

CURRICULUM VITAE

Aaron Matthew Lynne

ADDRESS

Work 125C Lee Drain Building
Box 2116
Department of Biological Sciences
Sam Houston State University
1900 Avenue I
Huntsville, TX 77341
(936) 294-1544 (Office)
(936) 294-3940 (FAX)
aaronlynne@shsu.edu

CURRENT POSITION

Assistant Professor, Department of Biological Sciences, Sam Houston State University, Huntsville, TX 77380, August 2008-present.

EDUCATION

Ph.D., Molecular Pathogenesis, North Dakota State University, Fargo, ND, 2006.

B.S., Microbiology, North Dakota State University, Fargo, ND, 2000.

ACADEMIC/PROFESSIONAL AWARDS

Alpha Chi Outstanding Teacher, Sam Houston State University, 2010.

Travel Award to AVMA Convention, AAAP (Avian Medicine Section), 2001, 2002, 2006, 2007

Technology Transfer Graduate Traineeship, North Dakota State University, 2001, 2003

USDA Doctoral Fellowship, North Dakota State University, 2000.

RESEARCH INTERESTS

Understanding the molecular basis of virulence and antimicrobial resistance of *Escherichia coli* and *Salmonella* in humans and animals.

Understanding the microbial metagenome and molecular processes associated with putrefaction in order Mammalia with focus on forensic implications in *Homo sapiens*.

TEACHING AND ACADEMIC WORK EXPERIENCE

Assistant Professor, Department of Biological Sciences, Sam Houston State University, Huntsville, TX 77380, August 2008-present.

Post-Doctoral Fellow, National Farm Medicine, Marshfield Clinic Research Foundation, Marshfield, WI 54449, (with Dr. S.L. Foley) August 2006 - July 2008.

Post-Doctoral Research Associate, Department of Veterinary Microbiology and Preventative Medicine, Iowa State University, Ames, IA. (with Dr. L.K. Nolan) May 2006 – August 2006.

Pre-Doctoral Associate, Department of Veterinary Microbiology and Preventative Medicine, Iowa State University, Ames, IA (with Dr. L. K. Nolan) January 2004 – May 2006

Graduate Research Assistant, Department of Veterinary and Microbiological Sciences, North Dakota State University, (with Dr. L. K. Nolan) 2000- 2003.

Undergraduate Research Assistant, Department of Veterinary and Microbiological Sciences, North Dakota State University, (with Dr. L. K. Nolan) 1999-2000.

Undergraduate Research Assistant, United States Department of Agriculture Bioscience Research Laboratory, North Dakota State University, (with Dr. W. Shelver) 1999-2000

Adjunct Instructor, Human Anatomy and Physiology, University of Wisconsin Marshfield/Wood County, 2008.

Adjunct Instructor, Health Science Physiology, Des Moines Area Community College, 2004-2006.

Laboratory Instructor, Introductory Microbiology, North Dakota State University, 2000 – 2002.

Guest Lecturer, Pathogenic Microbiology, North Dakota State University, 2002, 2003.

Guest Lecturer, Introductory Microbiology, North Dakota State University, 2002, 2003.

North Dakota Biomedical Research Infrastructure Network (ND-BRIN) Graduate Teaching Intern, Minot State University, August 2002- December 2002.

Laboratory Instructor, General Microbiology, Minot State University, 2002.

Laboratory Instructor, Concepts of Biology, Minot State University, 2002.

Guest Lecturer, General Microbiology, Minot State University, 2002.

COURSES TAUGHT

Introductory Applied Microbiology
General Microbiology
Medical Microbiology
Molecular Biology
Virology
Molecular Pathogenesis
Biology Seminar
Human Anatomy and Physiology
Health Science Physiology
Honor's Seminar – Decision Making

COMMITTEE EXPERIENCE

Member, SHSU Department of Biological Sciences Budget Committee, 2013

Member, SHSU Department of Biological Sciences Visiting Professor Search Committee (Integrative Biologist), 2013

Member, SHSU Department of Biological Sciences Visiting Professor Search Committee (Cell/Molecular), 2013

Member, SHSU College of Science Undergraduate Research Award Committee, 2012- present

Member, SHSU Department of Biological Sciences Biomedical Committee, 2012 - present

Member, SHSU Department of Biological Sciences Animal Physiologist Search Committee, 2012

Member, SHSU Department of Biological Sciences Pre-Nursing Committee, 2010- present

Member, SHSU Department of Biological Sciences Graduate Committee, 2010-2013

Member, SHSU Department of Biological Sciences Student Research Award Committee, 2009- 2012

Member, SHSU Department of Biological Sciences Undergraduate Scholarship Committee, 2008- 2012

Member, SHSU Department of Biological Sciences Seminar Committee, 2008-present, Chair 2011-

Member, SHSU Department of Biological Sciences Space Utilization Committee, 2008- present, Chair 2011 -2012

Member, UW Colleges Senate Institutional Review Board, 2007- 2008.

