Curriculum Vitae

Abani K. Pradhan

Department of Nutrition and Food Science
and Center for Food Safety and Security Systems
University of Maryland
0112 Skinner Building
College Park, MD 20742
Phone: 301-405-4502, Fax: 301-314-3313, E-mail: akp@umd.edu

EDUCATION

Ph.D. in Biological Engineering — December 2006
University of Arkansas, Fayetteville, Arkansas, USA — GPA: 4.0/4.0
Dissertation title: *"Quantitative risk assessment of foodborne pathogens in poultry production and processing based on microbial challenging tests and predictive models"*

M.Tech. in Agricultural and Food Engineering — May 2001
Indian Institute of Technology (IIT), Kharagpur, India — GPA: 9.74/10.00
Thesis title: *"Evaluation of simple analytical models for freezing time prediction of slab and brick shaped foodstuffs"* [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)]

B.Tech. in Agricultural Engineering — October 1998
Orissa University of Agriculture and Technology, Bhubaneswar, India — GPA: 8.81/10.00
Project title: *"Planning of watershed using remote sensing and GIS techniques"*

PROFESSIONAL EXPERIENCE

Assistant Professor — March 2011-Present
Department of Nutrition and Food Science
and Center for Food Safety and Security Systems
University of Maryland, College Park, Maryland, USA

Postdoctoral Research Associate/Research Associate — March 2007-March 2011
Quality Milk Production Services
Department of Population Medicine and Diagnostic Sciences
Cornell University, Ithaca, New York, USA

Postdoctoral Research Associate — January -February 2007
Department of Biological and Agricultural Engineering
University of Arkansas, Fayetteville, Arkansas, USA

Senior Research Assistant August 2002-December 2006
Department of Biological and Agricultural Engineering
University of Arkansas, Fayetteville, Arkansas, USA

Project Officer July 2001-June 2002
Department of Agricultural and Food Engineering
Indian Institute of Technology, Kharagpur, India

Graduate Research Scholar May 2000-February 2001
Institute of Process Engineering
Federal Research Center for Nutrition, Karlsruhe, Germany

Graduate Scholar July1999-May 2001
Department of Agricultural and Food Engineering
Indian Institute of Technology, Kharagpur, India

Technical Consultant October 1998-June 1999
Geo Informatics, Bhubaneswar, Orissa, India.

Summer Intern June 1997
Northern Region Farm Machinery Training and Testing
Institute (NRFMTTI), Hisar, Haryana,
Ministry of Agriculture, Government of India.

HONORS AND AWARDS

- Johne's Disease Integrated Program (JDIP) travel scholarship award in recognition of the outstanding research at the JDIP sixth annual conference that was held in conjunction with the Joint Annual meeting (JAM) of ADSA-PSA-AMPA-CSAS-WSASAS-ASAS, Denver, Colorado (2010).
- One of the best poster awardees (given to top five among ~150 posters) at the annual meeting of the Society for Risk Analysis (SRA), Baltimore, Maryland (2009).
- Johne's Disease Integrated Program (JDIP) travel scholarship award (awarded to 12 outstanding graduate and post-doctoral presenters throughout the world) in recognition of the outstanding research at the 10th International Colloquium on Paratuberculosis (ICP), Minneapolis, Minnesota (2009).
- Student merit award for the best research from the Exposure Assessment Specialty Group of the Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland (2006).
- Best poster award (first place) at the Food Safety Consortium (FSC) annual meeting, Manhattan, Kansas (2005).
- Travel award scholarship from the Society for Risk Analysis (SRA) annual meeting, Palm Springs, California (2004).
- Best poster award (second place) at the Arkansas section of American Society of Agricultural and Biological Engineers (ASABE) annual meeting, Littlerock, Arkansas (2004).
- Travel award scholarship from the Society for Risk Analysis (SRA) annual meeting, Baltimore, Maryland (2003).

- Best poster award (third place) at the 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 (including Colleges of Engineering, Agriculture, Veterinary Science) of 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 of the Orissa University of Agriculture and Technology, Bhubaneswar (OUAT), India (1994-1998).

