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

FSPCA Preventive Controls for Human Food Participant Courses
August 28-30; October 2-4; November 6-8 at the IIT Moffett Campus, Bedford Park, IL

IFSH 2018 Annual Meeting (for IFSH members)
September 25-26, 2018 at Chicago Marriott Southwest, Burr Ridge, IL

Food Waste and Sustainability: Strategies to Improve Food Safety, Food Security and Nutrition.
IFSH and University of Wisconsin’s Food Research Institute (FRI) Joint Symposium
September 27, 2018 at Chicago Marriott Southwest, Burr Ridge, IL

High Pressure Processing Short Course and Workshop
April 8-11, 2019 at the IIT Moffett Campus, Bedford Park, IL

Connect with IFSH

LinkedIn- institute news https://www.linkedin.com/company/iit-institute-for-food-safety-and-health/

Twitter-keep up to date with our latest news and activities https://twitter.com/iit_ifsh

Facebook-find out about our history, news and events https://www.facebook.com/IITIFSH/

https://www.ifsh.iit.edu/news-events
New IFSH Members

We are delighted to welcome our newest member companies.

For more information about IFSH membership, check out our membership pages at: https://www.ifsh.iit.edu/members. Please notify Armand Paradis at aparadi2@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.

https://www.ifsh.iit.edu/members

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 2018 webinar showcased the topic of High Throughput Sequencing. Invited speakers were: Dr. Behzad Imanian, Research Assistant Professor, FSN and IFSH HTS Initiative leader and Dr. Kristin Schill, Research Microbiologist.

We look forward to having you join us for the upcoming 2018-2019 Technical Connections Meetings

Save the date for the Fall TCM!

Wednesday, November 14, 2018

The Safety of High Pressure Processed Juices and Beverages

The November 14th webinar will feature the following speakers:

Dr. Alvin Lee, Director of the Center for Food Processing and Innovation and Associate Professor of Food Science and Nutrition, IIT IFSH, Jill Costelow, Process Coach, FSO Institute and Joyce Longfield, VP of Product Innovation, Good Foods Group and Chair, Cold Pressure Council. Jill will present on low-acid juices and beverages and Joyce will present updates from high acid juices and beverages.

Please contact Renee Anderson at randerson1@iit.edu if you would like to learn more about our IFSH Technical Connections Meeting Webinars!
April 18. Dr. Elizabeth Grasso-Kelley, Research Scientist at IFSH and Assistant Professor Food Science and Nutrition, IIT was on ABC7 Chicago and interviewed about the Salmonella egg recall. More than 200 million eggs were recalled across nine states because of potential contamination of Salmonella. “They have over 2 million eggs produced at the farm each day,” says Elizabeth Grasso-Kelley. “So if you think about, if they are having an issue and they recall it later, at some point in time there’s going to be more eggs that are affected versus a smaller producer.”

April 25-27. Dr. Alvin Lee, Associate Professor, Food Science and Nutrition, Director of the Center for Processing Innovation presented two talks titled: “Non-Thermal and Thermal Process Validation” and “Validation and Verification-Successes, Pitfalls and Disasters” at IAFP’s European Symposium on Food Safety in Stockholm Sweden. 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/

May 7-10. IFSH exhibited and Dr. Alvin Lee, Associate Professor, Food Science and Nutrition, Director of the Center for Processing Innovation was an invited panelist presenting on “Microbial Interventions Across the Supply Chain” at the Food Safety Summit. In Rosemont, IL. More than 1,700 food safety researchers and regulators came together with food producers for the 20th annual Food Safety Summit. https://www.foodsafetystrategies.com/food-safety-summit

May 8. The Institute for Food Safety and Health was a sponsor for the Global Midwest Alliance’s Expanding Food Trade: Ways to Innovate and Thrive event at the Federal Reserve Bank of Chicago. This was the first program in the Alliance’s 2018 Innovation, Growth and Globalization Industry-Focused Series. The program showcased leading food industry experts discussing the topics of global food trade, innovative new technologies, expanding partnerships and growing trade flows.
http://www.globalmidwestalliance.org/