REVIEWER EXPERIENCE

Journals

Editorial Board Member, *Journal of Microbiology and Biology Education* 2011-

Ad hoc reviewer, *BMC Microbiology*

Ad hoc reviewer, *Journal of Pathogens*

Ad hoc reviewer, *Avian Diseases*

Ad hoc reviewer, *Acta Veterinaria Scandinavica*

Ad hoc reviewer, *Letters in Applied Microbiology*

Ad hoc reviewer, *Foodborne Pathogens and Disease*

Ad hoc reviewer, *Revue De Medecine Veterinaire*

Ad hoc reviewer, *Veterinary Microbiology*

Ad hoc reviewer, *Zoonoses and Public Health*

Textbooks

Ad hoc reviewer, *Microbiology: An Evolving Science*, 3 ed. Slonczewski and Foster, Norton Publishing, 2013.

Ad hoc reviewer, *Microbiology: An Allied Health Perspective* 1 ed. Foster, Aliabadi and Slonczewski, Norton Publishing, 2011, 2012

Ad hoc reviewer, *Molecular Microbiology Laboratory: A Writing Intensive Course*, 2ed. Ream, Geller, Trempy and Field, Academic Press, 2011.

Ad hoc reviewer, *Microbiology: An Evolving Science*, 2 ed. Slonczewski and Foster, Norton Publishing, 2010.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Association of Avian Pathologist, 2006- 2008.

American Society for Microbiology, 2001- present.

GRADUATE STUDENTS DIRECTION

Major Professor

Cindy Botero, M.S. Tentative graduation August 2014. Thesis title “Potential Protein Candidates for Vaccine Development Against Avian Colibacillosis”

Daniel Haarmann, M.S. Tentative graduation August 2014. Thesis title: “Metagenomic Analysis of Human Decomposition”

Keri Powell, M.S. Tentative graduation May 2014. Thesis title: “A Comparative Analysis of Host Pathogen Interactions Among Several *Salmonella* Serovars and *Caenorhabditis elegans*”

Alison Garner, M.S. Aug 2010. Thesis title: “Genome Analysis of Salmonella Serovars: A Step Towards Understanding Differences in Pathogenicity and Host Specificity.”

Thesis Committee Member

Cheramie Trahan, M.S. May 2012. Thesis title: “The Rapid Evolution of Accessory Chromosomes in Bacteria: Role of Mutation, Selection, and Horizontal Gene Transfer”

Thesis Committee Member, Lin Lin, M.S. Aug 2010. Thesis title: “The Role of CtrA in *Rhodobacter sphaeroides* 2.4.1”

UNDERGRADUATE STUDENT DIRECTION

Mentor, Afifa Perkins, 2013-present, project: Plasmid Incompatibility Groups in *Salmonella* from Human Origin.

Mentor, Nwakaego Amaechia, 2013-present, project: Microbial Metagenomics of Human Decomposition.

Mentor, Nwakaego Amaechina, 2013- present: Metagenomic Analysis of Human Decomposition

Mentor, Dawn Fisher, 2013-present, project: Characterization of Antimicrobial Resistance in *Salmonella enterica* serovar Heidelberg isolates from Human Origin

Mentor, Lauren Smith, 2013-present, project: Characterization of Antimicrobial Resistance in *Salmonella enterica* serovar Typhimurrium isolates from Human Origin.

Mentor, Christopher Crocket, 2012, project: Bacterial Examination of a University Meat Processing Plant.

Mentor, Jordan Baker, 2011-2013, project: Metagenomics of Human Decomposition. **American Society for Microbiology Undergraduate Research Fellow.**

Mentor, Aaron Arnold, 2011-2013, project: Bacterial Examination of Raw Pet Foods

Mentor, Maria Garcia, 2011, project: Bacterial Examination of Raw Pet Foods.

Mentor, Jillian Carnes, 2010, project: Detection of *Salmonella* in Raw Pet Foods,

Mentor, Daniel Haarmann, 2010, project: Characterizing Antimicrobial Resistance in *Salmonella enterica* serovar Typhimurrium from Food Animals.

Mentor, Keri Kershaw, 2010-2011, project: Antimicrobial Selective Pressure in Conjugation of R Plasmids in *Salmonella*. **Elliot T. Bowers Honor's Thesis**

Mentor, Rebecca McNair, 2009-2010, project: Plasmid Incompatibility Groups in *Salmonella* from Food Animals.

