Author and Presenter Index

*Presenter

Notes

Developing Scientist Competitors

Aboubakr, Hamada, *University of Minnesota* (T5-10)
Adebo, Oluwafemi, *University of Johannesburg* (P2-18)
Afari, G. Kwabena, *University of Georgia* (P1-205)
Ahmad, Nurul, *Michigan State University* (T6-12)
Aijuka, Matthew, *University of Pretoria* (T2-01)
Akanni, Gabriel, *University of Pretoria* (P1-56)
Aljasir, Sulaiman, *University of Wyoming* (P1-220)
Allen-McFarlane, Rachelle, *Howard University* (P1-97)
Allison, Abimbola, *Tennessee State University* (P1-58)
Alnughaymishi, Hamoud, *Michigan State University* (P3-36)
Anes, João, *University College Dublin* (T5-08)
Aryal, Manish, *Oklahoma State University* (P1-123)
Bailey, Matthew, *Purdue University* (P1-224)
Balamurugan, S., *Agriculture & Agri-Food Canada* (T5-11)
Barnes, Stephanie, *University of Connecticut* (T5-01)
Beno, Sarah, *Cornell University* (P2-221)
Bhatia, Sohini, *Texas A&M University* (P1-79)
Brandao Delgado, Jose, *Louisiana State University* (P3-225)
Britton, Brianna, *Colorado State University* (P3-146)
Buckley, David, *Clemson University* (P3-210, P1-11)
Buehler, Ariel, *Cornell University* (P3-117)
Buerman, Elizabeth, *Cornell University* (P3-123)
Bullard, Brittney, *Colorado State University* (P3-121)
Burnett, John, *Purdue University* (P2-88)
Cao, Loan, *Michigan State University* (P2-06)
Carstens, Christina K., *U.S. Food and Drug Administration* (P3-90)
Castillo Rivera, Milagros Liseth, *Universidade de São Paulo* (P3-163)
Chaves, Laura, *Pontificia Universidad Javeriana* (T9-07)
Chen, Huihui, *University of British Columbia* (P3-69)
Chen, Jian, *Hokkaido University* (P1-222)
Chhetri, Vijay Singh, *Louisiana State University AgCenter* (P3-52, P3-53)
Chipchakova, Stoyka, *University of Aberdeen* (T10-07)
Choi, Yukyung, *Sookmyung Women's University* (P3-66, P2-198)
Choo, Min Jung, *Korea University* (P3-120)
Cobert, Adam, *University of California-Davis* (P3-55)
Colavecchio, Anna, *McGill University* (T7-11)
Cook, Peter, *Texas Tech University* (P2-154)
Cope, Sarah, *North Carolina State University* (T3-08)
Courtney, Sarah, *University of Waterloo* (T3-02)
Craighead, Shani, *University of Delaware* (P1-21)
Cuellar, Darvin, *Texas Tech University* (P2-29)
Cui, Yue, *University of Georgia* (P3-73)
D'Souza, Doris, *University of Tennessee* (P1-119, P1-120)
Dharmarha, Vaishali, *Virginia Tech* (P2-122, T3-07)
Dharmasena, Muthu, *Clemson University* (P3-107)
Dunn, Laurel, *University of Tennessee, Department of Food Science* (P2-147)
Duong, Minh, *North Carolina State University* (T3-10)
Dutta, Madhumeeta, *North Carolina State University* (T3-09)
Evans, Ellen W., *ZERO2FIVE Food Industry Centre, Cardiff Metropolitan University* (P2-110)
Falcao de Oliveira, Erick, *University of California-Davis* (P1-202)
Ferelli, Angela, *University of Maryland* (P3-56)
Fogler, Kendall, *Virginia Tech* (P3-97)
Garcés-Vega, Francisco, *Michigan State University* (P3-08, T6-06)
Gartley, Samantha, *University of Delaware* (P3-224)
Gavriil, Alkmini, *Agricultural University of Athens* (P1-77)
Gil, Carolina, *Universidad Autonoma de Nuevo Leon* (P1-208)
Gkerekou, Maria, *Agricultural University of Athens* (P2-216)
Golden, Chase, *University of Georgia* (P1-200)
Goodman, MiKayla, *University of Georgia* (P3-141)
Gunter-Ward, Danielle, *Tennessee State University* (P1-124)
Gustafson, Ryann, *Michigan State University* (P3-45)
Ha, Jimyeong, *Sookmyung Women's University* (P1-140, T6-02, P1-139)
Hakeem, Mohammed, *University of British Columbia* (P1-141)
