

Alejandro Echeverry, Ph.D.

Curriculum Vitae

Texas Tech University
Dept. of Animal and Food Sciences
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Eleven years experience in food industry and research, with increasing responsibility and exposure. Experience in meat packing and RTE operations, as well as quality assurance, HACCP training for non-English speakers, food safety management, validation studies, food microbiology techniques and consulting services.

EDUCATIONAL BACKGROUND

2005-2007 | Texas Tech University (Lubbock, Texas)

Department of Animal and Food Sciences

Doctor of Philosophy (Ph.D.) in Animal Science / Food Microbiology, Dec 2007

Dissertation title: "Development and validation of intervention strategies to control *Escherichia coli* O157:H7 and *Salmonella* spp. in needle tenderized and injected beef"

Dissertation written under the direction of Professor Mindy M. Brashears

2002-2004 | Texas Tech University (Lubbock, Texas)

Department of Animal and Food Sciences

Master of Science (M.S.) in Food Technology / Food Microbiology, Dec 2004

Master's thesis title: "Survival and distribution of *Escherichia coli* O157 in bovine manure"

Thesis written under the direction of Professor Mindy M. Brashears

1995-2000 | Lasalle University Corporation (Medellín, Colombia)

Department of Engineering

Bachelor of Science (B.S.) in Food Engineering

Bachelor of Science thesis title: "Development of different seasonings and tomato-based ketchup and dressings for Industrias Alimenticias LAM Ltda"

1980-1994 | Deutsche Schule Medellín (Medellín, Colombia)

LANGUAGES

English, Spanish (Native Speaker), German (*Großes Sprachdiplom I & II*)

EMPLOYMENT AND EXPERIENCE

2010 – Present | Assistant Research Professor in Food Microbiology

Texas Tech University (Lubbock, Texas)

Department of Animal and Food Sciences, Food Microbiology & Safety Program, College of Agricultural Sciences and Natural Resources under the supervision of Dr. Mindy M. Brashears.

2007 – 2009 | Post Doctoral Research Associate in Food Microbiology

Texas Tech University (Lubbock, Texas)

Department of Animal and Food Sciences, Food Microbiology & Safety Program, College of Agricultural Sciences and Natural Resources under the supervision of Dr. Mindy M. Brashears.

Research interests include the quality and safety implications of new meat processing technologies & ingredients and the use of antimicrobial interventions and lactic acid bacteria in fresh meat and RTE products. Current and future projects include determination of the prevalence of *Salmonella* and *E. coli* O157:H7 in fresh beef and pork products in multiple retail outlets in major cities in Mexico, studies on the shelf life properties of ground beef obtained from carcasses and trimmings treated with lactic acid bacteria, the application of Geographical Information Systems (GIS) and spatial data for surveillance, monitoring, and identification of risk factors associated with *E. coli* O157:H7 and *Salmonella* in food animal populations and the validation and modeling of cooking parameters of mechanically tenderized steaks and frozen hamburgers patties using an integrated lethality approach. Other duties include the supervision of graduate students, the coordination, experimental design, preparation, execution, and assistance of research protocols used by graduate students in a variety of projects in the food safety area as well as composing written reports and analysis of the different studies conducted in the food microbiology and pathogen challenge laboratories.

2002 – 2007 | Graduate Research Assistant

Texas Tech University (Lubbock, Texas)

Department of Animal and Food Sciences, Food Microbiology & Safety Program, College of Agricultural Sciences and Natural Resources under the supervision of Dr. Mindy M. Brashears.

Research included Pre-harvest food safety, strategies for reduction of *E. coli* O157:H7 and *Salmonella* shedding in cattle, use of microwaves for sterilization of *Salmonella enteritidis* in eggs, use of

microwaves for inhibition of mold in white bread for military ready-to-eat (RTE) rations, strategies for reduction of *E. coli* O157:H7 and *Salmonella* in fresh meat and RTE products, assistance with translation and training of HACCP online workshop course for Spanish-speaking students, assistance in food validation and intervention studies in the Pathogen Processing Laboratory, aseptic Microbiological samples collection, and preparation of microbiological media and supplies. Other duties included Teaching Assistance in the Food Microbiology (FDT 5301) & Food Safety (FDT 5309) courses: preparation of lectures, presentations, media and supplies needed for the experiments. Served as a simultaneous translator, English-Spanish-English for HACCP training workshops with representatives of Latin American Industry.

