

CURRICULUM VITAE

Amit Morey, Ph.D.

Education

Ph.D. Poultry Science (Poultry Processing), Auburn University, Auburn, AL.

M.S. Seafood Science and Technology, University of Alaska Fairbanks.

M.S. Fisheries Science (Industrial Fishery Technology), University of Agricultural Sciences, Bangalore, Karnataka, India.

B.S. Fisheries Science, Dr. B.S. Konkan Agriculture University, Dapoli, Maharashtra, India.

Qualification Summary

Dr. Morey is a poultry meat quality scientist with research background in meat biochemistry, food microbiology, food processing technology as well as process and product development.

- Currently leading a multi-disciplinary woody breast research grant with a team of veterinarian, physicist, cell biologist, poultry nutritionist and feed milling expert.
- Developed research proposals with collaborators from Cuba and Honduras
- Have developed a research program dedicated to meat quality research comprising of a Research Associate, Graduate and Undergraduate students.

Research

Woody Breast Research:

1. Developing novel method to detect woody breast myopathy from different strains of broilers
 - a. Bioelectrical impedance
 - b. Magnetic Resonance Imaging
 - c. Elastography/Ultrasound
2. Identification of protein biomarkers of woody breast in different broiler strains
3. Application of innovative interventions to reduce the toughness of woody breast meat
4. Reducing toughness of woody breast fillets from fast-growing big-broilers
5. Diversification of woody breast meat into value added products

Developing “Sustainable Release Mechanisms”:

1. Application of “Functional Ice” (FICE) as an innovative method to reduce food loss of poultry and seafood during transportation and storage
2. Effect of FICE on food safety (Salmonella and Campylobacter), meat quality and consumer acceptability of poultry parts

Awards for the Woody Breast Research:

- **Amit Morey, Innovation Award 2017**, Auburn University. Application of BIA to detect woody breast.
- Meredith Johnson: 2nd Prize. Graduate Student Competition at the 74th Professional Workers in Agriculture Conference, Tuskegee University, Dec. 4-6th, 2016.
- Avery Smith
 - 2nd Prize . Undergraduate Student Competition at the 74th Professional Workers in Agriculture Conference, Tuskegee University, Dec. 4-6th, 2016
 - Don R. Sloan Undergraduate Research Award, International Production and Processing Expo, January 2017, Atlanta, GA.
 - Poultry Science Association Jones-Hamilton Co. Undergraduate Student Travel Award 2017
 - Poultry Science Association Student Research Paper Certificate Of Excellence, 2017

Provisional Patents filed in 2017

1. “Functional Ice”, an Innovative Sustained Antimicrobial Release Mechanism to Increase Food Safety, Reduce Spoilage and Improve Quality of Foods (Provisional Patent)
2. Bioelectric impedance analysis to detect myopathy in animals (Provisional Patent)

Teaching:

- POUL 5110/6110: 3 credits Poultry Processing
- POUL 5140/6140: 3 credits Poultry Further Processing

Outreach:

- USAID Training, Demonstration and Presentations (15-days) in Myanmar on Poultry Processing, Food Safety, Rapid Pathogen Detection Technologies, and Biosecurity.
- Future Farmers of America: Trained students from schools in Alabama on poultry meat quality
- Provided information and guidance on woody breast, poultry meat quality defects and potential detection methods to poultry companies including Alatrade and Albertville Quality Foods
- Discussed issues faced by the poultry industry with major poultry processors.

International Activities (2016-2017):

1. Poultry Processing Expert, USAID Project on Developing the Poultry Sector in Myanmar
2. Developed scholar exchange programs and research collaborations with Zamorano University, Honduras, Tamil Nadu Fisheries University and Bombay Veterinary College, India

Publication List:

Book Chapter: A. Morey and C. Owens. “Advances in the Understanding and Measurement of Poultry Meat Texture”, Book: Poultry Quality Evaluation, Elsevier. Petracci and Berri (eds): 115-132

Conference abstracts and presentations (2016-2017):

