

CURRICULUM VITAE

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LISA KAY NOLAN

ADDRESS

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CURRENT POSITIONS

Georgia Athletics Association Distinguished Professor and Dean, University of Georgia College of Veterinary Medicine, Athens, Georgia, July 1, 2017-
Professor and Dr. Stephen G. Juelsgaard Dean Emerita, College of Veterinary Medicine (CVM), Iowa State University (ISU), Ames, Iowa, July 2017-
Fellow, American Academy of Microbiology, 2016-
Honorary Diplomat, American Veterinary Epidemiology Society (AVES), 2014-

PREVIOUS ACADEMIC POSITIONS

Professor of Veterinary Microbiology and Dr. Stephen G. Juelsgaard Dean, College of Veterinary Medicine (CVM), Iowa State University (ISU), Ames, Iowa, January 2011 - June 2017
Associate Dean of Research and Graduate Studies, CVM, ISU, Ames, Iowa, 2009-2011
Associate Dean of Academic and Student Affairs, CVM, ISU, Ames, Iowa, 2007-2009
Executive Chair, CVM, Iowa State University (ISU), Ames, Iowa, 2006-2007
Interim Chair, Dept of Veterinary Diagnostic and Production Animal Medicine, CVM, ISU, 2004-2005
Professor and Chair, Department of Veterinary Microbiology & Preventive Medicine, ISU-CVM, 2003-2008
Walter F. and Verna Gehrts Presidential Professor, North Dakota State University (NDSU), 2001-2003
Professor, NDSU, 2003
Founding Director, Great Plains Institute of Food Safety, NDSU, 1999-2003
Associate Professor, Veterinary and Microbiological Sciences, NDSU, 1998-2003
Assistant Professor, Veterinary and Microbiological Sciences, NDSU, 1992-1998

EDUCATION

B.S., Biology, Valdosta State College, Valdosta, GA, 1975
D.V.M., University of Georgia (UGA), Athens, GA, 1988
M.S., Medical Microbiology, UGA, Athens, GA, 1989

Ph.D., Medical Microbiology, UGA, Athens, GA, 1992

ACADEMIC AWARDS

Marjorie Carter Memorial Award in Biology, Valdosta State College, 1975
Outstanding Junior Veterinary Student, UGA, 1987
Salsbury Scholar, UGA, 1987
Who's Who in Veterinary Science and Medicine, UGA, 1988
Phi Zeta Veterinary Honor Society, UGA, 1988 and ISU, 2012
Large Animal Clinical Proficiency Award, UGA, 1988
Graduate Assistant Merit Supplement, UGA, 1989, 1990, 1991
University of Georgia Research Foundation Tuition Scholarship, UGA, 1988-1989
Best Student Presentation, Southern CRWAD (Microbiology Section), 1989
Gamma Sigma Delta Honor Society, UGA, 1990
Blue Key National Honor Society, UGA, 1991
Best Research Paper, Phi Zeta College-Wide Competition, UGA, 1992
Sigma Xi, 1993
Selectee, Bison Ambassadors' Apple Polisher Event, NDSU, 1995, 1997, 2001
Preferred AG Instructor, College of Agriculture (CoA), NDSU, 1995
Mortar Board Preferred Professor, NDSU, 1996, 1997, 1998, 1999
Commendation, CoA Excellence in Teaching, Early Career, NDSU, 1996
Who's Who Among America's Teachers, 1998, 2000, 2002, 2005
Honorary Member, Golden Key National Honor Society, NDSU, 1998
Member, Phi Kappa Phi, 1998
Mary McCannel Gunkelman 10th Annual Recognition Award, NDSU, 1998
University-Wide Odney Teaching Award, NDSU, 1999
Outstanding Academic Advisor, Mortar Board National Honor Society, NDSU, 1999
Distinguished Educator, Blue Key National Honor Society, NDSU, 2001
Professorship, Walter F. and Verna Gehrts Presidential Professor, NDSU, 2001-2003
Paper recognized in Journal Highlights in ASM's *Microbe*, September 2010
Featured lab on the AVMA website highlighting veterinarians' contributions to public health, 2013-
Honored as an American Veterinary Epidemiology Society (AVES) Honorary Diplomat, 2014
Philbro Animal Health Excellence in Poultry Research Award, 2014
CVM Academic Alumnus of the Year, University of Georgia Alumni Association, 2016
Fellow, American Academy of Microbiology, 2016-
Dr. Fred C. Davison Award for Service to Veterinary Medicine, OTS Fraternity, Athens, GA, 2017
Honorary Member, AgHon, University of Georgia, Athens, GA, 2017
Outstanding Alumna of 2017, Department of Biology, Valdosta State University, Valdosta, GA, 2017

TEACHING/TEACHING-RELATED WORK EXPERIENCE

Instructor, Introductory Biology, Valdosta State College, 1980
Teacher, Science and Computer Skills, Athens Academy, Athens, GA, 1983-1984
University Tutor, Veterinary Histology, Physiology, and Parasitology, UGA, 1984-1986
Research Assistant, Medical Bacteriology (with Dr. R. E. Wooley), UGA, 1985-1992

Instructor, Introductory Biology I and II, Human Anatomy and Physiology I and II, and associated laboratories, Truett-McConnell College, Watkinsville, GA, 1983-1992
Pre-Veterinary and Microbiology Advisor (10 to 50 or more advisees at a time), NDSU, 1993-2003
Instructor, Pathogenic Microbiology, NDSU, 1994-2003
Instructor, Pathogenic Microbiology, Graduate Level (MICR 660), NDSU, 1997-2003
Instructor, Clinical Parasitology Laboratory, NDSU, 1995, 1996
Instructor, Medical Mycology Seminar Series, NDSU, 1998
Lecturer/Guest Lecturer/Assistant Instructor, Introductory Microbiology, General Microbiology, General Microbiology Laboratory, Immunology, Weighing the Evidence (Honors), Introduction to Veterinary Sciences, Introduction to Agriculture, Terrorism, Microbiology Capstone, and Journal Club courses, NDSU, 1992-2003; Zoonoses, ISU, 2006-
Instructor, Etiology of Foodborne Illness, NDSU, 2000-2002
Author, Successful Requests to Establish a Minor in Food Safety, the Great Plains Institute of Food Safety, and a Graduate Certificate in Food Protection, NDSU, 2000
Instructor, Economic, Epidemiologic, and Regulatory Issues in Food Safety, NDSU, 2001-2002
Author, Successful Request for Establishment of B.S., M.S., and Ph.D. Programs in Food Safety, including several new courses proposals, NDSU, 2002
Instructor, Advanced Pathogenic Bacteriology, NDSU, 2002
Co-Instructor, Graduate-Level Pathogenic Bacteriology, ISU, 2004-2007

ADMINISTRATIVE SERVICE/ADVISORY BOARD EXPERIENCE

North Dakota Rep, Veterinary Medicine Advisory Council, WICHE, 1996-1998
Member, Advisory Board for Expanding Your Horizons, NDSU, 1997-2003
Member, Women's Studies Advisory Board, NDSU, 1999-2002
Member, Wellness Center Advisory Board, NDSU, 2001-2003
Member, North Dakota EPSCoR Steering Committee, 2001-2002
Member, Center for Advanced Technology Transfer Advisory Board, NDSU, 2002-2003
Member, FDA-CVM's Veterinary Medicine Advisory Committee, 2003-2006
Primary author, VMPPM Self-Study, 2005
Facilitator, CVM Faculty Evaluation of Nebraska 2 + 2 Proposal, ISU, 2005-2006
Member, President's Budget Advisory Board, ISU, 2006-2007
Member, CVM Dean's Budget Advisory Board, ISU, 2006-2010
Member, Vice Provost for Research Department Chairs' Advisory Board, ISU, 2007-2008
Ex officio Member, Foundation Board of Directors, IVMA, 2007
Member, University Chairs Cabinet, ISU, 2007
Member, University's Research Computing Council, ISU, 2007
Member, Entrepreneurship Supervisory Committee, ISU, 2007
Member, North Central Advisory Committee, Animal Health, 2008
Member, NC_TEMP1019, Emerging & Re-emerging Poultry Respiratory Disease, 2008-2009
Member, *Avian Diseases* Advisory Board, 2008-2011
Member, Dean's Advisory Board for the College of Public Health, University of Iowa, 2011-15
President, Board of ISU-VCS (a Des Moines Emergency/Specialty Veterinary Clinic), 2011-
Member representing Veterinary Colleges, Board of Directors, US Pork Center of Excellence, 2011-
Leadership Chair, United Way Campaign, ISU, 2012-2013

Member, Board of the Blank Park Zoo Foundation, Des Moines, Iowa, 2012-
Chair, ISU United Way Campaign, 2013
Secretary, American Association of Veterinary Medical Colleges, 2012-2015
Member, Science Moving Forward Subcommittee, FDA Science Board, 2013-2014
Chair, Governance Committee, American Association of Veterinary Medical Colleges, 2014-2015
Member, Finance Committee, American Association of Veterinary Medical Colleges, 2014-2015
Member, FDA's Science Board, 2014-
Post-Senior Administrators' Retreat Working Group, UGA, 2017
Chair, FDA Science Board Subcommittee to Review the U.S. National Antimicrobial Resistance
Monitoring System (NARMS), 2017
Member, Task Force to Resolve Research Animal Space Challenges, UGA, 2017
Member, Innovation District Task Force, UGA, 2017

OTHER SERVICE

President, Professional Veterinary Class of 1988, VM2-4 years, CVM, UGA, 1985-1988
Member, Faculty-Student Liaison Committee, UGA, CVM, 1985-1988
Member, Josiah Meigs Teaching Awards Committee, UGA, 1989
Instructor, Expanding Your Horizons, NDSU, 1992, 1995, 1996
Member, CoA Scholarship Committee, NDSU, 1992-2002
Member, University Board of Appeals, NDSU, 1993-1996
Member, CoA Recruitment Committee, NDSU, 1992-2002
External Reviewer, Promotion/Tenure Evaluation, Departments of Large Animal Medicine, Medical
Microbiology, Anatomy and Radiology, and Avian Medicine, UGA, 1992, 1993, 1995, 2000 and
2005, respectively; Animal Science, BYU, 1995; Microbiology, CVM, CSU, 2000; Veterinary and
Microbiological Sciences, NDSU, 2004, 2005; Veterinary Microbiology, CVM, Auburn University,
2004; Virginia-Maryland Regional CVM, 2006; Animal Science, University of Tennessee, 2013;
Pathology, University of Iowa College of Medicine, 2016; Animal Science, University of Maryland,
2016
Member, Graduate Curriculum Committee, VMS, NDSU, 1992-2003
Member, Undergraduate Curriculum Committee, VMS, NDSU, 1992-2001
Advisor, Sigma Alpha Fraternity, NDSU, 1992-1993
Auxiliary Advisor, Pre-Veterinary Club, NDSU, 1992-1996
Moderator, AVMA Convention (Avian Medicine Section), 1993
Moderator, AAVLD Convention (Plenary Session), 1993
Chair, VMS Departmental Goals Committee, NDSU, 1993
Member, VMS Departmental Scholarship Committee, NDSU, 1994-2000
Member, Steinhaus-Rhinehart Scholarship Committee, NDSU, 1994-2002
Interviewer, Resp Rx & Clinical Lab Sci Mock Interviews, NDSU, 1993-1994, 1996-1998, 2000
Member, Search Committee for the Experiment Station Director, NDSU, 1994 (Bob Todd hired)
Member, CoA Committee to Improve Advising, NDSU, 1994-1998
Chair, Training Subcommittee of CoA Committee to Improve Advising, NDSU, 1995
Originator and Organizer, "Hot Zone Party," NDSU, 1995, 1996, 1997, 1998, 2000
Member, Search Committee for Pathogenic Microbiologist, NDSU, 1995 (Dave White hired)
Member, Search Committee for Information Specialist, NDSU, 1995 (Tom Jirik hired)