2000 – 2001 | Restaurant Manager

KFC Francoper (Medellin, Colombia)

Ensured daily efficient and profitable operations, planned and coordinated daily activities, handled daily money transactions, trained employees in GMP's and SSOP's, daily inventory control, monitor for sanitation, quality and presentation, ensured employees' adherence to the company standards, recruited, hired, supervised and scheduled of up to 25 employees, handled customer feedback/complaints

1998 – 1999 | Quality Control Supervisor

Industrias Alimenticias Lam, Ltda (Medellin, Colombia)

Created, developed and implemented all sanitation and pre-requisite programs for a HACCP plan, education and continuous training of Employees in Good Manufacturing Practices and Sanitation Standard Operating Procedures, development and maintenance of quality assurance manuals, daily inventory control, daily verification of cleaning and sanitation procedures for food quality, collected samples for microbial analysis.

1998 – 1999 | Consulting Services

Industria de Alimentos Zenu SA (Medellin, Colombia)

Literature review and composing of white papers on the effects of consumption of nitrites, liquid smoke and other additives in human health and their use in processed and RTE meats.

MEMBERSHIPS AND AFFILIATIONS

American Society for Microbiology ([ASM](#)).

International Association for Food Protection ([IAFP](#))

Professional Development Groups:

- Food Law PDG
- Meat and Poultry Safety and Quality PDG
- Retail Food Safety and Quality PDG
- Student PDG

Institute of Food Technologists ([IFT](#))

Divisions:

- [Food Microbiology Division](#)
- [Quality Assurance Division](#)
- [Food Laws and Regulations Division](#)
- [IFT Longhorn Section](#)

American Meat Science Association ([AMSA](#))

American Biological Safety Association ([ABSA](#))

Gamma Sigma Delta, The National Honor Society of Agriculture ([GSD](#))

American Society for Quality ([ASQ](#))

American Association for the Advancement of Science ([AAAS](#))

Global Harmonization Initiative ([GHI](#))

PEER REVIEW PUBLICATIONS

BOOK CHAPTERS:

Claudia Narvaez-Bravo, **Alejandro Echeverry**. 2008. *Aspectos importantes sobre la inocuidad de la carne de res. En Desarrollo sostenible en la ganaderia de doble proposito*. Ediciones Astro Data, S.A. Maracaibo, Venezuela. Capitulo LXXVI: 898-910. ISBN: 978-980-6863-05-7. *"Important aspects on the safety of fresh beef meat"*.

Angela Laury, **Alejandro Echeverry**, Mindy M. Brashears. 2009. Fate of *Escherichia coli* O157:H7 in meat. *In Safety of Meat and Processed Meats, Food Microbiology and Food Safety series*. Chapter 2, pp 31-53 (Toldra, F. ed.). Springer Science, New York, New York. ISBN: 978-0-387-89025-8. Information: [Springer](#)

PEER REVIEW ARTICLES:

Rogers, H.B., J. C. Brooks, J. N. Martin, M. Alvarado, **A. Echeverry**, and M. M. Brashears. 2010. The impact of ground beef packaging systems and temperature abuse on the quality of ground beef. *(In Review, Submitted to the Meat Science Journal)*.

Alison Brown, J. Chance Brooks, Enusha Karunasena, **Alejandro Echeverry**, Angela Laury, and Mindy M. Brashears. 2010. Inhibition of *Escherichia coli* O157:H7 and *Clostridium sporogenes* in Spinach Packaged in Modified Atmospheres After Treatment with Chlorine and Lactic Acid Bacteria. (*In Review, Submitted to the Journal of Food Protection*)

J. A. Collins, J. C. Brooks, M. M. Brashears, **A. Echeverry** and M. F. Miller. 2010. Sensory properties of needle tenderized and injected beef after treatment with interventions strategies to control food-borne pathogens. (*In Review, Submitted to the Meat Science Journal*)

A. Echeverry, J. C. Brooks, M. F. Miller, J. A. Collins, G. H. Loneragan, and M. M. Brashears. 2010. Validation Of Lactic Acid Bacteria, Lactic Acid, And Acidified Sodium Chlorite As Decontaminating Interventions To Control *Escherichia coli* O157:H7 And *Salmonella* Typhimurium DT 104 In Mechanically Tenderized And Brine Enhanced (Non – Intact) Beef At The Purveyor And Retail Level. (*Under Review, Submitted to the Journal of Food Protection*)

Laury, AM., M. V. Alvarado, G. Nace, C. Z. Alvarado, J. C. Brooks, **A. Echeverry**, and M. M. Brashears. 2009. Validation of a Lactic Acid– and Citric Acid–Based Antimicrobial Product for the Reduction of *Escherichia coli* O157:H7 and *Salmonella* on Beef Tips and Whole Chicken Carcasses. *Journal of Food Protection*. Vol. 72 (10): 2208-2211.