May 22. IFSH was an organizing partner at the Fresh & Less Processed: High Pressure Processing technology breakfast hosted by the Chicagoland Food and Beverage Network. Dr. Kathiravan Krishnamurthy, Assistant Professor, Food Science and Nutrition, IFSH, IIT was an invited panelist. The panel discussed trends that are driving the HPP industry and food safety related to HPP. https://chicagolandfood.org/
**IFSH On The Road & In the Press**

May 21. Dr. Robert Brackett, IIT Vice President and IFSH Director was interviewed by Dr. Ira Breite and **SIRUS XM radio** about how safe it is to eat romaine lettuce and eggs. Dr. Brackett responded to questions such as "Are we still at risk for *E.coli* or *Salmonella*?". Discussions also focused on how to stay safe with potato salad. You can follow Dr. Ira Breite on twitter @doctorira

May 22-24. IFSH/IIT Food Science and Nutrition (FdSN) students attended the **Sweets and Snacks Expo** on May 22-24, 2018 in Chicago, IL. https://sweetsandsnacks.com/

May 30-31. IFSH hosted the **Food Safety & High-Throughput Sequencing- What Does the Future Hold? Symposium** at the Burr Ridge Marriot in Burr Ridge, IL. Nearly 100 industry, government and academic personnel attended the symposium. Presentation materials can be accessed: https://www.ifsh.iit.edu/food-safety-and-high-throughput-sequencing-symposium-2018
June 9-12. Dr. Indika Edirisinghe, Associate Professor Food Science and Nutrition, Associate Director of the Center for Nutrition Research and Dr. Amandeep Sandhu, Assistant Professor Food Science and Nutrition traveled to the Nutrition 2018 in Boston, Massachusetts. Dr. Edirisinghe presented a talk titled “Addition of Orange Pomace Alters Acute Glycemic Response to Orange Juice in Healthy Adults” during the Carbohydrate Metabolism, Glycemic Response, and Health session at the American Society for Nutrition’s inaugural flagship meeting. Dr. Sandhu presented a poster titled “Pharmacokinetic parameters of red raspberry polyphenols in human plasma over 24 hour period. https://meeting.nutrition.org/
June 18-20. Dr. Alvin Lee, Associate Professor, Food Science and Nutrition; Director of the Center for Processing Innovation presented “Use of HPP for Novel Products” at the Cold Pressure Council’s Annual Conference in Itasca, IL. The aim of the conference is to highlight HPP best practices and share insights from leading food processors and service supplier experts in the HPP field. http://coldpressurecouncil.org/annual-conference/
June 25. Dr. Jason Wan, IFSH Associate Director attended the inaugural **SelectChicago 2018** Investment Conference as an invited panelist at the Westin O’Hare, showcasing IFSH capabilities to a group of over 120 international, agrifood, business and community leaders seeking or encouraging investment within the Chicago region.

Dr. Jason Wan (first on left) fielding questions at the SelectChicago 2018 Forum
June 25-27. IFSH participated in the United FreshTEC conference’s University Showcase. The University Showcase is where participants can discover the latest technologies and cutting-edge research going on at top universities. IFSH also participated in the Listeria Learning Lab where participants were engaged in hand-on activities to enhance their knowledge about Listeria.


![Food Safety Matters Podcast](image)

July 8-11  IFSH presented at **2018 International Association for Food Protection (IAFP)** in Salt Lake City, Utah.

Dr. Robert Brackett, IIT Vice President and IFSH Director was an invited panelist talking about “Complex Risk Assessment and Classic Hazard Analysis on a Spectrum-Do We Really Need Both/Can We Really Do Both?”