Member, Institutional Animal Care and Use Committee, NDSU, 1995-2000
 Advisor, NDSU Rifle and Pistol Team, NDSU, 1996-1999
 Member, Search Committees for VP of Agricultural Affairs, NDSU, 1996, 1997 (Pat Jensen hired)
 Member, Search Committee for VMS Pathogenic Microbiologist, NDSU, 1996 (Lynn Rust hired)
 Judge, Bison Brevs, Blue Key Honor Society, NDSU, 1997, 2000
 Member, Search Committee for the Expt Station Dir, NDSU, 1997-1998 (Cole Gustafson hired)
 Mentor, New Faculty Mentor Program, NDSU, 1997-1998
 Chair, Board of Directors, North Dakota Science Research Foundation, 1997-1999
 Advisor, Golden Key Honor Society, NDSU, 1997-2000
 Member, Search Committee for Dir of Multicultural Services, NDSU, 1998 (Paul Boswell hired)
 Chair, VMS Departmental Scholarship Committee, NDSU, 1998-2000
 Chair, Search Committee for VMS Food-Safety Microbiol, NDSU, 1998-1999 (Cathy Logue hired)
 Chair, Search Committee for VMS Postdoctoral Associate, NDSU, 1998 (Shelley Horne hired)
 Participant, Summer Institute for Young Women, University of Minnesota-Crookston, 1998
 Panel Participant, Imp of Math, NSA-Sponsored Workshop for Young Women, NDSU, 1998, 1999
 Member, Committee on the CoA's Mission, NDSU, 1998-1999
 Member, Fundamental Research Committee, National Alliance for Food Safety, 1999
 Moderator, Food and Environ. Safety Session/Bact Pathogenesis Session, CRWAD, Chicago, IL, 1999
 Member, Search Committee for Chair of the old VMS, NDSU, 1999-2000
 Member, Teaching Awards Committee, College of Business, NDSU, 1999
 Member, Teaching Awards Committee, CoA, NDSU, 2000
 Chair, CoA's Scholarship Committee, NDSU, 2000-2002
 Member, CoA, Selection Committee for Presidential Doctoral Fellowships, NDSU, 2001
 Member, Search Committee for Chair of VMS, NDSU, 2001 (Doug Freeman hired)
 President-elect, Phi Kappa Phi, NDSU, 2001-2002 and President, 2002-2003
 Member, Search Committee for VMS Lecturers, NDSU, 2001 (Jess Ebert and Tom Gustad hired)
 Member, Search Committee for VMS Technician, NDSU, 2001 (Scott Hoselton hired)
 Chair, Search Committee for the Epidemiology Position, VMS, NDSU, 2002 (Margaret Khaitza hired)
 Member, Search Committee for Infect Dis position, VMS, NDSU, 2002 (Penny Gibbs hired)
 Member, Consensus Committee for Animal Health, ND, SD, MN, & Manitoba, 2002-2003
 Chair, Search Committee for Food Safety Post-Doctoral Fellows, NDSU, 2002
 Member, *Ad hoc* Committee on the Future of the Cereal and Food Sciences, NDSU, 2002
 Member, Conference Organizing Committee, Bioterrorism and Food Security: Issues and Challenges
 Conference, Fargo, ND, 2002
 Member, Search Committee for Dir of the Institute for Food Safety, ISU, Ames, IA, 2003-2004
 Chair, Cabinet Committee to Evaluate CVM Restructuring, 2004
 Panel Member, USDA-Center for Veterinary Biologics, 2004
 Moderator, North Central Avian Disease Conference, Ames, Iowa, 2004
 Moderator, CRWAD, Chicago, IL, 2004
 Member, Organizing Committee for the 4th Int Symp on Virulence Mechanisms of Bacterial
 Pathogens, 2005-2006
 Member, Search Committee for Program Coordinator, CVM, ISU, 2005 (Tom Ligouri hired)
 Facilitator, Budget Subcommittee, Planning and Performance Committee, CVM, ISU, 2007-
 Panel member, Veterinary Summer Scholars Researcher Panel, ISU CVM, 8/07

Department Reviewer, Department of Veterinary Science, University of Arizona, 9/07
Panel member, "Getting-to-Know NSF" Grantsmanship Workshop, ISU, 9/07
Chair, Search Committee for Chair of the Department of Veterinary Clinical Sciences, ISU, 3/08-
Member, Veterinary Medical Center, Phase II Building Planning Committee, 2008
Member, Search Committee for Dir of OSPA, ISU, 2009-
Member, Search Committee for Dir of the Nutrition and Wellness Research Center, ISU, 2009-
Co-chair, One Health Medicine Symposium/Initiative Organizing Committee, ISU, 2009-
Member, Committee to Review the Status of Women in the CVM, ISU, 2010-
Panelist, Women in Natural Resources Professional Development Workshop, ISU, 2010
Member, Committee to Assess Needs Related to ISU's Increasing and Diversified Grant and
Contract Portfolio Member, Iowa State University in 2050, Strategic Planning Committee, 2010
Chair, Search Committee for ADASA, ISU CVM, 2010 (Claire Andreasen hired)
Member, Ethics Committee, American Association of Veterinary Medical Colleges, 2012-2017
Mentor and Presenter, Emerging Leaders Program, ISU, 2013-2017
Invited Panel member, Leadership Development in CVMs, Annual AAVMC CVM Deans Conference,
Naples, February 2017
Member, Search Committee for UGA Police Chief, 2017-2018
Chair, Search Committee for Dean of Public Health, University of Georgia, 2018-

EDITORIAL/REVIEWER/SCIENTIFIC PROGRAMMING EXPERIENCE

Reviewer, Graduate Research Enhancement Awards Program, NDSU, 1992, 1993
Reviewer, Louisiana Education Quality Support Fund, 1992
Ad hoc Reviewer, USDA NRICG Program, 1993, 1994, 2000, 2001, 2002
Member, Board of Scientific Reviewers, *American Journal of Veterinary Research*, 1994-1996
Member, USDA Challenge Grants Review Panel, USDA-HEP Program, Washington, D.C., 1998
Member, Program Committee, National Alliance for Food Safety, 1st Ann Meeting, D.C., 1999
Chair, Food and Environmental Safety Session, CRWAD, Chicago, IL, 1999, 2000
Co-Chair, Food & Environ Safety Session, CRWAD, Chicago, IL, 2001; Moderator, 1999-2003
Member, Editorial Review Board, *Animal Health Research Reviews*, 1999-2000
Member, FDA Food Animal Grants Review Panel (Microbiological Hazards Associated with the Food
Animal Production Environment), CVM-FDA, Rockville, MD, 2000
Section Editor, Food and Environmental Safety, *Animal Health Research Reviews*, 2000-2005
Ad hoc Reviewer, *American Journal of Veterinary Research*, 1999, 2000, 2003, 2009; *Applied and
Environmental Microbiology*, 2008; *Avian Diseases*, 2004-2010; *Avian Pathology*, 2003, 2005,
2007, 2008, 2011; *ASM EcoSal* Book Chapter, 2015; *BMC Genomics*, 2007, 2008; *British Journal of
Poultry Research*, 2011; *Clinical Infectious Diseases*, 2013; *European Journal of Clinical
Microbiology and Infectious Diseases*, 2008, 2009; *Electronic Journal of Biotechnology*, 2008;
European Journal of Clinical Microbiology & Infectious Disease, 2009; *FEMS Microbiology Letters*,
2005; *Food and Chemical Toxicology*, 2007; *Infection and Immunity*, 2007, 2008, 2010, 2011;
Journal of American Veterinary Medical Association, 1994, 1995, 1997, 1998, 2001; *Journal of
Antimicrobial Chemotherapy*, 2006, 2009; *Journal of Applied Communication Research*, 2007;
Journal of Bacteriology, 2006; *Journal of Medical Microbiology*, 2007; *Nature Communications*,
2011, 2013; *Veterinary Research Communications*, 1997, 1999, 2000, 2001; *Letters in Applied
Microbiology*, 2006; *Microbial Ecology*, 2007; *Microbes and Infection*, 2003, 2004; *Microbiology*,

2003, 2009; *Microbial Pathogenesis*, 2008; *Plant Disease*, 1996, 1997; *Process Biochemistry*, 2006; *Plasmid*, 2007; *PLoS Genetics*, 2013; *PLoS One*, 2013; *Veterinaria Italiana*, 2015; *Veterinarni Medicina (Czech)*, 2008; *Veterinary Microbiology*, 2008; *Veterinary Research*, 2004; *Virulence*, 2012; *Zoonoses & Public Health*, 2007

Member, Editorial Review Board, *Avian Diseases*, 2004-2012

Associate Editor, *Diseases of Poultry*, 12th edition, 2005-2008; 13th edition, 2008-2013; 14th edition declined further involvement due to administrative commitments

Scientific Reviewer, SCOR Grants on Sex & Gender Factors Affecting Women's Health, NIH, 2007

Scientific Reviewer, UK's BBSRC Combating Endemic Diseases of Farmed Animals Grants, 2007

Co-Editor, *Virulence Mechanisms of Bacterial Pathogens*, 4th edition, ASM Press, 2007-

Scientific Reviewer, BARD US-Israel Grants Program, 2007

Scientific Reviewer, Keck Preproposals, Iowa State University, 2008

Scientific Reviewer, UK's BBSRC Agri-Food Grants Program, 2008

Panel Member, Challenge Grants: Genes, Genomes and Genetics Program, NIH, 2009

Panel Member, USDA-AFRI Functional Genomics Grant Panel, July 2009

Panel Member, Program Grants through NIH NIDDK, July 2010

Scientific Reviewer, UK's BBSRC Animal Systems, Health & Welfare Grants Program, 2010, 2013

Scientific Reviewer, Professorship in Preventive Veterinary Microbiology, University of Copenhagen, 2011

External Dissertation Reviewer, University College Dublin, Belfield, Ireland, 2011

Reviewer, Canada Research Chair Nomination, 2011, 2012-2013

External Dissertation Advisor, The University of Queensland, Brisbane St. Lucia, Australia, 2012

External Scientific Reviewer, Austrian Science Fund, Austrian Doctoral Program, 2012

Scientific Reviewer, SCOR Grants on Sex Differences, NIH, 2012

Member of Site Visit Team, Austrian Science Fund, 2012

External Peer Reviewer, The Danish Council for Strategic Research, 2014

External Expert, International Laboratory of Animal Infectious Diseases and Food Safety, Nanjing Agricultural University, pending

External Peer Reviewer, Doctoral Program, Vetmeduni Vienna, Austria, 2016

Reviewer, Technical Evaluation Panel, AMR Rapid, Point-of-Need Diagnostic Test, NIH, 2017

Reviewer, Canada Research Chairs Program, 2017

Reviewer, Mid-Term Probationary Review, University of Agriculture of Faisalbad Pakistan, 2017

Grant Reviewer, National Children's Research Centre, Dublin Ireland, 2017

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Veterinary Medical Association (AVMA), 1984-
American Association of Avian Pathologists (AAAP), 1991-
American Society for Microbiology (ASM), 1992-
Conference of Research Workers in Animal Disease (CRWAD), 1993-
Iowa Veterinary Medical Association (IVMA), 2007-

POSTDOCTORAL DIRECTION

Mentor, Shelley M. Horne, 1995-2003: "Molecular Aspects of APEC Virulence"

Mentor, Mohamed Fakhr, 2002-2003: "Characterization of Avian *Salmonella* spp." (Employed as an Associate Professor at Oklahoma State University at Tulsa)

Mentor, Timothy J. Johnson, 2004-2007: "APEC Pathogenomics" (Employed as an Associate Professor at the University of Minnesota)

Mentor, Subhashinie Kariyawasam, 2004-2007: "PAIs in APEC Virulence" (Employed as a Professor at Penn State University)

Mentor, Aaron M. Lynne, 2006: "Creating a Vaccine to Protect Against APEC" (Employed as an Associate Professor at Sam Houston State University)

Mentor, Ganwu Li, 2007-2011: "Transcriptome Analysis of APEC O1" (Employed as an Assistant Professor of Veterinary Diagnostic and Production Animal Medicine at Iowa State University and a Full Professor at Nanjing Agricultural University and the Harbin Research Institute)

Mentor, Kelly Tivendale, 2007-2010: "Are APEC Zoonotic Pathogens?" (Employed as a Lecturer at Melbourne University)

Co-mentor, Renato Maluta, 2014-2015: "Comparative Genomic Analysis of Human and Avian ExPEC" (Co-advised with Dr. Wanderley dias da Silveria, Depto. Genética, Evolução e Bioagentes; Instituto de Biologia, CP 6109; Universidade Estadual de Campinas; Campinas, SP Brazil)

Co-Mentor, Nicolle Barbieri, 2014- : "Control of ExPEC Infections"

GRADUATE STUDENT DIRECTION

Major professor, Theodore J. Kottom, graduation with M.S. in December 1994. Thesis title: "Invasion of Caco-2 Cells by *Salmonella typhimurium* (Copenhagen) Isolates of Sick and Healthy Chickens" (Currently with the Mayo Clinic)

Major professor, Craig G. Mueller, graduation with M.S. in August 1996. Thesis title: "The Role of Colicin V in the Virulence of an Avian *Escherichia coli* Isolate" (Currently with the FBI)

Major professor, Chad A. Brackelsberg, graduation with M.S. in August 1997. Thesis title: "Phenotypic Characterization of Bovine Salmonellae" (Unknown)

Major professor, Samantha J. Pfaff-McDonough, graduation with M.S. in December 1998. Thesis title: "Virulence Factors of Avian *Escherichia coli*" (Currently with the Mayo Clinic)

Major professor, Julie Goplin, graduation with M.S. in December 2000. Thesis title: "Cloning and Sequence Analysis of the *cnf-1* Gene from a Mink *Escherichia coli* Isolate" (Currently the Foodborne Surveillance Epidemiologist for the North Dakota Department of Public Health)

Major professor, Shauna Schmidt, graduation with M.S. in December 2000. Thesis title: "Characterization of Chromosomal Multiple Antibiotic Resistant Mutants of *Yersinia pestis*" (Currently with a Biotech Company)