Echeverry, A., J. C. Brooks, M. F. Miller, J.A. Collins, G. H. Loneragan, and M. M. Brashears. 2009. Validation of Intervention Strategies to Control *Escherichia coli* O157:H7 and *Salmonella* Typhimurium DT 104 in Mechanically Tenderized and Brine Enhanced Beef. *Journal of Food Protection*. Vol. 72 (8): 1616-1623.

Fluckey, W.M., M. M. Brashears, R. D. Warner, G. H. Loneragan, and **A. Echeverry**. 2009. Diversity and Susceptibility of *Enterococcus* Isolated from Cattle before and after Harvest. *Journal of Food Protection*. Vol. 72 (4):766-774.

D.G. Lakins, **A. Echeverry**, C.Z. Alvarado, M.M. Brashears, and J.C. Brooks. 2008. Quality of and Mold Growth on White Enriched Bread for Military Rations Following directional Microwave treatment. *Journal of Food Science*. Vol. 73 (3): M99 - M103.

T. C. Lowrance, G. H. Loneragan, D. J. Kunze, T. M. Platt, S. E. Ives, H. M. Scott, B. Norby, **A. Echeverry**, M. M. Brashears. 2007. Changes in antimicrobial susceptibility in a population of *Escherichia coli* isolated from feedlot cattle administered ceftiofur crystalline-free acid. *American Journal of Veterinary Research*. Vol. 68 (5): 501-507.

Echeverry A, G. H. Loneragan, M. M. Brashears. 2006. Survival Of *Escherichia coli* O157:H7 In Bovine Feces Over Time Under Various Temperature Conditions. *Journal of Food Protection*. Vol. 69 (12): 2851-2855.

A. Echeverry, G. H. Loneragan, M. M. Brashears, B. A. Wagner. 2005. Effect of intensity of fecal

pat sampling on estimates of *Escherichia coli* O157. *American Journal of Veterinary Research*. Vol. 66 (12): 2023 – 2027.

POSTERS:

Alejandro Echeverry, Ansen Pond, Claudia Narváez-Bravo, Mark F. Miller, Tanya Jackson, Angela Laury, Kevin Pond, Guy H. Loneragan, Todd Brashears, Nelson Huerta-Leidenz y Mindy M. Brashears. 2010. Prevalencia de Salmonella en Carne de Res y Cerdo en Mercados Minoristas Mexicanos: Su Relacion con Observaciones en Diferentes Plantas de Sacrificio Suplidoras e Impacto en la Inocuidad del Producto Final. *To be presented at the 10th National Congress of Food Science and Technology ACTA, XVI Latin American Seminar of Food Science and Technology ALACCTA and 2nd Latin American symposium on food safety (IAFP), September 21st - 24th, Bogota, Colombia.*

Claudia Narváez-Bravo, **Alejandro Echeverry**, Argenis Rodas-González, Mark Miller, Tanya Jackson, Kevin Pond, Angela Laury, Evan Chaney, Todd Brashears, Guy H. Loneragan, y Mindy M. Brashears. 2010. Prevalencia Estacional De *Salmonella* Y *E. coli* O157:H7 En Ganado De Engorde Y Su Impacto En Diferentes Etapas De Del Procesamiento De Carne De Res En Una Planta De Faenado En México. *To be presented at the 10th National Congress of Food Science and Technology ACTA, XVI Latin American Seminar of Food Science and Technology ALACCTA and 2nd Latin American symposium on food safety (IAFP), September 21st - 24th, Bogota, Colombia*

Sunkara Praveena, **Alejandro Echeverry**, Guy H. Loneragan, Mark Miller, Ansen Pond, Enusha Karunasena y Mindy M. Brashears. 2010. Perfiles De Resistencia A Los Antibióticos En Serotipos De Salmonella Aislados De Muestras De Carne De Res Y De Cerdo En Establecimientos De Venta Al Público En México. *To be presented at the 10th National Congress of Food Science and Technology ACTA, XVI Latin American Seminar of Food Science and Technology ALACCTA and 2nd Latin American symposium on food safety (IAFP), September 21st - 24th, Bogota, Colombia*

Echeverry, A., T. Jackson, A. Laury, S. Gragg, A. Brown, W. E. Chaney, L. Yen-Te, M. F. Miller, and M. M. Brashears. 2010. Validation of Lactic Acid as an Antimicrobial Intervention in a Beef Processing Plant. *To be presented at the 63rd Reciprocal Meat Conference (RMC), June 19 -23, Lubbock, Texas.*