Dr. Alvin Lee, IIT Associate Professor, Food Science and Nutrition; IFSH Director of the Center for Processing Innovation presented “Non-Thermal and Thermal Process Validation and Verification (including FSMA Ramifications)” and “Validation and Verification—The Dos, the Don'ts and the Differences”

Dr. Nathan Anderson, Agriculture Engineer, FDA presented “Regulatory Perspective” and was an invited panelist speaking on “Process Validation—Stories from the Trenches”

Dr. Tong-Jen Fu, Research Chemical Engineer, FDA and Dr. Kaiping Deng, Research Assistant Professor, IIT were on a panel discussing “Improving Safety of Sprouted Seeds”

Dr. Lauren Jackson, Chief Process Engineering Branch FDA presented “FDA Perspective on Control of Chemical Hazards in International Supply Chains”

Dr. Kristin Schill, Microbiologist, FDA, Joelle Salazar, Microbiologist, FDA and Stephen Walker, Consumer Safety Officer, FDA presented at a session titled “From Cow to Curd: Defining Microbiomes in the Dairy Industry”

Josh Warren, Liyun Zhang and Magdalena Naziemiec at the IAFP student poster session
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Ifsh On The Road
July 8-11 IFSH presented at 2018 International Association for Food Protection (IAFP) in Salt Lake City, Utah.

IFSH had 23 posters exhibited at IAFP.  https://www.foodprotection.org/annualmeeting/

- Lindsay Halik et al. “Comparison of Listeria monocytogenes Inactivation on Cellulose Filter Membranes during Hot-Air Roasting”
- Quincy Suehr et. al. “Effectiveness of Dry Purging for Removing Salmonella from a Contaminated Lab-scale Auger Conveyor System”
- Rachel Streufert et. al. “Comparison of the Thermal Resistance of Salmonella enterica Serotypes in Peanut Butter and Soy Protein Powder”
- Liyun Zhang et al. “Effectiveness of Push-Through Cleaning Methods for Removing Milk Chocolate from a Stainless Steel Pipe and Butterfly Valve”

- Mu Ye et. al. “Inactivation of Hepatitis A Virus on Strawberries and Blueberries by High-Pressure Processing”
- Nicole Maks et. al. “Assessing the Inactivation of Listeria monocytogenes on Raspberries by Chlorine and Peroxyacetic Acid Spray Treatments”
- Samantha Lindemann et. al. “Comparing Quantitative MPN and PCR Vibrio parahaemolyticus Methods in Oyster Samples: A Six-Year Study”
- Yan Zhang et. al. “Assess Hepatitis A Virus Survival on Dried Berries during Month-Long Storage”
- TJ Fu et. al. “The Efficacy of Peroxyacetic Acid-Based Sanitizer for Disinfection of Seeds Artificially Inoculated with Salmonella as Affected by Treatment Time, Concentration, and Seed Type”
- Tanvi Mhetras et. al. “Analysis of Desiccation Resistance of Listeria monocytogenes Strains”
- Shannon Pickens et. al. “Survival of Various Microorganisms in Powdered Infant Formula”
- Magdalena Naziemiec et. al. “Improved Sampling Methods for Detection of Food Allergens on Food Contact Surfaces”
- Yingshu He et. al. “Transcriptomic Analysis of Listeria monocytogenes Adaptation on Fresh-Cut Produce”
- Kristin M. Schill et. al. “Genetic Characterization of 15 Nonproteolytic Clostridium botulinum Type B and E Strains Using Pulsed-Field Gel Electrophoresis and High-Throughput Sequencing”
- Travis Morrissey et. al. “Evidence of Bacillus cereus Spores as the Target Pathogen in Thermally Processed Extended-Shelf Life Refrigerated Foods”
- TJ Fu et. al. “Survival of Escherichia coli O157:H7 in Spent Sprout Irrigation Water”
- Kristin M. Schill et. al. “Genetic Characterization of 60 Proteolytic Clostridium botulinum Strains Using Pulsed-Field Gel Electrophoresis and High-Throughput Sequencing”
- Kristin M. Schill et. al. “Transcriptomic Analysis of Arginine-Induced Botulinum Neurotoxin Repression in Clostridium botulinum Strain ATCC3502 Using RNA Sequencing”
- Vidya Natarajan et. al. “Fate of Listeria monocytogenes during 90-Day Aging of Gouda Cheese Prepared from Unpasteurized Milk”
- Yingshu He et. al. “Salmonella Transfer and Survival on Fresh-cut Fruits”
- Yadwinder Singh Rana et. al. “Effect of Shipping Time, Temperature, and Transport Media on Recovery of Listeria Monocytogenes from Environmental Swabs”
July 15-18. IFSH exhibited and presented at **IFT18: A Matter of Science + Food** in Chicago, IL. Dr. Robert Brackett, IIT Vice President and IFSH Center Director was an invited speaker for the sessions: “Preventive Controls for Human Foods: Successes and Challenges for FDA and the Food Industry”, “Food Importing: Green Light Strategies for Compliance with Game Changing FSVP Requirements” and “Educating the Future Food Scientists Capable of Facing Evolving Regulatory and Technological Challenges in Global Food Industry”

