Newsletter
SUMMER 2019

Innovation Through Collaboration

IFSH
INSTITUTE FOR FOOD SAFETY AND HEALTH

ILLINOIS INSTITUTE OF TECHNOLOGY
A full list of scheduled events is available on our website!
https://www.ifsh.iit.edu/news-events

**Technical Connections Webinar (IFSH Members)**  
July 10, 2019 (Online)

**Method Validation and Statistics for Microbiological Methods-Part A: Qualitative Methods**  
September 18-20, 2019 at Joint Institute for Food Safety and Applied Nutrition, College Park, MD  
Registration link: https://bit.ly/2DEv82A

**IFSH Annual Meeting 2019 (IFSH Members)**  
September 24-25, 2019 at Chicago Marriott Southwest, Burr Ridge, IL

**FSPCA 2019 Annual Conference**  
October 22-23, 2019 at Chicago Marriott Southwest, Burr Ridge, IL  
Registration link: https://bit.ly/2Ji3xZA

**IFSH & University of Wisconsin’s Food Research Institute Joint Symposium**  
Managing Microbiological Testing as a Preventive Controls Verification  
October 24, 2019 at Chicago Marriott Southwest, Burr Ridge, IL  
Registration link: https://bit.ly/2I6d3xM

**FSPCA Preventive Controls for Human Food Participant Course**  
November 5-7, 2019 at the IIT Moffett Campus, Bedford Park, IL  
Registration link: https://bit.ly/2VrMwSg

**High Pressure Processing Short Course and Workshop**  
April 27-30, 2020 at the IIT Moffett Campus, Bedford Park, IL

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**Connect with IFSH**

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IFSH began implementing a series of webinars called Technical Connections Meetings (TCMs) to communicate and engage with our members and stakeholders concerning IFSH’s collaborative research program. Our Spring 2019 webinar showcased “Factors Affecting Transfer of Heavy Metals to Beer and Wine During Filtration” by Ben Redan, a Research Chemist/ORISE Fellow, FDA.

We look forward to having you join us for the upcoming 2019 Technical Connections Meeting. Mark your calendars!

Diane Stewart, Research Microbiologist at FDA will present “Comparison of Sampling Devices for Recovery of Listeria monocytogenes from Stainless Steel Surfaces”

Wednesday, July 10, 2019 at 10a.m.-11a.m. (CST)

Please contact Renee Anderson at randerson1@iit.edu if you would like to learn more about our IFSH Technical Connections Meeting Webinars!

New IFSH Members

We are delighted to welcome our newest member companies:

![RefrigIT Warehouse](image1)

![Universal Pure](image2)

![Lamb Weston](image3)

For more information about IFSH membership, check out our membership pages at: https://www.ifsh.iit.edu/members. Please notify Renee Anderson at randerson1@iit.edu of any changes to your company's name, address or email addresses of your delegates to allow us to keep our records up to date.
IFSH On The Road & In The Press

February 7. Dr. Kathiravan Krishnamurthy, IIT Assistant Professor of Food Science and Nutrition presented “Novel non-thermal processing technologies and their applications in fruit and vegetable products” at the IFT Live Webcast organized by the Nonthermal Processing Division of IFT.

February 21. Dr. Robert Brackett, IIT VP and Director IFSH was a featured speaker at Soup, Salad, and Science, a science focused public lecture series at the River Falls Community Education Center in River Falls, Wisconsin. Dr. Brackett discussed the Safety of the American Food Supply: Myths, Misconceptions and Realities during his talk.

February 25. Dr. Alvin Lee, IIT Associate Professor, Food Science and Nutrition, Director of the Center for Processing Innovation IFSH was invited to present “Process Validation: The How To's” at the American Frozen Food Institute (AFFI) Food Safety Leadership Conference in San Diego, CA.

February 26-28. Dr. Nathan Anderson, Agricultural Engineer-FDA was invited to speak about “How Validation Pitfalls Translate to Inspection Citations (483s) and Warning Letters” at the Institute for Thermal Processing Specialist (IFTPS) Annual Meeting and Symposia in San Antonio, TX. The meeting convenes leading thermal process specialists from across the nation and leadership in this important food safety category.