Echeverry, A., T. Jackson, A. Laury, S. Gragg, A. Brown, W. E. Chaney, L. Yen-Te, M. F. Miller, and M. M. Brashears. 2010. Validation of a hot water wash as a Carcass Intervention in a Beef Processing Plant. *To be presented at the 63rd Reciprocal Meat Conference (RMC), June 19 -23, Lubbock, Texas.*

Pond, A. R., C. Gardner, W. E. Chaney, **A. Echeverry**, A. Laury, and M. M. Brashears. 2010. Validation of beefside on the reduction of *Salmonella* and *Escherichia coli* O157:H7 on a beef carcasses calf model. *To be presented at the 63rd Reciprocal Meat Conference (RMC), June 19 -23, Lubbock, Texas*

Sunkara, P., G. H. Loneragan, M. F. Miller, **A. Echeverry**, E. Karunasena, and M. M. Brashears. 2010. Comparison of antibiotic resistance profiles of cattle associated Salmonella serotypes in United States and Mexico. *To be presented at the 63rd Reciprocal Meat Conference (RMC), June 19 -23, Lubbock, Texas*

Praveena Sunkara, Guy Loneragan, Mark Miller, **Alejandro Echeverry**, E. Karunasena, and Mindy Brashears. 2010. Antibiotic Resistance Profiles of Cattle Associated Salmonella Serotypes in United States and Mexico. *To be presented at the 97th Annual Meeting of the International Association for Food Protection (IAFP), August 1- 4, Anaheim, California.*

Claudia Narvaez-Bravo, Mark Miller, **Alejandro Echeverry**, Kevin Pond, and Mindy Brashears. 2010. *Salmonella* and *E. coli* O157:H7 prevalence in cattle and on carcasses in a vertically integrated feedlot and harvest plant in Mexico. *To be presented at the 97th Annual Meeting of the International Association for Food Protection (IAFP), August 1- 4, Anaheim, California.*

Ansen Pond, , Mark Miller, **Alejandro Echeverry**, Guy Loneragan, Maria Salud Rubio, Adrian Chavez, and Mindy Brashears. 2010. *Salmonella* and Pathogenic *E. coli* Prevalence and Generic *E. coli* Quantitative Baselines in Raw Pork and Beef at Retail Outlets in Mexico. *To be presented at the 97th Annual Meeting of the International Association for Food Protection (IAFP), August 1- 4, Anaheim, California.*

Laury, A, **A. Echeverry**, M. Alvarado, S. Gragg, A. Brown, C. Narvaez, P. Sunkara, and M. M. Brashears. 2010. Electrostatically sprayed lactic acid bacteria as a pre-harvest intervention strategy for reduction of *Escherichia coli* O157:H7 on spinach plant. *To be presented at the 97th Annual Meeting of the International Association for Food Protection (IAFP), August 1- 4, Anaheim, California.*

W. Evan Chaney, **Alejandro Echeverry**, Henry Ruiz, Mark F. Miller, Mindy M. Brashears. 2010. Efficacy of Brine Chilling on the Reduction of *Escherichia coli* O157:H7 and *Salmonella* on Hot Beef Carcass Surfaces. *To be presented at the 97th Annual Meeting of the International Association for Food Protection (IAFP), August 1- 4, Anaheim, California.*

Laury, A.M., M.V. Alvarado, J.C. Brooks, **A. Echeverry**, and M. M. Brashears. 2009. Inhibition of Growth of *Escherichia coli* O157:H7 and *Salmonella* in ground beef using modified atmosphere packaging systems. Presented at the 96th Annual Meeting of the International Association for Food Protection (IAFP), July 12 - 15, Grapevine, Texas

Chaney, William E., Enusha Karunasena, **Alejandro Echeverry** and Mindy M. Brashears. 2009. Influence of Modified Atmosphere Packaging (MAP) on *Escherichia coli* O157:H7 Growth and Virulence: Effects on Shiga Toxin and Biofilm Production. Presented at the 96th Annual Meeting of the International Association for Food Protection (IAFP), July 12 - 15, Grapevine, Texas.

Pond, Ansen, **Alejandro Echeverry**, Markus F. Miller, J. C. Brooks and Mindy M. Brashears. 2009. Validation of dosage and shelf-life properties of beef products treated with bovine meat cultures. Presented at the 62nd Reciprocal Meat Conference (RMC), June 21-24, Rogers, Arkansas.

