Divya Jaroni, Ph. D
Assistant Professor, Food Microbiology
112 FAPC
Dept. of Animal Science
Oklahoma State University

EDUCATION

Doctor of Philosophy, Food Microbiology - August 2001
University of Nebraska – Lincoln

Master of Science, Animal Science - December 1996
University of Nebraska – Lincoln

Bachelor of Education - May 1990
Devi Ahilya University, Indore, India

Bachelor of Science - May 1987
Holkar Science College, Devi Ahilya University, Indore, India

CURRENT POSITION

Assistant Professor- January, 2012 to Present
Dept. of Animal Science, Oklahoma State University

Research:

Address current and emerging food safety issues. Special emphasis:

- Pre- and post-harvest control strategies to reduce foodborne pathogens
- Natural antimicrobials in improving food safety at pre- and post-harvest levels.
- Detection and characterization of pathogenic microorganisms.

Teaching:

- Pre-Harvest Food Safety (FDSC 4253 and 4253-G) – Spring (Odd Calendar Year)
- Advanced Food Microbiology (FDSC 4153 and FDSC 4153-G) – Spring (Even Calendar Year)

ACTIVE AND COMPLETED FUNDED PROJECTS:

- USDA-NIFA (2015-2018): Southern Training, Education, Extension, Outreach, and Technical Assistance Center to Enhance Produce Safety. $1.2 million. August, 2015-2018.
- Oklahoma State Technology and Business Development Grant (2016): "Phage-Technology to Control Bio-film-forming Shigatoxigenic *Escherichia coli* in the Food Industry. $20,000. May 2016-2017.
- Sitlington Enriched Graduate Scholarship Proposal, DASNR, OSU (2016): Evaluate the effectiveness of bacteriophages against biofilm-forming shiga-toxigenic *Escherichia coli* on fresh-produce and produce-contact-surfaces. $18,000 ($15000 for student and $3000 for research supplies). August, 2016 to December, 2019.
- SCBG- USDA-AMS (2016): Food Safety Modernization Act Training and Technical Support for the Oklahoma Agricultural Producers. $ 50,300.

- Oklahoma State Technology and Business Development Program (2015): Novel Antimicrobial Ice Based Meat Grinder Sanitation Processes. $15,000. May, 2015-2016.
- USDA-NIFA Agricultural and Food Research Initiative (2010): "Reduction of *E. coli* O157:H7 in Small-Scale Cow/Calf Operations Using Best Management Practices". $1,077,639. February 2010-2016.

PATENT AWARDED

United States Patent (#7,323,166), Titled: "Lactic Acid Bacteria Cultures That Inhibit Foodborne Pathogens", University of Nebraska-Lincoln.

PROFESSIONAL ACTIVITIES

- Vice-Chair: Oklahoma Association for Food Protection (OKAFP), IAFP Affiliate.
- Chair: Pre-harvest Food Safety PDG, International Association for Food Protection (IAFP). August 2014 to 2016.
- Vice-Chair: Pre-harvest Food Safety PDG, IAFP. August 2012 to 2014.
- Editor-in-Chief: International Journal of Dairy Science and Processing.
- Editorial Board: Agriculture, Food and Analytical Bacteriology Journal
- USDA/NIFA AFRI Foundation Program Review Panel: Food Safety, 2014
- USDA/NIFA AFRI Panel Member: Food Safety, 2010
- USDA/CSREES NRI Panel Member: Food Safety, 2008

ORGANIZATIONAL MEMBERSHIPS

- International Association of Food Protection (IAFP)
- American Society for Microbiology (ASM)
- Institute of Food Technologists (IFT)

PREVIOUS EXPERIENCE

Assistant Professor, Food Microbiology – October, 2006 – December, 2011

Southern University Agricultural Research & Extension Center (SUAREC), Baton Rouge, LA.

Post-Doctoral Research Associate, Food Safety Microbiologist – April, 2003 to April, 2005.
University of Nebraska-Lincoln, Department of Veterinary and Biomedical Sciences, Lincoln, NE.

Post-Doctoral Research Associate, Microbiologist - September, 2002 to April, 2003.
USDA, Roman L. Hruska U.S. Meat Animal Research Center, Clay Center, NE.

SELECTED PUBLICATIONS (*****Corresponding Author)

Jaroni, D.*, R. Kakani, S. Ravishankar, and R. Jadeja. **2016**. Efficacy of roselle (*Hibiscus sabdariffa*) calyx formulations against *Escherichia coli* O157:H7 during flume-washing of organic leafy greens. Quality Assurance and Safety of Crops and Foods. DOI:http://dx.doi.org/10.3920/QAS2015.0679.

Litt, P. K., S. Ravishankar, and **D. Jaroni***. 2016. Use of Fulvic Acid Formulations as Flume-Wash Treatments for Reduction of *Escherichia coli* O157:H7 on Organic Leafy Greens. Food Protection Trends, 36 (4): 284-292.

