

2017 Booklet of Posters

Section 1. Food Safety Including Fundamental Understanding of Pathogens

Judges: Dana Hite, bioMerieux Industry; Sara Symanietz, Merieux Nutrisciences; Young Min Kwon, University of AR

<u>Poster #</u>	<u>Title</u>	<u>Presenting Author</u>	<u>University</u>
1	<i>Salmonella</i> excludes <i>Salmonella</i> in poultry: Confirming an old paradigm using conventional and barcode-tagged isogenic strains	Yichao Yang	University of Arkansas - Fayetteville
2	A carvacrol wash and/or chitosan based coating reduced <i>Campylobacter jejuni</i> on chicken wingettes	Sandip Shrestha	University of Arkansas - Fayetteville
3	Selection of DNA aptamers whole-bacterium SELEX for rapid detection of <i>E. coli</i> O157:H7 with a QCM sensor	Xiaofan Yu	University of Arkansas - Fayetteville
4	Genetic factors required for the interaction of <i>Campylobacter jejuni</i> with free-living amoebae	Deepti Samarth	University of Arkansas - Fayetteville
5	Survival of acid stress adapted cells of <i>Listeria monocytogenes</i> serotypes 1/2a and 4b in lethal concentrations of disinfectants in broth and water	Nitin Dhowlaghar	Mississippi State University
6	Poultry serovar <i>Salmonella</i> biofilm formation at the air-liquid interface in media of differing compositions and environmental incubation conditions	Zhaohao Shi	University of Arkansas - Fayetteville
7	Aerotolerance of <i>Campylobacter jejuni</i> and <i>Campylobacter coli</i> isolated from various retail meat and liver products	Anand Karki	The University of Tulsa
8	Impact of withdrawal periods between cattle grazing and harvest on food safety risk of native pecans	Claudia Diaz	Oklahoma State University
9	Quantitative detection of <i>Listeria monocytogenes</i> in cheese and bean sprouts using droplet digital PCR	Santiago Molina	Oklahoma State University
10	Application of whole genome sequencing in food safety and food quality control	Elena Olson	Pittsburg State University
11	Disinfectant efficacy against antibiotic resistant pathogens is impacted by variations in strain, disinfectant type, concentration, and contact time	Alyssa West	Purdue University
12	The application of next generation sequencing to evaluate the microbial ecology in commercial poultry processing environments	Jennifer Wages	University of Arkansas - Fayetteville

Section 2. Interventions, Pre and Post Harvest

Judges: Lindsey Ulbrich, SafeFoods; Susan Watkins, University of AR; Geetha Phillips, University of AR

<u>Poster #</u>	<u>Title</u>	<u>Presenting Author</u>	<u>University</u>
13	Phytochemicals reduce biofilm formation and inactivate mature biofilm of <i>Campylobacter jejuni</i>	Basanta Raj Wagle	University of Arkansas - Fayetteville
14	Comparison of PrestoBlue® and plating method to evaluate antimicrobial activity of ascorbic acid, boric acid and curcumin in an in vitro gastrointestinal model	D. Hernandez-Patlan	Universidad Nacional Autonoma de Mexico-Cuautitlan Izcalli
15	Evaluation of chitosan and cellulosic polymers as binding adsorbent materials to prevent aflatoxin B1, fumonisin B1, ochratoxin, trichothecene, deoxynivalenol, and zearalenone mycotoxins through an in vitro gastrointestinal model for poultry	B. Solis-Cruz	Universidad Nacional Autonoma de Mexico-Cuautitlan Izcalli
16	Action of antimicrobial copper on bacteria and fungi isolated from commercial poultry houses	K. P. Pontin	Universidad Federal de Santa Maria -UFSM
17	Antimicrobial effect of eugenol and biologically synthesized silver nanoparticles against <i>Listeria monocytogenes</i>	Giovana Bodnar	Oklahoma State University
18	Inactivation of <i>Salmonella</i> on in-shell pecans by cold plasma and iodine infusion	Claudia Diaz	Oklahoma State University
19	A preliminary overview of commercialized probiotics for food animal application, research directions and future commercial trends	Andrew Micchiche	University of Arkansas - Fayetteville
20	The effects of feeding Diamond V Original XPC on <i>Salmonella</i> prevalence, numbers, virulence and antibiotic resistance in ceca and cloaca samples obtained from commercial poultry	Kristina Feye	Iowa State University
21	Scaled-up method for rapid simultaneous drying and microbial decontamination of corn using infrared heating	Zeinab Mohammadi-Shad	University of Arkansas - Fayetteville
22 moved			
23	Optimization of clean-in-place type beef grinder sanitation process	Sabra Billups	Oklahoma State University
24	Impact of drying deep beds of rice with microwave set at 915 MHz frequency on the rice milling yields	Deandrae Smith	University of Arkansas - Fayetteville
25 moved			
26	Potential antimicrobials for controlling <i>Listeria monocytogenes</i> in hotdogs	Aaron Bodie	University of Arkansas - Fayetteville