- A. Morey, A. E. Smith, M. Johnson, L. Bauermeister, J. Starkey, R. Beyer, R. Moon, K. Cox and W. Berry. 2017. Advanced Technologies For Detection And Analysis Of Broiler Meat Quality With Novel Myopathies Such As Woody Breast. World Poultry Science Association Conference. Edinburgh, United Kingdom.
- A. Morey. 2017. Functional ice: A sustained antimicrobial release mechanism to improve food safety and shelf-life of raw poultry. 10th Mini Food Safety Summit, College Park MD. P. 13.
- J.E. Smith, L. Wang, L. Kriese-Anderson, A. Morey and C.L. Bratcher. 2017. Evaluating the Effects of Oat Fiber and Modified Corn Starch on the Characteristics of Smoked Sausage Utilizing Mechanically Separated Chicken. 10th Mini Food Safety Summit, College Park MD. P. 2.
- M. L. Johnson, A. Kennedy-Smith, L. Bauermeister and A. Morey. 2017. Effect of extended deboning time and subsequent storage on the breast meat quality of fast-growing big broilers. International Poultry Processing Expo. Atlanta, Georgia. Book of abstracts p.7.
- M. L. Johnson, A. Kennedy-Smith, L. Bauermeister and A. Morey. 2017. Carcass Aging as a Potential Solution for Tough Meat Quality Issue in Modern Broilers. This is Research Student Symposium. Auburn, Alabama. Book of abstracts p.111.
- M. L. Johnson, A. Smith, A. M. Sandoval, A. Pinto, L. J. Bauermeister and A. Morey. 2017. Optimizing Deboning Times to Improve Texture of Breast Meat from Fast-Growing Big Broilers. Poultry Science Association Conference. Orlando, Florida. P. 55.
- M. L. Johnson, A. Smith, A. M. Sandoval, A. Pinto, L. J. Bauermeister and A. Morey. 2017. Investigating the Effect of Post-Slaughter Deboning Times on Texture of Breast Fillets from Fast-growing Big Broilers. World Poultry Science Association Conference. Edinburgh, United Kingdom.

- A. Kennedy-Smith, L. Bauermeister, M. Johnson, M. Keith Cox, A. Morey. 2017. Evaluating a novel bioelectric impedance analysis technology for the rapid detection of Wooden Breast myopathy in broiler breast filets. International Poultry Processing Expo. Atlanta, Georgia. Book of abstracts p.6.
- A. Smith, S. Patton, L. Bauermeister, R. Beyers, A. Madrid, A. Pinto, J. Starkey, and A. Morey. 2017. Exploring magnetic resonance imaging, an advanced technology to study modern meat quality defects, such as wooden breast, in broilers. Poultry Science Association Conference. Orlando, Florida. P. 56.
- A. Morey. 2017. Status quo and opportunities for a structured development of Myanmar's poultry sector. Poultry Science Association Conference. Orlando, Florida. P. 85.
- A. Smith, M. Johnson, K. Cox, L. Bauermeister, and A. Morey. 2017. Evaluation of bioelectric impedance analysis to detect wooden breast myopathy from broiler breast fillets. This is Research Student Symposium (Spring 2017). Auburn, Alabama. Book of abstracts.
- S. Patton, A. Morey, R. Beyer, L. Bauermeister and J. Starkey. 2017. Exploring magnetic resonance imaging technology for observing detectable differences of wooden breast tissue in broiler breast filets. This is Research Student Symposium (Spring 2017). Auburn, Alabama. Book of abstracts.
- J. Kataria, M. Johnson, A. Smith, L. Bauermeister, A. Morey. 2017. Effect Of Functional Ice On The Survival Of Salmonella Typhimurium Inoculated On Raw Chicken Thighs During 48 H Refrigerated Storage. Graduate Research Poster Competition 2017. Poster # B-M-11.
- M. L. Johnson, A. Smith, L. J. Bauermeister, A. Pinto, A. M. Sandoval, J. Kataria and A. Morey. 2017. Investigating The Effect Of Post-Slaughter Deboning Times On Texture Of Breast Fillets From Fastgrowing Big Broilers. Graduate Research Poster Competition 2017. Poster # B-M-12.
- A. Smith, M. L. Johnson, L. J. Bauermeister, J. Kataria and A. Morey. 2017. Using Advanced Technologies To Determine Meat Quality In Poultry Breast Filets. Graduate Research Poster Competition 2017. Poster # B-M-09.
- A. E. Smith M.K. Cox, R.J. Beyers, R.S. Moon, J.D. Starkey, L.J. Bauermeister, M.L. Johnson, A Morey. 2017. Advanced Technologies For The Detection Of Woody Breast In Poultry Broiler Breast Filets. 75th Professional Agriculture Workers Conference, Tuskegee AL. p. 24
- J. Kataria, M. Johnson, A. Smith, L. Bauermeister, A. Morey. 2017. Application Of Functional Ice, A Novel Intervention Strategy To Control Salmonella Typhimurium In Chicken During Refrigerated Storage. 75th Professional Agriculture Workers Conference, Tuskegee AL. p. 24

