

# Curriculum Vitae

## **Abani Kumar Pradhan**

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### **I.A. Professional Experience**

- August 2017 – Director, Graduate Program in Nutrition and Food Science, University of Maryland, College Park
- August 2017 – Associate Professor, Department of Nutrition and Food Science & Center for Food Safety and Security Systems, University of Maryland, College Park
- March 2011 – Assistant Professor, Department of Nutrition and Food Science & Center for Food Safety and Security Systems, University of Maryland, College Park
- August 2017 –
- March 2007 – Postdoctoral Associate/Research Associate, Quality Milk Production Services, Department of Population Medicine and Diagnostic Sciences, Cornell University, Ithaca, New York, USA
- March 2011 –
- January - February 2007 Postdoctoral Associate, Department of Biological and Agricultural Engineering, University of Arkansas, Fayetteville, Arkansas, USA
- August 2002 – Graduate Research Assistant, Department of Biological and Agricultural Engineering, University of Arkansas, Fayetteville, Arkansas, USA
- December 2006 –
- July 2001 - June 2002 Project Officer, Department of Agricultural and Food Engineering, Indian Institute of Technology, Kharagpur, India
- October 1998 – Technical Consultant, Geo Informatics, Bhubaneswar, Orissa, India
- June 1999 –

### **I.B. Educational Background**

- 2006 Ph.D. Department of Biological and Agricultural Engineering, University of Arkansas, Fayetteville, Arkansas, USA  
Dissertation title: *“Quantitative risk assessment of foodborne pathogens in poultry production and processing based on microbial challenging tests and predictive models”*

2001	M.Tech.	Department of Agricultural and Food Engineering, Indian Institute of Technology (IIT), Kharagpur, India Thesis title: <i>“Evaluation of simple analytical models for freezing time prediction of slab and brick shaped foodstuffs”</i> [This research was conducted at the Institute of Process Engineering, Federal Research Center for Nutrition, Karlsruhe, Germany, and was supported by the German Academic Exchange Service (DAAD) scholarship]
1998	B.Tech.	College of Agricultural Engineering and Technology, Orissa University of Agriculture and Technology, Bhubaneswar, India

**I.C. Member in Professional Societies/Associations**

- International Association for Food Protection (IAFP)
- Institute of Food Technologists (IFT)
- Society for Risk Analysis (SRA)
- American Society for Microbiology (ASM)
- American Society of Agricultural and Biological Engineers (ASABE)

**I.D. Awards and Honors**

- The Paul R. Poffenberger Excellence in Teaching and Advising Award, College of Agriculture and Natural Resources (AGNR), University of Maryland, College Park (2018).
- Chauncey Starr Distinguished Young Risk Analyst Award, Society for Risk Analysis (SRA) (2015).
- Excellence in Instruction Award, Alumni Chapter-College of Agriculture and Natural Resources (AGNR), University of Maryland, College Park (2015).
- On-Campus Junior Faculty Award of Excellence, College of Agriculture and Natural Resources (AGNR), University of Maryland, College Park (2014).
- John’s Disease Integrated Program (JDIP) travel award, JDIP 6<sup>th</sup> annual conference, Denver, Colorado (2010).
- John’s Disease Integrated Program (JDIP) travel award, 10<sup>th</sup> International Colloquium on Paratuberculosis (ICP), Minneapolis, Minnesota (2009).
- Student Merit Award, Exposure Assessment Specialty Group-Society for Risk Analysis (SRA), SRA annual meeting, Baltimore, Maryland (2006).
- 1<sup>st</sup> place award winner, poster competition, Food Safety Consortium (FSC) annual meeting, Manhattan, Kansas (2005).
- Student Travel Award, Society for Risk Analysis (SRA), SRA annual meeting, Palm Springs, California (2004).
- 2<sup>nd</sup> place award winner, poster competition, Arkansas section of American Society of Agricultural and Biological Engineers (ASABE) annual meeting, Littlerock, Arkansas (2004).
- Student Travel Award, Society for Risk Analysis (SRA), SRA annual meeting, Baltimore, Maryland (2003).
- 3<sup>rd</sup> place award winner, poster competition, Food Safety Consortium (FSC) annual meeting, Fayetteville, Arkansas (2003).
- Institute Silver Medal for the best graduate student in the Department of Agricultural and Food Engineering, Indian Institute of Technology (IIT), Kharagpur, India (2001).
- German Academic Exchange Service (DAAD) Scholarship, Federal Republic of Germany (2000-2001).
- Graduate Aptitude Test in Engineering (GATE) Fellowship, Ministry of Human Resource Development, Government of India (1999-2001).

- Basudev Prasad Modi Gold Medal for securing the top position (rank 1) among all graduating students (Bachelor's degree) of all Colleges, Orissa University of Agriculture and Technology (OUAT), Bhubaneswar, India (1998).
- University Gold Medal for securing the top position (rank 1) among all graduating students (Bachelor of Technology) of the College of Agricultural Engineering and Technology, Orissa University of Agriculture and Technology (OUAT), Bhubaneswar, India (1998).
- University Merit Scholarship, Orissa University of Agriculture and Technology, Bhubaneswar (OUAT), India (1994-1998).

## II. Research, Scholarly, Creative and/or Professional Activities

### II.A. Books

#### II.A.1. Chapter in Books

(\* , Dr. Pradhan as corresponding author)

- **Pradhan A. K.\***, A. Mishra, and H. Pang. 2018. Relevant pathogenic and spoilage microorganisms in vegetable products, p. 29-58. *In* F. Pérez-Rodríguez, P. Skandamis, and V. Valdramidis (ed.), Quantitative methods for food safety and quality in the vegetable industry (Food microbiology and food safety – practical approaches), Springer International Publishing AG, Switzerland.

### II.B. Refereed Journals

#### II.B.1. Refereed Journal Articles

(\* , Dr. Pradhan as corresponding author; #, graduate student or postdoctoral scholar from Dr. Pradhan's lab)

1. Juneja, V. K., A. Mishra#, and **A. K. Pradhan**. 2018. Dynamic predictive model for growth of *Bacillus cereus* from spores in cooked beans. *Journal of Food Protection*, 81: 308-315. [PMID: 29369689]
2. Pang, H. #, R. McEgan, S. A. Micallef, and **A. K. Pradhan\***. 2018. Evaluation of meteorological factors associated with pre-harvest contamination risk of generic *Escherichia coli* in a mixed produce and dairy farm. *Food Control*, 85: 135-143. <https://doi.org/10.1016/j.foodcont.2017.08.003>
3. Pang, H. #, R. McEgan, A. Mishra#, S. A. Micallef, and **A. K. Pradhan\***. 2017. Identifying and modeling meteorological risk factors associated with pre-harvest contamination of *Listeria* species in a mixed produce and dairy farm. *Food Research International*, 102: 355-363. [PMID: 29195959] <http://dx.doi.org/10.1016/j.foodres.2017.09.029>
4. Dubey, J. P., J. Brown, S. K. Verma, C. K. Cerqueira-Cézar, J. Banfield, O. C. H. Kwok, Y. Ying#, F. H. A. Murata, **A. K. Pradhan**, C. Su. 2017. Isolation of viable *Toxoplasma gondii*, molecular characterization, and seroprevalence in elk (*Cervus canadensis*) in Pennsylvania, USA. *Veterinary Parasitology*, 243: 1-5. [PMID: 28807274] <http://dx.doi.org/10.1016/j.vetpar.2017.05.030>
5. Ying, Y. #, S. K. Verma, O. C.H. Kwok, F. Alibana, R. Mcleod, C. Su, J. P. Dubey, **A. K. Pradhan\***. 2017. Prevalence and genetic characterization of *Toxoplasma gondii* in free-range chickens

- from grocery stores and farms in Maryland, Ohio and Massachusetts, USA. *Parasitology Research*, 116: 1591–1595. [PMID: 28337538]
6. Pang, H.#, E. Lambertini#, R. L. Buchanan, D. W. Schaffner, and **A. K. Pradhan\***. 2017. Quantitative microbial risk assessment for *Escherichia coli* O157:H7 in fresh-cut lettuce. *Journal of Food Protection*, 80: 302-311. [PMID:28221978]
  7. Guo, M.#, E. Lambertini#, R. L. Buchanan, J. P. Dubey, D. E. Hill, H. R. Gamble, J. L. Jones, and **A. K. Pradhan\***. 2017. Quantifying the risk of human *Toxoplasma gondii* infection due to consumption of fresh pork in the United States. *Food Control*, 73: 1210-1222. <http://dx.doi.org/10.1016/j.foodcont.2016.10.038>
  8. Mishra, A.#, H. Pang#, R. L. Buchanan, D. W. Schaffner, and **A. K. Pradhan\***. 2017. A system model for understanding the role of animal feces as a route of contamination of leafy greens before harvest. *Applied and Environmental Microbiology*, 83:e02775-16. <https://doi.org/10.1128/AEM.02775-16>. [PMID: 27836846]
  9. Mishra, A.#, M. Guo#, R. L. Buchanan, D. W. Schaffner, and **A. K. Pradhan\***. 2017. Prediction of *Escherichia coli* O157:H7, *Salmonella*, and *Listeria monocytogenes* growth in leafy greens without temperature control. *Journal of Food Protection*, 80: 68-73. [PMID: 28221878]
  10. Mishra, A.#, M. Guo#, R. L. Buchanan, D. W. Schaffner, and **A. K. Pradhan\***. 2017. Development of growth and survival models for *Salmonella* and *Listeria monocytogenes* during non-isothermal time-temperature profiles in leafy greens. *Food Control*, 71: 32-41. doi:10.1016/j.foodcont.2016.06.009
  11. Mishra, A.#, R. L. Buchanan, D. W. Schaffner, and **A. K. Pradhan\***. 2016. Cost, quality, and safety: A nonlinear programming approach to optimize the temperature during supply chain of leafy greens. *LWT – Food Science and Technology*, 73: 412-418. doi:10.1016/j.lwt.2016.06.037
  12. Guo, M.#, A. Mishra#, R. L. Buchanan, J. P. Dubey, D. E. Hill, H. R. Gamble, and **A. K. Pradhan\***. 2016. Quantifying the risk of human *Toxoplasma gondii* infection due to consumption of domestically produced lamb in the United States. *Journal of Food Protection*, 79: 1181-1187. [PMID: 27357038]
  13. Guo, M.#, A. Mishra#, R. L. Buchanan, J. P. Dubey, D. E. Hill, H. R. Gamble, J. L. Jones, X. Du, and **A. K. Pradhan\***. 2016. Development of dose-response models to predict the relationship for human *Toxoplasma gondii* infection associated with meat consumption. *Risk Analysis*, 36: 926-938. [PMID: 26477997]
  14. Guo, M.#, A. Mishra#, R. L. Buchanan, J. P. Dubey, D. E. Hill, H. R. Gamble, J. L. Jones, and **A. K. Pradhan\***. 2016. A systematic meta-analysis of *Toxoplasma gondii* prevalence in food animals in the United States. *Foodborne Pathogens and Disease*, 13: 109-118. [PMID: 26854596]
  15. Lambertini, E.#, R. L. Buchanan, C. Narrod, and **A. K. Pradhan\***. 2016. Transmission of bacterial zoonotic pathogens between pets and humans: The role of pet food. *Critical Reviews in Food Science and Nutrition*, 56: 364-418. [PMID: 25875576] (Review article)
  16. Lambertini, E.#, A. Mishra#, M. Guo#, H. Cao#, R. L. Buchanan, and **A. K. Pradhan\***. 2016. Modeling the long-term kinetics of *Salmonella* survival on dry pet food. *Food Microbiology*, 58: 1-6. [PMID: 27217351]
  17. Slater, N., R. M. Mitchell, R. H. Whitlock, T. Fyock, **A. K. Pradhan**, E. Knupfer, Y. H. Schukken, and Y. Louzoun. 2016. Impact of the shedding level on transmission of persistent infections in *Mycobacterium avium* subspecies *paratuberculosis* (MAP). *Veterinary Research*, 47: 38. [PMID: 26925966] DOI: 10.1186/s13567-016-0323-3
  18. Smith, R. L., Y. T. Gröhn, **A. K. Pradhan**, R. H. Whitlock, J. S. Van Kessel, J. M. Smith, D. R. Wolfgang, and Y. H. Schukken. 2016. The effects of progressing and nonprogressing *Mycobacterium avium* ssp. *paratuberculosis* infection on milk production in dairy cows. *Journal of Dairy Science*, 99: 1383-1390. [PMID: 26686721]