Major professor, Robert J. Tibbetts, graduation with M.S. in March 2001. Thesis title: "Characterization of *Escherichia coli* Isolated from Mink with Colisepticemia" (Obtained a PhD from Purdue, was Chief Clinical Microbiology Fellow, Washington U. School of Medicine, and currently is Associate Director of Microbiology in the Department of Pathology and Laboratory Medicine in the Henry Ford Health System)

Major professor, Michelle M. Kahan, graduation with M.S. in June 2001. Thesis title: "Isolation and Characterization of *Salmonella* spp. from Apparently Healthy Swine" (K12 teacher)

Major professor, Steven L. Foley, graduation with Ph.D. in September 2001. Dissertation title: "Monoclonal Antibodies to Iss from an Avian *Escherichia coli* Isolate" (Formerly at University of

Central Arkansas and the Marshfield Clinic and Research Foundation; now at the National Center for Toxicological Research of the FDA in Arkansas)

Major professor, Shana Petermann, graduation with M.S. in November 2001. Thesis title: “Integron-Mediated Antibiotic Resistance of *Escherichia coli* Implicated in Calf Scours” (Currently with the University of Minnesota System and a graduate student at NDSU)

Major professor, Erick Handegard, graduation with M.S. in February 2003. Thesis title: “Novel Approaches to Colibacillosis Control” (Currently a pilot in the US Air Force)

Major professor, Timothy J. Johnson, graduation with Ph.D. in August 2004. Dissertation title: “Characterization of a Colicin V Virulence Plasmid in an APEC Isolate” (Assoc Prof at UMN)

Major professor, Kylie Ellen Rodriguez Siek, graduation with M.S. in April 2005. Thesis title: “Characterization of the Avian Pathogenic *Escherichia coli* Pathotype” (Formerly with the University of Nevada Las Vegas and currently with a biotech company)

Major professor, Alicia Carley, graduation with M.S. in January 2006. Thesis title: “Characteristics of Isolates Incriminated in Bovine Colisepticemia & Enteric Colibacillosis” (With the UMN System)

Major professor, Jerod A. Skyberg, graduation with Ph.D. in January 2006. Dissertation title: “Mutational Analysis of Putative Virulence Genes carried on a 180-Kb ColV Plasmid from a Virulent Avian *Escherichia coli* Isolate” (Assistant Professor at the University of Missouri College of Veterinary Medicine)

Major professor, Aaron M. Lynne, graduation with Ph.D. in April 2006. Dissertation title: “Utility of Monoclonal Antibodies to Iss for Detection of Virulent Avian *Escherichia coli*” (Assoc Professor at Sam Houston State University at Huntsville, Texas)

Co-major professor, Ashraf H.M. Hussein, graduation with PhD in Veterinary Microbiology, Zagazig University in June 2013. Thesis title: “Vaccine Against APEC”

Major professor, Paul Mangiamele, graduation with PhD in Human Computer Interaction, Iowa State in April 2014. Thesis title: “Interactive Tools for Pathogenomic Study of Bacterial Pathogens” (Employed in a software development company in San Francisco)

Co-major professor, Bryon A. Nicholson, graduation with PhD in Microbiology, Iowa State University in December 2015. Thesis title: “Genomic Epidemiology and Characterization of Neonatal Meningitis *Escherichia coli* and their Virulence Plasmids” (Employed by BIVI)

Co-major professor, Ginger Harvey, graduation with MS in Veterinary Microbiology, December 2016. Thesis title: “Development of a Diagnostic Test for Botulism” (Employed at USDA NVSL)

Co-major professor, Daniel W. Nielson, anticipated graduation with PhD in August 2018

Member, Graduate Committees of Stephanie Garner (M.S., 1994), Janice Zearley (M.S., 1996), Wei Wang (M.S., 1998), Emily Mitzel (M.S., 1999), Julie Sherman (M.S., 1999), Huang Xiaoli (M.S., 1998), Mary Osenga (M.S., 2000), Lisa Althoff (M.S., 2000), Scott Hoselton (M.S., 2001), and Pamela Olah (M.S., 2002), VMS; Jennifer Bath (Ph.D., 2000), Yuanxiu Chen (Ph.D., 1996), Weisong Gu (Ph.D., 2000), and Jane Schuh (Ph.D., 2000), Cellular and Molecular Biology Program; Li Qiongzheng (Ph.D, 2006), Molecular Pathogenesis; Cherylynn Fausell (M.E.E., TBA), Department of Electrical Engineering; Nicole Cochran (M.S., 2002), Department of Zoology; Jake Ihle (Ph.D., 2006); Chantal Nde (Ph.D., 2007) and Stephanie Lauerbach (M.S., 2004), Food Safety; Manoj Venugopal (M.S., 2003), Department of Ag and Biosystems Engineering; Garry Grant (M.S., 2002), HPER; and Chitra Vijayakumar (M.S., 2001), Department of Food and Nutrition; Justin Meyer, Chemistry (Ph.D., ended in 2003); NDSU; Jenny Wilson (M.S., 2004; Ph.D., 2009), Paul Plummer (Ph.D., 2010), Jing Han (Ph.D., 2009), Tara L. Grinnage-Pulley (DVM, Ph.D., 2011), Zhangqi Shen

(PhD, 2010), Kathy Mou (PhD, 2015), Veterinary Microbiology; Kelly L. Klinge (M.S., 2009), Interdisciplinary Microbiology, ISU; Erin Beach Sanford (PhD, 2011), Feng Lin (PhD, 2014), Genetics; Hongyan Sun (PhD., 2016), Animal Breeding and Genetics, ISU

UNDERGRADUATE/PROFESSIONAL STUDENT RESEARCH DIRECTION

Hugh Smith, 1993, Chad Brackelsberg, 1993-1994, Craig Mueller, 1993-1994, Tara Brodersen, 1994, Theresa Sarkela, 1994-1995, Janet Malpert, 1995, Jennifer Lykken, 1995, Tracy Gebhard, 1995, Robert Tibbetts, 1995, Cory Brown, 1995, Mark Benton, 1995, LaRae Ewert, 1995, Amy Ellwein, 1995, Roberta Steeke, 1996, Soon-Pak-Shinji Yue, 1996-1997, Corey Martin (McNair Scholar), 1996-1998, David Betz, 1996, Paytre Topp, 1996-1997, Jessica O. Ebert (McNair Scholar), 1997-1999, Melissa Breider, 1997-1998, Jennifer Kesler, 1998-1999, Scott Ruele (McNair Scholar), 1999, Ben Peake (McNair Scholar), 1999-2000, Thomas Foley, 1999-2000, Aaron Lynne, 1999-2000, Jerod Skyberg, 2000-2001, Tara Gerads (McNair Scholar), 2000, Rasheed Mohammed, 2000-2001, Rhonda Kercher, 2000-2001, Natasha Petrie, 2000-2001, Becky Oliver, 2001-2002, Jodi Young, 2001-2002, Allison Rae Schultz, 2002-2003, Mandy Michaels, 2003, Jen Scaccianoce (Honor's Student), 2005-2006, Dorie Spitler (Veterinary Summer Scholar), 2005, Sarah Johnson, 2004-2007, Kathy Mou (Honor's Student), 2006, Brad Pingel (Honor's Student), 2006, Karinne Harmon (Honor's Student), 2006, Paul Mangiamele, 2006-2007, Luke Baldwin, 2007-2008, Christine Fanelli (Veterinary Summer Scholar), 2008, Kathy Mou, 2008-2009, Brian Nicholson, 2010-2011, Grace Kooy, 2012 (Veterinary Summer Scholar), Carolyn Cypher, 2013 (Veterinary Summer Scholar)

VISITING SCIENTISTS

Ashraf H.M. Hussein, Ass't lecturer, Department of Avian and Rabbit Medicine, Faculty of Veterinary Medicine in Zagazig University, Egypt, 2008
Catherine M. Logue, Assoc Prof, VMS, NDSU, 2008-2009; 2010
Musafiri Karama, Ass't Prof, Western's College of Veterinary Medicine, Pomona, CA, 2008-2009
Peter Schierack, Prof, University of Applied Sciences, Senftenberg, Germany, 2010
Sophia Guo, Doctoral student, University of Adelaide, Roseworthy Australia, 2011
Nicolle Barbieri, Doctoral student, Universidade Estadual Federal do Rio Grande do Sul, Porte Alegre, RS, Brazil, 2012-2013
Cecilia Rosario Cortés, MVZ MPA, Departamento de Medicina y Zootecnia de Aves Facultad de Medicina Veterinaria y Zootecnia. Universidad Nacional Autónoma de México, Circuito Exterior cp 04510 Ciudad Universitaria, México, 2013
Gemerlyn G. Garcia, Fullbright Scholar, Republic of the Philippines, Member of the faculty of the College of Veterinary Science and Medicine, Central Luzon State University, 3120 Science City of Muñoz, Nueva Ecija, 2018 (Co-mentor with Dr. Catherine Logue)

GRANTS/SUBCONTRACTS/OTHER FUNDS

PI, *Salmonella* Carriage in ND Cattle. NDSU Grant-in-Aid Program, 2/93-1/94, \$6,000
PI, APEC Complement Resistance. USDA NRICGP, 8/94-7/96, \$49,778
PI, Detection of APEC. Southeastern Poultry and Egg Association, 8/95-9/96, \$14,000
Co-PI, Advising Initiatives for Females in Agriculture. NDSU-PPRC, 6/95-7/96, \$2770
Co-PI, *fkpA* & Intracellular Survival of *Salmonella*. Animal Health Money, NDSU, 1/95-6/95, \$9,240

PI, Automated DNA Sequencer for Pathogenic Bacteriology Research. USDA NRICGP-Equipment Grant, 8/95, \$39,630 (match of \$39,630 obtained from various sources)

Co-PI, *Strep suis* as a Multisystem Pathogen in ND Swine. ND Pork Producers, 8/96-7/97, \$4,000

Co-PI, FK506 Binding Proteins in *Salmonella*. USDA-NRICGP, 10/96-9/98, \$107,264

Co-PI, *Escherichia coli* of Septicemic Mink. Mink Fur Producers Foundation, 1/97-12/98, \$16,200

Co-PI, Remote Inspection Biological Sensor Development. Technology Transfer Incorporated and Northern Plains Premium Beef, 12/96-11/97, \$90,000

Director, Scholarships for Native Americans in Vet & Food Sci. USDA-HEP, 8/97-7/02, \$80,000

PI, Flow Cytometer for Animal Health Research. USDA NRICGP-Equipment Grant, 10/97-9/98, \$49,750 (match of \$49,750 obtained from various sources)

Project Director, Fellowships to Promote Expertise in Infectious Disease of Animals. USDA-National Need Graduate Fellowship Program, 11/97-8/01, \$108,000

PI, Facilitating Colibacillosis Control. NDSU Research Foundation, 12/97-6/98, \$3,000

PI, MacIntosh-Based DNA/Protein Analysis Software. ND EPSCoR, 3/98-6/98, \$1,800

Co-PI, *Escherichia coli* Isolates from Septicemic Ranch Mink. Mink Furbearers Producers Foundation, 7/98-6/00, \$20,000

Co-PI, Computer Cluster to Enhance the VMS Teaching, NDSU Technology Fund, 7/98-6/99, \$17,400

PI, *Escherichia coli* Iss Protein. NIH-EPSCoR IDeA Seed Grant Program, 5/98-9/98, \$3,000

Co-PI, PPlases in the Intracellular Survival of *Salmonella*. USDA-NRICGP, 9/98-8/99, \$77,800

Co-PI, Integrins Among Swine *Salmonella*. National Pork Producers Council, 10/98-9/99, \$24,000

PI, CNF-1 as a Potential Control Target for *E. coli*-Caused Calf Scours. ND Gas Tax Fund and State Board of Agricultural Research, 1/99-12/99, \$14,000

PI, Serologic Identification of *Salmonella typhimurium* DT104. NDSU Research Development Support Program, 12/98-11/99, \$5,000

PI, Small Equipment Award for Upgrade of the LI-COR Automated DNA Sequencing System. ND EPSCoR, 10/99 (\$1,140 with match)

Co-PI, NDSU Faculty Development Committee Instructional Development Grant (Purchase of Double-Headed Microscope). NDSU Foundation, 1/99-12/99, \$3,000

PI, Start-up Funds for the Food Safety Faculty Position in VMS. ND EPSCoR, 1/99-12/99, \$30,000 (match of \$30,000 obtained from various sources)

PI, Filling the Food Safety Expertise Gap: The Great Plains Summer Institute. USDA-HEP, 10/99-9/02, \$90,000 (\$180,000 with match)

PI, CNF-1 as a Potential Control Target for *E. coli*-caused Calf Scours. ND-Gas Tax Fund and State Board of Agricultural Research and Education, 1/00-12/00, \$19,700

PI, Fellowships to Promote Expertise in Infectious Disease of Animals. USDA-HEP National Need Fellowships Grant Program, 11/99-8/03, \$138,000

PI, Antibodies to Iss for Study of APEC. NIH-AREA Program, 7/00-6/03, \$141,000

Co-PI, PFGE to Enhance Study of Animal Pathogens. USDA NRICGP Grant, 10/00-9/01, \$23,000