Dr. Kathiravan Krishnamurthy, Assistant Professor Food Science and Nutrition was an instructor for the Certified Food Science Preparatory Course. Additionally, Dr. Krishnamurthy was an invited speaker of the sessions “Educating the Future Food Scientists Capable of Facing Evolving Regulatory and Technological Challenges in Global Food Industry” and “Shedding Light on Food Safety, Quality and Nutrition: Opportunities and Challenges with Light-Based Technologies”

Dr. Alvin Lee, Associate Professor, Food Science and Nutrition, Director of the Center for Processing Innovation and Dr. Nathan Anderson, Agricultural Engineer, FDA were invited speakers of the session “High Pressure Processing of Meats: Validation and Pathogen Destruction as Influenced by Formulation and Processing”

Dr. Lauren Jackson, Chief, Processing Engineering Branch, FDA presented a Hot Topic Session: “Establishing a Regulatory Action Levels for Food Allergens-Do We Have the Data We Need?”

Dr. Kristin Schill, Research Microbiologist, FDA, Dr. Rukma Reddy, Research Food Technologist, FDA, and Dr. Yun Wang Research Biochemist/ORISE Research Fellow, FDA were invited to speak at “New Advancements in Botulinum Neurotoxin Detection Methods”

IFSH, IIT and FDA had nine posters that were presented and shared during the IFT poster sessions throughout the event.

- A Novel Method for Analyzing Lipid Oxidation in Infant Cereals and Fish Oil Supplements by Dr. Krishnamurthy and Chengyu Gao
- Survival of *Listeria Monocytogenes* on Sunflower Seeds During Storage by Dr. Anderson and Alisha Aggarwal
- Effect of pH on Desiccation Survival on *Salmonella* Anatum by Dr. Anderson and Fangyu Chen
- Polyphenolic Composition of Wild Salal Berries from Northwest United States by Dr. Sandhu
- Dry Transfer of *Salmonella* in Flour on Corn Meal to Food Contact Surfaces During Mixing by Dr. Anderson and Siman Liu
- Inactivation of *Enterococcus faecium* NRRL B-2354, a Surrogate for *Salmonella*, During Baking at Different Oven Relative Humidity Levels by Dr. Anderson and Xiyang Liu
- Application of High Pressure Processing to Inactive *Escherichia coli* and *Listeria monocytogenes* on Fresh and Frozen Strawberries and Blueberries by Drs. Lee and Mu Ye
- Evaluation of Sanitizer Washing to Inactive Norovirus on Red Raspberry Fruit by Dr. Lee and Mu Ye
- Characterization of a Novel Pulsed Light System for Inactivation of *Listeria monocytogenes* ATCC 35152 on the Surface of Apple by Dr. Krishnamurthy and Hanman Chang
July 17. The **Technical Field Trip** to IFSH occurred on Tuesday July 17. 29 people were in attendance. The tour included the GMP pilot plant, processing and novel technology areas of high pressure, pulsed ultraviolet light, infrared thermal processing and cool plasma technologies; and laboratories for microbial, instrumental analysis and high-throughput genomic sequencing. 
https://www.iftevent.org/
July 15. Phi Tau Sigma & IFT honor division competition winners. Chengyu Gao, IIT received 3rd place in the Food Chemistry Graduate Student Oral Presentation competition and Fangyu Chen, IIT received 3rd place in the Food Microbiology Graduate Student Oral Presentation competition at **IFT 18: A Matter of Science + Food** in Chicago, IL.