19. Lambertini, E.#, R. L. Buchanan, C. Narrod, R. M. Ford, R. C. Baker, and **A. K. Pradhan\***. 2016. Quantitative assessment of human and pet exposure to *Salmonella* associated with dry pet foods. *International Journal of Food Microbiology*, 216: 79-90. [PMID: 26414858]
20. Guo, M.#, R. L. Buchanan, J. P. Dubey, D. E. Hill, E. Lambertini#, Y. Ying#, H. R. Gamble, J. L. Jones, and **A. K. Pradhan\***. 2015. Qualitative assessment for *Toxoplasma gondii* exposure risk associated with meat products in the United States. *Journal of Food Protection*, 78: 2207-2219. [PMID: 26613916]
21. Yang, Y., Y. Ying#, S. K. Verma, A. B. M. Cassinelli, O. C. H. Kwok, H. Liang, **A. K. Pradhan**, X. Q. Zhu, C. Su, and J. P. Dubey. 2015. Isolation and genetic characterization of viable *Toxoplasma gondii* from tissues and feces of cats from the central region of China. *Veterinary Parasitology*, 211: 283-288. [PMID: 26033402]
22. Lambertini, E.#, J. S. Karns, J. S. Van Kessel, H. Cao#, Y. H. Schukken, D. R. Wolfgang, J. M. Smith, and **A. K. Pradhan\***. 2015. Dynamics of *Escherichia coli* virulence factors in dairy herds and farm environments in a longitudinal study in the United States. *Applied and Environmental Microbiology*, 81: 4477-4488. [PMID: 25911478]
23. Guo, M.#, J. P. Dubey, D. Hill, R. L. Buchanan, H. R. Gamble, J. L. Jones, and **A. K. Pradhan\***. 2015. Prevalence and risk factors for *Toxoplasma gondii* infection in meat animals and meat products destined for human consumption. *Journal of Food Protection*, 78: 457-476. [PMID: 25710166] (Review article)
24. Wang, W., M. Li, W. Fang, **A. K. Pradhan**, and Y. Li. 2013. A predictive model for assessment of decontamination effects of lactic acid and chitosan used in combination on *Vibrio parahaemolyticus* in shrimps. *International Journal of Food Microbiology*, 167: 124-130. [PMID: 24135668]
25. Li, M., **A. Pradhan**, W. Wang, and Y. Li. 2013. Prediction of *Listeria innocua* survival in fully cooked chicken breast products during postpackage thermal treatment. *Poultry Science*, 92: 827-835. [PMID: 23436535]
26. **Pradhan, A. K.**, M. Li, Y. Li, L. C. Kelso, T. A. Costello, and M. G. Johnson. 2012. A modified Weibull model for growth and survival of *Listeria innocua* and *Salmonella* Typhimurium in chicken breasts during refrigerated and frozen storage. *Poultry Science*, 91: 1482-1488. [PMID: 22582310]
27. **Pradhan, A. K.\***, R. Ivanek, Y. T. Gröhn, R. Bukowski, and M. Wiedmann. 2011. Comparison of public health impact of *Listeria monocytogenes* product-to-product and environment-to-product contamination of deli meats at retail. *Journal of Food Protection*, 74: 1860-1868. [PMID: 22054186]
28. Smith, R. L., Y. H. Schukken, **A. K. Pradhan**, J. M. Smith, R. H. Whitlock, J. S. Van Kessel, D. R. Wolfgang, and Y. T. Gröhn. 2011. Environmental contamination with *Mycobacterium avium* subsp. *paratuberculosis* in endemically infected dairy herds. *Preventive Veterinary Medicine*, 102: 1-9. [PMID: 21775002]
29. Latorre, A. A., **A. K. Pradhan**, J. S. Van Kessel, J. S. Karns, K. J. Boor, D. H. Rice, K. J. Mangione, Y. T. Gröhn, and Y. H. Schukken. 2011. Quantitative risk assessment of listeriosis due to consumption of raw milk. *Journal of Food Protection*, 74: 1268-1281. [PMID: 21819653]
30. Li, M., **A. Pradhan**, L. Cooney, A. Mauromoustakos, P. Crandall, M. Slavik, and Y. Li. 2011. A predictive model for the inactivation of *Listeria innocua* in cooked poultry products during postpackage pasteurization. *Journal of Food Protection*, 74: 1261-1267. [PMID: 21819652]
31. Latorre, A. A., J. S. Van Kessel, J. S. Karns, M. J. Zurakowski, **A. K. Pradhan**, K. J. Boor, E. Adolph, S. Sukhnanand, and Y. H. Schukken. 2011. Increased *in vitro* adherence and on-farm persistence of predominant and persistent *Listeria monocytogenes* strains in the milking system. *Applied and Environmental Microbiology*, 77: 3676-3684. [PMID: 21441322]
32. **Pradhan, A. K.\***, R. M. Mitchell, A. J. Kramer, M. J. Zurakowski, T. L. Fyock, R. H. Whitlock, J. M. Smith, E. Hovingh, J. S. Van Kessel, J. S. Karns, and Y. H. Schukken. 2011. Molecular

- epidemiology of *Mycobacterium avium* subsp. *paratuberculosis* in a longitudinal study of three dairy herds. *Journal of Clinical Microbiology*, 49: 893-901. [PMID: 21209171]
33. **Pradhan, A. K.\***, R. Ivanek, Y. T. Gröhn, R. Bukowski, I. Geornaras, J. Sofos, and M. Wiedmann. 2010. Quantitative risk assessment of listeriosis-associated deaths due to *Listeria monocytogenes* contamination of deli meats originating from manufacture and retail. *Journal of Food Protection*, 73: 620-630. [PMID: 20377949]
  34. Smith, R. L., R. L. Strawderman, Y. H. Schukken, S. J. Wells, **A. K. Pradhan**, L. A. Espejo, R. H. Whitlock, J. S. Van Kessel, J. M. Smith, D. R. Wolfgang, and Y. T. Gröhn. 2010. Effect of Johne's disease status on reproduction and culling in dairy cattle. *Journal of Dairy Science*, 93: 3513-3524. [PMID: 20655419]
  35. Latorre, A. A., J. S. Van Kessel, J. S. Karns, M. J. Zurakowski, **A. K. Pradhan**, K. J. Boor, B. M. Jayarao, B. A. Houser, C. S. Daugherty, and Y. H. Schukken. 2010. Biofilm in milking equipment on a dairy farm as a potential source of bulk tank milk contamination with *Listeria monocytogenes*. *Journal of Dairy Science*, 93: 2792-2802. [PMID: 20494189]
  36. **Pradhan, A. K.\***, R. Ivanek, Y. T. Gröhn, I. Geornaras, J. Sofos, and M. Wiedmann. 2009. Quantitative risk assessment for *Listeria monocytogenes* in selected categories of deli meats: Impact of lactate and diacetate on listeriosis cases and deaths. *Journal of Food Protection*, 72: 978-989. [PMID: 19517724]
  37. Smith, R. L., Y. T. Gröhn, **A. K. Pradhan**, R. H. Whitlock, J. S. Van Kessel, J. M. Smith, D. R. Wolfgang, and Y. H. Schukken. 2009. A longitudinal study on the impact of Johne's disease status on milk production in individual cows. *Journal of Dairy Science*, 92: 2653-2661. [PMID: 19447998]
  38. **Pradhan, A. K.\***, J. S. Van Kessel, J. S. Karns, D. R. Wolfgang, E. Hovingh, K. A. Nelen, J. M. Smith, R. H. Whitlock, T. Fyock, S. Ladely, P. J. Fedorka-Cray, and Y. H. Schukken. 2009. Dynamics of endemic infectious diseases of animal and human importance on three dairy herds in the northeastern US. *Journal of Dairy Science*, 92: 1811-1825. [PMID: 19307664]
  39. Latorre, A. A., J. S. Van Kessel, J. S. Karns, M. J. Zurakowski, **A. K. Pradhan**, R. N. Zadoks, K. J. Boor, and Y. H. Schukken. 2009. Molecular ecology of *Listeria monocytogenes*: Evidence for a reservoir in milking equipment on a dairy farm. *Applied and Environmental Microbiology*, 75: 1315-1323. [PMID: 19114514]
  40. **Pradhan, A. K.**, Y. Li, J. A. Marcy, M. G. Johnson, and M. Tamplin. 2007. Pathogen kinetics and heat and mass transfer-based predictive model for *Listeria innocua* in irregular-shaped poultry products during thermal processing. *Journal of Food Protection*, 70: 607-615. [PMID: 17388048]
  41. **Pradhan, A. K.**, Y. Li, B. L. Swem, and A. Mauromoustakos. 2005. Predictive model for the survival, death, and growth of *Salmonella* Typhimurium in broiler hatchery. *Poultry Science*, 84: 1959-1966. [PMID: 16479956]

## **II.C. Research Funding**

### **II.C.1. Extramural**

- Funding Source: Mars, Inc. Project Title: Risk Assessment of Salmonellosis Associated with Consumption of Chocolate. Amount: \$457,719.00. Duration: 07/01/2017-06/30/2020. My role: PI.
- Funding Source: Mars, Inc. Project Title: Assessing the Potential for *Salmonella* Survival, Growth, or Decline in Rehydrated Dry Dog Food. Amount: \$145,043.00. Duration: 07/01/2015-06/30/2018. My role: PI. Co-PI: E. Lambertini, J. Dubois.
- Funding Source: USDA-NIFA. Project Title: Reducing On-farm Enteric Pathogens through Cropping Methods and Improved Food Safety Trainings. Amount: \$424,999.00. Pradhan

portion: \$60,833.00. Duration: 12/15/2013-12/14/2017. My Role: Co-PI. PI-S. A. Micallef; Co-PI: C. A. Narrod, D. M. Pahl, A. Pradhan, D. Biswas, C. S. Walsh, R. L. Buchanan.

- Funding Source: USDA-ARS. Project Title: Antimicrobial Resistance of Enterobacteriaceae Populations in Northeastern U.S. Dairy Operations. Amount: \$96,000.00. Duration: 09/12/2013-07/31/2017. My role: PI. Specific Cooperative Agreement.
- Funding Source: USDA-NIFA. Project Title: Risk Identification for *Toxoplasma* Transmission in Pasture Raised Animals. Amount: \$495,856.00. Duration: 07/15/2012-07/14/2017. My role: PI. Co-PI: D. E. Hill, J. P. Dubey.
- Funding Source: Cornell University; Prime Sponsor: USDA-NIFA. Project Title: On-farm Optimal Intervention Programs Resulting in Reduction of MAP Bacterial Load in Milk. Amount: \$499,841.00. Pradhan portion: \$76,728.00. Duration: 07/01/2012-06/30/2017. My role: Co-PI. PI: Y. Schukken; Co-PI: Y. T. Gröhn, A. Pradhan.
- Funding Source: USDA-NIFA. Project Title: Developing Scientifically-based Consensus Food Safety Metrics for Leafy Greens and Tomatoes. Amount: \$10,157,853.00. Pradhan portion: \$376,139.00. Duration: 09/01/2011-08/31/2016. My role: Co-Investigator. PI: R. L. Buchanan; Co-PI: P. Kahn-Rivadeneira, J. T. Lejeune, D. Schaffner, K. Kniel, M. Jay-Russell, F. Hashem, P. Millner, M. D. Danyluk.
- Funding Source: Mars, Inc. Project Title: Assessment of the Risk of Salmonellosis Associated with Dry Dog Food. Amount: \$274,152.00. Duration: 01/01/2012-06/30/2015. My role: PI. Co-PI: C. Narrod.

#### **II.C.2. Intramural**

- Funding Source: Maryland Agricultural Experiment Station (MAES). Project Title: Evaluating Food Safety Risk of *Toxoplasma gondii* in Naturally-Infected Meat Animals. Amount: \$30,000.00. Duration: 01/01/2018-06/30/2019. My role: PI. MAES Competitive Grants Program.
- Funding Source: Maryland Agricultural Experiment Station (MAES). Project Title: Assessment of *Toxoplasma* Risk in Chickens from Amish Market. Amount: \$30,000.00. Duration: 01/01/2015-06/30/2016. My role: PI. MAES Competitive Grants Program.
- Funding Source: Maryland Agricultural Experiment Station (MAES). Project Title: Quantitative Risk Assessment for *Listeria monocytogenes* in Cantaloupes. Amount: \$30,000.00. Duration: 07/01/2012-12/31/2013. My role: PI. Co-PI: S. A. Micallef. MAES Competitive Grants Program.

#### **II.D. Conferences, Workshops, and Talks**

##### **II.D.1. Invited Talks**

- **Pradhan, A. K.** Improving food safety through risk assessment. Presented to the Delegation from UNION de GREMIOS de la PRODUCCION (UGP), The Republic of Paraguay, at the College of Agriculture and Natural Resources (AGNR), University of Maryland, College Park; April 12, 2018.
- **Pradhan, A. K.** Improving food safety through risk analysis. Presented to the Delegation from the Food and Drug Administration of Henan Province, China; organized by Forte International, Falls Church, Virginia; October 18, 2017.
- **Pradhan, A. K.** Improving food safety through predictive microbiology and risk modeling. Presented at the Department of Food Safety and Nutrition & Sino-US Joint Research Center for Food Safety, Northwest A&F University, China; October 27, 2016.
- **Pradhan, A. K.** Evaluating food safety risk of *Toxoplasma gondii*. Presented at the special session: "Advances in *Toxoplasma gondii* Research" by the FDA/Center for Food Safety and

Applied Nutrition/Office of Analytics and Outreach/Division of Public Health Informatics and Analytics/Epidemiology Branch, held at Silver Spring, Maryland; February 17, 2016.