RESEARCH GRANTS/AWARDS

- Project Title: Risk Identification for *Toxoplasma* Transmission in Pasture Raised Animals. Duration: 07/15/2012-07/14/2016. Amount: $495,856.00. Funding Source: USDA-NIFA-AFRI. (My role: PI).
- Project Title: On-farm Optimal Interventions Programs Resulting in Reduction of MAP Bacterial Load in Milk. Duration: 07/01/2012-06/30/2016. Amount: $499,841.00. Funding Source: USDA-NIFA-AFRI. (PI-Ynte Schukken from Cornell University; My role: co-PI, My share: $76,728.00).
- Project Title: Quantitative Risk Assessment for *Listeria monocytogenes* in Cantaloupes. Duration: 07/01/2012-06/30/2013. Amount: $30,000.00. Funding Source: Maryland Agricultural Experiment Station (MAES). (My role: PI).
- Project Title: Assessment of the Risk of Salmonellosis Associated with Dry Dog Food. Duration: 01/01/2012-06/30/2013. Amount: $274,152.00. Funding Source: Private Pet Food Industry. (My role: PI).
- Project Title: Developing Scientifically-based Consensus Food Safety Matrices for Leafy Greens and Tomatoes. Duration: 09/01/2011-08/31/2014. Amount: approx. $5.4 million. Funding Source: USDA-NIFA-SCRI. (PI-Robert L. Buchanan from University of Maryland; My role: co-PI, My share: $152,128.00).
- Project Title: Role of Risk Analysis in the Development and Implementation of Food Safety Programs and Standards. Duration: 12/01/2010-12/31/2011. Amount: $39,142.00 (PI-Buchanan). Funding Source: USDA-FAS. (My role: collaborator).

TEACHING EXPERIENCE

Department of Nutrition and Food Science — Fall 2012 (August-December)
University of Maryland, College Park, Maryland, USA

NFSC679R: Food Safety and Nutrition Risk Assessment (4 credits course; 2 lectures and 1 lab per week; graduate level course)

Department of Nutrition and Food Science — Spring 2012 (January-May)
University of Maryland, College Park, Maryland, USA

NFSC431: Food Quality Control (4 credits course; 2 lectures and 1 lab per week; undergraduate level course)
NFSC699: Problems in Nutrition and Food Science-Food Quality Control

Department of Nutrition and Food Science — Fall 2011 (August-December)
University of Maryland, College Park, Maryland, USA

NFSC699: Problems in Nutrition and Food Science-Special Topic on Food Safety Risk Assessment (Individual instruction course)

Department of Biological and Agricultural Engineering — Fall 2005 (August-December)
University of Arkansas, Fayetteville, Arkansas, USA.

BENG 450V 007: Risk Analysis for Biological Systems (instructed undergraduate and graduate students)

REFEREED ARTICLES

1. Li, M., **A. Pradhan,** W. Wang, and Y. Li. Prediction of *Listeria innocua* survival in fully cooked chicken breast products during post-package thermal treatment. ***Poultry Science.*** *(in press).*
2. **Pradhan, A. K.**, M. Li, Y. Li, L. C. Kelso, T. A. Costello, 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(6):1482-1488. [PMID: 22582310]
3. **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(11):1860-1868. [PMID: 22054186]
4. Smith, R. L., **A. K. Pradhan,** Y. T. Gröhn, R. H. Whitlock, J. S. Van Kessel, J. M. Smith, D. R. Wolfgang, and Y. H. Schukken. 2011. Environmental contamination with *Mycobacterium avium* subsp. *paratuberculosis* in endemically infected dairy herds. ***Preventive Veterinary Medicine***, 102:1-9. [PMID: 21775002]
5. 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(8):1268-1281. [PMID: 21819653]

6. 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(8):1261-1267. [PMID: 21819652]
7. 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(11):3676-3684. [PMID: 21441322]
8. **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(3):893-901. [PMID: 21209171]
9. **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(4):620-630. [PMID: 20377949]
10. 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(8):3513-3524. [PMID: 20655419]
11. 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(6):2792-2802. [PMID: 20494189]
12. **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-diacetate on listeriosis cases and deaths. ***Journal of Food Protection***, 72(5):978-989. [PMID: 19517724]
13. 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 for the impact of Johne's disease status on milk production in individual cows. ***Journal of Dairy Science***, 92 (6):2653-2661. [PMID: 19447998]
14. **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(4):1811-1825. [PMID: 19307664]
15. 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* on a dairy farm: Evidence for a reservoir in milking equipment. ***Applied and Environmental Microbiology***, 75(5):1315-1323. [PMID: 19114514]
16. **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(3):607-615. [PMID: 17388048]