Chengyu Gao receiving his IFT Food Chemistry Graduate Student Oral Presentation award

Fangyu Chen receiving her IFT Food Microbiology Graduate Student Oral Presentation award

Alvin Lee, Behzad Imanian and Glenn Black assisting with the IFSH booth

Pratistha Banerjee and Neha Kulkarni assist with the IFSH booth

Cindy Koschetz and Alvin Lee assist with the IFSH booth
July 15. IFSH Associate Director Jason Wan, Ph.D., delivered a keynote presentation at the Chicago Forum co-organized by the Chinese American Food Society and the Food Systems Network. The Forum was assisted by a group of IIT food science alumni and hosted at the IIT Mies Campus Perlstein Hall, as part of the satellite activities of the Institute of Food Technologists (IFT) 2018 Annual Meeting in Chicago during the week. The Forum was attended by over 100 students and faculty in food science and nutrition from all over the world. FDA Chemical Engineer Tong-jen Fu, Ph.D., also presented at the Forum as an invited panelist.

July 16. Hossein Daryaei Ph.D., Scientist at IIT IFSH received the “Outstanding Service Award” from the IFT Food Packaging Division at IFT18: A Matter of Science + Food in Chicago, IL.
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 to-date trained over 1,900 Lead Instructors and issued over 70,000 Preventive Controls for Human/Animal Food certificates and Foreign Supplier Verification Programs certificates combined. Visit the FSPCA Website at fspca.net for more information.

2018 FSPCA Annual Conference
The second annual FSPCA conference was held at Navy Pier, Chicago IL on July 18-19, 2018 with over 280 attendees. Key topics of discussion included: FDA Perspective on FSMA Implementation and Inspection, FSVP and Intentional Adulteration. The networking reception was well attended and provided an opportunity to continue discussions with colleagues. Conference materials are now available at: https://www.ifsh.iit.edu/fspca/fspca-presentations-and-conferences

Updated Training Materials
The FSPCA Preventive Controls for Animal Food course manual and the FSPCA FSVP course manual have been updated! Download a free copy from the FSPCA website.

The public version of the Animal Food participant manual v1.1 along with the errata sheet are available for download on the FSPCA website: https://www.ifsh.iit.edu/fspca/fspca-preventive-controls-animal-food. The public version of the FSVP participant manual v1.1 along with the errata sheet are available for download on the FSPCA website: https://www.ifsh.iit.edu/fspca/courses/foreign-supplier-verification-programs-fsvp/

2019 Lead Instructor Training
The FSPCA is in the midst of planning Human Food, Animal Food and FSVP Lead Instructor courses for 2019. Approved Lead Instructor applicants will receive email notifications, and the FSPCA website will be updated, once additional courses are available.

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

April 16. The Sprout Safety Alliance (SSA) has conducted a SSA Sprouter Training Blended Course Part 2 in Tampa FL, in conjunction with the FDA inspector training FD225. FDA/state inspectors, sprout growers and consultants attended the course.