Hanlon, Keelyn, *Texas Tech University* (P2-20)
Harrand, Anna Sophia, *Cornell University* (P3-40)
Haymaker, Joseph, *University of Maryland Eastern Shore* (P3-220)
Hernandez, Juan Francisco, *Purdue University Northwest* (P1-107)
Higgins, Daleniece, *University of Memphis* (P2-137)
Hildebrandt, Ian, *Michigan State University* (P1-150)
Hingston, Patricia, *University of British Columbia* (P1-63, P2-126)
Holzer, Katlyn, *Colorado State University* (P2-37)
Hu, Ziyi, *University of Alberta* (P2-43)
Hudson, Lauren, *University of Georgia* (P2-155)
Hurley, Daniel, *University College Dublin* (T2-07)
Hussein, Walaa, *Ohio State University* (P3-160)
Ismail, Amir, *Bahauddin Zakariya University* (P2-05)
Jayasena, Shyamali, *University of Nebraska-Lincoln* (P2-14)
Jeong, Dana, *Konkuk University* (P3-157)
Jones, Amy, *University of Florida* (T2-11)
Jung, Jiin, *Rutgers University* (P3-44)
Kharel, Karuna, *Louisiana State University AgCenter* (P3-41)
Kim, Dong-Hyeon, *Konkuk University* (P3-156)
Kim, Hong-Seok, *Konkuk University* (P2-201)
Kim, Jeong Sook, *Gyeongsang National University* (P2-163, P2-162)
Kim, Sejeong, *Sookmyung Women's University* (T6-05, P1-65)
Kirchner, Margaret, *North Carolina State University* (P2-139)
Korir, Robert, *University of Maryland College Park* (P3-54)
Koukkidis, Giannis, *University of Leicester* (P3-104)
Kovacevic, Jovana, *Oregon State University* (P3-133)
Koyama, Kento, *Hokkaido University* (T10-11)
Kozak, Sarah, *University of Connecticut* (T5-09)
Kulkarni, Prachi, *University of Maryland* (P3-216)
Lau, Soon Kiat, *University of Nebraska-Lincoln* (T6-10)
Lee, Debbie, *Emory University* (P1-38)
Lee, Heeyoung, *Sookmyung Women's University* (P2-143)
Lee, Kyu Ri, *Korea University* (P3-124)
Lee, Sookyoung, *Konkuk University* (P2-203)
Lee, Soomin, *Sookmyung Women's University* (P2-218, P1-160)
Lee, Wan-Ning, *Georgia Institute of Technology* (P3-74)
Li, Ka Wang, *West Virginia University* (P2-38, P3-58)
Liao, Chao, *Auburn University* (P1-72, P3-93)
Litt, Pushpinder Kaur, *Oklahoma State University* (T5-07)
Liu, Da, *University of Georgia* (P1-73)
Liu, Shuxiang, *Washington State University* (T6-08, P3-07)
Liu, Siman, *Illinois Institute of Technology* (P3-03)
Luque-Sastre, Laura, *University College Dublin* (T2-09)
Mafiz, Abdullah Ibn, *Wayne State University* (T2-02)
Makariti, Ifigeneia, *Agricultural University of Athens* (P1-155)
Malekmohammadi, Sahar, *North Dakota State University* (T6-09)
Mathew, Elza Neelima, *University of Connecticut* (T1-05)
Matle, Itumeleng, *Agricultural Research Council - Bacteriology Division* (P1-68)
McCoy, Ashley, *University of Nebraska-Lincoln* (P2-31)
McKinney, Samantha, *Penn State University* (P2-30)
Miranda, Robyn, *Rutgers University* (T10-02)
Mishra, Abhinav, *University of Maryland* (P1-158)
Mohammad, Zahra, *Texas A&M University* (P1-83, P1-84)
Monte, Daniel, *University of São Paulo* (P1-190)
Moreno Switt, Andrea, *Universidad Andres Bello* (P2-210, P1-62)
Murashita, Suguru, *Hokkaido University* (T9-08)
Murray, Kayla, *University of Guelph* (P3-87)
Novoa Rama, Estefania, *Purdue University* (P2-54)
Oh, Hyemin, *Sookmyung Women's University* (P1-146, P1-147, P1-145, P3-142, P1-54, P1-55)
Olorunfemi, Momodu, *University of Ibadan* (P2-17)
Ordaz, Gilberto, *Universidad Autonoma de Nuevo Leon* (P1-93)
Overdiep III, Jacques, *Iowa State University* (P2-116)
Owusu-Darko, Rodney, *University of Pretoria* (T6-04)
Oyedeji, Ajibola, *Durban University of Technology* (T6-03)