J. N. Martin, J. C. Brooks, A. Pond, **A. Echeverry**, R. A. Bowling, and M. M. Brashears. 2009. Shelf life properties of ground beef from carcasses and trimmings treated with lactic acid bacteria. Presented at the 62nd Reciprocal Meat Conference (RMC), June 21-24, Rogers, Arkansas

Alejandro Echeverry, J. Chance Brooks, M. F. Miller, J. A. Collins and Mindy M. Brashears. 2008. Validation of intervention strategies to control *Escherichia coli* O157:H7 and *Salmonella* Typhimurium DT 104 in injected beef at the retail level. Presented at the 95th Annual Meeting of the International Association for Food Protection (IAFP), August 2 -6, Columbus, Ohio. Poster P2-46: Meat and Poultry, Microbial Food Spoilage, Beverage and Dairy poster Session

Alejandro Echeverry, J. Chance Brooks, M.F. Miller, J.A. Collins and Mindy M. Brashears. 2008. Validation of intervention strategies to control *Escherichia coli* O157:H7 and *Salmonella* Typhimurium DT 104 in beef subjected to blade tenderization at the purveyor. Presented at the 61st Reciprocal Meat Conference at the University of Florida. Gainesville, Florida, June 22-25 2008.

J. A. Collins, J. C. Brooks, M. M. Brashears, **A. Echeverry** and M. F. Miller. 2008. Sensory Properties of Needle Tenderized and Injected Beef After Treatment with Interventions Strategies to Control Food-Borne Pathogens. Presented at the 61st Reciprocal Meat Conference at the University of Florida. Gainesville, Florida, June 22-25 2008.

Alejandro Echeverry, J. Chance Brooks, M.F. Miller, J.A. Collins, Mindy M. Brashears, A. Laury y C. Narvaez. 2008. Intervenciones para controlar *Escherichia coli* O157:H7 y *Salmonella* Typhimurium DT104 en carne inyectada con salmuera en locales de venta al menudeo. Presented at the 1st Latin American Symposium on Food Safety. Campinas, Brazil, May 26-28, 2008

Alejandro Echeverry, J. Chance Brooks, M.F. Miller, J.A. Collins, Mindy M. Brashears, A. Laury y C. Narvaez. 2008. Intervenciones para control de *Escherichia coli* O157:H7 y *Salmonella* Typhimurium DT 104 en carne sometida a ablandamiento mecánico. Presented at the 1st Latin American Symposium on Food Safety. Campinas, Brazil, May 26-28, 2008

Mindy Brashears, Mark Miller, Chance Brooks, Deidrea Harris, Guy Loneragan, **Alejandro Echeverry**, Tanya E. Jackson and John Michael Mehaffey. 2007. *Microbial Risk Factors Associated With Condensation In Ready-To-Eat Processing Facilities*. Presented at the 94th Annual Meeting of the International Association for Food Protection (IAFP). Lake Buena Vista, FL, July 8-11, 2007. Poster 32, Session 4: Beverages and water, antimicrobials, sanitation and non-microbial food safety.

Echeverry, A., D.G. Lakins, C.Z. Alvarado, M.M. Brashears, and J.C. Brooks. 2007. *Quality and Mold Growth Effects Following Microwave Commercial Sterilization on White Enriched Bread for Military Rations*. Presented at the 94th Annual Meeting of the International Association for Food Protection (IAFP). Lake Buena Vista, FL, July 8-11, 2007. Poster 73, Session 5: Food Defense, pathogens, and general microbial.

Echeverry, A., T.C. Lowrance, G.H. Loneragan, M.M. Brashears, M.S. Brown, D.J. Kunze, T.M. Platt, S. Ives, H.M. Scott, and B. Norby. 2007. *Ceftiofur Crystalline Free Acid Administration reduces Susceptibility of Generic E. coli in Cattle*. Presented at the 94th Annual Meeting of the International Association for Food Protection (IAFP). Lake Buena Vista, FL, July 8-11, 2007. Poster 31, Session 2: Meat and Poultry.

Echeverry, A., L. A. Branham, G. H. Loneragan, M. M. Brashears. 2006. *Detection of Escherichia coli O157 in Bovine Fecal Pats by a Multiple Sampling Strategy*. Presented at the 11th International Symposium on Veterinary Epidemiology and Economics (ISVEE). Cairns, Australia, August 6-11 2006: 424. Poster 325 Theme 7-S5 Food Safety & Zoonotic Issues.

Echeverry, A., L. A. Branham, G. H. Loneragan, M. M. Brashears. 2005. *Fecal Pat Sampling and Homogenation for Detection of Escherichia coli O157*. Presented at the 92nd Annual Meeting of the International Association for Food Protection (IAFP). Baltimore, MA, August 14-17 2005. Poster P2-10 - Risk Assessment and Antimicrobials Session.