Co-PI, CNF-1 as a Potential Control Target for Mink Colibacillosis. Mink Furbearers, Producers Foundation, 7/00-6/01, \$6,000

Co-PI, Spectrophometer for Path Bacteriol Res. ND-EPSCoR, 8/00, \$2,500 (\$5,000 with match)

Co-PI, Thermocycler for Pathogenic Bacteriology Research. ND-EPSCoR, 12/00, \$2,500

Co-PI, Ultralow Freezer for Veterinary and Microbiological Sciences. ND-EPSCoR, 2/01, \$2,000

PI, CNF-1 as a Potential Control Target for *E. coli*-caused Calf Scours. ND-Gas Tax Fund and State Board of Agricultural Research and Education, 1/01-12/01, \$18,848

Co-PI, Intelligent Quality Sensors for Safe Food. USDA-Special Research Grant, 4/01-3/03, \$132,828

PI, Start-up Fund Supplement for Recruitment of the Chair of VMS. NSF-EPSCoR (IIP), 8/01-7/03, \$60,000 (\$210,000 with match from various sources)

PI, Presidential Doctoral Graduate Fellowships for Jerod Skyberg, Li Qiongzhen, and C.S. Aishwarya, NDSU Graduate School, 6/01-5/04, \$192,000

PI, Doctoral Dissertation Assistantship for Steve Foley, ND-EPSCoR, 7/02-7/03, \$9,000

PI, Novel Approaches to the Control of *E. coli*-Caused Calf Scours, SBARE-ARF, 1/02-12/02, \$20,060

Acting PI, Intelligent Quality Sensors for Food Safety: Further Development and Validation, USDA-CSREES Special Grants Program, 6/02-5/04, \$336,730

Co-PI, Food Safety Risk Assessment, USDA Special Grant, 5/02-4/04, \$748,289

PI, Validation of Sensors for Food Safety, USDA Special Grant (#2003-06091), 6/03-5/05, \$360,000

Co-PI, Food Safety Risk Assessment, USDA Special Grant (# 2003-06068), 5/03-4/05, \$1,400,000

Recipient, New Faculty Start-Up Funds, ISU's Provost's Office, Biotechnology Council, and CVM Dean's Office, 8/03-7/06, \$340,000

Author, Doctoral Dissertation Assistantship for Aaron M. Lynne, ND-EPSCoR, 3/04-7/05, \$34,320

PI, APEC: A Major Cause of Human UTI? Roy J. Carver Charitable Trust, 5/04-3/07, \$296,532

Co-PI, Iss Protein as a Vaccine Against Avian Colibacillosis, IHLAC, 6/05-5/06, \$18,400

PI, Possible Emergence of a Plasmid-Mediated Reservoir of Resistance Genes among the *Escherichia coli* of Poultry. The Alliance for the Prudent Use of Antibiotics, 1/05-12/05, \$60,000

Co-PI, *E. coli* Peritonitis in Commercial Laying Hens. Iowa Egg Council, 4/05-3/06, \$25,434

Co-PI, Fellowships to Promote Expertise in Animal Well-Being. USDA-HEP National Need Fellowships Grant Program, 9/05-8/08, \$276,000

Co-PI, Plasmid-Mediated Virulence in APEC. HLICGP, 6/05-5/06, \$20,000

Co-PI, Possible Emergence of Plasmid-Containing APEC Strains in Poultry, USDA Formula Funds Program, 12/05-11/06, \$20,000

Co-PI, Vaccine to Protect Chickens from *Escherichia coli* Respiratory Tract Infection, USDA Formula Funds Program, 12/05-11/06, \$20,000

Co-PI, Live Vaccine Against Avian Colibacillosis, US Poultry & Egg Association, 3/06-2/07, \$63,258

Co-PI, Recombinant Iss Protein as a Vaccine Against Avian Colibacillosis. IHLAC, 6/06-5/07, \$16,700

Co-PI, Refining the Laying Hen Peritonitis Model, ISURF, 9/06-8/07, \$19,964

PI, Enhancing the *E. coli* Plasmid Genome Database and the Tools for Its Effective Use. NSF, 10/06-9/08, \$374,423

Co-PI, Development of a Plasmid Chip, USDA Formula Funds Program, 12/06-11/07, \$20,000

Co-PI, Assaying APEC Virulence Using Nematodes. IHLAC, 6/07-5/08, \$21,000

Co-PI, Sequence Analysis of *Gallibacterium anatis*, Midwest Poultry Consortium, 1/07-12/07, \$68,309 (Includes \$15,000 in match from the Iowa Egg Council)

Co-PI, *Gallibacterium* Virulence in Chick Embryos. IHLAC, 6/07-5/08, \$7,511

PI, Identification of Novel APEC Virulence Genes via Functional Genomics, Healthy Livestock Initiative, 7/07-6/08, \$20,000

PD, Host: Pathogen Interactions in Avian Colibacillosis: a Systems-Based, Functional Genomics Approach, USDA NRICGP, 1/08-12/12, \$950,000

Co-PI, Identification of Novel APEC Virulence Genes via Functional Genomics, USDA Formula Funds,

1/08-12/09, \$35,000

Co-PI, Characterization of Three Putative Autotransporters of Avian Pathogenic *E. coli* and their Potential Use as Vaccines Against Laying Hen Peritonitis, IHLAC, 7/1/08-6/30/11, \$45,000

PI, Genomic Toolbox for Studying APEC Pathogenesis, Evolution, Control, and Host Specificity, USDA NRI, 9/15/08-10/31/12, \$370,000

Co-PI, Identification and Characterization of Novel Virulence Factors of Neonatal Meningitis Associated *E. coli* via Proteomic Analysis, ICAN, 4/15/09 – 6/30/11, \$37,500

Co-PI, APEC Vaccine, CAHDIT, 4/11-3/12, \$20,000

Co-PI, RNA Sequencing of ExPEC, CIAG, 6/12/11-5/31/12, \$15,000

PI, Impact of Poultry Practices on Emergence of Plasmid-Bearing *E. coli* In Poultry and Retail Poultry, ILHAC, 6/1/12-6/30/14, \$45,000

PI, Phylogeny, Structure and Virulence Contributions of NMEC's Virulence Plasmids, NIH R21, 10/1/12 – 9/31/15 (NCE), \$399,365

PI, Impact of Poultry Production and Processing Practices on Emergence of Plasmid-Bearing *Escherichia coli* and *Salmonella* spp. on Retail Poultry Meat, ISU Health Research Initiative, 10/5/12-6/30/13, \$35,000

Co-PI, Identification of Potential Anti-Plasmid Agents to Control Extraintestinal Pathogenic *Escherichia coli* Infections, CVM Seed Grant, 7/1/14-6/30/16, \$41,132.50

Co-PI, Role of FNR in Regulating APEC Virulence, ILHAC, 6/1/15-5/30/16, \$25,000

Co-PI, Potential Impact of Litter Quality on *E. coli*-Associated Cellulitis in Production Turkeys in Iowa, US Poultry & Egg Association, 2017-2018

Co-PI, Enterobactin-Based Immune Intervention to Control Colibacillosis in Poultry, USDA NIFA, 2018-

PATENTS/PATENT APPLICATIONS

Nolan, L.K. and Horne, S.M. DNA Encoding an Avian *E. coli* *iss* (patent no. 6,087,128). NDSU, Fargo, ND, issued July, 2000

Nolan, L.K. Horne, S.M., and Robinson, M. Avian *Escherichia coli* *iss* Polypeptide (patent no. 6,187,321 B1). NDSU, Fargo, ND, issued February, 2001

Nolan, L.K. and Horne, S.M. An *iss*-DNA Vaccine. NDSU, Fargo, ND, submitted December 2000 (Serial number: 09/738.599; Publication number: 2002/0102546 A1)

Trampel, D. and Nolan, L.K. Bacterin to Protect Against Laying Hen Peritonitis. ISU, Ames, IA, Provisionary patent filed in October 2006

Plummer, P., Nolan, L.K., et al. New Animal Model for UTI. ISU, Ames, IA, In progress

REFEREED PUBLICATIONS/ACCEPTED/UNDER REVISION MANUSCRIPTS

****under the mentorship of LK Nolan***

1. Nolan, L.K., Wooley, R.E., Brown, J., Blue, J.L., and Camp, M. 1987. Comparison of Virulence Factors and Antibiotic Resistance Profiles of *Escherichia coli* Strains from Humans and Dogs with Urinary Tract Infections. *J Vet Int Med.* 1: 152-157.
2. Brown, J., Wooley, R.E., Spears, K.R., Lee, M.D., Nolan, L.K., and Shotts, E.B. 1990. A Quantitative, Automated Method for Determining Microbial Resistance to Complement. *J Vet Diagn Invest.* 2: 150-153.

3. Nolan, L.K., Wooley, R.E., Brown, J., and Payeur, J. 1990. Comparisons of Phenotypic Characteristics of *Salmonella* spp. Isolated from Healthy and Ill (Infected) Chickens. *Am J Vet Res.* 52: 1512-1517.
4. Lee, M.D., Wooley, R.E., Brown, J., Spears, K.R., Nolan, L.K., and Shotts, E.B. 1991. Comparison of a Quantitative Microtiter Method, a Quantitative Automated Method, and the Plate-Count Method for Determining Microbial Complement Resistance. *Avian Dis.* 35: 894-896.
5. Wooley, R.E., Brown, J., Spears, K.R., and Nolan, L.K. 1991. Comparison of Chicken Plasma and Guinea Pig Serum in a Quantitative Microtiter Method of Determining Microbial Complement Resistance. *Avian Dis.* 35: 897-900.
6. Wooley, R.E., Spears, K.R., Brown, J., Nolan, L.K. and Dekich, M.S. 1992. Characteristics of Conjugative R-Plasmids from Pathogenic Avian *Escherichia coli*. *Avian Dis.* 36: 348-352.
7. Nolan, L.K., Wooley, R.E., and Cooper, R.K. 1992. Transposon Mutagenesis Used to Study the Role of Complement Resistance in the Virulence of an Avian *Escherichia coli*. *Avian Dis.* 36: 398-402.
8. Nolan, L.K., Wooley, R.E., Brown, J., Spears, K.R., Dickerson, H.W., and Dekich, M. 1992. Comparison of a Complement Resistance Test, a Chicken Embryo Lethality Test, and the Chicken Lethality Assay for Determining Virulence of Avian *Escherichia coli*. *Avian Dis.* 36: 395-397.
9. Wooley, R.E., Spears, K.R., Brown, J., Fletcher, O.J., and Nolan, L.K. 1992. Relationship of Complement Resistance and Selected Virulence Factors in Pathogenic Avian *Escherichia coli*. *Avian Dis.* 36: 679-684.
10. Spears, K.R., Wooley, R.E., Brown, J., and Nolan, L.K. 1992. Failure of the Congo Red Uptake Test to Discriminate between Virulent and Avirulent Avian *Escherichia coli*. *Avian Dis.* 36: 1012-1014.
11. Wooley, R.E., Nolan, L.K., Gibbs, P.S., Giddings, C.W., and Turner, K.S. 1993. Association of K1 Capsule, Smooth Lipopolysaccharide, TraT, and ColicinV with Complement Resistance and Virulence of Avian *Escherichia coli*. *Avian Dis.* 37: 1092-1096.
12. Grier, J.W., Bjerke, M.S., and Nolan, L.K. 1993. Snakes and the *Salmonella* Situation. *Bull Chicago Herp Soc.* 28:53-59.
13. Wooley, R.E., Nolan, L.K., Brown, J., Gibbs, P.S., and Bounous, D.I. 1994. Phenotypic Expression of pKT107 and pHK11 in an Avirulent Avian *Escherichia coli*. *Avian Dis.* 38: 127-134.
14. Wooley, R.E., Gibbs, P.S., Nolan, L.K., Turner, K.R., and Brown, J. 1994. Effect of Normal Intestinal Flora of Chickens on Colonization by Virulent, Colicin V-Producing, Avirulent, and Mutant Colicin V-Producing Avian *Escherichia coli*. *Avian Dis.* 38: 141-145.
15. Nolan, L.K., Wooley, R.E., Giddings, C.W., and Brown, J. 1994. Characterization of an Avirulent Mutant of a Virulent Avian *Escherichia coli* Isolate. *Avian Dis.* 38: 146-150.
16. Nolan, L.K., Giddings, C.W., Boland, E.W., Steffen, D.J., Brown, J., and Misek, A. 1995. Detection and Characterization of a *Salmonella typhimurium* from a Dairy Herd in North Dakota. *Vet Res Comm.* 19: 3-8.
17. Nolan, L.K., Giddings, C.W., and Brown, J. 1995. Distribution of *invA*, *pagC*, and *spvC* Genes among *Salmonella* Isolates of Animals. *Vet Res Comm.* 19: 167-177.