- M. Johnson, A. Smith, J. Kataria, I. Wise, A. Morey. 2017. Application Of Food-Grade Enzymes To Reduce Tough Texture Of Wooden Breast Fillets. 75th Professional Agriculture Workers Conference, Tuskegee AL. p. 24
- B. Schrader, E. Chadwick, Y. Li, K. Macklin and A. Morey. 2016. Evaluation of objective methods to detect woody breast and white striping myopathy. Abstract and Oral Presentation at IPPE 2016, Atlanta, GA, January 25-26th, 2016.
- M. Johnson, A. Smith, L. Bauermeister and A. Morey. 2016. Optimizing post-slaughter deboning times to improve broiler breast meat quality from fast-growing big-birds. Abstract and Oral Presentation, 74th PAWC Conference, Tuskegee University, Dec 4-6th, 2016.
- A. Smith, M. Johnson, L. Bauermeister and A. Morey. 2016. Bioelectrical Impedance Analysis: A novel and rapid method to detect wooden breast myopathy in poultry meat. Abstract and Oral Presentation, 74th PAWC Conference, Tuskegee University, Dec 4-6th, 2016.
- A. Morey. 2016. Antimicrobial intervention strategies to control Salmonella and Campylobacter in broiler processing. Abstract and Oral Presentation. 2016 Mini-Summit Food Safety, Policy and Sustainability, Shanghai, China, October 24-25th, 2016.
- A. Morey. 2016. Poultry processing in the United States and modern meat quality defects. Proceedings Paper and Oral Presentation. INVITED PRESENTATION, Simposium Internacional Avicultura de Traspatio, Veracruz, Mexico, October 17th, 2016.
- A. Morey. 2016. A global perspective on the paradigm changes in seafood safety and quality. Proceedings Paper and Oral Presentation. INVITED PRESENTATION, International Conference on Emerging Issues in Quality and Safety of Fish and Shellfish, Chennai, India, August 11-12th, 2016.

Select Publications List

- N. Sharma, L. Bambusch and T. Le and **A. Morey**. 2014. InstantLabs® *Listeria monocytogenes* Food Safety Kit AOAC Performance Tested Method SM 051304. *Journal of AOAC International* 97(3):852-861.
- N. Sharma, L. Bambusch, T. Le and **A. Morey**. 2014 InstantLabs® *Listeria* Species Food Safety Kit AOAC Performance Tested Method SM 041304. *Journal of AOAC International* 97(3): 843-851
- N. Sharma, L. Bambausch, T. Le, A. Morey, M. Heyman and S. J. Montez. 2014. InstantLabs® *Salmonella* Species Detection Method: Matrix Extension of AOAC Performance Tested Method SM 031202. *Journal of AOAC International* 97(6): 1585-1591.
- C. Bapanpally, G. Maganty, S. Khan, K. Kasra and **A. Morey**. 2014. Immunomagnetic Separation and Visual Fluorescence Detection of *Salmonella* spp., Using AOAC Approved SASTM Molecular Tests. *Journal of AOAC International* 97(4): 1067-1072.

- **A. Morey**, J. W. J. Bowers, L. J. Bauermeister, M. Singh, T-Shi Huang and S. R. McKee. The effect of acid marinades on *Listeria monocytogenes*, shelf-life, meat quality, and consumer acceptability of beef frankfurters. *Journal of Food Science* 79(1): M54-M60.
- **A. Morey**, A.C.M. Oliveira, C. Crapo and B.H. Himelbloom. 2013. Identification of seafood bacteria from cellular fatty acid analysis via the Sherlock® Microbial Identification System. *Journal of Biology and Life Science*. 4(2): 139-153.
- **A. Morey**, C. Bratcher, M. Singh, S.R. McKee. 2012. Effect of liquid smoke as an ingredient in frankfurters on *Listeria monocytogenes* and quality attributes. *Poultry Science*. 91: 2341-2350.
- **A. Morey**, M. Singh. 2012. Low-temperature survival of *Salmonella* spp. in a model food system with natural microflora. *Foodborne Pathogens and Disease* 9(3): 218-223.
- **A. Morey**, M. Singh, and S.R. McKee. 2012. Efficacy of manufacturer recommended microwave time against *Listeria monocytogenes* in ready-to-eat chicken products. *International Journal of Poultry Science* 11(3): 177-180.
- **A. Morey**, S. R. McKee, J. S. Dickson, and M. Singh. 2010. Efficacy of ultraviolet light exposure against survival of *Listeria monocytogenes* on conveyor belts. *Foodborne Pathogens and Disease* 7(6): 737-740.
- L.J. Bauermeister, **A. Morey**, E. T. Moran, M. Singh, C.M. Owens, and S.R. McKee. 2009. Occurrence of white stripping in chicken breast fillets in relation to broiler size. *Poultry Science* 88:33

Popular Press Articles:

- **A. Morey** and M. Singh. Time-temperature alternatives to control *Salmonella* during poultry processing. *World Poultry*. March 2012
- M. Singh and **A. Morey**. 2010. UV light treatment minimizes pathogen contamination. *World Poultry*. 44-45.

Reviewer:

- Journal of Food Science
- Food Protection
- Foodborne Pathogen and Disease
- LTW
- Poultry Science
- Journal of Applied Poultry Research
- PlosOne

Symposiums and Roundtables Organized:

Organized 6 symposiums and 2 roundtables at the International Association for Food Protection Annual Conference: 2015-2017.