A. Echeverry, G. H. Loneragan, M. M. Brashears, B. A. Wagner. 2004. *Potential Non-Uniform Distribution of E. coli O157:H7 in Feces and Underestimation of Prevalence*. Presented at the 91st Annual Meeting of the International Association for Food Protection (IAFP). Phoenix, AZ. August 8-11 2004. Poster 099 – Risk Assessment Session.

TECHNICAL SESSIONS PRESENTED:

Alejandro Echeverry, M.F. Miller. and Mindy M. Brashears. 2010. Safety of Meat Products: Interventions and Controls in the United States and Mexico. *To be presented at the 63rd Reciprocal Meat Conference (RMC), June 19 -23, Lubbock, Texas*

Alejandro Echeverry, M. F. Miller, M. S. Rubio, and Mindy M. Brashears. 2009. Study on *Salmonella*, Pathogenic *E. coli* Prevalence and Generic *E. coli* Quantitative Baselines in Raw Pork and Beef at Retail Outlets in Mexico - Microbial profiles of beef and pork products in Mexican markets. Presented at the Coloquio Nacional en Ciencia y Tecnologia de la Carne 2009. Universidad Autonoma Metropolitana Iztapalapa. Noviembre 5 - 6, Mexico City, Mexico.

Alejandro Echeverry, Mindy M. Brashears, M. F. Miller. 2009. Application of Glo Germ[®] to live animals and transfer to carcass during the slaughter process. Presented at the 1st Pre-Harvest Food Safety Workshop. International Center for Food Industry Excellence, Texas. Tech University, June 17-18, 2009. Lubbock, TX. Available online at: <http://www.beefusa.org/uDocs/Pre-harvest%20D%20-%20Miller.pdf>

Alejandro Echeverry, J. Chance Brooks, M. F. Miller, J. A. Collins and Mindy M. Brashears. 2008. Validation of intervention strategies to control *Escherichia coli* O157:H7 and *Salmonella* Typhimurium DT 104 in moisture enhanced beef. Presented at the 95th Annual Meeting of the International Association for Food Protection (IAFP), August 2 -6, Columbus, Ohio. Technical Session 3 - Toxicology, Seafood and Meat and Poultry.

Alejandro Echeverry, J. Chance Brooks, M. F. Miller, J. A. Collins and Mindy M. Brashears. 2008. Validation of intervention strategies to control *Escherichia coli* O157:H7 and *Salmonella* Typhimurium DT 104 in beef subjected to mechanical tenderization in a simulated packer setting.

Presented at the 61st Reciprocal Meat Conference at the University of Florida. Gainesville, Florida, June 22-25 2008.

A. Echeverry, G. H. Loneragan, M. M. Brashears. 2004. Survival of *Escherichia coli* O157:H7 in Manure under Different Storage Conditions. Presented at the 91st Annual Meeting of the International Association for Food Protection (IAFP). Phoenix, AZ. August 8-11 2004. Technical Session 068 – Pathogens.

Loneragan, G. H., M. M. Brashears, **A. Echeverry**, B. A. Wagner. 2003. Potential non-uniform distribution of *E. coli* O157 in feces and underestimation of prevalence. 84th Annual Meeting of the Conference of Research Workers in Animal Diseases (CRWAD), November 9-11, Chicago, IL. Proceedings.

ABSTRACTS AND PROCEEDINGS

D. Lakins, **E. Echeverry**, C. Alvarado, M. Brashears and L. Thompson. 2006. *Destruction of Salmonella enteritidis and quality of table shell eggs using microwave commercial sterilization*. Poultry Science Association. 85:100 (Suppl 1.) (Abstr)

L. Flowers, M. Costello, P. M. Gray, D. Kang, M. M. Brashears, **A. Echeverry**, J. E. Mann, W. R. Henning, E. W. Mills, and C. N. Cutter. 2003. A Microbiological Profile Of Red Meat Carcasses Processed In Very Small Establishments In Three Geographical Regions Of The United States - 2003. Proceedings of the 56th Reciprocal Meat Conference.

EXTENSION

A. Echeverry, M. M. Brashears. December 2004. *Escherichia coli* O157:H7. Texas Tech University, Department of Animal and Food Sciences. Publication for “*The International Center for Food Industry Excellence*”. Electronic version available online at:

<http://www.orgs.ttu.edu/icfie/pubs/2004/techniques/Escherichia%20coli.pdf>

GRANTS:

Texas Peanut Producers Board (TPPB). 2010. Use of Directional Microwaves to Control *Salmonella* post-processing in Peanut Butter. (Principal Investigators - Alejandro Echeverry , M. M. Brashears, J. C. Brooks, Texas Tech University).