18. *Kottom, T.J., Nolan, L.K., and Brown, J. 1995. Invasion of Caco-2 Cells by *Salmonella typhimurium* (Copenhagen) Isolates from Healthy and Sick Chickens. *Avian Dis.* 39: 867-872.
19. Cooper, R.K., Shotts, E.B., and Nolan, L.K. 1996. Use of a MiniTransposon to Study Chondroitinase Activity Associated with *Edwardsiella ictaluri*. *J Aquatic An Health* 8: 319-324.
20. Wooley, R.E., Gibbs, P.S., Dickerson, H.W., Brown, J. and Nolan, L.K. 1996. Analysis of Plasmids Cloned from a Virulent Avian *Escherichia coli* and Transformed into *Escherichia coli* DH5 α . *Avian Dis.* 40: 533-539.
21. *Doetkott, D., Nolan, L.K., Giddings, C.W., and Berryhill, D.L. 1996. Large Plasmids in Avian *Escherichia coli*. *Avian Dis.* 40: 927-930.
22. Horne, S.M., Kottom, T.J., Nolan, L.K., and Young, K.D. 1996. Decreased Intracellular Survival of an *fkpA* Mutant of *Salmonella typhimurium* (Copenhagen). *Infect Immun.* 65: 806-810.
23. *Brackelsberg, C.A., Nolan, L.K., and Brown, J. 1997. Characterization of *Salmonella typhimurium* (Copenhagen) and *Salmonella dublin* Isolates of Cattle. *Vet Res Comm.* 21: 409-420.
24. *Kottom, T.J., Nolan, L.K., Robinson, M., Brown, J., Gustad, T., Horne, S.M., and Giddings, C.W. 1997. Further Characterization of a Complement-Sensitive Mutant of a Virulent Avian *Escherichia coli* Isolate. *Avian Dis.* 41: 817-823
25. *Pfaff-McDonough, S.J., Horne, S.M., Giddings, C.W., Ebert, J. O., Doetkott, C., Smith, M.H, and Nolan, L.K. 2000. Complement-Resistance Related Traits among *Escherichia coli* Isolates from Apparently Healthy Birds and Birds with Colibacillosis. *Avian Dis.* 44: 23-33.
26. *Horne, S.M., Giddings, C.W., and Nolan, L.K. 2000. Cloning and Sequence Analysis of *iss* from a Virulent Avian *Escherichia coli* Isolate. *Avian Dis.* 44: 179-184.
27. *Foley, S.L., Horne, S.M., Giddings, C.W., Robinson, M., and Nolan, L.K. 2000. *iss* from an Avian *Escherichia coli*. *Avian Dis.* 44: 185-191.
28. Jeffrey, J.S., Nolan, L.K., Tonooka, K.H., Wolfe, S., Giddings, C.W., Horne, S.M., Foley, S.L., Lynne, A.M., Ebert, J.O., Elijah, L.M., Bjorklund, G., Pfaff-McDonough, S.J., Singer, R.S., and Doetkott, C. 2002. Virulence Factors of *Escherichia coli* from Cellulitis or Colisepticemia Lesions in Chickens. *Avian Dis.* 46: 48-52.
29. *Johnson, T.J., Giddings, C.W., Horne, S.M., Skyberg, J., Olah, P., Kercher, R., Sherwood, J.S., Gibbs, P.S., Wooley, R.E., and Nolan, L.K. 2002. Location of Increased Serum Survival Gene and Selected Virulence Traits on a Conjugative R Plasmid in an APEC Isolate. *Avian Dis.* 46: 342-352.
30. Nolan, L.K., Giddings, C.W., Horne, S.M., Doetkott, C., Gibbs, P.S., Wooley, R.E., and Foley, S.L. 2002. Complement Resistance, as Determined by Viable Count and Flow Cytometric Methods, and its Association with the Presence of *iss* and the Virulence of Avian *Escherichia coli*. *Avian Dis.* 46: 1-8.
31. White, D.G., Zhao, S., McDermott, P.F., Ayers, S., Friedman, S., Sherwood, J., Breider-Foley, M., and Nolan, L.K. 2002. Characterization of Multiple-Antimicrobial Resistant *Salmonella* Isolated from Diseased Swine. *Canadian J Vet Res.* 67: 39-47.

32. Nolan, L.K., Horne, S.M., Giddings, C.W., Foley, S.L., Johnson, T.J., Lynne, A.M., and Skyberg, J. 2003. Serum Complement Resistance, *iss*, and Virulence of Avian *Escherichia coli*. *Vet Res Comm.* 27: 101-110.
33. *Tibbetts, R.J., White, D.G., Dyer, N.W., Giddings, C.W., and Nolan, L.K. 2003. Characterization of *Escherichia coli* Isolates Incriminated in Mink Colisepticemia. *Vet Res Comm.* 27: 341-357.
34. *Foley, S.L., Horne, S.M., Giddings, C.W., Gustad, T.R., Robinson, M., and Nolan, L.K. 2003. Monoclonal Antibodies to Avian *Escherichia coli* *Iss*. *Avian Dis.* 47: 79-86.
35. Gibbs, P.S., Maurer, J.J., Nolan, L.K., and Wooley, R.E. 2003. Prediction of Chicken Embryo Lethality with the Avian *Escherichia coli* Traits Complement Resistance, Colicin V Production, and Presence of the Increased Serum Survival Gene Cluster (*iss*). *Avian Dis.* 47: 370-379.
36. *Skyberg, J.A, Horne, S.M., Giddings, C.W., Wooley, R.E., Gibbs, P.S., and Nolan, L.K. 2003. Characterizing Avian *Escherichia coli* Isolates with Multiplex PCR. *Avian Dis.* 47: 1441-1447.
37. *Horne, S.M., Goplin, J., and Nolan, L.K. 2004. Cloning and Sequence Analysis of *cnf-1* from Virulent Bovine and Mink *Escherichia coli* Isolates. *Vet Res Comm.* 28: 103-112.
38. *Johnson, T.J., Skyberg, J., and Nolan, L.K. 2004. Multiple Antimicrobial Resistance Region of a Putative Virulence Plasmid from an *Escherichia coli* Isolate Incriminated in Avian Colibacillosis. *Avian Dis.* 48: 351-360.
39. Balasubramanian, S., Panigrahi, S., Logue, C.M., Marchello, M., Doetkott, C., Gu, H., Sherwood, J., and Nolan, L.K. 2004. Spoilage Identification of Beef Using an Electronic Nose System. *Trans Am Soc Agric Eng* 47: 1625-1633.
40. *Rodriguez-Siek, K.E., Giddings, C.W., Fakhr, M., Doetkott, C., Johnson, T.J., and Nolan, L.K. 2005. Characterizing an APEC Pathotype. *Vet Res.* 36: 1-16.
41. *Johnson, T.J., Siek, K., Skyberg, J., Doetkott, C., and Nolan, L.K. 2005. Plasmid-Linked Virulence Factors among Avian Pathogenic *Escherichia coli*. Plasmid Biology 2004: International Symposium on Molecular Biology of Plasmids and Other Mobile Genetic Elements, Kanoni, Corfu, Greece, September 2004. *Plasmid* 53: 23-96.
42. *Fakhr, M.H., Nolan, L.K., and Logue, C.M. 2005. Multilocus Sequence Typing Lacks the Discriminatory Ability of Pulse Field Gel Electrophoresis for Typing *Salmonella enterica* serovar Typhimurium. *J Clin Microbiol.* 43: 2215-2219.
43. *Rodriguez-Siek, K.E., Giddings, C.W., Johnson, T.J., Fakhr, M., Doetkott, C., and Nolan, L.K. 2005. Comparison of *Escherichia coli* Implicated in Human Urinary Tract Infection and Avian Colibacillosis. *Microbiol.* 151: 2097-2110.
44. *Johnson, T.J., Siek, K.E., Johnson, S.J., and Nolan, L.K. 2005. DNA Sequence and Comparative Genomics of pAPEC-O2-R, an Avian Pathogenic *Escherichia coli* (APEC) Transmissible R Plasmid. *Antimicrob Agents Chemother.* 49: 4681-4688.
45. *Johnson, T.J., Siek, K.E., Johnson, S., and Nolan, L.K. 2006. Complete Sequence of a ColV Plasmid and Prevalence of Selected Plasmid-Encoded Virulence Genes among Avian *Escherichia coli* Strains. *J Bacteriol.* 188: 745-758

46. *Kariyawasam, S., Johnson, T.J., and Nolan, L.K. 2006. *pap* Operon of Avian Pathogenic *Escherichia coli* Strain O1 is Located on a Novel Pathogenicity Island. *Infect Immun.* 74: 744-749.
47. *Skyberg, J.A., Logue, C.M., and Nolan, L.K. 2006. Virulence Genotyping of *Salmonella* spp. with Multiplex PCR. *Avian Dis.* 50: 77-81.
48. Q. Li, J.A. Skyberg, M.K. Fakhr, J.S. Sherwood, L.K. Nolan, and C.M. Logue. 2006. Antimicrobial Susceptibility and Characterization of *Salmonella* Isolated from Processed Bison Carcasses. *Appl Environ Microbiol.* 72: 3046-3049.
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50. *Skyberg, J.A., Siek, K.E., Doetkott, C., and Nolan, L.K. 2006. Biofilm formation on Plastic Surfaces by *Escherichia coli* Isolated from Sick and Healthy Poultry. *J Appl Microbiol.* 102: 548-554.
51. *Lynne, A. M., Foley, S.L., and Nolan, L.K. 2006. Characterization of Monoclonal Antibodies to Avian *Escherichia coli* Iss. *Avian Dis.* 50: 445-449.
52. *Johnson, T.J., Johnson, S.J., and Nolan, L.K. 2006. Complete DNA Sequence of a ColBM Plasmid Occurring in an Extraintestinal Pathogenic *Escherichia coli* Isolate and Its Prevalence among Other *E. coli* Isolates. *J Bacteriol.* 188: 5975-5983.
53. *Kariyawasam, S., Johnson, T.J., DebRoy, C., and Nolan, L.K. 2006. Occurrence of Pathogenicity Island_{APEC-O1} Genes Among *Escherichia coli* Implicated in Colibacillosis. *Avian Dis.* 50: 405-410.
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55. *Kariyawasam, S., Johnson, T.J., Siek, K.E., and Nolan, L.K. 2006. Unique DNA Sequences of Avian Pathogenic *Escherichia coli* Isolates as Determined by Genomic Suppression Subtractive Hybridization. *FEMS Microbiol Lett.* 262: 193-200.
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INVITED PUBLICATIONS/BOOK CHAPTERS

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PUBLISHED ABSTRACTS/PROCEEDINGS OF MEETINGS

*under the mentorship of LK Nolan; † = also presented as a talk; ‡ = also presented as a poster

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128. Johnson, T.J.*‡, Kariyawasam, S., Wannemuehler, Y., Mangiamele, P., Johnson, S.J., Doetkott, C., Skyberg, J.A., Lynne, A.M., and Nolan, L.K. Analysis of the Complete Genome of an APEC Isolate. Proceedings of the AVMA-AAAP Annual Meeting, Washington DC, 2007
129. Nolan, L.K. ‡, Johnson, T.J., Wannemuehler, Y., and Johnson, S. Widespread Occurrence of Plasmids in APEC. Proceedings of the AVMA-AAAP Annual Meeting, Washington DC, 2007
130. Wannemuehler, Y.*‡, Johnson, T.J., Johnson, S., and Nolan, L.K. Rapid Procedure to Identify APEC. Proceedings of the AVMA-AAAP Annual Meeting, Washington DC, 2007
131. Trampel, D.T., Wannemuehler, Y., and Nolan, L.K. Peritonitis Caused by *Gallibacterium anatis* and APEC. Proceedings of the AVMA-AAAP Annual Meeting, Washington DC, 2007
132. Mangiamele, P.*‡, Johnson, T.J., Wannemuehler, Y.M., and Nolan, L.K. Creation of an *E. coli* Plasmid Genome Database. Proceedings of the AVMA-AAAP Annual Meeting, Washington DC, 2007
133. Johnson, T.J.*†, Wannemuehler, Y.M., Kariyawasam, S., and Nolan, L.K. Transcriptome Analysis of an APEC ColV Virulence Plasmid during Systemic Colibacillosis Infection. CRWAD, 2007
134. Topp, E., Summers, A., and Nolan, L.K. † Diversity of Plasmids in Prokaryotes: Implications for Health and Environment. NSF/ CREES Microbial Genome Sequencing Program Awardees Meeting held in conjunction with Plant and Animal Genome Meeting XVII, San Diego, CA, 2008
135. Johnson, T.J.,† Wannemuehler, Y., and Nolan, L.K. Evolution of the *iss* Gene in *E. coli* and the Implications for Avian Health. North Central Avian Disease Conference, St. Paul, MN, 2008
136. Nolan, L.K. ‡, Johnson, T.J., Kariyawasam, S., Wannemuehler, Y., Li, G., Jordan, D.M., and Logue,