- **Pradhan, A. K.** Application of predictive and risk modeling to evaluate critical food safety issues. Presented at the session “The Role of Science and Technology in Food Safety” at the Food Safety Summit, Baltimore, Maryland; April 30, 2015.
- **Pradhan, A. K.** Application of quantitative microbial risk assessments to address critical and emerging food safety issues. Presented at the symposium-“Expecting the Unexpected: Risk Informed Policies and Procedures to Predict, Detect and Control Emerging Food Safety Risk”, Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland; December 9, 2013.
- **Pradhan, A. K.** Food safety risks in organic pork and lamb. Presented at the College of Agriculture and Natural Resources (AGNR) Convocation-AGNR: Promoting Public Health Through Our Food Supply, University of Maryland, College Park; May 8, 2013.
- **Pradhan, A. K.** Quantitative risk assessments to address critical food safety issues. Presented to the members of the American Registry of Professional Animal Scientists (ARPAS), Washington, DC area chapter, held at the USDA Beltsville campus, Maryland; October 23, 2012.
- **Pradhan, A. K.** Introduction to food safety risk analysis. Presented to the Delegation from China-Shanghai Food and Drug Administration at the Maryland International Incubator Workshop, University of Maryland, College Park; November 8, 2011.

#### II.D.2. Refereed Abstracts (for meetings/conferences)

Oral presentations are indicated within parenthesis; others are poster presentations.

#, graduate student or postdoctoral scholar from Dr. Pradhan’s lab.

1. Karanth, S. #, A. Mishra#, and **A. K. Pradhan**. Applicability of whole genome sequencing data for *Salmonella* risk assessment in poultry meat. Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December, 2017.
2. Pang, H.#, and **A. K. Pradhan**. Risk of pre-harvest microbiological contamination in tomatoes: Effects of meteorological, farm management, and environmental factors. Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December, 2017. (oral presentation)
3. **Pradhan, A. K.** Innovative supply chain and system modeling approaches for pathogenic bacteria in leafy greens. Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December, 2017. (oral presentation)
4. Rani, S.#, J. P. Dubey, and **A. K. Pradhan**. Assessing food safety risk of *Toxoplasma gondii* in muscle tissues of naturally infected meat animals in the United States. Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December, 2017.
5. **Pradhan, A.** Innovative modeling approaches for the quality and microbial safety of leafy greens. III International Conference on Food Chemistry and Technology, Linthicum, Maryland; November, 2017. (oral presentation)
6. Juneja, V., A. Mishra#, **A. Pradhan**, and T. Mohr. Behavior of *Bacillus cereus* spores in cooked beans under isothermal conditions from 10 to 49°C. 10<sup>th</sup> International Conference on Predictive Modelling in Food, Cordoba, Spain; September, 2017.
7. **Pradhan, A.**, and A. Mishra. Innovative modeling techniques for the quality and microbial safety of foodborne pathogens in leafy greens. 10<sup>th</sup> International Conference on Predictive Modelling in Food, Cordoba, Spain; September, 2017.
8. Pang, H.#, S. Micallef, K. Everts, and **A. Pradhan**. Evaluation of cover cropping, farming system, and meteorological factors on the survival of generic *Escherichia coli* and *Listeria*



- innocua* in produce fields. International Association for Food Protection (IAFP) annual meeting, Tampa, Florida; July, 2017. (oral presentation)
9. Rani, S.#, and **A. Pradhan**. Quantitative risk model for predicting *Mycobacterium avium* subsp. *paratuberculosis* contamination in bulk tank milk on dairy farms. International Association for Food Protection (IAFP) annual meeting, Tampa, Florida; July, 2017.
  10. Mishra, A.#, H. Pang#, R. L. Buchanan, D. W. Schaffner, and **A. Pradhan**. Evaluation of different animal feces levels on contamination of leafy greens using sensitivity analyses of a mathematical system model. International Association for Food Protection (IAFP) annual meeting, Tampa, Florida; July, 2017.
  11. Mishra, A.#, H. Pang#, R. L. Buchanan, D. W. Schaffner, and **A. K. Pradhan**. A system modeling approach to estimate the risk of *E. coli* O157:H7 contamination of pre-harvest leafy greens. Society for Risk Analysis (SRA) annual meeting, San Diego, California; December, 2016. (oral presentation)
  12. Pang, H.#, R. McEgan, S. A. Micallef, and **A. K. Pradhan**. Evaluation of meteorological factors affecting pre-harvest contamination risk of *Listeria* species in a mixed produce and dairy farm. Society for Risk Analysis (SRA) annual meeting, San Diego, California; December, 2016. (oral presentation)
  13. **Pradhan, A. K.**, and M. Guo#. Modeling the risk of human *Toxoplasma gondii* infection through consumption of meat products in the United States. Society for Risk Analysis (SRA) annual meeting, San Diego, California; December, 2016. (oral presentation)
  14. Qu, Y.#, E. Lambertini#, R. L. Buchanan, and **A. K. Pradhan**. Evaluation of *Salmonella* survival and growth in rehydrated dry pet food. Society for Risk Analysis (SRA) annual meeting, San Diego, California; December, 2016.
  15. Rani, S.#, E. Lambertini#, and **A. K. Pradhan**. Development of a risk model to predict *Mycobacterium avium* subsp. *paratuberculosis* contamination in bulk tank milk. Society for Risk Analysis (SRA) annual meeting, San Diego, California; December, 2016.
  16. Guo, M.#, A. Mishra#, R. Buchanan, J. Dubey, D. Hill, H. R. Gamble, J. Jones, and **A. Pradhan**. A systematic meta-analysis of *Toxoplasma gondii* prevalence in meat animals in the United States. International Association for Food Protection (IAFP) annual meeting, St. Louis, Missouri; August, 2016.
  17. Guo, M.#, A. Mishra#, R. Buchanan, J. Dubey, D. Hill, H. R. Gamble, and **A. Pradhan**. Quantifying the risk of human *Toxoplasma gondii* infection through consumption of domestically-produced lamb in the United States. International Association for Food Protection (IAFP) annual meeting, St. Louis, Missouri; August, 2016. (oral presentation; presenter: A. Pradhan)
  18. Lambertini, E.#, S. Rani#, A. Beaver, Y. Schukken, P. Ruegg, and **A. Pradhan**. Assessing the role of farm hygiene as predictor of milk contamination by *Mycobacterium avium* subsp. *paratuberculosis* (MAP) in dairy farms. International Association for Food Protection (IAFP) annual meeting, St. Louis, Missouri; August, 2016.
  19. Mishra, A.#, and **A. Pradhan**. Development of a system model to predict the impact of pre-harvest contamination sources on a possible leafy greens-related *E. coli* O157:H7 outbreak. International Association for Food Protection (IAFP) annual meeting, St. Louis, Missouri; August, 2016. (oral presentation)
  20. Pang, H.#, R. McEgan, S. A. Micallef, and **A. Pradhan**. Identifying and modeling meteorological risk factors associated with pre-harvest contamination of generic *Escherichia coli* in an integrated dairy and crop farm. International Association for Food Protection (IAFP) annual meeting, St. Louis, Missouri; August, 2016.
  21. Ying, Y.#, J. Dubey, O. Kwok, and **A. Pradhan**. Prevalence, isolation, and genetic characterization of *Toxoplasma gondii* in chicken from the United States. International Association for Food Protection (IAFP) annual meeting, St. Louis, Missouri; August, 2016.

22. Mishra, A.#, and **A. Pradhan**. Modeling to understand the seasonality effect on leafy greens related disease outbreaks. American Society of Agricultural and Biological Engineers (ASABE) annual international meeting, Orlando, Florida; July, 2016. (oral presentation)
23. Guo, M.#, and **A. Pradhan**. Development of a risk model for human *Toxoplasma gondii* infection from consumption of fresh pork in the United States. American Society of Agricultural and Biological Engineers (ASABE) annual international meeting, Orlando, Florida; July, 2016. (oral presentation; presenter: A. Pradhan)
24. Pang, H.#, R. McEgan, S. A. Micallef, and **A. Pradhan**. Identifying and modeling meteorological risk factors associated with pre-harvest contamination of *Listeria* species in an integrated dairy and vegetable crop farm. Institute of Food Technologists (IFT) annual meeting, Chicago, Illinois; July, 2016.
25. Mishra, A.#, and **A. K. Pradhan**. Development of growth-survival models for *S. enterica* and *L. monocytogenes* during non-isothermal time-temperature profiles in leafy greens. Inverse Problems Symposium, Virginia Military Institute, Lexington, Virginia; June, 2016. (oral presentation)
26. Pang, H.#, R. McEgan, S. A. Micallef, and **A. K. Pradhan**. Identifying and modelling meteorological risk factors associated with preharvest contamination of *Listeria* species in mixed produce and dairy farms. Inverse Problems Symposium, Virginia Military Institute, Lexington, Virginia; June, 2016. (oral presentation)
27. **Pradhan, A.**, and M. Guo#. Development of dose-response models for predicting the relationship of human *Toxoplasma gondii* infection associated with meat consumption. Inverse Problems Symposium, Virginia Military Institute, Lexington, Virginia; June, 2016. (oral presentation)
28. Guo, M.#, R. L. Buchanan, J. P. Dubey, D. E. Hill, H. R. Gamble, J. L. Jones, and **A. K. Pradhan**. Development of the dose-response relationship for human *Toxoplasma gondii* infection associated with meat consumption. Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December, 2015.
29. Mishra, A.#, and **A. K. Pradhan**. Development of a pre-harvest system model to understand the ecology of *E. coli* O157:H7 in leafy greens production. Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December, 2015.
30. Pang, H.#, E. Lambertini#, and **A. K. Pradhan**. Modeling of environmental and meteorological risk factors for contamination by foodborne pathogens in produce farms. Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December, 2015.
31. Ying, Y.#, M. Guo#, J. P. Dubey, and **A. K. Pradhan**. Prevalence, isolation, and genetic characterization of *Toxoplasma gondii* in chicken from Amish community. Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December, 2015.
32. **Pradhan, A. K.**, and A. Mishra#. Cost, quality, and safety: Temperature optimization for leafy greens using nonlinear programming technique. 9<sup>th</sup> International Conference on Predictive Modelling in Food, Rio de Janeiro, Brazil; September, 2015.
33. Guo, M.#, E. Lambertini#, R. Buchanan, J. Dubey, D. Hill, H. R. Gamble, J. Jones, and **A. Pradhan**. Quantitative risk assessment of *Toxoplasma gondii* infection through consumption of fresh pork in the United States. International Association for Food Protection (IAFP) annual meeting, Oregon, Portland; July, 2015. (oral presentation)
34. Guo, M.#, R. Buchanan, J. Dubey, D. Hill, Y. Ying#, H. R. Gamble, J. Jones, and **A. Pradhan**. Assessment of the dose-response relationship of *Toxoplasma gondii* infection in mice experimentally infected with type II bradyzoites. International Association for Food Protection (IAFP) annual meeting, Oregon, Portland; July, 2015.
35. Lambertini, E.#, R. L. Buchanan, C. Narrod, and **A. K. Pradhan**. Modeling foodborne pathogen transfer and exposure in the household environment. International Association for Food Protection (IAFP) annual meeting, Oregon, Portland; July, 2015.