National Research Initiative Competitive Grants Program ([NRICGP](#)), Division of Nutrition, Food Safety and Health (United States Department of Agriculture). 2009. Development and Evaluation of Educational Tools to Foster a Comprehensive Food Safety Culture in Small and Very Small Beef Processing Plants. (Principal Investigators - M. M. Brashears, T. Brashears, M. Miller, J. C. Brooks, Alejandro Echeverry, Texas Tech University; G. H. Loneragan, West Texas A&M)

U.S. Meat Export Federation ([USMEF](#)). 2009. Study on *Salmonella* and Pathogenic *E. coli* Prevalence and Generic *E. coli* Quantitative Baselines in Raw Pork and Beef at Retail Outlets in Mexico. (Principal Investigators M. M. Brashears, M. Miller, Alejandro Echeverry, Texas Tech University and G. H. Loneragan, West Texas A&M; Maria Salud Rubio, UNAM).(Funded, \$50000)

American Meat Institute Foundation ([AMIF](#)). 2008. An integrated approach on the effects of cumulative cooking temperatures on the safety of mechanically tenderized beef steaks and hamburger patties (Principal Investigators - Dr Alejandro Echeverry, Dr. Mindy M. Brashears, Dr. Pawan Takhar, and Dr Chance Brooks, Texas Tech University)

National Research Initiative Competitive Grants Program ([NRICGP](#)), Division of Nutrition, Food Safety and Health (United States Department of Agriculture). 2007. Multi-hurdle intervention strategies to assure the microbial food safety and quality of Fruits and Vegetables. (Principal Investigators Alejandro Echeverry, M.S. and Dr. M. M. Brashears, Texas Tech University).

American Meat Institute Foundation ([AMIF](#)). 2007. Development Of Viscous Antimicrobial Interventions To Enhance Pathogen Inactivation And Shelf-Life Extension In Poultry Processing. (Principal Investigators- Dr. M. X. Sánchez-Plata, Dr. J. C. Grunlan, Texas A&M University. Collaborators – Dr. M. M. Brashears, A. Echeverry, Texas Tech University).

AWARDS AND HONORS

2007- 2008. Helen DeVitt Jones Graduate Fellowship recipient (\$3500).

2006. 3rd Place Bob Albin Graduate Student Research Award – Texas Tech University (\$100).

2002 - 2007. Competitive Animal and Food Sciences Graduate Student Scholarship – Texas Tech University (\$1000 on a semester basis).

2002 – 2007. Animal and Food Sciences Graduate Research Assistantship.

REVIEWER & EDITORIAL BOARDS

2009- Present. Member, Meat Science Journal Committee

2008- Present. Reviewer, Journal of Food Protection

2008- Present: Reviewer, Journal of Food Science - Food Microbiology & Safety

ADDITIONAL QUALIFICATIONS & CONFERENCES ATTENDED

- Workshop – Resucing the burden of STEC-Induced Hemolytic Uremic Syndrome in Argentina. Argentinian Beed Promotion Institute (IPCVA), Buenos Aires, Argentina. April 28-30, 2010.
- 2009 Beef Industry Food Safety Council (BIFSCo) Summit, March 6-8, 2009 (Dallas, TX)
- Service Plus – Quality Service & Professional Development Course. Texas Tech University, October 15, 2009.
- XVI Ciclo Internacional de Conferencias en Avicultura, Colegio de Posgraduados Campus Cordoba, September 18-19, 2009 (Veracruz, Mexico).