Section 3. Pet Food and Animal Feed Safety

Judges: John Marcy, University of AR; Yongcheng Liu, Tyson Foods; Franck Carbonero, University of AR

<u>Poster #</u>	<u>Title</u>	<u>Presenting Author</u>	<u>University</u>
22	Kinetics of aflatoxigenic mold growth on rice during storage	Shantae Wilson	University of Arkansas - Fayetteville
25	Impacts of pre-harvest fungicide application on discoloration of rice during storage	Soraya Shafiekhani	University of Arkansas - Fayetteville
27	Evaluation of feeds and raw milk for occurrence of aflatoxin and safety	Zeinab Mohammadi-Shad	University of Arkansas - Fayetteville
28	Impact of radiant-heat and tempering treatments on the decontamination and aflatoxin production ability of <i>Aspergillus flavus</i> on shelled corn	Deandrae Smith	University of Arkansas - Fayetteville

Section 4. Other and Miscellaneous

Judges: John Marcy, University of AR; Yongcheng Liu, Tyson Foods; Franck Carbonero, University of AR

<u>Poster #</u>	<u>Title</u>	<u>Presenting Author</u>	<u>University</u>
29	Impact of drying deep beds of rice with microwave set at 915 MHz frequency on rice microbial community responses	Deandrae Smith	University of Arkansas - Fayetteville
30	Effects of ButiPEARL™ and PrimaLac® used alone or in combination on 57 d broiler performance and processing	Dana Dittoe	Mississippi State University
31	A fluorescent biosensor using quantum dots, magnetic nanoparticles and microfluidics for in-field detection of foodborne bacteria	Xinge Xi	University of Arkansas - Fayetteville
32	Rapid detection of <i>Salmonella</i> Typhimurium in poultry using a portable immunosensing system	America Sotero	University of Arkansas - Fayetteville
33	Evaluation of rye versus corn as a source of energy on the microbiome in different sections of the gastrointestinal track of broiler chickens	Mikayla Baxter	University of Arkansas - Fayetteville
34	Rapid detection of pathogen in complex metagenomic data by EDNA	Marie Sharp	Oklahoma State University
35	Comparison of DNA extraction methods for qPCR detection of pathogenic <i>Campylobacter</i> strains	Andrew Micciche	University of Arkansas - Fayetteville

Section 5. Undergraduate

Judges: John Marcy, University of AR; Yongcheng Liu, Tyson Foods; Franck Carbonero, University of AR

<u>Poster #</u>	<u>Title</u>	<u>Presenting Author</u>	<u>University</u>
36	Assessment of sodium bisulfate as a potential antimicrobial against <i>Salmonella</i> Typhimurium on chicken breast meat	Julie Atchley	University of Arkansas - Fayetteville