Developing Scientist Competitors

Ozturk, Samet, *University of Georgia* (T9-11)
Pang, Hao, *University of Maryland* (T7-05)
Partyka, Melissa L, *University of California-Davis* (T7-03)
Patterson, Laura, *University of California-Davis* (P2-65)
Paudel, Sumit, *University of Central Oklahoma* (P3-85)
Perera, Liyanage Nirasha, *Wayne State University* (T11-08)
Perry, Bridget, *Iowa State University* (P2-117)
Porter, Adam, *Auburn University* (P1-197)
Rao, Aishwarya, *University of Arizona* (P1-192)
Ray, Andrea, *Purdue University* (T2-10)
Recker, Jordan, *University of Wisconsin-La Crosse* (P1-15)
Reddi, S.G.D.N. Lakshmi, *National Institute of Nutrition (ICMR)* (P1-115)
Ren, Tian, *Auburn University* (P3-154)
Rivas, Miguel, *Wayne State University* (P2-134)
Robocon, Danielle, *University of Alberta* (P3-138)
Rubio, Nancy, *Louisiana State University* (P1-204)
Rupert, Christopher, *North Carolina State University* (T1-08)
Saha, Joyjit, *Oklahoma State University* (P1-214, P1-215, T7-09, P1-216)
Salaheen, Serajus, *University of Maryland* (T5-03)
Saniga, Kristen, *North Carolina State University* (T3-05)
Saunders, Thomas, *Virginia Tech* (P3-06)
Schonberger, Harry, *Virginia Tech* (T3-04)
Shahbaz, Muhammad, *Mawarid Food Company - KSA (Pizzahut, Taco Bell)* (P2-74)
Sibanda, Thulani, *Universityof Pretoria* (P2-227)
Silva, Nathália B., *UFSC - Universidade Federal de Santa Catarina* (P1-135)
Smith, Dara, *University of Tennessee, Department of Food Science* (P2-149)
Stanborough, Tamsyn, *CSIRO Agriculture & Food* (P3-119)
Stenkamp-Strahm, Chloe, *Colorado State University* (T2-04)
Strawn, Laura, *Virginia Tech - Eastern Shore AREC* (P1-47)
Subbiah, Jeyamkondan, *University of Nebraska-Lincoln* (P3-21)
Sudagar, Varalakshmi, *Ghent University* (P2-228)
Suehr, Quincy, *Michigan State University* (P3-13)
Sullivan, Genevieve, *Cornell University* (T4-07)
Sundarram, Ajita, *Purdue University* (T5-06, P2-53)
Tiong, Hung King, *Oklahoma State University* (P2-153)
Tolen, Tamra, *Texas A&M University* (P2-32)
Troyanovskaya, Eleonora, *Tennessee State University* (P1-131)
Truitt, Laura, *Virginia Tech - Eastern Shore AREC* (P3-227)
Unruh, Daniel, *Kansas State University* (P3-213)
Valdés, Lidia N., *University of Florida* (P3-37)
Vanore, Adam, *University of Delaware* (P1-09)
Vegdahl, Ann, *Rutgers University* (P3-103)
Vuia-Riser, Jennifer, *Texas A&M University* (T11-03)
Wang, Danhui, *Cornell University* (T1-11)
Wang, Fei, *Iowa State University* (P3-122)
Wang, Hongye, *Clemson University* (P2-169)
Wang, Xinyue, *University of Florida* (P3-43)
Webster, Brad, *University of Alberta* (P2-28)
Weller, Daniel, *Cornell University* (P3-48, T1-10)
White, Chanelle, *University of Maryland Eastern Shore* (P3-222)
Wilder, Amanda, *Kansas State University* (T5-12)
Wu, Shuang, *University of Florida* (P3-01)
Wu, Tongyu, *Purdue University* (P2-73)
Xie, Jing, *University of Georgia* (P3-33)
Xie, Yicheng, *Texas A&M University* (T5-02)
Xu, Aixia, *University of Maryland* (T7-12, P1-46)
Xu, Yumin, *University of Georgia* (P1-199)
Yan, Runan, *Illinois Institute of Technology* (P1-25)
Yavelak, Mary, *North Carolina State University* (T3-03)
Yuan, Jing, *Auburn University* (P3-96, P3-95)
Zhang, Peipei, *Agriculture and Agri-Food Canada* (P3-127, P3-126)
Zhang, Shaokang, *University of Georgia, Center for Food Safety* (P2-144)
Zhang, Yan, *Illinois Institute of Technology* (P1-24)
Zhang, Zijing, *Illinois Institute of Technology, Institute for Food Safety and Health* (P3-59)
Zhou, Zijin, *Ghent University* (T9-09)