Saha, J., Litt, P. K. and **Jaroni, D***. **2016**. Modeled Adsorption Efficacy of Bacteriophage Fitness. Food Processing and Engineering Technology Conference Proceedings, Vol. 59: 601-608.

Saha, J., Litt, P. K., **Jaroni, D**., and Jadeja, R. (2016). Labeling of Mechanically Tenderized Beef Products: A Mini Review. MOJ Food Process. Technol. 3(2): 00067. doi:10.I5406/mojfpt.2016.03.00067.

Rada, X., J. Todd-Searle, M. Friedman, J. Patel, **D. Jaroni**, and S. Ravishankar. **2016**. Combining essential oils and olive extract for control of multi-drug resistant *Salmonella enterica* on organic leafy greens. SDRP Journal of Food Science & Technology. Vol 1 (2). Available at http://www.openaccessjournals.siftdesk.org/articles/full-text/Combining-essential-oils-and-olive.html#abs

Denton, J. J., S. Ravishankar, M. Friedman and **D. Jaroni***. **2015**. Efficacy of Plant-derived Compounds against *Escherichia coli* O157:H7 during Flume-washing and Storage of Organic Leafy Greens. J. Food Process. Preserv. doi:10.1111/jfpp.12523

R. Jadeja, **D. Jaroni**, P. Vijayakumar, S. Chintagari. **2015**. Application of Monoclonal Antibodies to Develop Rapid Immunoassays for *Vibrio vulnificus*: A Mini Review. AASCIT Journal of Biology, 1(4): 48-54.

O'Bryan, C. A., P. Crandall, **D. Jaroni**, S. C. Ricke, K. E. Gibson. **2015**. Assessment of Nitrogen and Phosphorus Loads Present in Environments Impacted by Alternative Poultry Processing Operations Utilized in Pasture-Raised Poultry Production. J. Renewable Agriculture and Food Systems. Accepted. In Press.

Jayasundera, P. K., J. Jones, S. Ravishankar, and **D. Jaroni***. **2014**. Evaluating the Efficacy of Olive, Apple and Grape Seed Extracts in Reducing *Escherichia coli* O157:H7 Contamination on Organic Leafy Greens during the Wash Process. Intl. J. Food Sci., Nutr., Diet. 03(10), 1-7

O'Bryan, C. A., P. G. Crandall, M. L. Davis, G. Kostadini, K. E. Gibson, W. Q. Alali, **D. Jaroni,** S. C. Ricke and J. A. Marcy. **2014**. Mobile Poultry Processing Units: A Safe and Cost-Effective Poultry Processing Option for the Small-Scale Farmer in the United States. World's Poult. Sci. J. 70 (December): 787-802.

Trimble, L. M., W. Q. Alali, K. E. Gibson , S. C. Ricke, P. Crandall, **D. Jaroni**, M. Berrang and Habteselassie, M. Y. **2013**. Prevalence and concentration of *Salmonella* and *Campylobacte*r in the processing environment of small-scale pastured broiler farms. Poultry Sci. 92:3060–3066.

Todd, J., J. Patel, M. Friedman, **D. Jaroni**, and S. Ravishankar. **2013**. The Antimicrobial Effects of Cinnamon Oil against Multi-Drug Resistant *Salmonella* Newport on Organic Leafy Greens. Intl. J. Food Micro. 16: 166(1):193-9

Zhu, L., C. Olsen, T. McHugh, M. Friedman, **D. Jaroni** and S. Ravishankar. **2013**. Apple, Carrot, and Hibiscus Edible Films Containing the Plant Antimicrobials Carvacrol and Cinnamaldehyde Inactivate *Salmonella* Newport on Organic Leafy Greens in Sealed Plastic Bags. J. Food Sci. 79 (11): M61-66

Moore-Neibel, K., C. Gerber, J. Patel, M. Friedman, **D. Jaroni**, S. Ravishankar. **2013**. Antimicrobial activity of oregano oil against antibiotic-resistant *Salmonella enterica* on

organic leafy greens at varying exposure times and storage temperatures. J. Food Micro. May-34(1):123-9

Trimble, L. M., W. Q. Alali, K. E. Gibson , S. C. Ricke, P. Crandall, **D. Jaroni**, M. Berrang. **2013**. *Salmonella* and *Campylobacter* prevalence and concentration on pasture-raised broilers processed on-farm, in a mobile processing unit, and at small USDA-inspected facilities. Food Control. 34:177-182.

Ravishankar, S., **D. Jaroni**, L. Zhu, C. Olsen, T. McHugh, and M. Friedman. **2012**. Inactivation of *Listeria monocytogenes* on ham and bologna using pectin-based apple, carrot, and hibiscus edible films containing carvacrol and cinnamaldehyde. J. Food Sci. 77(7): M377-82.