Section 6. Non-competition Posters

Poster #	Title	Presenting Author	University/Professional Affiliate
37	Characterization of mixed bacterial populations in chicken ceca recovered from colonies on <i>Campylobacter</i> selective commercial media using 16S rRNA next generation sequencing	Kim, Park, Wolfenden, Hargis, Pavlidis, McIntyre and Ricke	University of Arkansas - Fayetteville and Diamond V
38	Inhibition of <i>Campylobacter jejuni</i> by Original XPC™ in an anaerobic mixed fecal <i>in vitro</i> culture system	Rubinelli, Park, Pavlidis, McIntyre and Ricke	University of Arkansas - Fayetteville and Diamond V
39	Effect of <i>Salmonella</i> vaccine strains on broiler chicken cecal microbiota	Park, Kim, Rubinelli, Baker and Ricke	University of Arkansas - Fayetteville
40	Impact of incubation time and addition of original-XPC on the microbiota in an <i>in vitro</i> cecal bioassay	Lee, Park, Roto, Rubinelli, Pavlidis, McIntyre and Ricke	University of Arkansas - Fayetteville and Diamond V
41	Microbial population analysis of broilers in different flock and embryonic ages from GI, yolk and egg wash via Illumina Miseq and QIIME pipeline	Lee, Park, Hiatt, Sellers, Rothrock and Ricke	University of Arkansas - Fayetteville, USDA-ARS - Athens, GA and University of Georgia - Athens
42	A novel <i>Salmonella</i> Typhimurium quantification approach in a mixed cell culture spiked in chicken breast	Kim, Park, Lee and Ricke	University of Arkansas - Fayetteville
43	BACGene <i>Salmonella</i> spp.: Fast and convenient detection of 1 CFU <i>Salmonella</i> in up to 375g pet food	Bleichner, Bahrtdt	Eurofins Genescan Technologies GmbH
44	An electrochemical aptasensor for rapid detection of <i>Salmonella</i> Typhimurium in poultry based on the bifunctional magnetic nanocomposites	Wang, Xu, Kidd, Lin, Liao, Wang and Li	University of Arkansas - Fayetteville, China Agricultural University - Beijing, South China Agricultural University - Guangdong and Zhejiang University - Hangzhou, Zhejiang
45	Bacterial contamination of single-user mobile devices with comparison of two cleaning interventions	Jones, Almeda and Gibson	University of Arkansas - Fayetteville
46	The use of probiotics as an alternative to formaldehyde fumigation in commercial broiler chicken hatch cabinets	Graham, Teague, Latorre, Yang, Baxter, Merino-Guzman, Mahaffey, Wolfenden, Hernandez-Velasco, Bielke, Hargis and Tellez	University of Arkansas - Fayetteville, Universidad Nacional Autonoma de Mexico - Mexico and Ohio State University - Wooster
47	<i>In ovo</i> evaluation of FloraMax®-B11 on Marek's disease HVT vaccine protective efficacy, hatchability, microbiota composition, morphometric analysis, and <i>Salmonella</i> Enteritidis infection in broiler chickens	Teague, Graham, Dunn, Cheng, Anthony, Latorre, Mencone, R.E. Wolfenden, A.D. Wolfenden, Mahaffey, Baxter, Hernandez-Velasco, Merino-Guzman, Bielke, Hargis and Tellez	University of Arkansas - Fayetteville, USDA-ARS - East Lansing, Pacific Vet Group, Universidad Nacional Autonoma de Mexico - Mexico and The Ohio State University - Columbus
48	Evaluation of the effects of a turkey cellulitis oil emulsion vaccine on immune response and mortality in the field	Mahaffey, Robbins, Pumford, Morgan, Merino-Guzman, Graham, Teague, Baxter, Latorre, Wolfenden, Hargis and Tellez	University of Arkansas - Fayetteville, Butterball, and Universidad Nacional Autonoma de Mexico - Ciudad de Mexico
49	Effects of humic acids on recovery of <i>Salmonella enterica</i> serovar Enteritidis	Maguey, Michel, Solis-Cruz, Hernandez-Patlan, Merino-Guzman, Hernandez-Velasco, Latorre, Hargis, Tellez and Gomez-Rosalis	Universidad Nacional Autonoma de Mexico - Mexico, Universidad Nacional del Nordeste - Corrientes, Argentina, University of Arkansas - Fayetteville and National Institute of Research in Forestry, Agriculture and Livestock - Queretaro, Mexico
50	Effect of humic acids on intestinal viscosity, leaky gut and ammonia excretion in a 24 h feed restriction model to induce intestinal permeability in broiler chickens	Maguey, Michel, Baxter, G.Tellez Jr, Moore, Solis-Cruz, Hernandez-Patlan, Merino-Guzman, Hernandez-Velasco, Latorre, Hargis, Gomez-Rosales, G. Tellez	Universidad Nacional Autonoma de Mexico - Mexico, Universidad Nacional del Nordeste - Corrientes, Argentina, University of Arkansas - Fayetteville and National Institute of Research in Forestry, Agriculture and Livestock - Queretaro, Mexico
51	Evaluation of a commercially available probiotic and organic acid blend on production parameters and economics in broiler breeders	Michel, Revidatti, Baxter, Fernandez, Sindik, Saenz, Nava-Morales, Hernandez-Velasco, Latorre, Tellez	Universidad Nacional del Nordeste - Corrientes, Argentina, Universidad Autonoma de Queretaro - Queretaro, Mexico, Universidad Nacional Autonoma de Mexico - Mexico and University of Arkansas - Fayetteville

Award Sponsorship

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1	Food Safety Including Fundamental Understanding of Pathogens	WBA Analytical Labs	Novolyze	Novolyze
2	Interventions, Pre and Post Harvest	Jones-Hamilton	AAFP	Jones-Hamilton
3	Pet Food and Animal Feed Safety	3D Corporate Solutions	Cherney Microbiological Services	Cherney Microbiological Services
4	Other and Misc.	Twin Rivers	QTI	SAI GLOBAL
5	Undergraduate	ATC Scientific	N/A	N/A