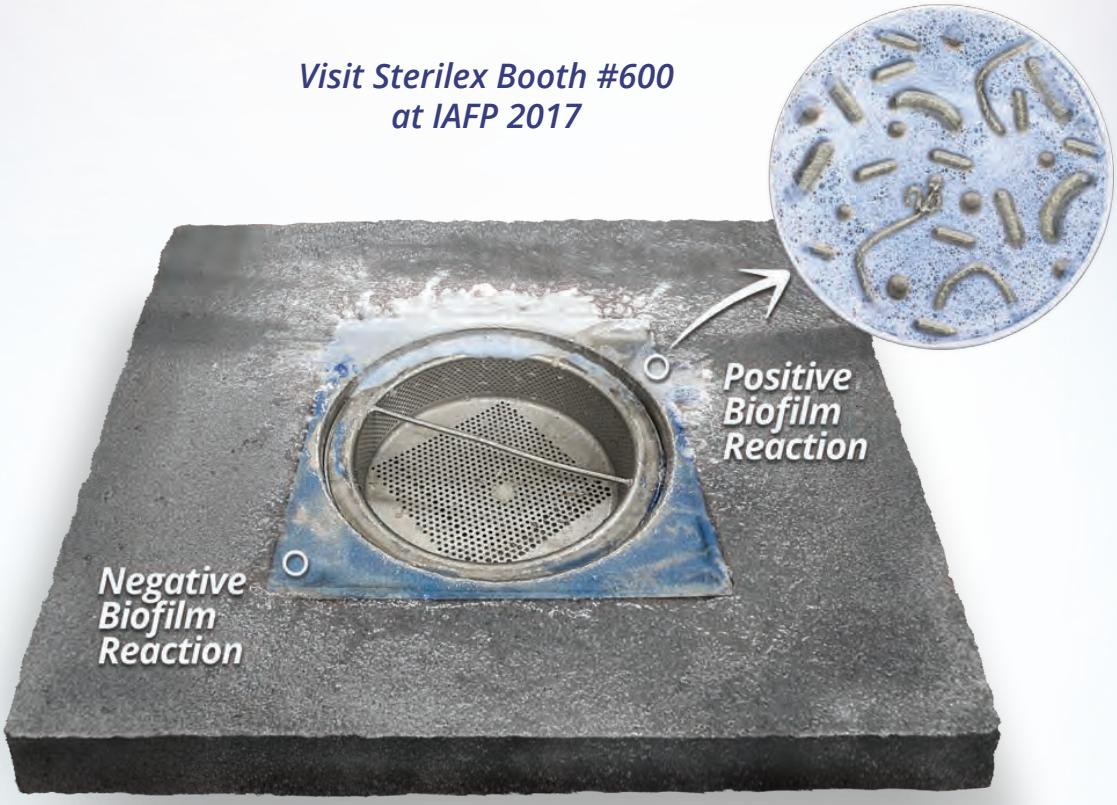
Undergraduate Student Award Competitors

Bertoldi, Bruna, *University of Florida* (P1-44)
Carroll, Joanna, *Michigan State University* (P3-10)
Castillo, Adam, *Texas Tech University* (P1-189)
Chen, Anqi, *Cornell University* (P2-188)
DeFrain, Lindsey, *Michigan State University* (P3-80)
Hsu, Yung-Chen, *Purdue University Northwest* (P1-105)
Infante, Kristina, *University of Houston* (P1-180, P2-90)
Kountoupis, Tony, *Oklahoma State University* (P2-36)
Mackenroth, Beata, *Oklahoma State University* (P1-219)
Marik, Claire, *University of Delaware* (P1-37)
Millan-Borrero, Nathalia, *University of Connecticut* (P2-219)
Mo, Kevin, *Ohio State University* (P2-94)
Rock, Christine A., *Kansas State University* (P1-31)
Schwartz, Renee, *Michigan State University* (P3-09)
Steinbrunner, Philip, *Michigan State University* (P3-12)
Teichmann, June, *University of Delaware* (P1-35)
Uhl, Bennett, *Kansas State University* (P2-44)
Veenhuizen, Deklin, *Purdue University* (P2-84)
West, Alyssa, *Purdue University* (P2-21)