17. **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(12):1959-1966. [PMID: 16479956]

NON PEER-REVIEWED ARTICLES

1. Schukken Y. H., R. M. Mitchell, **A. K. Pradhan**, Z. Lu, R. Smith, J. Cho, J. Dressler, L. W. Tauer, and Y. T. Gröhn. 2010. Elimination of *Mycobacterium avium* subspecies *paratuberculosis* from dairy farms: fact or fiction? Michigan Dairy Review, 15(3):14.
2. **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. 2009. Multilocus short sequence repeat analysis of *Mycobacterium avium* subspecies *paratuberculosis* isolates from dairy herds in northeastern United States of a longitudinal study indicates low shedders are truly infected. ***Proceedings of the Tenth International Colloquium on Paratuberculosis***, Minneapolis, Minnesota.
3. Schukken Y. H., R. M. Mitchell, **A. K. Pradhan**, Z. Lu, R. Smith, J. Cho, J. Dressler, L. W. Tauer, and Y. T. Gröhn. 2009. Elimination of *Mycobacterium avium* subspecies *paratuberculosis* from dairy farms: fact or fiction? ***Proceedings of the Tenth International Colloquium on Paratuberculosis***, Minneapolis, Minnesota.
4. **Pradhan, A. K.**, M. Li, and Y. Li. 2007. Quantitative microbial risk analysis model for exposure assessment of *Salmonella* during poultry processing. ***American Society of Agricultural and Biological Engineers*** (ASABE) annual meeting, Minneapolis, Minnesota. [Paper No. 07-6056]
5. Li, M., **A. K. Pradhan**, and Y. Li. 2007. Effectiveness of hot water pasteurization for thermal inactivation of *Listeria* on fully cooked and vacuum packaged chicken breast meat products. ***American Society of Agricultural and Biological Engineers*** (ASABE) annual meeting, Minneapolis, Minnesota. [Paper No. 07-2154]

INVITED TALKS/PRESENTATIONS

- **Pradhan, A. K.** 2012. "Introduction to Food Safety Risk Analysis." Invited guest lecture for NFSC112 Food: Science and Technology Course, University of Maryland, College Park; November 07, 2012.
- **Pradhan, A. K.** 2012. "Quantitative Risk Assessments to Address Critical Food Safety Issues". Invited presentation to the members of the American Registry of Professional Animal Scientists (ARPAS), Washington, DC area chapter that was held at the USDA Beltsville campus in Maryland; October 23, 2012.
- **Pradhan, A. K.** 2012. "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.
- **Pradhan, A. K.** 2011. "Introduction to Food Safety Risk Analysis." Invited guest lecture for NFSC112 Food: Science and Technology Course, University of Maryland, College Park; November 14, 2011.
- **Pradhan, A. K.** 2011. "Introduction to Food Safety Risk Analysis." Invited presentation at the Maryland International Incubator Workshop, University of Maryland, College

Park, presented to the Delegation from China-Shanghai Food and Drug Administration; November 08, 2011.

- **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, organized by the Biostatistics and Risk Assessment Center, University of Maryland at Silver Spring, Maryland; October 12-14, 2011.
- **Pradhan A.K.** 2011. "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; USDA-Foreign Agriculture Service (FAS) funded program organized by Biotech Consortium India Limited (BCIL), University of Maryland-College Park and University of Nebraska-Lincoln; June 20-22, 2011.
- **Pradhan A.K.** 2011. "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; USDA-Foreign Agriculture Service (FAS) funded program organized by Biotech Consortium India Limited (BCIL), University of Maryland-College Park and University of Nebraska-Lincoln; June 20-22, 2011.
- **Pradhan A.K.** 2011. "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; USDA-Foreign Agriculture Service (FAS) funded program organized by Biotech Consortium India Limited (BCIL), University of Maryland-College Park and University of Nebraska-Lincoln; June 20-22, 2011.
- Invited to participate in the "*Listeria monocytogenes* Dose-Response Workshop" co-sponsored by Interagency Risk Assessment Consortium (IRAC) and Joint Institute for Food Safety and Applied Nutrition (JIFSAN), University of Maryland, at Arlington, Virginia; March 17-18, 2011.
- **Pradhan A.K.** 2010. Research seminar on "Food safety from farm to fork; identifying control strategies using risk assessment" at the University of Maryland, College Park, Maryland; September 8, 2010.
- **Pradhan A.K.** 2010. Teaching seminar on "Food safety risk assessment: Monte Carlo simulation" at the University of Maryland, College Park, Maryland; September 9, 2010.