- 96th Annual Meeting of the International Association for Food Protection (IAFP), July 12-15, 2009 (Grapevine, Texas).
- United States Department of Agriculture-Cooperative State Research, Education & Extension Service Project Directors Meeting, July 11, 2009 (Grapevine, Texas).
- 62nd Reciprocal Meat Conference – American Meat Science Association, June 21 -24, 2009 (Rogers, Arkansas).
- Pre-Harvest Food Safety Workshop. International Center for Food Industry Excellence, Texas Tech University, June 17-18, 2009. Lubbock, TX
- 7th International Symposium on Shiga Toxin (Verocytotoxin) – Producing Escherichia coli Infections (VTEC). May 10 -13, 2009, Buenos Aires, Argentina
- 95th Annual Meeting of the International Association for Food Protection (IAFP), August 2 -6, 2008 (Columbus, Ohio)
- 2008 IFT Annual Meeting & Food Expo, June 27th – July 2nd (New Orleans, LA)
- 61st Reciprocal Meat Conference – American Meat Science Association, June 22 -25, 2008 (Gainesville, FL)
- 1st IAFP Latin American Symposium on Food Safety. May 24-28, 2008 (Campinas, Brazil)
- 2008 Beef Industry Food Safety Council (BIFSCo) Summit, March 5-7, 2008 (Dallas, TX)
- Workplace Violence Prevention for Employees with substantial public contact. Texas Tech University, Lubbock, Texas, USA (2008)
- Laboratory Safety Essentials for working with laboratory animals. Texas Tech University Health Sciences Center and Animal Care and Use Committee (ACUC), Lubbock, Texas, USA (2007)
- Laboratory Safety Essentials (Handling and storage of biohazardous materials and chemicals, biosafety levels and hazard recognition). Texas Tech University, Lubbock, Texas, USA (2007)
- 51st Annual Southwest Meat Association Convention & Suppliers' Showcase. July 18-21, 2007 (Bastrop, Texas)
- 94th Annual Meeting of the International Association for Food Protection (IAFP), July 8-11, 2007 (Orlando, FL)
- 60th Reciprocal Meat Conference – American Meat Science Association, June 17-20, 2007 (Brookings, SD)
- Listeria Control Workshop. Texas Tech University, Lubbock, Texas, USA (2007)
- 1st International Conference for Food Safety and Quality workshop. San Francisco, California, USA (2006).
- Poultry 101 Workshop. Texas Tech University, Lubbock, Texas, USA (2006)
- 50th Annual Southwest Meat Association Convention & Suppliers' Showcase. August 13 - 16, 2006 (San Antonio, Texas)
- Advanced HACCP workshop for meat processors. Texas Tech University, Lubbock, Texas, USA (2006).
- Animal Care and Use – Texas Tech University
- XI International Symposium on Veterinary Epidemiology and Economics (ISVEE). August 6-11, 2006 (Cairns, Australia)
- 49th Annual Southwest Meat Association Convention and Suppliers' Showcase. 2005 (Frisco, Texas)

- National Cattlemen's Beef Association (NCBA) Summer conference. July 26-30, 2005 (Denver, Colorado)
- From the surface up: Food safety workshop. Clemson University, Myrtle Beach, South Carolina, USA (2005)
- 92th Annual Meeting of the International Association for Food Protection (IAFP), August 14-17, 2005(Baltimore, Maryland)
- 51st International Congress of Meat Science and Technology (ICOMST). August 7-12, 2005 (Baltimore, Maryland)
- IFT Longhorn Section Suppliers' Night and College Bowl Competition. March 24-26, 2005 (Dallas, Texas)
- 2nd Annual Southwest Meat Science Conference, September 16 – 17, 2004. West Texas A&M University (Canyon, Texas)
- 91st Annual Meeting of the International Association for Food Protection (IAFP), August 8-11, 2004 (Phoenix, Arizona)
- ServSafe[®] certified. National Restaurant Association Educational Foundation (NRAEF, 2003).
- 90th Annual Meeting of the International Association for Food Protection (IAFP), August 10-13, 2003 (New Orleans, LA)
- Certificate of HACCP Implementation and Management, International HACCP Alliance (2002).
- Environmental Management and ISO 14000 for the Food Industry. Corporacion Universitaria Lasallista, Medellín, Colombia (2000)
- HACCP and Total Quality Systems for the Food Industry Workshop. Corporacion Universitaria Lasallista, Medellín, Colombia (1999)
- Total Quality Management and ISO 9000 Systems for the Food Industry. Corporacion Universitaria Lasallista, Medellín, Colombia (1999)
- Packaging and Logistics for the Food Industry. SENA, Medellin, Colombia (1999)
- Biotechnology application in the food and beverage industry – Symposium. Universidad de Caldas, Manizales, Colombia (1998)
- Application of new technologies in the food Industry – 1st International Symposium. EAFIT University, Medellin, Colombia (1998)

SKILLS AND SPECIALIZED TRAINING

Immunomagnetic Separation (Dynal[®] IMS)
 Automatic Q-Counter[®]
 Real-time PCR (BAX[®] System)

SOFTWARE

Microsoft Office, SAS (Statistical Analysis Software), Publisher, Front Page, Adobe Photoshop

VOLUNTEER WORK | COMMUNITY SERVICE

2005 - Present. American Society for Microbiology Volunteer Translators Network
2002 – Present. Food Technology Club (Relay for Life, Food Science Extravaganza).
2002 – Present. Texas Tech University - Future Farmers of America Career Development
2008. 80TH Future Farmers of America Convention Judge

WEBSITE

<http://echeverryalejandro.googlepages.com/>

<http://www.depts.ttu.edu/foodsafety/postdocs.php>