36. Mishra, A.#, and **A. Pradhan**. Development of survival, growth, and death models for *Salmonella* during non-isothermal time-temperature profiles in leafy green supply chain. International Association for Food Protection (IAFP) annual meeting, Oregon, Portland; July, 2015.
37. Mishra, A.#, E. Lambertini#, and **A. Pradhan**. Development of a graphical-user interface to optimize the temperature for the supply chain of leafy greens using nonlinear programming. International Association for Food Protection (IAFP) annual meeting, Oregon, Portland; July, 2015. (oral presentation)
38. Pang, H.#, E. Lambertini#, and **A. Pradhan**. Identifying and modeling multi-scale risk factors for contamination by foodborne pathogens in mixed farms. International Association for Food Protection (IAFP) annual meeting, Oregon, Portland; July, 2015.
39. Wang, M.#, E. Lambertini#, S. Micallef, and **A. Pradhan**. Quantitative risk assessment for *Listeria monocytogenes* in cantaloupe. International Association for Food Protection (IAFP) annual meeting, Oregon, Portland; July, 2015.
40. Guo, M.#, E. Lambertini#, R. Buchanan, J. Dubey, D. Hill, H. R. Gamble, J. Jones, and **A. K. Pradhan**. Quantitative risk assessment of *T. gondii* infection through consumption of fresh pork in the United States. Institute of Food Technologists (IFT) annual meeting, Chicago, Illinois; July, 2015.
41. Mishra, A.#, and **A. K. Pradhan**. Application of three-phase linear model to predict the growth of *Listeria monocytogenes* for dynamic time-temperature profiles during the leafy green supply chain. Institute of Food Technologists (IFT) annual meeting, Chicago, Illinois; July, 2015.
42. Cao, H.#, J. S. Karns, **A. K. Pradhan**, D. R. Wolfgang, E. Hovingh, and J. S. Van Kessel. Antimicrobial resistance of *Salmonella* and *E. coli* from Pennsylvania dairy herds. American Society for Microbiology (ASM) annual general meeting, New Orleans, Louisiana; June, 2015.
43. Lambertini, E.#, J. S. Karns, J. S. Van Kessel, H. Cao#, and **A. K. Pradhan**. Dynamics of *E.coli* virulence factors in dairy cow herds. American Society for Microbiology (ASM) annual general meeting, New Orleans, Louisiana; June, 2015.
44. Cao, H.#, E. Lambertini#, A. Mishra#, and **A. K. Pradhan**. Quantitative microbial risk assessment model for antimicrobial resistant *Salmonella spp.* and verocytotoxin-producing *E. coli* associated with consumption of raw milk. Society for Risk Analysis (SRA) annual meeting, Denver, Colorado; December, 2014.
45. Guo, M.#, E. Lambertini#, R. L. Buchanan, J. P. Dubey, D. Hill, H. R. Gamble, J. Jones, and **A. K. Pradhan**. Quantitative risk assessment for human toxoplasmosis through consumption of pork products in the U.S. Society for Risk Analysis (SRA) annual meeting, Denver, Colorado; December, 2014. (oral presentation)
46. Lambertini, E.#, R. L. Buchanan, C. Narrod, and **A. K. Pradhan**. Transfer of zoonotic pathogens in the household environment by direct surface contact. Society for Risk Analysis (SRA) annual meeting, Denver, Colorado; December, 2014. (oral presentation)
47. Mishra, A.#, E. Lambertini#, and **A. K. Pradhan**. Cost, Quality and Safety: A nonlinear programming approach to optimize the temperature for the supply chain of leafy greens. Society for Risk Analysis (SRA) annual meeting, Denver, Colorado; December, 2014. (oral presentation)
48. Pang, H.#, D. Biswas, and **A. K. Pradhan**. Evaluation of quantitative microbial risk assessments for *Salmonella* and *Campylobacter* in poultry meat. Society for Risk Analysis (SRA) annual meeting, Denver, Colorado; December, 2014.
49. Wang, M.#, E. Lambertini#, S. A. Micallef, and **A. K. Pradhan**. Quantitative risk assessment for *Listeria monocytogenes* in cantaloupe. Society for Risk Analysis (SRA) annual meeting, Denver, Colorado; December, 2014.

50. Guo, M.#, Y. Ying#, R. Buchanan, J. Dubey, D. Hill, H. Gamble, J. Jones, and **A. Pradhan**. Qualitative risk assessment of *Toxoplasma gondii* infection from meat consumption in the United States. International Association for Food Protection (IAFP) annual meeting, Indianapolis, Indiana; August, 2014.
51. Lambertini, E.#, H. Cao#, M. Guo#, A. Mishra#, R. Buchanan, and **A. Pradhan**. Decline of *Salmonella* on artificially contaminated dry pet food. International Association for Food Protection (IAFP) annual meeting, Indianapolis, Indiana; August, 2014.
52. Lambertini, E.#, R. Buchanan, C. Narrod, and **A. Pradhan**. Use of a quantitative risk assessment model to estimate exposure to *Salmonella* associated with dry pet foods. International Association for Food Protection (IAFP) annual meeting, Indianapolis, Indiana; August, 2014.
53. Pang, H.#, D. Biswas, and **A. K. Pradhan**. Evaluation of quantitative microbial risk assessments for *Salmonella* and *Campylobacter* in poultry meat. International Association for Food Protection (IAFP) annual meeting, Indianapolis, Indiana; August, 2014.
54. Mishra, A.#, and **A. Pradhan**. Dynamic modeling approach for growth of *Salmonella* and *Listeria monocytogenes* in leafy greens during transportation without temperature control. Institute of Food Technologists (IFT) annual meeting, New Orleans, Louisiana; June, 2014.
55. Wang, M.#, E. Lambertini#, S. A. Micallef, and **A. K. Pradhan**. Microbiological survey of pre-harvest cantaloupes in the mid-Atlantic region and risk profile of *Listeria monocytogenes* and *Salmonella* in cantaloupe. Institute of Food Technologists (IFT) annual meeting, New Orleans, Louisiana; June, 2014.
56. Guo, M.#, R. L. Buchanan, J. P. Dubey, D. Hill, H. R. Gamble, J. Jones, and **A. K. Pradhan**. Risk factors identification for *Toxoplasma gondii* infection in meat products destined for human consumption. Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland; December, 2013.
57. Lambertini, E.#, R. L. Buchanan, C. Narrod, and **A. K. Pradhan**. Zoonotic diseases from companion animals: Risk of salmonellosis associated with pet food. Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland; December, 2013. (oral presentation)
58. Mishra, A.#, E. Lambertini#, and **A. K. Pradhan**. Foodborne pathogens in leafy greens: Data, predictive models, and quantitative risk assessments. Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland; December, 2013.
59. Pang, H.#, R. L. Buchanan, D. W. Schaffner, and **A. K. Pradhan**. Quantitative risk assessment for *Escherichia coli* O157:H7 in fresh-cut lettuce. Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland; December, 2013.
60. Wang, M.#, E. Lambertini#, S. A. Micallef, and **A. K. Pradhan**. Risk assessments for *Listeria monocytogenes* and *Salmonella* spp. in melons. Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland; December, 2013.
61. Guo, M.#, and **A. Pradhan**. Seroprevalence and risk factors of *Toxoplasma gondii* infection in meat products destined for human consumption. International Association for Food Protection (IAFP) annual meeting, Charlotte, North Carolina; July, 2013.
62. Pang, H.#, and **A. Pradhan**. Quantitative risk assessment for *Escherichia coli* O157:H7 in fresh-cut lettuce. International Association for Food Protection (IAFP) annual meeting, Charlotte, North Carolina; July, 2013. (oral presentation)
63. Pang, H.#, and **A. K. Pradhan**. Quantitative risk assessment for *Escherichia coli* O157:H7 in leafy greens. Society for Risk Analysis (SRA) annual meeting, San Francisco, California; December, 2012.
64. **Pradhan, A. K.**, A. A. Latorre, J. S. Van Kessel, J. S. Karns, and Y. H. Schukken. Quantitative risk assessment of listeriosis due to consumption of raw milk. Society for Risk Analysis (SRA) annual meeting, Charleston, South Carolina; December, 2011. (oral presentation)

65. **Pradhan, A. K.** 2011. Quantitative risk assessments to evaluate food safety issues for *Listeria monocytogenes* in ready-to-eat deli meats. International Conference on Risk Assessment and Evaluation of Predictions, Silver Spring, Maryland; October, 2011. (oral presentation)
66. **Pradhan, A. K.**, R. Ivanek, Y. T. Gröhn, R. Bukowski, and M. Wiedmann. Public health impact of listeriosis due to *Listeria monocytogenes* cross-contamination of deli meats at retail level. Society for Risk Analysis (SRA) annual meeting, Salt Lake City, Utah; December, 2010. (poster platform)
67. **Pradhan, A. K.**, R. M. Mitchell, A. J. Kramer, J. Diéguez, R. H. Whitlock, J. M. Smith, E. Hovingh, J. S. Van Kessel, J. S. Karns, and Y. H. Schukken. Molecular epidemiology of *Mycobacterium avium* ssp. *paratuberculosis* in three dairy herds in the northeastern United States. Johne's Disease Integrated Program (JDIP) 6<sup>th</sup> annual conference, Denver, Colorado; July, 2010. (oral presentation)
68. Schukken Y. H., **A. K. Pradhan**, R. M. Mitchell, Z. Lu, R. Smith, Y. T. Gröhn, R. H. Whitlock, E. Hovingh, J. Smith, J. A. Van Kessel, J. Karns, and D. Wolfgang. Importance of latent infected animals in MAP infection dynamics in dairy herd. Johne's Disease Integrated Program (JDIP) 6<sup>th</sup> annual conference, Denver, Colorado; July, 2010. (oral presentation)
69. **Pradhan, A. K.**, R. Ivanek, Y. T. Gröhn, R. Bukowski, I. Geornaras, J. Sofos, and M. Wiedmann. Quantitative risk assessment on the effect of *Listeria monocytogenes* contamination in deli meats originating from manufacture and retail, on listeriosis cases. Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland; December, 2009.
70. **Pradhan, A. K.**, A. J. Kramer, R. M. Mitchell, R. H. Whitlock, J. M. Smith, E. Hovingh, J. S. Van Kessel, J. S. Karns, and Y. H. Schukken. Multilocus short sequence repeat analysis of *Mycobacterium avium* subsp. *paratuberculosis* isolates from dairy herds in northeastern United States of a longitudinal study indicates low shedders are truly infected. 10<sup>th</sup> International Colloquium on Paratuberculosis (ICP), Minneapolis, Minnesota; August, 2009. (oral presentation)
71. **Pradhan, A. K.**, R. Ivanek, Y. T. Gröhn, I. Geornaras, J. Sofos, and M. Wiedmann. Quantitative risk assessment for *Listeria monocytogenes* in selected categories of deli meats: Impact of lactate-diacetate on listeriosis cases. Society for Risk Analysis (SRA) annual meeting, Boston, Massachusetts; December, 2008.
72. Li, M., L. Cooney, **A. Pradhan**, and Y. Li. Predictive modeling of *Listeria monocytogenes* reduction on fully-cooked chicken drumettes during post-process hot water pasteurization. International Association for Food Protection (IAFP) annual meeting, Columbus, Ohio; August, 2008. (oral presentation)
73. Li, M., L. Cooney, **A. Pradhan**, and Y. Li. A predictive model for the survival of *Listeria monocytogenes* on fully-cooked chicken drum during post-package hot water pasteurization. Institute of Food Technologists (IFT) annual meeting, New Orleans, Louisiana; June-July, 2008.
74. **Pradhan, A. K.**, M. Li, L. Cooney, and Y. Li. Survival, growth, and death of *Salmonella* and *Listeria* in raw chicken breast meat during refrigerated and frozen storage. Institute of Food Technologists (IFT) annual meeting, Chicago, Illinois; July-August, 2007.
75. Li, M., **A. Pradhan**, L. Cooney, and Y. Li. Thermal inactivation of *Listeria* on fully-cooked and vacuum-packaged chicken breast products during hot water treatment. American Society of Agricultural and Biological Engineers (ASABE) annual meeting, Minneapolis, Minnesota; June, 2007. (oral presentation)
76. **Pradhan, A.**, M. Li, and Y. Li. Quantitative microbial risk assessment model for exposure assessment of *Salmonella* during poultry processing. American Society of Agricultural and Biological Engineers (ASABE) annual meeting, Minneapolis, Minnesota; June, 2007. (oral presentation)

77. **Pradhan, A. K.**, and Y. Li. Exposure assessment simulation for microbial behavior of *Salmonella* during poultry primary processing. Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland; December, 2006.
78. **Pradhan, A. K.**, L. Cooney, and Y. Li. Predictive modeling of microbial inactivation kinetics for *Listeria* and heat and mass transfer during thermal processing of ready-to-eat poultry products. Institute of Food Technologists (IFT) annual meeting, Orlando, Florida; June, 2006.
79. **Pradhan, A. K.**, B. Swem, and Y. Li. Pathogen kinetics and heat transfer modeling for thermal inactivation of *Listeria* in ready-to-eat poultry products. Institute of Food Technologists (IFT) annual meeting, New Orleans, Louisiana; July, 2005.
80. **Pradhan, A. K.**, and Y. Li. Microbial risk assessment simulation for *Salmonella* Typhimurium in poultry processing. Society for Risk Analysis (SRA) annual meeting, Palm Springs, California; December, 2004.
81. **Pradhan, A. K.**, and Y. Li. A quantitative microbial risk assessment model for *Salmonella* Typhimurium in poultry processing. Institute of Food Technologists (IFT) annual meeting, Las Vegas, Nevada; July, 2004.
82. **Pradhan, A. K.**, H. Yang, B. L. Swem, and Y. Li. Survival/death of *Salmonella* Typhimurium on chicken skin during poultry scalding: Data analysis using statistical software. Institute of Biological Engineering (IBE) annual meeting, Fayetteville, Arkansas; January, 2004.
83. **Pradhan, A. K.**, D. Sims, Y. Li, and P. Crandall. Simulation model of quantitative microbial risk assessment for *Staphylococcus aureus* in bananas from farm to table. Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland; December, 2003.