INDICON™ GEL

Quit Playing Hide and Seek with Biofilm
Make the Invisible Visible

Visit Sterilex Booth #600
at IAFP 2017



Rapid Biological Hygiene Indicator

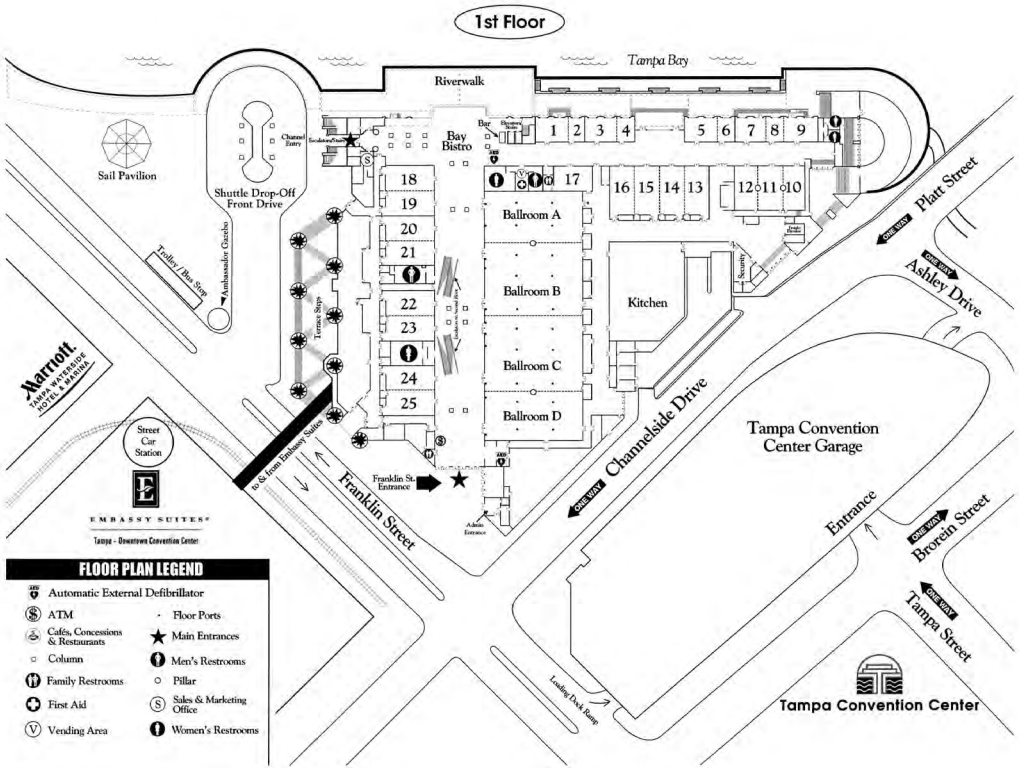
Rapidly detect the presence of biofilm harborage niches in your plant with Sterilex's NEW Indicon™ Gel. Indicon Gel provides an easy to use, cost-effective, rapid visual indication of the presence of biofilm on a surface. The surface may contain microorganisms such as *Listeria*, *E. coli,* or *Salmonella.*