CONFERENCE AND MEETING PRESENTATIONS

1. 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.
2. **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.
3. **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.

4. **Pradhan, A. K.**, Latorre, A. A., Y. H. Schukken, and RDQMA 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.
5. **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) sixth annual conference at the Joint Annual meeting (JAM) of ADSA-PSA-AMPA-CSAS-WSASAS-ASAS, Denver, Colorado; July, 2010.
6. Schukken Y. H., **A. K. Pradhan**, R. M. Mitchell, Z. Lu, R. Smith, Y. T. Gröhn, R. H. Whitlock, E. Hovingh, J. M. Smith, J. S. Van Kessel, J. S. Karns, and D. Wolfgang. Importance of latent infected animals in MAP infection dynamics in dairy herds. Johne's Disease Integrated Program (JDIP) sixth annual conference at the Joint Annual meeting (JAM) of ADSA-PSA-AMPA-CSAS-WSASAS-ASAS, Denver, Colorado; July, 2010.
7. **Pradhan, A. K.**, Y. H. Schukken, and RDQMA 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.
8. 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. Northeast United States Animal Health Association (NEUSAHA) annual meeting, Saratoga Springs, New York; May, 2010 (*paper presenter).
9. Whitlock, R. H., **A. K. Pradhan**,* Y. H. Schukken, J. M. Smith, J. S. Van Kessel, E. Hoving, J. S. Karns, D. Wolfgang, T. Johnson, R. Sweeney, S. McAdams, and T. Fyock. Cattle shedding MAP: A new paradigm-passive shedding or active shedding. Northeast United States Animal Health Association (NEUSAHA) annual meeting, Saratoga Springs, New York; May, 2010 (*paper presenter).
10. **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.
11. **Pradhan, A. K.**, and Y. H. Schukken. Multilocus short sequence repeat analysis of *Mycobacterium avium* subspecies *paratuberculosis* isolates from three RDQMA dairy herds. USDA/Agricultural Research Service (ARS)-Regional Dairy Quality Management Alliance (RDQMA) annual meeting, State College, Pennsylvania; November, 2009.
12. 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. Eighty sixth annual conference of New York State Association for Food Protection, Syracuse, New York; September 2009.

13. Schukken Y. H., R. M. Mitchell, **A. K. Pradhan**, Z. Lu, R. Smith, J. Cho, Y. T. Gröhn, L. W. Tauer, and RDQMA project team. Elimination of *Mycobacterium avium* subspecies *paratuberculosis* from dairy farms: fact or fiction? *Keynote Lecture* for Epidemiology section, Tenth International Colloquium on Paratuberculosis (ICP), Minneapolis, Minnesota; August, 2009.
14. **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* subspecies *paratuberculosis* isolates from dairy herds in northeastern United States of a longitudinal study indicates low shedders are truly infected. Tenth International Colloquium on Paratuberculosis (ICP), Minneapolis, Minnesota; August, 2009.
15. **Pradhan, A. K.**, Y. H. Schukken, and RDQMA team. Molecular epidemiology and genetic analysis of *Mycobacterium avium* subspecies *paratuberculosis*. Northeast United States Animal Health Association (NEUSAHA) annual meeting, Grasonville, Maryland; March, 2009.
16. **Pradhan, A. K.**, R. Ivanek, Y. T. Gröhn, I. Georgnaras, 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.
17. **Pradhan, A. K.**, and Y. H. Schukken. Dynamics of endemic infectious diseases of animal and human importance on thee dairy herds in the northeastern Unite States. USDA/Agricultural Research Service (ARS)-Regional Dairy Quality Management Alliance (RDQMA) annual meeting, State College, Pennsylvania; November, 2008.
18. **Pradhan, A. K.**, and Y. H. Schukken. Environmental sampling as an index of severity of *Mycobacterium avium* subspecies *paratuberculosis* (MAP) bio-burden on dairy farms. USDA/Agricultural Research Service (ARS)-Regional Dairy Quality Management Alliance (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/Agricultural Research Service (ARS)-Regional Dairy Quality Management Alliance (RDQMA) annual meeting, State College, Pennsylvania; November, 2008.
20. Li, M., L. Cooney, **A. K. 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.
21. Li, M., L. Cooney, **A. K. Pradhan**, and Y. Li. A predictive model for the survival of *Listeria monocytogenes* on fully-cooked chicken drumettes during post-package hot water pasteurization. Institute of Food Technologists (IFT) annual meeting, New Orleans, Louisiana; June-July, 2008.
22. **Pradhan, A. K.**, Y. H. Schukken, and RDQMA team. Infectious diseases on dairy farms. Northeast United States Animal Health Association (NEUSAHA) annual meeting, Bar Harbor, Maine; June, 2008.
23. **Pradhan, A. K.**, and Y. H. Schukken. Three dairy herds in the northeast Unite States: An overview of food safety and epidemiologic issues and concern. USDA/Agricultural