March 11. IFSH delegates and Food Science and Nutrition Students attended the Chicago Section Institute of Food Technologists (IFT) Student Night Dinner Meeting. It was a highly attended event of Chicago area food industry professionals. The evening represented a good opportunity to network and promote upcoming IIT IFSH events.
March 19-20. Dr. Nathan Anderson, Agricultural Engineer-FDA presented a session on FDA Low Acid Canned Foods (LACF) Regulations at the Better Process Cheese School at the University of Wisconsin’s Food Research Institute. This course covered LACF regulations as they pertain to shelf-stable process cheese manufacture. Course topics include microbiology and control of Clostridium botulinum, thermal processing/pasteurization, formulation control, process instrumentation, HACCP, food plant sanitation, GMPs, production and packaging controls, and records.

March 26-28. IIT IFSH exhibited at the ProFood Tech Expo at McCormick Place in Chicago, IL.

March 26-27. IFSH delegates attended the Cold Pressure Council Annual Meeting at McCormick Place in Chicago, IL. Dr. Alvin Lee, Associate Professor Food Science and Nutrition, Director of the Center for Processing Innovation-IIT IFSH and Dr. Nathan Anderson, Agricultural Engineer-FDA were invited speakers. Dr. Lee presented the findings of the IFSH Juice and Beverages Task Force and Dr. Anderson talked about the Many Facets of High Pressure Processing for the FDA.
As part of the FDA grant to IFSH and funded by the FDA Office of International Programs, IFSH and Food Safety Preventive Controls Alliance (FSPCA) are leading the effort in training a cadre of Lead Instructors in India who can then teach the FSPCA standardized Preventive Controls courses to the Indian food industry that export to the US market. Dr. Robert Brackett, IIT Vice President and IFSH Director and Dr. Jason Wan, IFSH Associate Director are lead Trainer-of-Trainers for these Lead Instructors training courses. Four Lead Instructor courses (Kolkata, Chennai, and two in Mumbai) were successfully completed during April and May, with 109 Lead Instructors trained. These in-country Lead Instructors represent the Indian government agencies, academia and industry, and will champion and facilitate FSMA standards implementation in India and enhance the safety of foods imported to the U.S. The training programs were assisted by the FDA Country Office-India, and the Expert Inspection Council of the Indian Government.

Dr. Jason Wan presenting at the FSPCA Preventive Controls for Human Foods Course in Chennai, India

Dr. Robert Brackett presenting at the FSPCA Preventive Controls for Human Foods Course in Mumbai, India
April 8-11. IFSH presented a successful High Pressure Processing Short Course & Workshop at the IIT Moffett Campus in Bedford Park, IL. There were seventeen participants in the workshop. Organizing partners included Chicagoland Food & Beverage Network, Latella Fresh, and Liberty Cold. The short course and workshop was sponsored by Hiperbaric, Avure and IDUS HPP Systems.
April 16-18. **Food Safety Preventive Controls for Human Foods Course** was held at the Institute for Food Safety and Health. Five participants completed the course. To learn more about upcoming FSPCA courses offered at IFSH check out the IFSH events page at: https://www.ifsh.iit.edu/news-events/events

April 24-26. Dr. Alvin Lee, Associate Professor, Food Science and Nutrition, Director of the Center for Processing Innovation was an invited panelist to speak at the session: “Foodborne Viruses: Detection, Risk Assessment and Control Options in Food Processing” at IAFP’s **European Symposium on Food Safety** in Nantes, France. The meeting was an excellent forum to gain knowledge about the latest developments and techniques in food science and safety. Attended by industry, government, and academic personnel. https://www.foodprotection.org/europeansymposium/
April 24-26. Catherine Rolfe, Food Science and Nutrition doctoral graduate student presented “Bacterial Strain Selection for the Validation of High Pressure Treated Juices” at IAFP’s European Symposium on Food Safety in Nantes, France. https://www.foodprotection.org/europeansymposium/