Mentor, Brian Loudon, 2009-2011, project, Metagenomic Analysis of Human Decomposition.

Mentor, Cole Anderson, 2009-2010, project, IncFIB Plasmid Prevalence in *Salmonella enterica* serovar Typhimurrium.

Mentor, Melinda Carter, 2009, project: Prevalence of Virulence Genes Associated with a Putative Virulence Plasmid in *Salmonella enterica* serovar Typhimurrium.

Mentor, Nicole Bruey, 2009, project: Antimicrobial Resistance Genotypes in Select Isolates of *Salmonella enterica* serovar Typhimurrium.

Mentor, Shandilynne Wright, 2009, project: Antimicrobial Resistance in Select Isolates of *Salmonella enterica* serovar Typhimurium.

PRECOLLEGE STUDENT DIRECTION

Mentor, Erica Pack, Conroe ISD Academy of Science and Technology, 2013 9th Grade Science project

Mentor, Nicholas Domino, McCulloch Junior High, 2009 7th Grade Science Project.

STUDENT ORGANIZATION FACULTY ADVISOR

Sam Houston Association of Medically Oriented Students (SHAMOS) 2008-present

GRANTS RECEIVED AND PENDING

PI, Human Decomposition: A Mosaic Model for Community Succession and Implications for Future Forensic Research. National Institute of Justice Basic Scientific Research to Support Forensic Science for Criminal Justice Purposes, \$312,000. Funded January 2013- December 2015. Award # 2012-DN-BX-K023

Co-PI, Treatment of Pharmaceuticals and Sanitary Chemicals Using the Deployable Aerobic Aqueous Bioreactor Technologies. U.S. Army Engineer Research and Development Center. \$159,808. January 2013- Dec 2013. Award # W912HZ-11-1-0001-SHSU

PI, Virulence Plasmids of Salmonella. SHSU Faculty Research Grant. \$5,000. Funded May 2012- August 2012.

PI, DABB Support. Product Concept Development, INC. \$10,000. Funded June 2011-January 2012

PI, Microbial Metagenomic Analysis of Human Decomposition. SHSU Enhancement Research Grant. \$15,000. Funded May 2011 – April 2012.

PI, Antimicrobial Resistance in *Salmonella*. SHSU Faculty Research Grant. Funded May 2010 – August 2010. \$5,000.

PI, DNA Sequence Analysis of Plasmids from Multi Drug Resistant *Salmonella enterica* serovar Heidelberg Strains. Marshfield Clinic Research Foundation, Funded May 2007- April 2008. \$33,000

PI, Recombinant Iss Protein as a Vaccine Against Avian Colibacillosis. Iowa Livestock Health Advisory Council, Funded July 2006- June 2007. \$16,700.

PI, Recombinant Iss Protein as a Vaccine Against Avian Colibacillosis. Iowa Livestock Health Advisory Council, Funded July 2005- October 2006, \$25,875.

FUNDING RECEIVED

Doctoral Dissertation Assistantship. ND EPSCoR. February 2004 – December 2005, \$24,000

USDA Doctoral Fellowship, USDA-HEP National Need Fellowship Grant Program. February 2001 – January 2004, \$66,000

PUBLICATIONS/ACCEPTED MANUSCRIPTS IN REFERRED JOURNALS

Zhang, X., Glennie, C.L., Bucheli, S.R., and **Lynne, A.M.** 2013. Terrestrial Laser Scanning and a Degenerated Cylinder Model to Determine Gross Morphological Change of Cadavers under Conditions of Natural Decomposition. Forensic Science International. *In review*.

Bucheli, S.R., Pan, Z., Glennie, C.L., **Lynne, A.M.**, and Hill, J.M. 2013. Terrestrial Laser Scanning to Model Sunlight Irradiance on Cadavers Under Conditions of Natural Decomposition. International Journal of Legal Medicine. *In review*.

Hyde, E.R., Haarmann, D., **Lynne, A.M.**, Bucheli, S.R., and Petrosino, J.F. 2013. The Living Dead: Bacterial Community Structure of a Cadaver at the Onset and End of Bloat Stage of Decomposition. PLoS ONE. 8(10): e77733. Doi10.1371/journal.pone.0077733.

Gokulan, K., Khare, S., Rooney, A., Han, J., **Lynne, A.M.**, and Foley, S.L. 2013. Impact of VirB4/D4 Type IV Secretion System Encoding Plasmids on Salmonella enterica Serovar Heidelberg Invasion, Persistence and Innate Immune Response in Macrophages and Epithelial Cells. PLoS ONE. 8(10): e77866. Doi.1371/journal.pone.0077866.