April 26. The SSA Co-Lead and Coordinator Dr. Kaiping Deng gave a presentation “Sprout Safety Alliance Outreach Activities” at the International Sprout Grower Association (ISGA) Annual Convention in Chatham MA.

April 27. Another SSA Sprouter Training Blended Course Part 2 was completed immediately after the ISGA Convention in Chatham MA. MA state inspectors and sprout growers from the northeast region attended the course.
Dr. Kaiping Deng received her B. S. and M. S. in Chemistry from China, and Ph. D. in Biochemistry and Molecular Biology from Oklahoma State University. She took an ORISE Research Fellow position at FDA Moffett location in 2009 and joined IFSH/IIT as a Senior Scientist in 2014. She became a research faculty member in 2015.

**Research** - Dr. Deng’s research is focused on food microbiology and aims to enhance food safety of fresh produce and ensure safe food production environment. Some of her projects include: Developing Validation Strategies for Fresh-Cut Produce Washing; Characterization of the Genes Involved in Oxidative Resistance in Outbreaks-Related *E. coli* O157:H7 Strains; Genetic Factors Regulating *Salmonella* Stress Response; Comparison of Environmental Swab Transport Media for Recovery of *Listeria monocytogenes*; and Assessing the Efficacy of Chlorine and Peroxyacetic Acid to Inactivate Pathogens on Raspberries.

**Extension** - Dr. Deng serves as a Co-Lead and Coordinator of the Sprout Safety Alliance (SSA). The alliance is formed by volunteer participation of food industry, academia, and government agencies. It develops a core curriculum and training/outreach programs for enhancing the sprout industry's understanding and implementation of the FDA regulations and best practices. Dr. Deng leads and coordinates the alliance’s activities, hosts and teaches training courses for sprout growers, inspectors and food safety trainers, serves as a Food Safety Expert to answer technical inquiries from the sprout industry, and updates the industry with FDA rules and guidance development. She is also a Lead Instructor of the Food Safety and Preventive Controls Alliance (FSPCA) and co-teaches FSPCA training courses.

**Teaching** - As a faculty member of the IIT Department of Food Science and Nutrition, Dr. Deng is involved in teaching courses “Food Microbiology”, “Food Microbiology Laboratory”, “Research and Thesis” and “Special Project”. She supervises graduate students on research projects and teaches workshops hosted by IFSH.

**Picture** - Dr. Deng and her graduate student, Zeyan Zhong were presenting a poster at the International Association for Food Protection Annual Meeting.
Education Updates

June 4. **Interdisciplinary Research Experience for Undergraduates in Food Safety, Food Engineering and Nutrition.** A group of ten interns: Jiaxin Chen, Sarah O’Donnell, Rhea Braun, Khoa Do, Michael Leyden, Beatriz Dos Santos, Lindsay Kokal, Terrance Shoemaker, Amy Nguyen, and Lea Gray arrived on campus June 4th to begin a ten-week program that provides them opportunities in mentoring, professional development training and hands-on research experiences. Student research project areas focus on nutrition, modeling & simulation, engineering design and microbiology. This experience is part of a National Science Foundation (NSF) funded grant received by Dr. Kathiravan Krishnamurthy, Assistant Professor Food Science and Nutrition.

Dr. Satish Parulekar-Professor Chemical Engineering, Dr. Sohail Murad-Professor Chemical Engineering, Dr. Fouad Teymour-Professor Chemical Engineering, Dr. Britt Burton-Freeman-Associate Professor Food Science and Nutrition, Dr. Elizabeth Grasso-Kelley–Assistant Professor Food Science and Nutrition, and Dr. Nathan Anderson-Agricultural Engineer FDA are the student project advisors.
Details coming soon!

SAVE THE DATE

MICROBIOLOGICAL METHODS VALIDATION COURSE
End of October 2018

IFSH MOFFETT CAMPUS
6502 SOUTH ARCHER AVENUE
BEDFORD PARK, IL 60501

Other News

Please check out our partner sites news and events.