Research Service (ARS)-Regional Dairy Quality Management Alliance (RDQMA) annual meeting, State College, Pennsylvania; November, 2007.

24. **Pradhan, A. K.**, and Y. H. Schukken. Monitoring bulk tank milk and milk filter to detect the infection status in three northeast Unite States dairy herds. USDA/Agricultural Research Service (ARS)-Regional Dairy Quality Management Alliance (RDQMA) annual meeting, State College, Pennsylvania; November, 2007.
25. **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, 2007.
26. **Pradhan, A. K.**, M. Li, and Y. Li. Quantitative microbial risk analysis model for exposure assessment of *Salmonella* during poultry processing. American Society of Agricultural and Biological Engineers (ASABE) annual meeting, Minneapolis, Minnesota; June, 2007.
27. Li, M., **A. K. Pradhan**, and Y. Li. Effectiveness of hot water pasteurization for thermal inactivation of *Listeria* on fully cooked and vacuum packaged chicken breast meat products. American Society of Agricultural and Biological Engineers (ASABE) annual meeting, Minneapolis, Minnesota; June, 2007.
28. **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.
29. **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.
30. **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.
31. **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.
32. **Pradhan, A. K.**, B. L. 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.
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. Microbial risk assessment simulation for *Salmonella* Typhimurium in poultry processing. Society for Risk Analysis (SRA) annual meeting, Palm Springs, California; December, 2004.
35. **Pradhan, A. K.**, and Y. Li. A Microbial risk assessment model for *Salmonella* Typhimurium in poultry primary processing. Arkansas Section of American Society of Agricultural and Biological Engineers (ASABE) annual meeting, Littlerock, Arkansas; October, 2004.
36. **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.

37. **Pradhan, A. K.**, B. L. Swem, and Y. Li. A predictive model for the survival/growth/death of *Salmonella* Typhimurium in broiler hatchery. Gamma Sigma Delta (GSD) annual research competition, Fayetteville, Arkansas; March, 2004.
38. **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.
39. **Pradhan, A. K.**, D. Sims, Y. Li, and P. Crandall. Simulation modeling 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.
40. **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.

GRADUATE STUDENTS

Advisor (Major Professor)

• Hao Pang	M.S. (Food Science)	2011-Present
• Miao Wang	M.S. (Food Science)	2012-Present
• Abhinav Mishra	Ph.D. (Food Science)	2012-Present
• Miao Guo	Ph.D. (Food Science)	2012-Present

Committee Member

• Pavan Soma	Ph.D. (Food Science)	Graduated 2011
• Irene Yossa	Ph.D. (Food Science)	Graduated 2012
• Noelia Williams	Ph.D. (Food Science)	2011-Present
• Elizabeth Ann Beck	M.S. (Food Science)	2012-Present

PROFESSIONAL MEMBERSHIP

- International Association for Food Protection (IAFP)
- Society for Risk Analysis (SRA)
- American Society for Microbiology (ASM)
- American Society of Agricultural and Biological Engineers (ASABE)
- The New York Academy of Sciences (NYAS)
- Institute of Biological Engineering (IBE)
- Institute of Food Technologists (IFT)
- Gamma Sigma Delta: Honor Society of Agriculture (GSD)
- Alpha Epsilon: Honor Society of Agricultural, Food, and Biological Engineering (AE)

COMPUTER SKILLS

- **Software:** Palisade DecisionTools with @RISK, Visual Basic for Application, MATLAB, Statistical software SAS and JMP, MS Access for Database.
- **Applications:** MS Office, SigmaPlot, Microcal Origin, Photoshop, Corel Draw, Dream Weaver.
- **Languages:** C and SQL.