#### **II.D.3. Non-Refereed Presentations**

1. **Pradhan, A. K.** Evaluation of meteorological factors associated with pre-harvest contamination risk of enteric bacteria in a mixed produce and dairy farm. Mini-Summit on Food Safety, Policy, and Sustainability at University of Maryland, College Park; October, 2017.
2. **Pradhan, A. K.** Improving food safety through predictive microbiology and quantitative microbial risk assessment. Mini-Summit on Food Safety, Policy, and Sustainability at Shanghai Ocean University, Shanghai, P.R. China; October, 2016.
3. **Pradhan, A. K.** Quantitative risk assessment of listeriosis due to consumption of raw milk. Presentation for extended risk analysis program, Summer Integrated Program (SIP), Joint Institute of Food Safety and Applied Nutrition (JIFSAN), University of Maryland, College Park; July 2014.
4. **Pradhan, A. K.** Quantitative risk assessment of listeriosis due to consumption of raw milk. Presentation for extended risk analysis program, Summer Integrated Program (SIP), Joint Institute of Food Safety and Applied Nutrition (JIFSAN), University of Maryland, College Park; July 2013.
5. **Pradhan, A. K.** Overview: Food safety. For the campus visit of Vice President for Research and Innovation & Director Research Support Services, University College of Cork, Ireland, at the Division of Research, University of Maryland, College Park; April 2013.
6. **Pradhan A. K.** Tools and data needs for performing quantitative risk assessments. Training workshop on “Role of Risk Analysis in the Development and Implementation of Food Safety Programs and Standards” at the National Institute of Nutrition (NIN), Hyderabad, India; June, 2011.
7. **Pradhan A. K.** The challenge of effective risk communications. Training workshop on “Role of Risk Analysis in the Development and Implementation of Food Safety Programs and Standards” at the National Institute of Nutrition (NIN), Hyderabad, India; June, 2011.

8. **Pradhan A. K.** Case study 1: Setting the acceptable exposure levels for a naturally occurring toxic element. Training workshop on “Role of Risk Analysis in the Development and Implementation of Food Safety Programs and Standards” at the National Institute of Nutrition (NIN), Hyderabad, India; June, 2011.
9. **Pradhan, A. K.**, and RDQMA research team. Epidemiology of *Listeria monocytogenes* on a New York State dairy farm. USDA/Agricultural Research Service (ARS)-Regional Dairy Quality Management Alliance (RDQMA) annual meeting, State College, Pennsylvania; October, 2010.
10. **Pradhan A. K.** 2010. Food safety from farm to fork: Identifying control strategies using risk assessment. University of Maryland, College Park, Maryland; September, 2010.
11. **Pradhan, A. K.**, and RDQMA research team. Molecular epidemiology of *Mycobacterium avium* subsp. *paratuberculosis* in a longitudinal study of three dairy herds. Northeast United States Animal Health Association (NEUSAHA) annual meeting, Saratoga Springs, New York; May, 2010.
12. Latorre, A. A., J. S. Van Kessel, J. S. Karns, M. J. Zurakowski, **A. K. Pradhan**, K. J. Boor, E. Adolph, S. Sukhnanand, and Y. H. Schukken. Update in RDQMA *L. monocytogenes* research- Molecular epidemiology of *Listeria monocytogenes* on a New York State dairy farm: Heterogeneity among fecal and environmental isolates and homogeneity in bulk tank milk and in-line milk filter isolates. NEUSAHA annual meeting, Saratoga Springs, New York; May, 2010 (presenter-A.K. Pradhan).
13. Whitlock, R. H., **A. K. Pradhan**, Y. Schukken, J. Smith, J. Van Kessel, E. Hoving, J. Karns, D. Wolfgang, T. Johnson, R. Sweeney, S. McAdams, and T. Fyock. Cattle shedding MAP: A new paradigm-passive shedding or active shedding? NEUSAHA annual meeting, Saratoga Springs, New York; May, 2010 (presenter-A.K. Pradhan).
14. **Pradhan, A. K.**, and RDQMA research team. Multilocus short sequence repeat analysis of *Mycobacterium avium* subsp. *paratuberculosis* isolates from three RDQMA dairy herds. USDA/ARS-RDQMA annual meeting, State College, Pennsylvania; November, 2009.
15. Latorre, A. A., **A. K. Pradhan**, Y. H. Schukken, and RDQMA & QMPS team. Milk quality in New York State: Molecular epidemiology of *L. monocytogenes* on a New York State dairy farm. 86<sup>th</sup> annual conference of New York State Association for Food Protection, Syracuse, New York; September 2009. (presenters-both A. A. Latorre, and A. K. Pradhan)
16. **Pradhan, A. K.**, and RDQMA research team. Molecular epidemiology and genetic analysis of *Mycobacterium avium* subspecies *paratuberculosis*. NEUSAHA annual meeting, Grasonville, Maryland; March, 2009.
17. **Pradhan, A. K.** Dynamics of endemic infectious diseases of animal and human importance on three dairy herds in the northeastern United States. USDA/ARS-RDQMA annual meeting, State College, Pennsylvania; November, 2008.
18. **Pradhan, A. K.** Environmental sampling as an index of severity of *Mycobacterium avium* subspecies *paratuberculosis* (MAP) bio-burden on dairy farms. USDA/ARS-RDQMA annual meeting, State College, Pennsylvania; November, 2008.
19. Latorre, A. A., J. S. Van Kessel, K. J. Boor, J. S. Karns, M. J. Zurakowski, **A. K. Pradhan**, C. S. Daugherty, and Y. H. Schukken. Update in RDQMA *Listeria monocytogenes* research: Biofilm in the milking equipment on a dairy farm as the potential source of bulk tank milk contamination with *L. monocytogenes*. USDA/ARS-RDQMA annual meeting, State College, Pennsylvania; November, 2008.
20. **Pradhan, A. K.**, Y. H. Schukken. Infectious diseases on dairy farms. NEUSAHA annual meeting, Bar Harbor, Maine; June, 2008. (presenter-Y.H. Schukken)
21. **Pradhan, A. K.** Three dairy herds in the northeast US: An overview of food safety and epidemiologic issues and concern. USDA/ARS-RDQMA annual meeting, State College, Pennsylvania; November, 2007.

22. **Pradhan, A. K.** Monitoring bulk tank milk and milk filter to detect the infection status in three northeast United States dairy herds. USDA/ARS-RDQMA annual meeting, State College, Pennsylvania; November, 2007.

#### II.D.4. Non-Refereed Posters

1. Gupta, N., and **A. K. Pradhan.** Evaluating the effect of time interval between manure applications and harvesting of leafy greens on public health risk of *Escherichia coli* O157:H7. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2018.
2. Horr, T., and **A. K. Pradhan.** Evaluation of public health risk for *Escherichia coli* O157:H7 in cilantro. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2018.
3. Karanth, S., and **A. K. Pradhan.** Integrating molecular data into a risk assessment framework for *Salmonella* spp. in poultry. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2018.
4. Rani, S., J. P. Dubey, and **A. K. Pradhan.** Evaluating food safety risk of *Toxoplasma gondii* in naturally-infected meat animals in the United States. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2018.
5. Karanth, S., A. Mishra, and **A. K. Pradhan.** Applicability of omics data in predicting serovar-specific *Salmonella* incidence. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2017.
6. Pang, H., S. A. Micallef, K. E. Everts, and **A. K. Pradhan.** Evaluation of cover cropping and meteorological factors on the survival of generic *E. coli* and *Listeria innocua* in produce fields. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2017.
7. Qu, Y., and **A. K. Pradhan.** Survival, growth, or decline of *Salmonella* spp. in rehydrated dry dog foods. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2017.
8. Rani, S., and **A. K. Pradhan.** Modeling *Mycobacterium avium* subspecies *paratuberculosis* contamination in bulk tank milk in the US Dairy Farms. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2017.
9. Rani, S., and **A. K. Pradhan.** Assessing the role of farm hygiene as predictor of milk contamination by *Mycobacterium avium* subsp. *paratuberculosis* (MAP) in dairy farms. AGNR Open House, held at the Central Maryland Research and Education Center, Clarksville, Maryland; October, 2016.
10. Pang, H., R. McEgan, S. A. Micallef, and **A. K. Pradhan.** Identifying and modeling meteorological risk factors associated with pre-harvest contamination of *Listeria* species in a mixed produce and dairy farm. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2016. (Also presented at the AGNR Open House, held at the Central Maryland Research and Education Center, Clarksville, Maryland; October, 2016)
11. Qu, Y., E. Lambertini, R. L. Buchanan, and **A. K. Pradhan.** Survival, growth, or decline of *Salmonella* in rehydrated dry pet food. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2016. (Also presented at the AGNR Open House, held at the Central Maryland Research and Education Center, Clarksville, Maryland; October, 2016)
12. Mishra, A., H. Pang, R. L. Buchanan, D. W. Schaffner, and **A. K. Pradhan.** Development of a system model to understand the role of animal feces as a route of contamination of leafy



- greens before harvest. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2016.
13. Rani, S., E. Lambertini, and **A. Pradhan**. Development of a risk model to predict *Mycobacterium avium* subsp. *paratuberculosis* contamination in bulk tank milk. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2016.
  14. Ying, Y., J. P. Dubey, O. Kwok, and **A. K. Pradhan**. Prevalence, isolation, and genetic characterization of *Toxoplasma gondii* in chickens. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2016.
  15. Cao, H., **A. K. Pradhan**, J. S. Karns, D. R. Wolfgang, E. Hovingh, and J. S. Van Kessel. Antimicrobial Resistance of *Salmonella* and *E. coli* from Pennsylvania Dairy Herds. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2015.
  16. Guo, M., E. Lambertini, R. L. Buchanan, J. P. Dubey, D. E. Hill, H. R. Gamble, J. L. Jones, and **A. K. Pradhan**. Quantitative risk assessment of *Toxoplasma gondii* infection through consumption of fresh pork in the United States. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2015.
  17. Mishra, A., and **A. K. Pradhan**. Dynamic modeling approach for growth of *Salmonella* and *Listeria monocytogenes* in leafy greens during transportation without temperature control. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2015.
  18. Pang, H., E. Lambertini, and **A. K. Pradhan**. Identifying and modeling multi-scale risk factors for contamination by foodborne pathogens in mixed farms. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2015.
  19. Ying, Y., M. Guo, J. P. Dubey, and **A. K. Pradhan**. Prevalence, isolation, and genetic characterization of *Toxoplasma gondii* in chickens from Amish community. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2015.
  20. Cao, H., and **A. K. Pradhan**. Antimicrobial resistance of Enterobacteriacease populations in northeastern U.S. dairy operations. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2014.
  21. Guo, M., Y. Ying, R. L. Buchanan, J. P. Dubey, D. Hill, H. R. Gamble, J. Jones, and **A. K. Pradhan**. Qualitative risk assessment of *Toxoplasma gondii* infection from meat consumption in the United States. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2014. (Also presented at the AGNR Open House, held at the Central Maryland Research and Education Center, Clarksville, Maryland; October, 2014)
  22. Mishra, A., R. L. Buchanan, D. W. Schaffner, and **A. K. Pradhan**. Dynamic modeling approach for growth of *Escherichia coli* O157: H7, *Salmonella* and *Listeria monocytogenes* in leafy greens during transportation without temperature control. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2014. (Also presented at the AGNR Open House, held at the Central Maryland Research and Education Center, Clarksville, Maryland; October, 2014)
  23. Pang, H., D. Biswas, and **A. K. Pradhan**. Evaluation of quantitative microbial risk assessments for *Salmonella* and *Campylobacter* in poultry meat. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2014.
  24. Wang, M., E. Lambertini, S. A. Micallef, and **A. K. Pradhan**. Microbiological survey of pre-harvest cantaloupes in mid-Atlantic region and risk assessment of *Listeria monocytogenes* and *Salmonella* in cantaloupe. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2014.

25. Pang, H., R. L. Buchanan, D. W. Schaffner, and **A. K. Pradhan**. Quantitative risk assessment for *Escherichia coli* O157:H7 in fresh-cut lettuce. S-294 poster session at the Unite Fresh, San Diego, California; May, 2013. (Also presented at the AGNR Open House, held at the Central Maryland Research and Education Center, Clarksville, Maryland; October, 2013)
26. Guo, M., R. L. Buchanan, J. P. Dubey, D. Hill, H. R. Gamble, J. Jones, and **A. K. Pradhan**. Seroprevalence and risk factors of *Toxoplasma gondii* infection in meat products destined for human consumption. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2013. (Also presented at the AGNR Open House, held at the Central Maryland Research and Education Center, Clarksville, Maryland; October, 2013)
27. Mishra, A., and **A. K. Pradhan**. Modeling of microbial contamination in leafy greens. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2013. (Also presented at the AGNR Open House, held at the Central Maryland Research and Education Center, Clarksville, Maryland; October, 2013)
28. Pang, H., and **A. K. Pradhan**. Quantitative risk assessment for *Escherichia coli* O157:H7 in fresh-cut lettuce. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2013.
29. Wang, M., and **A. K. Pradhan**. Food safety risk assessments for *Listeria monocytogenes* and *Salmonella* spp. in melons. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2013. (Also presented at the AGNR Open House, held at the Central Maryland Research and Education Center, Clarksville, Maryland; October, 2013)
30. Pang, H., and **A. K. Pradhan**. Quantitative risk assessment for *Escherichia coli* O157:H7 in leafy greens. NFSC Annual Research Day, held at the National Agricultural Library (NAL), Beltsville, Maryland; May, 2012. (Also presented at the AGNR Open House, held at the Central Maryland Research and Education Center, Clarksville, Maryland; October, 2012)
31. **Pradhan, A. K.**, and Y. Li. A quantitative microbial risk analysis model for exposure assessment of *Salmonella* during poultry primary processing. Food Safety Consortium (FSC) annual meeting, Fayetteville, Arkansas; October, 2006.
32. **Pradhan, A. K.**, and Y. Li. Interactive predictive modeling of pathogen kinetics, heat and mass transfer for thermal inactivation of *Listeria* in ready-to-eat poultry products. Food Safety Consortium (FSC) annual meeting, Manhattan, Kansas; October, 2005.
33. **Pradhan, A. K.**, B. L. Swem, and Y. Li. Thermal inactivation of *Listeria* in ready-to-eat poultry products. Gamma Sigma Delta (GSD) annual research competition, Fayetteville, Arkansas; March, 2005.
34. **Pradhan, A. K.**, and Y. Li. A quantitative microbial risk assessment model for *Salmonella* Typhimurium in poultry processing. Arkansas Section of the American Society of Agricultural and Biological Engineers (ASABE) annual meeting, Littlerock, Arkansas; October, 2004.
35. **Pradhan, A. K.**, B. L. Swem, and Y. Li. A mathematical predictive model for the survival/growth/death of *Salmonella* Typhimurium in broiler hatchery. Food Safety Consortium (FSC) annual meeting, Fayetteville, Arkansas; October, 2003.