April 23. IFT Next Newsletter featured the study on “Reducing heavy metals concentrations in wine and beer”. The research was conducted at FDA CFSAN/IFSH by Ben Redan, Research Chemist/ORISE Fellow, FDA. To access the article click on the following link: http://www.ift.org/IFTNEXT.aspx?cat=Newsletter
May 6-7. IFSH hosted the **Whole Genome Sequencing: A Tutorial and Hands-On Workshop to Help Understand Its Application to Food Safety**. The symposium was held at the Burr Ridge Marriott in Burr Ridge, IL. Sixty-seven industry, government and academic personnel attended the symposium. Following the symposium there was a one day workshop at the IIT Moffett campus. Thirty industry, government and academic personnel attended the workshop. Presentation materials will be available on the IFSH website soon.
May 13-16. Dr. Nathan Anderson, Agricultural Engineer, FDA presented Quality Assurance for Aseptic Processing and Packaging at Purdue University’s Aseptic Processing and Packaging Workshop.

May 29. The Institute for Food Safety and Health was a sponsor for the Global Midwest Alliance’s Fresher, Faster, Tastier: How Packaging Innovations are Changing the Food Industry event at the Federal Reserve Bank of Chicago. Dr. Robert Brackett, IIT VP and Director IFSH moderated the Growth and Global Opportunities panel. The program focused on packaging innovations that are changing the food industry. http://www.globalmidwestalliance.org/
The results of the collaborative research program at the Institute for Food Safety and Health's National Center for Food Safety and Technology, are reported in scientific publications, disseminated through presentations at professional conferences or published as monographs. Literature citations for publications authored or co-authored by IFSH/IIT, IFSH/NCFST, FDA CFSAN Division of Food Processing Science and Technology staff from 1989-2018 are available in one complete document. https://www.ifsh.iit.edu/knowledge-center/ifsh-research-papers-white-papers-and-reports

Each year, IFSH's National Center for Food Safety and Technology publishes the Annual Report of Research (ARR) exclusively for IFSH members. The 2018 Annual Report of Collaborative Research is available for IFSH members now. https://www.ifsh.iit.edu/knowledge-center/ ifsh-annual-review-reports

ARR 2018
A Sample of Project Titles

Evaluating the Effectiveness of Sprout Seed Treatments-Factors to Consider

Effect of pH on Survival of Foodborne Pathogens in Low Moisture Environments

Growth, Survival, and HPP Treatment of *Listeria monocytogenes* in Refrigerated RTE Dips

Systemic Approaches for Sampling Foods for Allergens and Gluten

A Pilot Study Investigating Consumer Perspective and Understanding of the Term “Milk”

Determination of Organic Surfactant Chemicals Releases from Polymer-Clay Nanocomposite Food Packaging
Milestone Best Practices for Sprout Production

Institute for Food Safety and Health at Illinois Tech Develops Milestone Best Practices for Sprout Production

New Findings, Released in Conjunction with the International Sprout Growers Association, Signifies Watershed Moment in Standardizing Best-Practices for Sprout Growers

Chicago, IL — April 1, 2019 — The International Sprout Growers Association (ISGA) and the Institute for Food Safety and Health (IFSH) announce the publication of the US Sprout Industry Production Best Practices. This document has been updated to comply with the Food Safety Modernization Act Final Rule on Produce Safety. It is now available to sprout growers and interested industry partners.

The Best Practices, which models the United Fresh Produce Association’s Harmonized Food Safety Standard, is first of its kind that addresses risk factors that are unique to sprouts and establishes production practices and requirements to minimize potential food safety risks. The document also includes verification procedures and recommended approaches for corrective actions.

The Sprout Production Best Practices is authored by the IFSH Sprout Safety Task Force (a stakeholder group representing all segments of the sprout industry - including sprout growers, seed suppliers, food service and retail industry, and other technical experts from industry, academia and government (FDA, USDA)).

The Sprout Production Best Practices is:

- Developed and owned by the sprout industry.
- The basis of a sprout safety audit program.
- A living document, which will continue to be revised in response to FDA guidance and as new best practices are developed.