- C.M. pAPEC-408: An APEC R Plasmid Harboring a Pathogenicity Island. AVMA/AAAP Annual Meeting, New Orleans, 2008
132. Mangiamele, P. ‡, Johnson, T.J., Wannemuehler, Y.M., and Nolan, L.K. Creation of an *Escherichia coli* Genome Database. Proceedings of the AVMA-AAAP Annual Meeting, New Orleans, 2008
138. Li, G. ‡*, Kariyawasam, S., Wannemuehler, Y.M., and Nolan, L.K. *tkt* is Located on A Novel PAI Found Among APEC. AVMA/AAAP Annual Meeting, New Orleans, 2008
139. Wannemuehler, Y.M. ‡*, Johnson, T.J., and Nolan, L.K. APEC-Like Plasmids and Other Traits among Human ExPEC of Human. AVMA/AAAP Annual Meeting, New Orleans, 2008
140. Kariyawasam, S. ‡, Wannemuehler, Y., Hardy, J., Li, G., Johnson, T.J., and Nolan, L.K. *Caenorhabditis elegans* as a Simple Model to Study APEC Virulence. AVMA/AAAP Annual Meeting, New Orleans, 2008
141. Barnes, H.J. †, Martin, M.P., Nolan, L.K., Day, J.M., Wages, D.P., Ley, D.H., Rives, D.V. Day of Hatch Compared with Day After Hatch Placement of Turkey Poults. AVMA/AAAP Annual Meeting, New Orleans, 2008
142. Cookson, K. †, Nolan, L.K., and Gustafson, C. Characterization of APEC from Broilers using PCR Analysis of Key Virulence Genotypes. AVMA/AAAP Annual Meeting, New Orleans, 2008
143. Johnson, T.J. †, Nolan, L.K., Trampel, D.W., and Wannemuehler, Y.M. Genome Sequencing of *Gallibacterium anatis* Causing Peritonitis in Laying Hens. Proceedings of the AVMA/AAAP Annual Meeting, New Orleans, 2008.
144. Nolan, L.K. ‡, Johnson, T.J., Lamont, S.J., Kariyawasm, S.K., Liu, P., and Trampel, D. Host: Pathogen Interactions in Avian Colibacillosis: a Systems-Based, Functional Genomics Approach, USDA NRICGP Microbial Functional Genomics Awardees Program, 2008
145. Johnson, T.J. † and Nolan, L.K. Pathogenomics of *E. coli* Virulence Plasmids. International Plasmid Biology Society, Gdansk, Poland, 2008 [**Winner of Brian Wilkins Prize**]
146. Nolan, L.K., ‡ Johnson, T.J., Kariyawasam, S., Wannemuehler, Y.M., Li, G., Jordan, D.M. and Logue, C.M. pAPEC408-ColBM/R: An APEC R Plasmid Harboring a Pathogenicity Island, International Plasmid Biology Society, Gdansk, Poland, 2008
147. Nolan, L.K. ‡, Tivendale, K.A., Mangiamele, P., Johnson, T.J., Wannemuehler, Y., and Trampel, D. 2009. Toolbox for Exploring APEC Pathogenesis, Evolution, Control, and Host Specificity, NSF/USDA-CREES Microbial Genome Sequencing Program Awardees Meeting held in conjunction with Plant and Animal Genome Meeting XVII, San Diego, 2009
148. Nolan, L.K. ‡, Johnson, T.J., Wannemuehler, Y.M., Li, G., Tivendale, K.A., Kariyawasam, S., Logue, C.M., and Mangiamele, P. APEC Virulence Plasmids: Multipurpose Contributors to Disease, AVMA/AAAP, Seattle, WA, 2009
149. Logue, C.M. ‡, Wannemuehler, Y.M., and Nolan, L.K. Do Arsenic-Containing Compounds Select for Multidrug Resistant APEC? AVMA/AAAP, Seattle, 2009
150. Mangiamele, P. ‡, Johnson, T.J., Wannemuehler, Y.M., Logue, C.M., and Nolan, L.K. R Plasmids Found among Emergent APEC, AVMA/AAAP, Seattle, 2009

151. Mou, K.T. ‡*, Tivendale, K.A., Wannemuehler, Y., and Nolan, L.K. Predicting the Virulence of APEC using Serogroup, Phylogenetic Group and MLST. AVMA/AAAP, Seattle, 2009
152. Li, G. ‡*, Kariyawasam, S., Wannemuehler, Y.M., Tivendale, K.A., and Nolan, L.K. Novel Autotransporter Is Necessary for the Full Virulence of APEC. AVMA/AAAP, Seattle, 2009
153. Tivendale, K.A. ‡*, Logue, C.M., Wannemuehler, Y.M., Li, G., Hussein, A., Kariyawasam, S., Mou, K., and Nolan, L.K. APEC O18: Emerging Isolates that are Highly Pathogenic in Poultry. AVMA/AAAP, Seattle, 2009
154. Tivendale, K.A., Logue, C.M., Kariyawasam, S., Jordan, D., Hussein, A., Li, G., Wannemuehler, Y., Nolan, L.K. APEC as a Causative Agent of Meningitis in Rats. ASM, San Diego, 2010
155. Li, G. ‡*, Johnson, T.J., Liu, P., and Nolan, L.K. Transcriptome Analysis of APEC in Serum Reveals Adaptive Responses to Systemic Infection. ASM, San Diego, 2010
156. Sandford, E., Orr, M., Liu, P., Nolan L., and Lamont S.J. Splenic gene expression after infection of broiler chickens with APEC. ISAG, Edinburgh, 2010
157. Sanford, E. Lamont, S.J., and Nolan, L.K. Effect of Avian Pathogenic *Escherichia coli* Infection on Peripheral Blood Leukocyte Gene Expression in Broiler Chickens. Poultry Science Association Annual Meeting, St. Louis, 2011
158. Sandford, E., Orr, M., Li, X., Zhou, H., Johnson, T.J., Kariyawasam, S., Liu, P., Nolan, L.K., and Lamont, S.J. Whole Transcriptome Response of Peripheral Blood Leukocytes to Avian Pathogenic *Escherichia coli* Infection in Broiler Chickens. 7th European Symposium on Poultry Genetics, Peebles, Scotland, 2011
159. Li, G., Johnson, T.J., Liu, P., and Nolan, L.K. Transcriptome Analysis of APEC in Serum Reveals Adaptive Responses to Systemic Infection. AVMA/AAAP, St. Louis, 2011
160. Cai, W., Li, G. and Nolan, L.K. A Novel Two-Component Signaling System KguS/KguR Involved in Utilization of α -Ketoglutarate Contributes to Urovirulence in Uropathogenic *Escherichia coli*. Microbial Pathogenesis and Host Response, Cold Spring Harbor, NY 2011
161. Nicholson, B.A.‡*, Li, G., Logue, C.M., and Nolan, L.K. Role of Plasmids in NMEC Virulence. NC ASM Meeting, Des Moines, Iowa 2011
162. Grace Kooley, Nolan, L.K., and Logue, C.M. Plasmid-Mediated Acid Tolerance in APEC. AAAP/AVMA Annual Meeting, San Diego, CA, 2012
163. Cai, W., Kariyawasam, S., Wannemuehler, Y.M., Logue, C.M., Nolan, L.K., Li, G. A Novel Two-Component Signaling System Facilitates Uropathogenic *Escherichia coli* to Exploit Abundant Host Metabolites. CVM Research Day, Ames, Iowa 2012
164. Hussein, A.H., Ghanem, I.A., Mahdi, A.A., Li, G., Nolan, L.K., and Logue, C.M. Characterization of *Escherichia coli* Strains Isolated from Broiler Chicken flocks in Egypt. CVM Research Day, Ames, Iowa 2012
165. Nicholson, B.A., Mangiamele, P.M., Li, G., and Nolan, L.K. Sequence Analysis and Characterization of the Large Plasmid from Neonatal Meningitis *Escherichia coli*. CVM Research Day, Ames, Iowa

2012 (2nd Place Finish in Graduate Student Competition)

166. Mangiamele, P., Nicholson, B.A., and Nolan, L.K. Modern Genomic Sequence Finishing. CVM Research Day, Ames, Iowa 2012
167. Kooley, G., Nolan, L.K., and Logue, C.M. Plasmid Burden in APEC. CVM Research Day, Ames, Iowa 2012 **(3rd Place Finish for Veterinary Summer Scholars)**
168. Sandford, E. E., Orr, M., Li, X., Zhou, H., Johnson, T.J., Kariyawasam, S., Liu, P., Nolan, L.K., Lamont, S.J. Multi-tissue, Multi-time Transcriptome Analysis of Host Response to APEC Infection. Avian Immunology Group Meeting. Edinburgh, Scotland, August 2012
169. Hussein, A.H.M., Ghanem, I.A.I., Li, G., and Nolan, L.K. Identification of Potential Antigens for APEC Vaccine Development. NC ASM Meeting, Fargo, ND, October 2012
170. Barbieri, N.L., Horn, F., Nolan, L.K., and Li, G. The FNR Deletion Affects Virulence in UPEC strain CFT073. NC ASM Meeting, Fargo, ND, October 2012
171. Nolan, L.K., Li, G., and Logue, C.M. 2013. Poultry as a Possible Food-Borne Source of Human ExPEC? Clinical and Scientific Advances in UTIs Conference, Research Institute at Nationwide Children's Hospital, Columbus, Ohio, May 2013
172. Cai, W., Wannemuehler, Y., Dell'Anna, G., Nicholson, B., Barbieri, N., Kariyawasam, S., Feng, Y., Logue, C.M., Nolan, L.K., and Li, G. A Novel Two-Component Signaling System Facilitates UPEC Adaptation to Renal Physiology. Clinical and Scientific Advances in UTIs Conference, Research Institute at Nationwide Children's Hospital, Columbus, Ohio, May 2013
173. Logue, C.M., Sherwood, J.S., Wannemuehler, Y., and Nolan, L.K. Antimicrobial Resistance Patterns in *Escherichia coli* Isolated from UTIs in Adults and Children. Clinical and Scientific Advances in UTIs Conference, Research Institute at Nationwide Children's Hospital, Columbus, Ohio, May 2013
174. Nolan, L.K., Li, G., and Logue, C.M. Invited Speaker. Co-Selection of Resistance and Virulence in Extraintestinal Pathogenic *Escherichia coli*. 5th Symposium on Antimicrobial Resistance in Animals and the Environment (ARAE), Ghent, Belgium, June 2013
175. Barbieri, N.L., Cai, W., Nicholson, B.A., Hussein, A., Logue, C.M., Horn, F., Nolan, L.K., and Li, G. FNR Controls Expression of Major Virulence Genes in *Uropathogenic Escherichia coli*. Brazilian Society of Microbiology, Natal, Brazil, October 2013
176. Oliveria, A.L., Barbieri, N.L., Nolan, L.K., Logue, C.M., Horn, F. Phylogenetic Relationship between Strains of APEC Isolated from Broilers with Colisepticemia. 27th Congresso Brasileiro de Microbiologica, October 2013
177. Mangiamele, P., Nicholson, B.A., and Nolan, L.K. Toolbox for Exploring APEC Pathogenesis and Control. Plant and Animal Genome Meeting, San Diego, CA, January 2014
178. Logue, C.M., Sherwood, J.S., Wannemuehler, Y.M., da Silveria, W.D., Hussein, A., Barbieri, N.L., Horn, F., Cortes, C.R., Hill, K.J., and Nolan, L.K. Phenotype and Genotype Analysis of Antimicrobial Resistance in Avian Pathogenic *Escherichia coli* from the US and Elsewhere. American Society for Microbiology, Boston, MA, May 2014
179. Sun, H., Liu, P., Nolan, L.K., and Lamont, S.J. Thymus Transcriptome in Response to *Avian*

Pathogenic Escherichia coli (APEC) Infection. Poultry Science Association, Corpus Christi, July 2014

180. Sun, H., Liu, P., Nolan, L.K., and Lamont, S.J. Avian pathogenic *Escherichia coli* (APEC) infection alters bone marrow transcriptome in broiler chickens. International Society for Animal Genetics (ISAG) Conference, Xi'an, China, July 2014
181. Sun, H., Liu, P., Nolan, L.K., and Lamont, S.J. Bursal Transcriptome Changes in Response to Avian Pathogenic *Escherichia coli* Infection. Poultry Science Association meeting and the International Society of Animal Genetics, 2014
182. Lindsey, C., Nolan, L.K., Logue, C.M., Rives, D., Strickland, J., and Barnes, H. J. A Longitudinal Study of *Escherichia coli* Virulence Factors in Turkeys. AAAP, Boston, July 2014
183. Catherine M. Logue¹, Yvonne Wannemuehler¹, Cecilia Rosario-Cortes², Fabiana Horn³, Ashraf Hussein⁴, Wanderley Dias da Silveria⁵, Nicolle Lima Barbieri^{1,3}, Renato Malluata⁵, Esra Buyukcangaz⁶, and Lisa K. Nolan. Extended-Spectrum Beta-Lactam (ESBL) Resistance in Avian Pathogenic *Escherichia coli*. AAAP, Boston, July 2014
184. Catherine M. Logue¹, Luke D. Bussiere¹, Nicolle Lima Barbieri¹, Yvonne Wannemuehler¹, Cecilia Rosario-Cortes², Fabiana Horn³, Ashraf Hussein⁴, Wanderley Dias da Silveira⁵, Renato Pariz Maluta⁵, Esra Buyukcangaz⁶, and Lisa K. Nolan. Phenotypic and Genotypic Analysis of Extended Spectrum Beta-Lactam (ESBL) Associated Resistance in Avian Pathogenic *Escherichia coli* (APEC). ASM, New Orleans, May 2015
185. Nicolle L. Barbieri, Catherine M. Logue, Fabiana Horn, Lisa K. Nolan and Ganwu Li. FNR Regulates the Expression of Important Virulence Factors Contributing to the Pathogenicity of Avian Pathogenic *Escherichia coli*. ASM, New Orleans, May 2015
186. Sun, H., Liu, P., Nolan, L.K., and Lamont, S.J. 2015. Combined Transcriptomic Analysis of Three Primary Lymphoid Tissues in Response to Extra-intestinal pathogenic *Escherichia coli* (ExPEC) Infection. Next Generation Sequencing USA Congress. Boston, MA, October 2015