#### **II.D.5. Symposia**

- Primary contact, co-organizer, co-convenor of symposium “Novel Processing Technologies to Improve Food Safety and Quality”. International Association for Food Protection (IAFP) annual meeting, Salt Lake City, Utah; July 2018. (Co-organizers: A. Pradhan, R. Tikekar; Co-convenors: A. Pradhan, R. Tikekar)

- Organizer and co-chair of the symposium “Innovative Microbial Risk Modeling for Food Supply Chain” at the Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December, 2017.
- Lambertini, E. #, R. L. Buchanan, C. Narrod, and **A. K. Pradhan**. Frontiers in quantitative microbial exposure and risk assessment for *Salmonella* control: Applications to managing risk in the dry pet food production chain. Presented at the symposium “Update on Salmonellosis: Why is it Still a Major Public Health Issues and What Value Does Risk Assessment have in Redirecting the Burden?” Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December, 2015. (#, Lambertini, E.: Postdoctoral scholar in Dr. Pradhan’s Lab)
- Co-Convenor of symposium “Safe Food for the Entire Family: The Global Pet Food Safety Frontier”. International Association for Food Protection (IAFP) annual meeting, Portland, Oregon; July 2015. (Co-organizers: R. Buchanan, L. Leake; Co-convenors: E. Lambertini, L. Leake, A. Pradhan)
- Primary contact, co-organizer, co-convenor of symposium “Understanding and Mitigating *Salmonella* Risk in Low-water Activity Foods Using Quantitative Microbial Risk Assessment”. International Association for Food Protection (IAFP) annual meeting, Indianapolis, Indiana; August 2014. (Co-organizers: A. Pradhan, A. Amézquita, I. Mello; Co-convenors: A. Pradhan, I. Mello)

#### **II.D.6. Workshops**

- Participated and presented at the training workshop on “Role of Risk Analysis in the Development and Implementation of Food Safety Programs and Standards” at the National Institute of Nutrition (NIN), Hyderabad, India; June, 2011. Co-organized by Biotech Consortium India Limited, University of Nebraska-Lincoln, and University of Maryland, College Park.
- Attended the “*Listeria monocytogenes* Dose-Response Workshop” co-sponsored by the Interagency Risk Assessment Consortium (IRAC) and the Joint Institute for Food Safety and Applied Nutrition (JIFSAN), University of Maryland, at Arlington, Virginia; March, 2011.

#### **II.E. Professional and Extension Publications**

##### **II.E.1. Reports and Non-Refereed Monographs**

- Prepared USDA/ARS-Regional Dairy Quality Management Alliance (RDQMA) annual project report; November, 2010.
- Prepared USDA/ARS-Regional Dairy Quality Management Alliance (RDQMA) annual project report; October, 2009.
- Prepared USDA/ARS -Regional Dairy Quality Management Alliance (RDQMA) annual project report; October, 2008.
- Prepared USDA/ARS-Regional Dairy Quality Management Alliance (RDQMA) annual project report; September, 2007.

#### **II.F. Other Research / Scholarship / Creative Activities**

- Attended and successfully completed the workshop on “The Alphabet Soup of NIH Training and Career Development Awards” coordinated by the Division of Research at the University of Maryland, College Park; October 21, 2013.
- Attended the public meeting on “Interagency Risk Assessment-*Listeria monocytogenes* in Retail Delicatessens” co-sponsored by the USDA-Food Safety and Inspection Service (FSIS)

and the FDA-Center for Food Safety and Applied Nutrition (CFSAN), Washington, D.C.; May 22, 2013.

- Attended the New Faculty Research Orientation organized by the Division of Research, University of Maryland, College Park; November 1, 2012.
- Attended the UMD Faculty Meeting with the National Institute of Food and Agriculture (NIFA) National Program Leaders, organized by the Associate Dean for Research and Associate Director for Maryland Agricultural Experiment Station (MAES), College of Agricultural and Natural Resources (AGNR), University of Maryland, College Park, held at NIFA's Water Front Center in Washington D.C.; June 18, 2012.
- Attended the National Institute of Health (NIH) Grant Writing Workshop for new and junior faculty organized by the Division of Research, University of Maryland, College Park, Maryland; June 07, 2012.
- Successfully completed "Quantitative Risk Assessment Methods (Summer Integrated Program)" offered through the Joint Institute for Food Safety and Applied Nutrition (JIFSAN), University of Maryland, College Park; June 18-22, 2012.
- Attended the US-EU Food Safety Conference on "Food Safety on Two Continents: Emerging Pathogens and Policies" organized by the Trans Atlantic Consumer Dialogue (TACD), Washington, D.C.; June 6, 2012.
- Participated in the Northeast Food Systems Forum; purpose was to catalyze and facilitate multi-disciplinary and multi-institutional groups to form and develop new regional initiatives, held at the USDA Beltsville Agricultural Research Center Campus, Maryland; December 7-8, 2011.
- Attended the public meeting on the "U.S. Food and Drug Administration (FDA) Food Safety Modernization Act: Focus on Preventive Controls for Facilities" at the U.S. FDA White Oak Campus, Silver Spring, Maryland; April 20, 2011.
- Participated in the "Postdoctoral Leadership Program" at Cornell University, Ithaca, New York; October, 2009-March, 2010.
- Successfully participated in the course/workshop "Modelling in livestock and crop production systems" at the University of Arkansas, Fayetteville; May 22-26, 2006.
- Participated in the leadership/teamwork training event organized by the Bumpers College Ambassadors, Dale Bumpers College of Agricultural, Food, and Life Sciences, University of Arkansas, Fayetteville; November, 2003.

### **III. Teaching, Mentoring and Advising**

#### **III.A. Courses Taught**

##### ***(i) Courses for instruction***

NFSC431: Food Quality Control (4 credits; with lab)

Spring 2012 (13 students)

Spring 2013 (23 students)

Spring 2014 (21 students)

Spring 2015 (20 students)

Spring 2016 (13 students)

Spring 2017 (21 students)

Spring 2018 (19 students)

NFSC679R: Food Safety and Nutrition Risk Assessment (4 credits; with lab)

Fall 2012 (7 students)  
Fall 2013 (6 students)  
Fall 2015 (9 students)  
Fall 2016 (8 students)  
Fall 2017 (2 students)

NFSC112: Food: Science and Technology (3 credits); Co-taught

Fall 2014 (186 students)  
Fall 2015 (179 students)  
Fall 2016 (179 students)  
Fall 2017 (155 students)

***(ii) Courses related to independent study, internship or lab experience, research mentorship***

NFSC386: Experiential Learning (3-6 credits)

Fall 2012 (1 student)  
Spring 2013 (1 student)  
Spring 2014 (1 student)  
Spring 2015 (1 student)

NFSC 498A: Selected Topics-Individual Study (1-3 credits)

Spring 2013 (1 student)  
Spring 2014 (1 student)  
Summer 2015 (1 student)

NFSC 678A: Selected Topics-Individual Study (1-3 credits)

Fall 2015 (1 student)

NFSC699: Problems in Nutrition and Food Science (1-4 credits)

Fall 2011 (2 students)  
Spring 2012 (1 student)  
Spring 2013 (1 student)  
Spring 2014 (3 students)  
Fall 2014 (3 students)  
Fall 2015 (1 student)  
Fall 2016 (2 students)  
Fall 2017 (1 student)

NFSC799: Master's Thesis Research (1-6 credits)

Fall 2011 (1 student)  
Spring 2013 (1 student)  
Summer 2013 (1 student)  
Fall 2013 (1 student)  
Spring 2014 (2 students)  
Summer 2014 (1 student)  
Spring 2015 (1 student)  
Summer 2015 (1 student)  
Spring 2016 (1 student)

Summer 2016 (1 student)  
Fall 2016 (1 student)  
Spring 2017 (1 student)

NFSC898: Pre-Candidacy Research (1-8 credits)

Fall 2013 (2 students)  
Spring 2014 (3 students)  
Fall 2014 (3 students)  
Spring 2015 (1 student)  
Fall 2015 (1 student)  
Spring 2016 (1 student)  
Fall 2017 (1 student)  
Spring 2018 (1 student)

NFSC899: Doctoral Dissertation Research (6 credits)

Spring 2015 (2 students)  
Fall 2015 (2 students)  
Spring 2016 (1 student)  
Fall 2016 (1 student)  
Spring 2017 (1 student)

***(iii) Contributions to Other Teaching Activities (e.g., Invited Guest Lectures)***

- **Pradhan, A. K.** Overview of food safety risk analysis. Invited guest lecture for ANSC 688J/440-Zoonotic Diseases and Control Course in the Department of Animal and Avian Sciences (ANSC) at the University of Maryland, College Park; February 6, 2018.
- **Pradhan, A. K.** Overview of food safety risk analysis. Invited guest lecture for ANSC 688J/440-Zoonotic Diseases and Control Course in the Department of Animal and Avian Sciences (ANSC) at the University of Maryland, College Park; March 8, 2016.
- **Pradhan, A. K.** Overview of food safety risk analysis. Invited guest lecture for ANSC 688J/489R-Zoonotic Diseases and Control Course in the Department of Animal and Avian Sciences (ANSC) at the University of Maryland, College Park; February 10, 2015.
- **Pradhan, A. K.** Overview of food safety risk analysis. Invited guest lecture for ANSC 688J/489R-Zoonotic Diseases and Control Course in the Department of Animal and Avian Sciences (ANSC) at the University of Maryland, College Park; February 11, 2014.
- **Pradhan, A. K.** Introduction to food safety risk analysis. Invited guest lecture for NFSC112 Food: Science and Technology Course in the Department of Nutrition and Food Science, University of Maryland, College Park; November 13, 2013.
- **Pradhan, A. K.** Overview of food safety risk analysis. Invited guest lecture for PLSC115-How Safe is Your Salad? The Microbiological Safety of Fresh Produce Course in the Department of Plant Science and Landscape Architecture (PSLA) at the University of Maryland, College Park; October 31, 2013.
- **Pradhan, A. K.** Quantitative risk assessment of listeriosis due to consumption of raw milk. Invited to be on the Expert Panel for the Raw Milk Debate as a part of Course FSHN 208: Dairy Foods: Current Issues and Controversies in the Department of Food Science and Human Nutrition at the Iowa State University; March 26, 2013. *(presented via Skype)*

- **Pradhan, A. K.** Introduction to food safety risk analysis. Invited guest lecture for NFSC112 Food: Science and Technology Course, in the Department of Nutrition and Food Science, University of Maryland, College Park; November 07, 2012.
- **Pradhan, A. K.** Quantitative risk assessment of listeriosis due to consumption of raw milk. Invited to be on the Expert Panel for the Raw Milk Debate as a part of Course FSHN 208: Dairy Foods: Current Issues and Controversies in the Department of Food Science and Human Nutrition at the Iowa State University; March 29, 2012. (*presented via Skype*)
- **Pradhan, A. K.** Introduction to food safety risk analysis. Invited guest lecture for NFSC112 Food: Science and Technology Course in the Department of Nutrition and Food Science, University of Maryland, College Park; November 14, 2011.
- **Pradhan A. K.** Food safety risk assessment: Monte Carlo simulation. University of Maryland, College Park, Maryland; September 9, 2010.

### **III.B. Course or Curriculum Development**

#### NFSC431: Food Quality Control (4 credits, with lab)

Redesigned the course curriculum, and developed the instructional materials for this course. The purpose of this course is to provide students with knowledge of food quality control concepts and procedures to improve the quality and safety of food products.

#### NFSC679R: Food Safety and Nutrition Risk Assessment (4 credits, with lab)

Developed this brand new course for graduate students. Developed the course curriculum, and instructional materials for this course. This course focuses on learning, understanding, and applying different methodologies, tools, and techniques to perform risk assessment modeling and simulation tasks.