Sprout industry leaders believe that an industry wide audit program is essential to ensure that the industry is implementing the food safety best practices and is meeting regulatory requirements. The IFSH Sprout Safety Task Force is working with USDA Agricultural Marketing Service (AMS) in developing a commodity specific audit designed for sprout growers based on the Production Best Practices. The USDA AMS sprout safety audit would be a good option for sprout growers. It focuses specifically on sprouts, is inexpensive, comprehensive and verified with additional unannounced audits. The Safe Quality Food Institute (SQFI) is using the best practices to modify their sprout audits, and other audit companies are welcome to adopt the best practices in their audit programs.

For more information, contact Barbara Sanderson, Jonathan’s Sprouts, and Chair, Sprout Safety Task Force at Barbara@isga-sprouts.org, 508-763-2577.

Access the US Sprout Industry Production Best Practices document at this website: https://www.ifsh.iit.edu/us-sprout-industry-production-best-practices or contact Rich Wolfe, ISGA, office@isga-sprouts.org, 401-615-7990.

The IFSH Sprout Safety Task Force was formed in 2009 with two major goals: 1) increase industry compliance with FDA sprout safety guidelines, and 2) address critical research needs to minimize microbial hazards in sprouts. IFSH members in the Task Force include sprout growers, seed producers, restaurant operator, food safety consultant, and IIT and FDA scientists.
SPROUT SAFETY ALLIANCE

http://www.iit.edu/ifsh/sprout_safety/

The Sprout Safety Alliance (SSA) training curriculum version 2.0 public version is available on the SSA website https://www.ifsh.iit.edu/ssa for free download and hard copies are available for purchase at the online bookstore http://bookstorefspca.ifpti.org/index.php/ssa.html. An SSA blended course comprising an online module covering the knowledge sections of the twelve chapters of the curriculum and a face-to-face component (Part 2) is available.

Kaiping Deng, Co-Lead and Coordinator of the Sprout Safety Alliance (SSA) presented “Water testing requirements of the Produce Safety Rule” at a webinar hosted by the Association of Public Health Laboratories (APHL) on April 15, 2019. More than one hundred and thirty people from public and private testing laboratories around the country tuned in the webinar. “The images are a good way to show us how the sampling is physically performed. With no knowledge of sprout process, it was an eye opener.” - written by an audience in the webinar evaluation.

The SSA conducted a Sprouter Training Blended Part 2 course in conjunction with the FDA sprouts inspection training at the FDA Chicago District Office on May 6. Thirty-two (32) participants, including ten FDA regulators, ten state inspectors, eight sprout growers, three university extension specialists and a retailer representative attended the training.
Food Safety Preventive Controls Alliance (FSPCA)
In accordance with the Alliance’s mission to support safe food production for the U.S. market, the FSPCA has, by May 2019, trained 2,442 Lead Instructors and issued 96,799 Preventive Controls for Human/Animal Food, Foreign Supplier Verification Programs, and Intentional Adulteration certificates combined. See metric details under Quick Links on the FSPCA homepage.

New Training Materials
The FSPCA IA Conducting Vulnerability Assessments Participant Manual v1.0 has been added to the FSPCA website. Visit https://www.ifsh.iit.edu/fspca/courses/intentional-adulteration and download your copy today!

2019 Lead Instructor Training
Human Food: The next available course of 2019 will be held on November 12-14 in Chicago, IL. No other Human Food Lead Instructor courses are scheduled in 2019. Register today! https://www.ifsh.iit.edu/fspca/fspca-preventive-controls-human-food#LICS
Animal Food: The next course of 2019 will be held on August 13-15 in Arlington, VA. No other Animal Food Lead Instructor courses are scheduled in 2019. Register today! https://www.ifsh.iit.edu/fspca/fspca-preventive-controls-animal-food#AFLICS
FSVP: The next course of 2019 will be held on August 27-29 in Arlington, VA. No other FSVP Combo courses are scheduled in 2019. Register today! https://www.ifsh.iit.edu/fspca/courses/foreign-supplier-verification-programs-fsvp#FSVP-lead-instructor-course-schedule
Intentional Adulteration Vulnerability Assessment: Additional courses will be added soon. The FSPCA website will be updated and all approved IAVA Lead Instructor candidates will be notified. https://www.ifsh.iit.edu/fspca/courses/fspca-ia-vulnerability-assessment-lead-instructor-criteria-and-online-application#CS