PRESENTATIONS/POSTERS WITHOUT PROCEEDINGS

1. Nolan, L.K., Wooley, R.E., Brown, J., and Payeur, J.B. Virulence Factors of *Salmonella* Isolated from Chickens. Georgia Veterinary Medical Association Poultry Program, Jekyll Island, GA, 1989
2. Rosen, P. P.* and Nolan, L. K. Detection of *Salmonella* in Cattle. Molecular Pathogenesis Symposium at the Joint MN-ND Academies of Science Meeting, Fargo, ND, 1994
3. Horne, S.M., Young, K.D., Kottom, T.J., and Nolan, L.K. FK506 Binding Proteins May Be Involved in Pathogenesis, Frank Low Research Day, Grand Forks, N.D., 1995
4. Yue, Shinji, S.P.* and Nolan, L.K. Virulence Factors Encoded by Conjugative R Plasmids of *Escherichia coli* O157 Isolates. Mid-Continent Undergraduate Student Research Conference, Minot State University, Minot, ND, 1997 [**Third Place Award**]
5. Nolan, L.K., White, D.G., Kahan, S., Horne, S.M., Giddings, C.W., and Dyer, N.W. Swine Salmonellosis. North Dakota Pork Producers, Carrington, ND, 1997
6. Dyer, N.W., Stoltenow, C.L., White, D.G., and Nolan, L.K. Calf Scours in North Dakota: Thoughts and Recommendations. Annual North Dakota Cow-Calf Conference, Bismarck, ND, 1998

7. Panigrahi, S., Kizil, U., Logue, C.M., Marchello, M., and Nolan, L.K. Quality Evaluation of Meat. American Society of Agricultural Engineers Annual Meeting, Sacramento, CA, 2001
8. Logue, C.M. and Nolan, L.K. Multidisciplinary Educational Program in Food Safety. AVMA/AAAP Annual Meeting, Philadelphia, 2004
9. Logue, C.M., Nolan, L.K., et al., Food Safety Risk Assessment. USDA CSREES Post-Award Management Workshop for Non-Competitive Food Safety Grants. Washington DC, 2005
10. Spitler, D.K., Johnson, T.J., Wannemuehler, Y., and Nolan, L.K. Plasmid-Linked Class 1 Integron among the *E. coli* of Poultry. Veterinary Summer Scholar Research Program National Symposium, Athens, GA, 2005
11. Scaccianoce, J., Wannemuehler, Y., Johnson, T.J., and Nolan, L.K. Comparison of APEC and Human UPEC. Research in the Capitol, Des Moines, IA, 2006
12. Kariyawasam, S.*‡ and Nolan, L.K. *papA* Gene of APEC. Virulence Mechanisms of Bacterial Pathogens Meeting, Ames, IA., 2006

INVITED SCIENTIFIC OR LAY PRESENTATIONS/LECTURES/MEDIA EVENTS/CONTINUING ED

1. Nolan, L.K. Complement Resistance and APEC. National Animal Disease Center, Ames, IA, 1992
2. Nolan, L.K. Complement Resistance and APEC. College of Osteopathic Medicine of the Pacific, Pomona, CA, 1992
3. Nolan, L.K. Virulence of APEC. University of Wisconsin, Department of Medical Microbiology, Madison, WI, 1992
4. Nolan, L.K. Complement Resistance and Virulence of APEC. National Institutes of Health, Bethesda, MD, 1992
5. Nolan, L.K. Complement Resistance and Avian APEC. NDSU, Fargo, ND, 1992
6. Nolan, L.K. Complement Resistance and APEC. Louisiana State University, Baton Rouge, 1992
7. Nolan, L.K. Getting in and Staying in Vet School. Pre-Vet Club, NDSU, Fargo, ND, 1992
8. Nolan, L.K. Transposons to Study Virulence Factors of APEC. Women in Science Group, Fargo, 1993
9. Nolan, L.K. Virulence Factors of Avian *Escherichia coli*. Department of Pathobiology, College of Veterinary Medicine, Auburn University, 1993
10. Nolan, L.K., Boland, E.W., and Smith, M.H. Bacterial Causes of Calf Scours. Annual North Dakota Cow-Calf Conference, Bismarck, ND, 1994
11. Rosen, P.P.* and Nolan, L.K. Amplification of *invA* and *pagC* Gene Sequences to Detect *Salmonella* Carriers in Cattle. University of Minnesota (Crookston Campus) Crookston, MN, 1995
12. Nolan, L.K. On Becoming a Veterinarian. F/M Communiiversity, Moorhead, MN, 1995
13. Nolan, L.K. Complement Resistance and Avian *Escherichia coli*: the Ongoing Saga. Department of Medical Microbiology, University of Georgia, Athens, GA, 1995

14. Nolan, L.K. Complement Resistance of an *Escherichia coli* Isolate. Department of Veterinary Science, South Dakota State University, Brookings, SD, 1995
15. Nolan, L.K. Life as a Scientist. Women in the Next Generation of Science Career Panel. North Dakota State University, Fargo, ND, 1995
16. Nolan, L.K. Complement Resistance of an Avian *Escherichia coli* Isolate. North Central Branch of the American Society for Microbiology, Iowa City, IA, 1995
17. Wooley, R.E. and Nolan, L.K. Traits of Virulent Avian *Escherichia coli*: An Update. Department of Medical Microbiology, University of Georgia, Athens, GA, 1996
18. Nolan, L.K. Life as a Scientist or Veterinarian. Dinan Residence Hall, NDSU, 1997
19. Nolan, L.K. Balancing Science Careers and Real Life. Phi Sigma Honor Society, NDSU, 1997
20. Nolan, L.K. Emerging Diseases in Veterinary Medicine. CE for Veterinarians, NDSU, 1997
21. Nolan, L.K. Swine Salmonellosis. Interview for the local radio station, KDSU, Fargo, ND, 1997
22. Nolan, L.K. The Hot Zone. Extension Youth Conference, ND 4H Ambassadors and NDSU Extension Service, 1997
23. Nolan, L.K. Detection of Virulent Avian *Escherichia coli*. Department of Veterinary and Biomedical Sciences, University of Nebraska-Lincoln, 1997
24. Nolan, L.K. Emerging Bacterial Diseases. Society for Midwifery. Fargo, ND, 1997
25. Nolan, L.K. and White, D.G. Animal Health Research in the VMS. State Board of Agricultural Research, Fargo, ND, 1997
26. Nolan, L.K. Adventures in Veterinary Schooling. Pre-Veterinary Club, Fargo, ND, 1997
27. Nolan, L.K. Animal Health Research at NDSU. Harvest Bowl (audience included award-winning producers from every county in the state), College of Agriculture, NDSU, Fargo, ND, 1997
28. Nolan, L.K. Scholarship of Teaching. NDSU, 1997
29. Nolan, L.K. Bacterial Diseases of Production Animals Research at NDSU. Biotech/Student ASM Chapter, NDSU, 1998
30. Nolan, L.K. Iss in Colibacillosis Control. Fort Dodge Animal Health Co., Fort Dodge, IA, 1998
31. Nolan, L.K. Grantsmanship. Fall Conference, Holiday Inn, Fargo, ND, 1998
32. Nolan, L.K. and White, D.G. Bioterrorism. News 4 (KXJB-TV) Interview, 1998
33. Nolan, L.K. Bioterrorism. TriCollege Symposium on Terrorism, TriCollege (NDSU, Moorhead State University, and Concordia), 1998
34. Nolan, L.K., Horne, S.M., Robinson, M., Martsching, S.L., and Dyer, N.W. CNF-1 as a Potential Control Target for *E. coli*-Caused Calf Scours. North Dakota's State Board of Agricultural Research, Agricultural Research Fund Committee, Bismarck, ND, 1998
35. Nolan, L.K. Detection of APEC. College of Pharmacy, NDSU, Fargo, ND, 1998

36. Nolan, L.K. Last Lecture: Bioterrorism - Is there a Connection? Last Lecture Series, Stockbridge Hall, NDSU, Fargo, ND, 1999
37. Nolan, L.K. Possible Use of Biological Weapons. ND-STEP, NDSU, Fargo, ND, 1999
38. Nolan, L.K. et al. Teaching Skills. New Academic Staff Orientation, NDSU, Fargo, ND, 1999
39. Nolan, L.K. Food Safety Education at NDSU. Annual Meeting of the North Dakota Poultry Industries, Fargo, ND, 1999
40. Nolan, L.K. Poultry Disease Research at NDSU. The Annual Meeting of the North Dakota Poultry Industries, Fargo, ND, 1999
41. Nolan, L.K. Balancing a Career in Science and Real Life. Phi Sigma Honor Society, NDSU, 2000
42. Nolan, L.K. Bacterial Virulence and Antimicrobial-Resistance Mechanisms. Department of Veterinary and Biomedical Sciences, University of Nebraska-Lincoln, 2000
43. Nolan, L.K. Are There Good *E. coli* and Bad *E. coli*? Poultry Health Symposium, Modesto, CA, 2000
44. Nolan, L.K., *et al.* The New Food Safety Minor at NDSU. Minnesota Public Radio, 2000
45. Nolan, L.K. Virulence Factors of APEC. World Poultry Congress, Montreal, Quebec, 2000
46. Nolan, L.K. Complement Resistance and Avian Colibacillosis. Women's Study Symposium, NDSU, Fargo, 2000
47. Nolan, L.K. *et al.* New Food Safety Minor at NDSU. Prairie Public TV, 2000
48. Nolan, L.K. Veterinary Medicine: A World of Opportunity. Annual Meeting of the Student American Veterinary Medical Association, Ames, IA, 2001
49. Nolan, L. K., Food Safety Minor at NDSU. *Fargo Forum*, 2001
50. Jensen, P.A. and Nolan, L.K., Food Safety Minor and Beyond. KFGO Radio Talk Show, 2001
51. Nolan, L. K. Multidisciplinary Teaching Collaboration. North Central Division of the American Phytopathological Society, Manhattan, KS, 2001
52. Nolan, L.K., Johnson, T.J., Foley, S.L., Horne, S.M., Giddings, C.W., Lynne, A.M., Kercher, R.M., and Skyberg, J. Complement Resistance, *iss* and its Associates, and APEC Virulence. 52nd North Central Avian Disease Conference, Grand Rapids, MI, 2001
53. Nolan, L.K. Emerging Disease: Should You Be Worried? North Dakota Educators Association: North Dakota Science Teacher Association Fall Conference. West Fargo, ND, 2001
54. Nolan, L.K. Bioterrorism. Dakota Medical Foundation. Fargo, ND, 2001
55. Nolan, L.K. Bioterrorism. NDSU Youth Leadership Conference. Fargo, ND, 2002
56. Nolan, L.K. Food Safety PhD. *Fargo Forum* and AP Wire. 2002
57. Nolan, L.K. Report to Governor on NDSU's Food Safety Programs. News 4 (KXJB-TV) Interview, 2002
58. Nolan, L.K. Food Safety Educational Programs. KFGO Radio Talk Show, 2002