#### NFSC112: Food: Science and Technology (3 credits)

Developed or modified instructional materials for about half of the lectures that I teach for this course (mostly topics related to food microbiology, quality and safety, processing). This is an introductory level undergraduate course to provide students across the campus with an introduction to the domain of food science and food technology.

### **III.C. Advising: Research or Clinical**

#### **III.C.1. Undergraduate**

Supervised following undergraduate students to provide lab research experience

- |                               |                           |
|-------------------------------|---------------------------|
| • Luxi Ruan                   | Spring, 2013              |
| • Yuqing Ying                 | Spring, 2013              |
| • Xinyue Wang                 | Fall, 2013-Spring, 2014   |
| • Zhiyuan Lou                 | Fall, 2013-Summer, 2014   |
| • Yu Wang                     | Spring, 2014-Spring, 2015 |
| • Carolina Maria Rojas Perea* | Summer, 2015              |
| • Caroline Johnson            | Fall, 2015-Spring, 2016   |
| • Yuyang Lu                   | Fall, 2015-Spring, 2016   |
| • Wendy Guan                  | Spring, 2016              |
| • Anthony Soc                 | Summer, 2016-Summer, 2017 |

- Anjali Mullor Summer 2017  
(School of Public Health, UMD)

\* Exchange visitor under the Brazil Scientific Mobility Program, State University of Campinas, UNICAMP, Brazil.

### III.C.2. Master's

#### **Committee Chair (Major Advisor)**

- Hao Pang 2011-2013
  - Thesis: Quantitative Risk Assessment for *Escherichia coli* O157:H7 in Fresh-cut Lettuce.
  - Completed M.S. in August 2013
  - Continued Ph.D. with me
- Miao Wang 2012-2014
  - Thesis: Assessment of Preharvest Microbial Quality of Cantaloupes and Public Health Risks Associated with Cantaloupes Contaminated with *Listeria monocytogenes*.
  - Completed M.S. in August 2014
  - Worked in food industry (Jiaherb, Inc. in Pine Brook, New Jersey)
- Huilin Cao 2013-2015
  - Thesis: Antimicrobial Resistance of *Salmonella* and *E. coli* from Pennsylvania Dairy Herds.
  - Completed M.S. in August 2015
  - Worked in USDA-ARS, Beltsville, Maryland
- Yuqing Ying 2014-2016
  - Thesis: Prevalence, Isolation, and Genetic Characterization of *Toxoplasma gondii* in Chicken.
  - Completed M.S. in August 2016
  - Worked in USDA-ARS, Beltsville, Maryland
- Yinzhi Qu 2015-2017
  - Thesis: Evaluation of the Behavior of *Salmonella enterica* in Rehydrated Dry Dog Foods
  - Completed M.S. in June 2017
  - Working in AUI Fine Foods, Gaithersburg, Maryland
- Taryn Horr 2017-
- Nidhi Gupta 2017-

#### **Committee Member**

- Elizabeth Ann Beck Graduated 2013
- Aixia Xu Graduated 2014
- Xiaojing Jiang Graduated 2015
- Junchao Lu Graduated 2016



- Luxi Ruan Graduated 2016
- Qiao Ding Graduated 2017
- Heather Dolan Graduated 2017
- Andrea Gilbert Graduated 2017
- Yanrui Xu Graduated 2018

### III.C.3. Doctoral

#### **Committee Chair (Major Advisor)**

- Miao Guo 2012-2015
  - Dissertation: Evaluating Food Safety risk of *Toxoplasma gondii* in Meat Products Consumed in the United States.
  - Completed Ph.D. in December 2015
  - Working in food industry (as Food Safety Manager in PepsiCo, Beijing, China)
- Abhinav Mishra 2012-2016
  - Dissertation: Development and Application of Predictive Models for Survival, Growth, and Death of Enteric Pathogens in Leafy Greens Supply Chain.
  - Completed Ph.D. in May 2016
  - Worked on his postdoctoral training with me till June 2017
  - Working as an Assistant Professor (tenure-track) at the Department of Food Science and Technology, University of Georgia, Athens (from Aug., 2017).
- Hao Pang 2013-2017
  - Dissertation: Evaluation and Modeling of Risk Factors Associated with Microbial Contamination in Produce Pre-harvest Environment.
  - Completed Ph.D. in May 2017
  - Working in the Division of Risk and Decision Analysis, Center for Food Safety and Applied Nutrition (CFSAN), Food and Drug Administration (FDA), College Park, Maryland (as Risk Analyst (ORISE Fellow))
- Surabhi Rani 2015-
- Shraddha Karanth 2016-

#### **Committee Member**

- Pavan Soma Graduated 2011
- Irene Yossa Graduated 2012
- Maryam Ganjavi Graduated 2014
- Meng Li Graduated 2014
- Setareh Shiroodi Graduated 2014
- Jayme Leger Graduated 2015
- Yangyang Yang Graduated 2016
- Aixia Xu Graduated 2017
- Noelia Williams Graduated 2017
- Lu Yu Graduated 2018
- Mengfei Peng\* Graduated 2018

- Ruth Oni 2017-
- Robert Korir\*\* 2017-
- Sultana Solaiman\*\* 2017-

\*Department of Biological Sciences – Department of Biological Sciences - Molecular and Cellular Biology & Animal and Avian Sciences, University of Maryland, College Park

\*\*Department of Plant Science and Landscape Architecture, University of Maryland, College Park

#### **III.C.4. Post-doctoral**

- Dr. Elisabetta Lambertini October, 2012- April, 2016
  - Working at RTI International in Rockville, Maryland (as Research Environmental Scientist)
- Dr. Abhinav Mishra July, 2016-June, 2017
  - Working as an Assistant Professor (tenure-track) at the Department of Food Science and Technology, University of Georgia, Athens (from Aug., 2017-present)

#### **III.C.5. Visiting Scholar**

- Dr. Jinyao Chen April, 2016-September, 2016
  - Sichuan University, China
- Dr. Weixin Jia January, 2018-
  - South China Agricultural University, China
- Hosted two visiting scholars, Dr. Min Li, Postdoctoral Research Associate and Ms. Wen Wang, Graduate Student (Ph.D.) from the College of Biosystems Engineering and Food Science, Zhejiang University, Hangzhou, China in my lab for about a week (July 27, 2012-August 2, 2012).

#### **III.D. Advising: Other than Directed Research**

##### **III.D.1. Undergraduate**

###### Number of Undergraduate Students Advised as Academic Advisor

- Fall, 2011 3 students
- Spring, 2012 3 students
- Fall, 2012 23 students
- Spring, 2013 20 students
- Fall, 2013 23 students
- Spring, 2014 18 students
- Fall, 2014 18 students
- Spring, 2015 10 students
- Fall, 2015 11 students
- Spring, 2016 13 students
- Fall, 2016 9 students
- Spring, 2017 8 students
- Fall, 2017 16 students

### **III.D.2. Other Advising Activities**

- Faculty Advisor, Graduate Student Organization 2017-  
Department of Nutrition and Food Science  
University of Maryland, College Park
- Faculty Advisor, Food Science Club 2012-  
Department of Nutrition and Food Science  
University of Maryland, College Park
  - As faculty advisor of food science club, advise/mentor students for different club activities such as bringing in guest speakers, organizing career development events, e.g., resume critique night, organizing community outreach and social events, and participating in several campus activities including the Maryland Day and AGNR Open House.
  - Help mentoring students for participating in the Institute of Food Technologist Student Associations' (IFTSA) regional College Bowl Competition. Food Science Club hosted the IFTSA Central Atlantic College Bowl Event at UMD in April 2013 and April 2018.
  - Help mentoring students so that they can prepare the questions and serve as judges for the Maryland Future Farmers of America (MD FFA) Food Science and Technology Career Development Event (CDE). (April 2013, April 2014, April 2015).

### **III.E. Other Teaching Activities**

#### ***Teaching and Advising Improvement Activities***

- Attended the "TLTC Faculty Workshop: Questions about creating your teaching portfolio?", Teaching and Learning Transformation Center (TLTC), University of Maryland, College Park; April, 2016.
- Attended the workshop "Developing a Teaching Portfolio" sponsored by the College of Agriculture and Natural Resources (AGNR) and Center for Teaching Excellence (CTE), University of Maryland, College Park; September, 2013.
- Attended the 17<sup>th</sup> Annual Undergraduate Studies Advising Conference and Workshops on "Navigating Change", sponsored by the UMD Office of Undergraduate Studies, University of Maryland, College Park; August 2012.
- Attended the "Innovations in Teaching and Learning Conference" jointly sponsored by the Office of Information Technology and Center for Teaching Excellence, University of Maryland, College Park, Maryland; UMD CTE, April, 2011.
- Attended seminars and courses offered by Center for Teaching Excellence at Cornell University, Ithaca, New York; Spring, 2010.

## **IV. Service and Outreach**

### **IV.A. Editorships, Editorial Boards, and Reviewing Activities**

#### **IV.A.1. Editorial Boards**

- Journal of Food Protection (Member-Editorial Board) 2014-
- Foods (Member-Editorial Board) 2012-
- Poultry Science (Associate Editor) 2011-
- International Journal of Food Microbiology - Guest Editor, Special Issue on 10<sup>th</sup> International Conference in Predictive Modelling in Food: Predictive Microbiology Models 2018

#### **IV.A.2. Reviewing Activities for Journals and Presses**

##### **Reviewer for following journals:**

- American Journal of Infection Control
- Applied and Environmental Microbiology
- Applied Engineering in Agriculture
- BMC Veterinary Research
- Comprehensive Reviews in Food Science and Food Safety
- Environmental International
- Epidemiology and Infection
- Food Control
- Food Microbiology
- Food Research International
- Food Science and Nutrition
- Foodborne Pathogens and Disease
- Frontiers in Microbiology
- Innovative Food Science and Emerging Technologies
- International Journal of Food Microbiology
- Journal of Agricultural and Food Chemistry
- Journal of Animal Physiology and Animal Nutrition
- Journal of Dairy Science
- Journal of Food Engineering
- Journal of Food Process Engineering
- Journal of Food Processing and Preservation
- Journal of Food Protection
- Journal of Food Science
- LWT – Food Science and Technology
- PLOS ONE
- Poultry Science
- Risk Analysis
- Science of the Total Environment
- Transboundary and Emerging Diseases
- Trends in Food Science and Technology
- Veterinary Medicine and Science
- Zoonoses and Public Health

#### **IV.A.3. Reviewing Activities for Agencies and Foundations**

- Reviewer - Grant Proposals, Department of Homeland Security (DHS) Center for Cross-Border Threat Screening (CBTS) & Supply Chain Defense Center of Excellence Review; 2017-2018.
- Reviewer, National Pork Board Research Proposal; June, 2015.
- Invited to participate in the Department of Homeland Security (DHS) award mid-term review and participated as a reviewer in the mid-term evaluation of the DHS National Center for Food Protection and Defense (NCFPD) Center of Excellence; held at Arlington, Virginia; January, 2013.
- Selected as one of the expert panel members and participated as a peer reviewer for reviewing the USDA-FSIS risk assessment - Risk Assessment for Guiding Public Health-

Based Poultry Slaughter Inspection; review conducted by the RTI International, Research Triangle Park, North Carolina; June-September, 2012.

- Served as an external reviewer for the Portuguese Foundation for Science and Technology (FCT), Portugal; July-August, 2012.