Looking for FSPCA Preventive Controls for Human Food/Animal Food, FSVP, or IA Conducting Vulnerability Assessments participant courses? Visit the FSPCA public participant course list: https://fspca.force.com/FSPCA/s/ (click on the “Course List” tab). The list can be sorted by course type, start date and location!

Registration now open for the 2019 FSPCA Annual Conference! The FSPCA 3rd Annual Conference “Advancing Food Safety Collaboration” will be held on October 22-23 at the Chicago Marriott Southwest in Burr Ridge, IL. Don’t miss this opportunity to learn from and network with leading food safety professionals from around the globe! Visit the FSPCA website for detailed information, a downloadable Information Packet and Agenda, and a link to registration: https://www.ifsh.iit.edu/fspca/fspca-presentations-and-conferences
Awards

Please join us in congratulating Dr. Lauren Jackson, Chief-Process Engineering Branch CFSAN, Food and Drug Administration for becoming an IFT Fellow.
http://www.ift.org/community/fellows.aspx

Please join us in congratulating, FdSN graduate student, Hitesh Moryani on receiving the IFT Andy and Jan Rao International Division Travel Scholarship. Hitesh will use this scholarship to attend the 2019 IFT Conference in New Orleans, LA June 2-5.
http://feedingtomorrow.org/student-travel-grants
March 2019. Dr. Kathiravan Krishnamurthy, Assistant Professor, Food Science and Nutrition and his Food Packaging Engineering class attended an onsite field experience at Teinnovations (IFSH Member) in Warrenville, IL. Students were able to see real-world examples of High Pressure Processing (HPP) lidding films, specialty and custom containers, and sealing/packaging machines as well as inquire about the concepts they learned throughout their Food Packaging Engineering course.
April 5. IFSH, IIT and FDA staff and students participated in the 6th Annual International Cultural Day. Everyone enjoyed a potluck lunch and talent show.
Tianxi Yang is a new ORISE fellow at FDA Moffet campus. She obtained her Ph.D. degree in Food Science at the University of Massachusetts Amherst in 2018. Her research focuses on developing innovative analytical methods for sensing and imaging applications. Her research interest involves nanotechnology, analytical chemistry, and food science. She will work on the nanotechnology-based food packaging and food safety projects under the mentorship of Dr. Timothy Duncan at FDA.
Retirements

Patrick Guinty, Facility Engineer worked for Illinois Institute of Technology (IIT) for over 20 years. He had been instrumental in many projects and improvements at IFSH throughout this time. His knowledge of the infrastructure of Moffett will be missed. During retirement, Patrick is planning to spend more time with his family. Please join us as we congratulate Patrick on his retirement.

Please check out our partner sites news and events.

SAVE THE DATE!

FOOD SAFETY PREVENTIVE CONTROLS ALLIANCE

2019 ANNUAL CONFERENCE
Advancing Food Safety Collaboration

CHICAGO MARRIOTT SOUTHWEST
OCTOBER 22 - 23, 2019

Register Today! https://bit.ly/2Ji3xZA
Managing Microbiological Testing as a Preventive Control Verification Symposium

SAVE THE DATE!

Organizing Partners

IFSH
ILLINOIS INSTITUTE OF TECHNOLOGY

Food Research Institute
UNIVERSITY OF WISCONSIN-MADISON

October 24, 2019

At: Chicago Marriott Southwest at Burr Ridge 1200 Burr Ridge Parkway, Burr Ridge, IL 60527

Sponsorships Available

HTTPS://IFSH-FRI-OCT2019.EVENTBRITE.COM

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