59. Nolan, L.K. Academic Achievement and Real Life. Golden Key International Honor Society Annual Banquet, NDSU, 2002
60. Nolan, L.K. It's All about Students! North Georgia College and University, NDSU, 2002
61. Nolan, L.K. Emerging Disease. NDSU Orientation: Sample Lecture for Freshmen Parents. 2002
62. Nolan, L.K. Impact of Plasmid-Mediated Virulence and Antimicrobial Resistance on Production of Poultry. Minnesota Public Radio, 2002
63. Nolan, L.K. You are Making a Difference! NDSU Development Foundation Service Award Banquet. Fargo, 2002
64. Nolan, L.K. Possible Approaches to Improving Food Security: An Academician's Contribution. Bioterrorism and Food Security: Issues and Challenges Conference. Fargo, 2002
65. Nolan, L.K. Infectious Diseases and You. West Fargo High School Assembly. West Fargo, 2002
66. Nolan, L.K. Complement Resistance, *iss* and its Associates, and APEC Virulence, Department of Pathobiology and Veterinary Science, University of Connecticut. Storrs, CT, 2002
67. Nolan, L.K. Bioterrorism: Dispelling the Myths, 1st Presbyterian Church, Fargo, ND, 2003
68. Nolan, L.K. Developing a Vision for VMPPM's Future, Iowa State University, Ames, IA, 2003
69. Nolan, L.K. Being a Happy, Successful Student. Scholars' Recognition Luncheon, NDSU, Fargo, 2003
70. Nolan, L.K. Success is Measured in Many Ways. Beta Beta Beta Honor Society, ISU, Ames, IA, 2004
71. Nolan, L.K. and Johnson, T.J. Emergence of a Plasmid-Mediated Reservoir of Resistance Genes among APEC, Alliance for the Prudent Use of Antibiotics, ASM, Atlanta, 2005
72. Nolan, L.K., Johnson, T.J., Kariyawasam, S., Skyberg, J., Lynne, A., Wannemuehler, Y.M., and Scaccianoce, J. APEC Virulence and Resistance. Iowa Egg Industry Symposium, 2005
73. Nolan, L.K. APEC: Devastating Avian Pathogen; Possible Human One. Osborn Club, ISU, 2006
74. Nolan, L.K. APEC: Devastating Avian Pathogen; Possible Human One. Department of Veterinary Microbiology and Preventive Medicine, ISU, 2006
75. Nolan, L.K. APEC: Devastating Avian Pathogen; Possible Human One. University of Maryland, 2006
76. Nolan, L.K. APEC: Devastating Avian Pathogen; Possible Human One. National Farm Medicine Center, Marshfield Clinic Research Foundation, Marshfield, WI, 2006
77. Nolan, L.K. Academic Veterinary Medicine of the Future. University of Florida's College of Veterinary Medicine, 2006
78. Nolan, L.K. New Insights into an Old Enemy: What Genomic Sequencing Tells Us about *E. coli*. NC Veterinary Conference, North Carolina State University, Raleigh, 2006
79. Trampel, D., Wannemuehler, Y., and Nolan, L.K. APEC Virulence and Laying Hen Peritonitis. Iowa Egg Industry Symposium, 2006
80. Nolan, L.K. APEC: Latest Insights. Pacific Egg and Poultry Association Annual Conference, San Diego, 2007

81. Johnson, T.J. and Nolan, L.K. APEC: Latest Insights. National Institute on Animal Agriculture, Sacramento, CA, 2007
82. Nolan, L.K. Commencement Address. Missouri Academy, Northwest Missouri State University, Maryville, MO, 2007
83. Nolan, L.K. New Insights into an Old Enemy: What Genomic Sequencing Tells Us about APEC and Future Control of Colibacillosis. AgTech, Waukesha, WI, 2007
84. Nolan, L.K., Trampel, D.T., Wannemuehler, Y., and Johnson, T.J. Changing Nature of Avian Colibacillosis and APEC. Iowa Egg Symposium, 2007
85. Nolan, L.K. APEC, the Etiologic Agent of Avian Colibacillosis. Fort Dodge Animal Health, Puerto Vallarta, Jalisco, Mexico, 2008
86. Nolan, L.K. Antibiotic Resistance Reservoirs in Commensal Organisms. Sponsored by the Alliance for Prudent Use of Antibiotics and the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID), ASM Annual Meeting, Boston, 2008
87. Nolan, L.K. Iowa State University's Vision for Veterinary Medical Education. Second Annual Regional Planning Meeting, ISU-CVM, Ames, IA 2008
88. Nolan, L.K. CE for CVTs on Zoonoses. Annual Meeting of Montana Veterinary Medical Association (Big Sky Veterinary Technology Association), Livingston, MT, 2008
89. Tivendale, K.* and Nolan, L.K. Epidemic of APEC-Like Plasmids. Iowa Emerging Zoonosis Conference, National Animal Disease Center, Ames, IA, 2008
90. Nolan, L.K. APEC: Devastating Avian Pathogen; Possible Human One. University of Arizona, Tucson, 2009
91. Nolan, L.K. APEC: Devastating Avian Pathogen; Possible Human One. JiaoTong University, Shanghai; Nanjing Agricultural University, Nanjing; and Yangzhou University Veterinary College, Yangzhou, China, 2009
92. Nolan, L.K. Master Lecture. Poultry as a Potential Source of ExPEC Causing Human Disease. Asociación Nacional en Ciencias Avícolas de México, Acapulco, Mexico, 2009
93. Nolan, L.K. What Genomic Sequencing Tells Us about APEC and Future Control of Colibacillosis, College of Veterinary Medicine, University of Minnesota, 2009
94. Nolan, L.K. Keynote Address. What Genomic Sequencing Tells Us about APEC and Future Control of Colibacillosis, Bacterial Pathogenesis Section of CRWAD, Chicago, planned for 2009 (canceled due to a family emergency)
95. Nolan, L.K. Master Lecture. Pathogenomics of Extraintestinal Pathogenic *Escherichia coli*. Universidade Estadual de Campinas, Campinas, São Paulo State, Brazil, 2010
96. Nolan, L.K. One Health Approaches to Prevention of Infectious Diseases, University-Wide One Health Symposium, Iowa State University, March 2010
97. Trampel, D.W., Tivendale, K.A., Nolan, L.K., and Frana, T. Colibacillosis in Turkeys and APEC. Turkey producers in Washington, Jewell, and Storm Lake, IA, 2010

98. Nolan, L.K. Division Z Lecturer and Interplay between Antibiotic Resistance and Bacterial Virulence Symposium Speaker. Coselection of Bacterial Virulence and Resistance Determinants, ASM, San Diego, 2010
99. Nolan, L.K. Keynote Address. Exploring ExPEC Virulence, Evolution, and Host Specificity using Pathogenomic Approaches, The Prato Conference on the Pathogenesis of Bacterial Diseases of Animals, Prato, Italy, October 6-9, 2010
100. Nolan, L.K. What Genomic Sequencing Tells Us about APEC and Future Control of Colibacillosis, São Paulo, Recife, Campinas, and Porto Alegre, Brazil, October 25-29 2010
101. Nolan, L.K. Latest Advances in Colibacillosis. Iowa Egg Industry Symposium, November 2010
102. Nolan, L.K. Keynote Address. Insights in APEC Pathogenesis, Evolution and Control. XII South Brazil Poultry Symposium, Chapeco, Santa Catarina State, Brazil, April 2011
103. Nolan, L.K. Keynote Address. Changing Role for Women in Veterinary Medicine. Sloss Women's Center Gender Equity Awards and Scholarship Reception, Iowa State University, April 2011
104. Nolan, L.K. Keynote Address. Recent Insights into APEC Pathogenesis. XVII Congress of the World Veterinary Poultry Association, Cancun, Mexico, August 2011
105. Nolan, L.K. Invited Speaker, *Escherichia coli* Infections in Poultry: A Food Safety Concern? XVII Congress of the World Veterinary Poultry Association, Cancun, Mexico, August 2011
106. Nolan L.K. Invited Speaker, APEC Pathogenesis, Evolution and Zoonotic Potential, *Escherichia coli* Pathogenesis Symposium, Society for General Microbiology, York, UK, September 2011
107. Nolan, L.K. Invited speaker. Exploring APEC Virulence, Evolution, and Host Specificity using Pathogenomic Approaches, Sam Houston State University, September 2011
108. Nolan, L.K. Invited Speaker. Leadership from a Dean's Perspective, Iowa Way Up Conference, Des Moines, Iowa, November 2011
109. Nolan, L.K. Keynote Address. Exploring APEC Virulence, Evolution, and Host Specificity using Pathogenomics, Bacterial Pathogenesis Section of CRWAD, Chicago, December 2011
110. Nolan, L.K. Invited Seminar. Exploring APEC Virulence, Evolution, and Host Specificity using Pathogenomics. Des Moines University, February 2012
111. Nolan, L.K. Invited Speaker. Innovative Solutions in One Health – The Land-Grant Perspective, Farm Animal Integrated Research Conference, Washington, D. C., March 2012
112. Nolan, L.K. Keynote Lecture. New Insights into an Old Foe: What Pathogenomic Analysis Tells Us about APEC. Post-Graduate Symposium, Universidade Estadual de Campinas, Campinas, São Paulo State, Brazil, May 2012
113. Nolan, L.K. Invited Lecture. New Insights into an Old Foe: What Pathogenomic Analysis Tells Us about APEC. Centre for Biotechnology, Dept. Biofísica, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil, May 2012
114. Nolan, L.K. Keynote Talk. Colibacillosis: Diagnosis, Treatment and Prevention. AVECAO. Mexico City, Mexico, to be presented August 2012 (Declined due to prior obligations)

115. Nolan, L.K. Invited Speaker, APEC: A Food-Borne Pathogen Important in Human Urinary Tract Infections and Neonatal Meningitis? 19th China Yangling Agricultural Hi-Tech Fair, Yangling, P.R. China, November 2012
116. Nolan, L.K. Invited Speaker, Current Information on Colibacillosis Control. Big Bad Bug Symposium, Ottawa, Canada, November 2012
117. Nolan, L.K. Invited Speaker. Foodborne Urinary Tract Infections (FUTIs): Assessing the State of the Science. The Pew Charitable Trusts, Washington, D.C., February 2013
118. Nolan, L.K. and Li, G. Invited Speaker. Exploring the Zoonotic Potential of Avian Pathogenic *Escherichia coli*. Proteomics Workshop, Plant Animal Genome Conference, San Diego, CA, January 2014
119. Nolan, LK, Andreasen, CA, and Zhang, Q. One Health Initiative at Iowa State University. AAVMC, Washington, DC, March 2014
120. Nolan, L.K. Keynote Address. Functional Genomics to Study ExPEC's Virulence Mechanisms. Avian and Animal Annual Symposium, University of Maryland, May 2014
121. Nolan, L.K. Keynote Address. Pathogenomics of *Escherichia coli*. CVM Research Day. Mississippi State University, August 14, 2014
122. Nolan, L.K. Invited Speaker. XIV International Seminar on Poultry Production and Pathology, University of Chile and Amevea-Chile, Viña del Mar, Chile, October 15, 2014
123. Nolan, L.K. Invited Speaker. Women's History Month Speaker. Ames Area Civil Rights Advisory Committee, National Animal Disease Center, Ames Iowa, March 2015
124. Nolan, L.K. Recent Developments in Understanding Avian Pathogenic *Escherichia coli* Virulence, Resistance and Control. The Science behind *E. coli* Symposium, Western Association of Poultry Veterinarians, Banff, Alberta, October 2015
125. Nolan, L.K. Keynote Speaker. ExPEC: A Global 'One-Health' Pathogen. Turkish Veterinary Microbiology Congress, Cappadocia, Turkey, September 1, 2016 (Canceled for safety purposes)
126. Nolan, L.K. Seminar. Pathogenomics of Extraintestinal Pathogenic *Escherichia coli*. Department of Biomedical Sciences, ISU-CVM, Ames, Iowa, October, 2016
127. Nolan, L.K. Speaker. Living and Thriving on the Edge: Sharps Safety. ISU Symposium on Research Safety, October, 2016
128. Nolan, L.K. Keynote Speaker. ExPEC: A Global 'One-Health' Pathogen. Latin American Poultry Congress 2017, Guadalajara, Jalisco, México, September 2017 (Cancelled due to family emergency)
129. Nolan, L.K. Speaker. APEC: An Old Foe that Constantly Reinvents Itself. ISU Egg Industry Symposium, Ames, IA, November, 2017 (Cancelled due to family emergency)
130. Nolan, L.K., et al. FDA Science Board Subcommittee Review of the U.S. National Antimicrobial Resistance Monitoring System (NARMS), NARMS Symposium, Washington, D.C., October, 2017
131. Nolan, L.K. Speaker, Graduate Commencement, University of Georgia, Athens, GA, December, 2017

132. Nolan, L.K. Speaker, ExPEC: A Global 'One-Health' Pathogen, Phi Zeta Research Day, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA, February 2018
133. Nolan, L.K. Speaker. APEC/Secondary Bacterial Invaders of Poultry, National Meeting on Poultry Health, Processing and Live Production, Delmarva Poultry Industry, Ocean City, Maryland, October 8-10, 2018
134. Nolan, L.K. Speaker, APEC: A Worldwide One Health Problem, 21st World Veterinary Poultry Association Congress, Bangkok, Thailand, September 2019

TALKS REPRESENTING THE COLLEGE

Many presentations showcasing or advocating for the University of Georgia and Iowa State University Colleges of Veterinary Medicine and the veterinary profession to donors, alumni, potential students, stakeholders, commodity groups, advisory boards, visiting dignitaries, international groups, legislative committees and other stakeholders, including ISU's Emerging Leaders Academy, Iowa and Georgia Farm Bureaus, Georgia Cattlemen, Iowa Pork Producers, Iowa Turkey Producers, Iowa Veterinary Medical Association, Georgia and Iowa Veterinary Medical Associations' Executive Boards, Grow Iowa Ag, Ag States, Nebraska Veterinary Medical Association, numerous other VMAs, Iowa State Alumni Board of Governors, Waukee Rotary, etc., and in many different venues, e.g., Western Veterinary Conference, American Veterinary Medical Association, North American Veterinary Conference, American Association of Veterinary Medical Colleges, etc.