#### **IV.A.4. Reviewing Activities for Conferences**

- Reviewer, Abstracts for Institute for Food Technologists (IFT) annual meeting; 2018
- Reviewer, Abstracts for Society for Risk Analysis (SRA) annual meeting; 2017
- Reviewer, Abstracts for 10<sup>th</sup> International Conference on Predictive Modelling in Food (ICPMF) that was held in Cordoba, Spain; 2017

#### **IV.A.5. Other**

- Reviewer, Competitive Grant Proposals, Integrated Agriculture and Natural Resources Extension and Research Program; 2017
- Reviewer and Panel Member, Maryland Agricultural Experiment Station (MAES) Competitive Grants Program; 2016
- Served as an external reviewer for a Doctoral thesis from the University of Cordoba, Spain; 2013.
- Reviewer, proposal review for Maryland Agricultural Experiment Station (MAES) Competitive Grants Program; 2012

### **IV.B. Committees, Professional & Campus Service**

#### **IV.B.1. Campus Service – Department**

- Director, NFSC Graduate Program; 2017-
- Coordinator, NFSC Departmental Newsletter; 2013-
- Member, Admission Committee in NFSC-Graduate Program; 2012-2017
- Member, NFSC 3-year Appointment, Promotion and Tenure (APT) Committee; 2017
- Chair, NFSC-Merit Pay Committee; 2017
- Member, NFSC-Merit Pay Committee; 2013, 2014, 2016
- Chair, NFSC Annual Research Day Committee; 2015
- Member, NFSC Annual Research Day Committee; 2014
- Chair, Search Committee-Research Associate Position; 2014
- Chair, Search Committee-NFSC Faculty Research Assistant (two positions); 2013
- Member, Search Committee-NFSC Faculty Research Assistant Position; 2013
- Chair, Search Committee-Research Associate Position; 2012
- Member, Search Committee-Coordinator Position, Food Safety Research Information Office (FSRIO) at USDA National Agricultural Library; 2012
- Member, Search Committee for several positions (e.g., Faculty Research Assistants) hired through NFSC Department for co-operative agreement projects from USDA-ARS, Beltsville, Maryland; 2012

#### **IV.B.2. Campus Service – College**

- Member, JIFSAN Appointment, Promotion and Tenure (APT) Committee; 2018
- Member, Judge - Annual Symposium of the Department of Animal and Avian Sciences (ANSC) at UMD, College Park; 2013-2016
- Member, AGNR College Faculty and Staff Excellence Awards Committee; 2015, 2016
- Member, Search Committee-NFSC Department Chair Position; 2014-2015

- Faculty Marshal, representing NFSC Department at the Fall AGNR Commencement Ceremony; December, 2012
- Member, Judge - AGNR Open House Poster Competition; 2011
- Member, Search Committee-Joint Institute for Food Safety and Applied Nutrition (JIFSAN) Risk Analysis Manager; 2011

#### **IV.B.3. Campus Service – University**

- Senator, University Senate, UMD - Tenured/Tenure-Track Faculty Representative, for the College of Agriculture and Natural Resources; 2018-2021
- Member (Faculty Representative), Educational Affairs Committee, a University Senate Standing Committee, UMD; 2016-2018
- Served as a discussant for the Team MILK thesis at the Gemstone Senior Thesis Conference, Gemstone Honors Program, University of Maryland, College Park; 2013

#### **IV.B.4. Offices and Committee Memberships**

- Past Chair: 2017-2018, Chair: 2016-2017, Vice Chair: 2015-2016, Senior Secretary: 2014-2015, Secretary: 2013-2014, Microbial Risk Analysis Specialty Group (MRASG) – Society for Risk Analysis (SRA).
- President: 2017-2018, Vice President: 2016-2017, Indian Association for Food Protection in North America – an affiliate of the International Association for Food Protection (IAFP).
- Member, Journal of Food Protection (JFP) Management Committee - International Association for Food Protection (IAFP); 2013-
- President, Alpha Epsilon-Arkansas Chapter; 2003-2004. This Chapter was awarded the most improved Chapter by the American Society of Agricultural and Biological Engineers (ASABE) in 2004. Alpha Epsilon is an honor society for outstanding agricultural, biological, and food engineers.

#### **IV.B.5. Leadership Roles in Meetings and Conferences**

- Co-Chair, Technical session - “Understanding Antimicrobial Resistance as a Global Concern”. Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December, 2017.
- Member, Organizing Committee - 10<sup>th</sup> Mini Summit on Food Safety, Policy, and Sustainability, College Park, Maryland; 2017.
- Member, Scientific Committee - 10<sup>th</sup> International Conference on Predictive Modelling in Food, Cordoba, Spain; 2017.
- Member, Program Committee - Society for Risk Analysis (SRA) Annual Meeting; 2017.
- Co-Chair, Technical session - “Modeling Environmental Transmission of Microbes”. Society for Risk Analysis (SRA) annual meeting, Arlington, Virginia; December 2015.
- Chair, Technical Session - “Understanding and Mitigating Risk of Illness: Pathogens in Human and Pet Food”. Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland; December 2013.
- Chair, Poster Platform Session - “Microbial Pathology and Food Safety” Society for Risk Analysis (SRA) annual meeting, Salt Lake City, Utah; December, 2010.

#### **IV.B.6. Other Non-University Committees, Memberships, Panels, etc.**

- Member, Selection Committee of Co-Editor for Journal of Food Protection; 2017
- Invited and participated as a retail food safety expert for a research project in the Department of Food Science at Cornell University in Ithaca, New York; Spring, 2013.

## **V. Other Information**

### **V.A. Other Recognition**

- Among honored faculty and researchers, 19<sup>th</sup> Annual Research Leaders Luncheon, Division of Research, University of Maryland, College Park (UMD); October, 2017.
- Among honored faculty and researchers, 17<sup>th</sup> Annual Research Leaders Luncheon, Division of Research, University of Maryland, College Park (UMD); October, 2015.
- Among honored faculty, 7<sup>th</sup> Annual University-Wide Celebration of Scholarship and Research, University of Maryland, College Park; May, 2014.
- Among honored faculty and researchers, 15<sup>th</sup> Annual Research Leaders Luncheon, Division of Research, University of Maryland, College Park; November, 2013.
- Among honored faculty, 6<sup>th</sup> Annual University-Wide Celebration of Scholarship and Research, University of Maryland, College Park; May, 2013.

### **V.B. Awards, Fellowships, and Prizes received by Dr. Pradhan's Group**

#### **V.B.1. Master's (M.S. students)**

1. Yinzhi Qu – Award winner, poster competition, for first year food science graduate student, NFSC Research Day, held at the National Agricultural Library (NAL) in Beltsville, Maryland; May, 2016.
2. Huilin Cao – 1<sup>st</sup> place award winner, poster competition, for continuing food science graduate student, Department of Nutrition and Food Science (NFSC) Research Day, held at the National Agricultural Library (NAL) in Beltsville, Maryland; May, 2015.
3. Yuqing Ying – Award winner, poster competition, for first-year graduate student in food science, NFSC Research Day, held at the National Agricultural Library (NAL) in Beltsville, Maryland; May, 2015.
4. Huilin Cao – Student Travel Award; Society for Risk Analysis (SRA), SRA annual meeting, Denver, Colorado; December, 2014.
5. Miao Wang – Student Travel Award; Society for Risk Analysis (SRA), SRA annual meeting, Denver, Colorado; December, 2014.
6. Miao Wang – Jacob K. Goldhaber Travel Award, UMD Graduate School, for Institute of Food Technologists (IFT) annual meeting, New Orleans, Louisiana; June, 2014.
7. Miao Wang – 1<sup>st</sup> place award winner, poster competition, for continuing food science graduate student, NFSC Research Day, held at the National Agricultural Library (NAL) in Beltsville, Maryland; May, 2014.
8. Miao Wang – Student Merit Award, Microbial Risk Analysis Specialty Group (MRASG)-Society for Risk Analysis (SRA), SRA annual meeting, Baltimore, Maryland; December, 2013.
9. Miao Wang – Student Travel Award; Society for Risk Analysis (SRA), SRA annual meeting, Baltimore, Maryland; December, 2013.
10. Miao Wang – Award winner, poster competition, for first-year graduate student in food science, Capital Area Food Protection Association (CAFPA), at NFSC Research Day, held at the National Agricultural Library (NAL) in Beltsville, Maryland; May, 2013.
11. Hao Pang – 2<sup>nd</sup> place award winner, poster competition, for continuing food science graduate students, Capital Area Food Protection Association (CAFPA), at NFSC Research Day, held at the National Agricultural Library (NAL) in Beltsville, Maryland; May, 2013.
12. Hao Pang – Jacob K. Goldhaber Travel Award, UMD Graduate School, for SRA Annual Meeting, San Francisco, California; December, 2012.
13. Hao Pang – Student Merit Award, Microbial Risk Analysis Specialty Group (MRASG)-Society for Risk Analysis (SRA), SRA annual meeting, San Francisco, California; December 2012.

14. Hao Pang – Student Travel Award; Society for Risk Analysis (SRA), SRA annual Meeting, San Francisco, California; December, 2012.
15. Hao Pang – Dean’s Fellowship, UMD; 2011-2012.

**V.B.2. Doctoral (Ph.D. students)**

1. Shraddha Karanth – Outstanding Graduate Assistant Award, UMD Graduate School; 2018.
2. Surabhi Rani - Kulkarni Graduate Student Summer Research Fellowship, UMD Graduate School; 2018
3. Shraddha Karanth – Graduate Student Summer Research Fellowship, UMD Graduate School; 2018.
4. Surabhi Rani – 1<sup>st</sup> place award winner, poster competition, for continuing food science graduate student, Department of Nutrition and Food Science (NFSC) Research Day, held at the National Agricultural Library (NAL) in Beltsville, Maryland; May, 2018.
5. Surabhi Rani - Dean’s Fellowship, Graduate School, UMD; 2017-2018.
6. Hao Pang – Student Merit Award, Microbial Risk Analysis Specialty Group (MRASG)-Society for Risk Analysis (SRA), SRA annual meeting, Arlington, Virginia; December, 2017.
7. Hao Pang – Developing Scientists Award (3<sup>rd</sup> place, technical competition), International Association for Food Protection (IAFP), IAFP annual meeting, Tampa, Florida; July, 2017.
8. Hao Pang – Student Travel Scholarship Award, International Association for Food Protection (IAFP), IAFP annual meeting, Tampa, Florida; July, 2017.
9. Hao Pang – 1<sup>st</sup> place award winner, poster competition, for continuing food science graduate student, Department of Nutrition and Food Science (NFSC) Research Day, held at the National Agricultural Library (NAL) in Beltsville, Maryland; May, 2017.
10. Shraddha Karanth – Award winner, poster competition, for first year food science graduate student, NFSC Research Day, held at the National Agricultural Library (NAL) in Beltsville, Maryland; May, 2017.
11. Abhinav Mishra – Student Merit Award (joint winner), Microbial Risk Analysis Specialty Group (MRASG)-Society for Risk Analysis (SRA), SRA annual meeting, San Diego, California; December, 2016.
12. Hao Pang – Student Merit Award (joint winner), Microbial Risk Analysis Specialty Group (MRASG)-Society for Risk Analysis (SRA), SRA annual meeting, San Diego, California; December, 2016.
13. Hao Pang – 3<sup>rd</sup> place award winner, poster competition, AGNR Open House, UMD; October, 2016.
14. Hao Pang – Developing Scientists Award (3<sup>rd</sup> place, poster competition), International Association for Food Protection (IAFP), IAFP annual meeting, St. Louis, Missouri; August, 2016.
15. Miao Guo – Outstanding Graduate Student Award-AGNR Alumni Chapter, UMD; April, 2016.
16. Miao Guo – Lee Thornton Dissertation Fellowship, UMD Graduate School; academic year 2015-2016.
17. Abhinav Mishra – 1<sup>st</sup> place poster, voted by the 2015 Society for Risk Analysis (SRA) annual meeting attendees; Arlington, Virginia; December, 2015.
18. Miao Guo – Student Merit Award (1<sup>st</sup> place), Dose-Response Specialty Group-Society for Risk Analysis (SRA), SRA annual meeting, Arlington, Virginia, USA; December, 2015.
19. Abhinav Mishra – Jacob K. Goldhaber Travel Award, UMD Graduate School, for International Association for Food Protection (IAFP) annual meeting, Portland, Oregon; July, 2015.
20. Miao Guo – Jacob K. Goldhaber Travel Award, UMD Graduate School, for International Association for Food Protection (IAFP) annual meeting, Portland, Oregon; July, 2015.



21. Abhinav Mishra - Kulkarni Graduate Student Summer Research Fellowship, UMD Graduate School; 2015
22. Miao Guo – Award winner, poster competition, among food science graduate students working on food safety research, Capital Area Food Protection Association (CAFP), at NFSC Research Day, held at the National Agricultural Library (NAL) in Beltsville, Maryland; May, 2015.
23. Abhinav Mishra – Student Merit Award, Microbial Risk Analysis Specialty Group (MRASG)-Society for Risk Analysis (SRA), SRA annual meeting, Denver, Colorado; December, 2014.
24. Abhinav Mishra – Student Travel Award; Society for Risk Analysis (SRA), SRA Annual Meeting, Denver, Colorado; December, 2014.
25. Hao Pang – Student Travel Award; Society for Risk Analysis (SRA), SRA annual Meeting, Denver, Colorado; December, 2014.
26. Miao Guo – Student Travel Award; Society for Risk Analysis (SRA), SRA annual meeting, Denver, Colorado; December, 2014.
27. Miao Guo – Jacob K. Goldhaber Travel Award, UMD Graduate School, for International Association for Food Protection (IAFP) Annual Meeting, held in Indianapolis, Indiana, August, 2014.
28. Abhinav Mishra – Jacob K. Goldhaber Travel Award, UMD Graduate School, for Institute of Food Technologists (IFT) annual meeting, New Orleans, Louisiana; June, 2014.
29. Abhinav Mishra – Graduate Student Summer Research Fellowship, UMD Graduate School; 2014.
30. Abhinav Mishra – One of top 5 poster winners, Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland; December, 2013.
31. Abhinav Mishra – Student Travel Award; Society for Risk Analysis (SRA), SRA Annual Meeting, Baltimore; Maryland, December, 2013.
32. Miao Guo – Student Travel Award; Society for Risk Analysis (SRA), SRA annual meeting, Baltimore, Maryland; December, 2013
33. Abhinav Mishra – 3<sup>rd</sup> place award winner (joint), poster competition, AGNR Open House, UMD; October, 2013.
34. Hao Pang – 3<sup>rd</sup> place award winner (joint), poster competition, AGNR Open House, UMD; October, 2013.
35. Abhinav Mishra - Dean's Fellowship, UMD; 2012-2013.