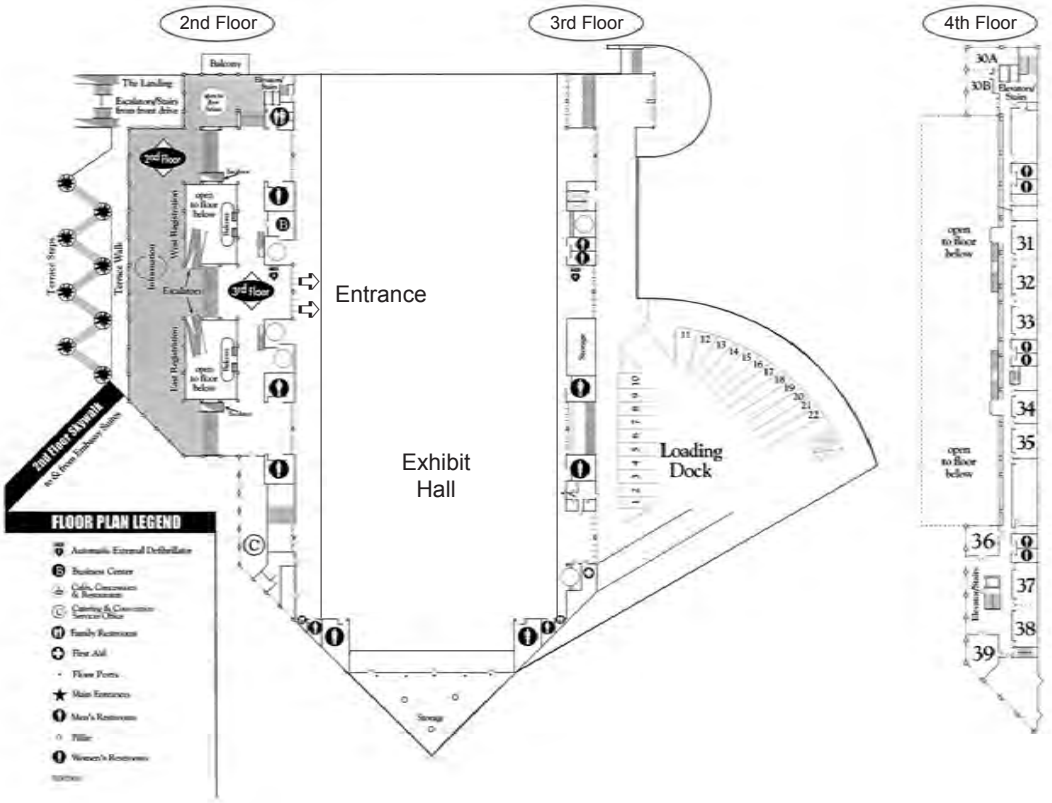
www.sterilex.com/indicongel

STERILEX®
Innovative Solutions for Microbial Control

Floor Plan

Tampa Convention Center





China International Food Safety & Quality Conference

November 1 – 2, 2017 • Beijing, P. R. China

Come join 900+ food safety leaders to learn, discuss and discover the most recent developments in…. Surveillance and Epidemiology Information Risk Management
Food Traceability
Food Fraud: Vulnerability Assessment, Prevention and Analytical Detection
Creating and Implementing a Culture of Food Safety
Next Generation Methodologies in Chemical Risk Assessments for Food
Predictive Microbiology and Quantitative Microbial Risk Assessment
Sustainability and Food Safety Challenges
Managing Hygiene in Food Operations and Role of Non-Pathogen Limits in Standards
New Methods and Solutions in Rapid Testing and Detection
Real Time Testing Methods for the Food Industry
Modern Analytical Techniques and Testing of Contaminants in Food and Environmental Samples
Chemical and Microbiological Risk Assessment and Risk Management of the Food Supply Chain
Whole Genome Sequencing in Disease and Outbreak Investigation
Impact and Control Strategies for Antimicrobial Resistance
China's 13th Five Year Plan for Food Safety
Horizon 2020 EU - China Food Safety Progress Report
Food Allergens: Detection, Management & Prevention

www.chinafoodsafety.com

EFFICIENCY AND RELIABILITY WITH THE EHEC SOLUTION.

LISTERIA MONOCYTOGENES • *E.COLI* O157:H7 • *LISTERIA SPP.* • *SALMONELLA*
EHEC • NOROVIRUS GI • NOROVIRUS GII • HEPATITIS A VIRUS • HEPATITIS E VIRUS

When screening for STEC and 0157:H7, you need a fast, simple, and accurate method for detecting these pathogens. GENE-UP® is a real-time PCR pathogen detection system from the microbiology experts at bioMérieux. It provides efficiency and reliability with the EHEC Solution. The kit combines stx and eae, and the top 6 serogroups in one solution. And, when used in combination with VIDAS®, the EHEC solution provides exceptional specificity.

GENE-UP® is an easy way to get rapid, reliable results when detecting food-borne pathogens. To learn more, visit **biomérieux-usa.com/gene-up**.

BIOMÉRIEUX
INDUSTRY