OTHER SCHOLARLY AND PROFESSIONAL ACTIVITIES

- 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, on January 15-16, 2013.
- Selected as one of the four expert panel members and participated as a peer reviewer for reviewing the USDA-FSIS risk assessment titled "FSIS Risk Assessment for Guiding Public Health-Based Poultry Slaughter Inspection"; review conducted independently by the RTI International, Research Triangle Park, North Carolina; June-September, 2012.
- Served as an external reviewer for international peer review process for the Portuguese Foundation for Science and Technology (FCT), the public research funding agency in Portugal that selects and distributes research funds for a wide range of scientific fields of research; July-August, 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.
- Organized and presented a 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 20-22, 2011); part of a USDA Foreign Agriculture Service funded program and organized by University of Maryland, CFS3/JIFSAN, University of Nebraska-Lincoln, and Biotech Consortium India Limited.
- Participated in the "2011 Innovations in Teaching and Learning Conference" jointly sponsored by the Office of Information Technology and the Center for Teaching Excellence" at the University of Maryland, College Park, Maryland (April 29, 2011)
- Participated in the annual advisory council annual symposium of Joint Institute for Food Safety and Applied Nutrition (JIFSAN) in the occasion of celebrating 15 years of excellence of the JIFSAN (April 27-28, 2011).
- Participated in 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).
- Chaired the session on "Microbial Pathology and Food Safety" at the 2010 annual meeting of the Society for Risk Analysis (SRA) at Salt Lake City, Utah; December, 2010.
- Participated in the "Postdoctoral Leadership Program" at Cornell University, Ithaca, New York (October 2009-March 2010).
- Attended seminars and courses offered by Center for Teaching Excellence at Cornell University, Ithaca, New York (Spring, 2010).
- Prepared USDA/ARS-Regional Dairy Quality Management Alliance (RDQMA) annual project report (October, 2009).
- Participated in the expert opinion elicitation for *Mycobacterium avium* subspecies *paratuberculosis* and food products (risk assessment related to ParaTBTools), invited by the research team at the Royal Veterinary College, University of London, UK (October 2008-January 2009).
- Prepared USDA/ARS -Regional Dairy Quality Management Alliance (RDQMA) annual project report (October, 2008).

- Reviewed the report "Risk assessment of *Campylobacter* in the Netherlands via broiler meat and other routes" (February-March, 2008).
- Prepared USDA/ARS-Regional Dairy Quality Management Alliance (RDQMA) annual project report (September, 2007).
- Participated in the certified course in "Modeling of livestock and crop roduction systems" at the University of Arkansas, Fayetteville (May, 2006).
- An invention disclosure entitled, "An interactive computer simulation program for prediction of temperature, water content and pathogens in poultry products during thermal processing" was filed by Y. Li, C. Jia, A. K. Pradhan at the University of Arkansas, Fayetteville (August, 2005).
- Designed (with colleagues), developed materials, and maintained a website "biorisk" devoted to farm-to-fork food safety risk assessment at University of Arkansas, Fayetteville; http://www.uark.edu/ua/biorisk/ (2003-2006).
- *President* of Alpha Epsilon-Arkansas Chapter (2003-2004). This Chapter was awarded the most improved Chapter by the American Society of Agricultural and Biological Engineers (ASABE) annual meeting, Ottawa, Ontario, Canada, 2004.
- 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).

INVITED REVIEWER FOR MANUSCRIPTS IN JOURNALS

- PLoS ONE
- Transboundary and Emerging Diseases
- Food Science and Nutrition
- BMC Veterinary Research
- Journal of Dairy Science
- Journal of Food Engineering
- Journal of Food Processing and Preservation
- Epidemiology and Infection
- Foodborne Pathogens and Disease
- Applied Engineering in Agriculture
- Transaction of the American Society of Agricultural and Biological Engineers
- Philippines Journal of Science