Han, J., **Lynne, A.M.**, David, D.E., Tang, H., Xu, J., Nayak, R., Kaldhone, P., Logue, C.M., and Foley, S.L. 2012. DNA Sequence Analysis of Plasmids from Multidrug Resistant *Salmonella enterica* Serotype Heidelberg Isolates. PLoS One. 7(12) E51160. Doi:10.1371/journal.pone.0051160.

Lewis, M.L., Bucheli, S.R., and **Lynne, A.M.** 2012. Use of Microthemes to Increase Writing Content for Introductory Science Laboratory. Journal of Microbiology and Biology Education. 13(1):74-77

Lynne, A.M., Kariyawasam, S., Wannemuehler, Y., Johnson, T. J., Johnson, S. J., Spitler, D. K., Moon, H. W., Jordan, D. M., Logue, C. M., Foley, S. L., and Nolan, L. K. 2012. Recombinant Iss as a Potential Vaccine for Avian Colibacillosis. *Avian Diseases*. 56(1):192-199.

Louden, B.C., Haarmann, D., Han, J., Foley, S.L., and **Lynne, A.M.** 2012. Characterization of Antimicrobial Resistance in *Salmonella enterica* serovar Typhimurium isolates from Food Animals. *Food Research International*. 45(2): 968-972.

Marrero-Ortiz, R., Han, J., **Lynne, A.M.**, David, D.E., Stemper, M., Farmer, D., Burkhardt III W., Nayak, R. and Foley, S.L. 2012. Genetic Characterization of Antimicrobial Resistance in *Salmonella enterica* Serovars Isolated from Dairy Cattle. *Food Research International*. 45(2): 962-967.

Han, J., **Lynne, A.M.**, David, D.E., Nayak, R., Foley, S.L. 2012. Plasmid Mediated Antimicrobial Resistance in *Salmonella enterica* Serovar Dublin. *Food Research International*. 45(2):931-934.

Louden, B.C., Haarmann, D. and **Lynne A.M.** 2011. Use of Blue Agar CAS Assay for Siderophore Detection. *Journal of Microbiology and Biology Education*. 12(1):51-53

Han, J., David, D.E., Deck, J. **Lynne, A.M.**, Kaldhone, P., Nayak, R., Stefanova, R., and Foley, S.L. 2011. Comparison of *Salmonella enterica* serovar Heidelberg Isolated from Human Patients. *Journal of Clinical Microbiology*. 49(3):1130-33

Johnson, T.J., Thorsness, J.L., Anderson, C.P., **Lynne, A.M.**, Foley, S.L., Han, J., Fricke, W.F., McDermott, P.F., White, D.G., Khatri, M., Stell, A.L., Flores, C., and Singer, R.A. 2010. Horizontal Gene Transfer has Resulted in a Dominant Avian Clonal Type of *Salmonella enterica* serovar Kentucky. *PLoS ONE* 5(12): e15524. doi:10.1371/journal.pone.0015524

David, D.E., **Lynne, A.M.**, Han, J., and Foley, S.L. 2010. Evaluation of Virulence Factor Profiling in the Characterization of Veterinary *Escherichia coli* Isolates. *Appl. Environ. Microbiol.* 76(22):7509-13.

Foley, S. L., **Lynne, A. M.**, and Nayak, R. 2009. Molecular Typing Methodologies for Microbial Source Tracking and Epidemiological Investigations of Bacterial Foodborne Pathogens. *Infect. Genet. Evol.* 9(4):430-40.

Lynne, A.M., Dorsey, L.L., David, D, Kaldhone, P., and Foley, S.L. 2009. Characterization of antimicrobial resistance in host-adapted *Salmonella enterica*. *Int. J. Antimicrob Agents*. 34(2):169-72.

Lynne, A.M., Kaldhone, P., White, D.G., and Foley, S.L. 2009. Characterization of antimicrobial resistance in *Salmonella enterica* serotype Heidelberg from veterinary sources. Foodborne Pathog Dis. 6(2):207-15

Kaldhone, P., Nayak, R., **Lynne, A.M.,** McDermott, P.F., Logue, C.M., and Foley, S.L. 2008. Characterization of *Salmonella enterica* serovar Heidelberg from pre-harvest and post-harvest turkey sources. Appl Environ Microbiol. 74(16):5038-46.

Foley, S.L. and **Lynne, A.M.** 2008. Food Animal-Associated *Salmonella* Challenges: Pathogenicity and Antimicrobial Resistance. J Anim Sci. 86(14 Suppl):E173-87.

Foley, S.L., **Lynne, A.M.,** and Nayak, R. 2008. *Salmonella* Challenges: Prevalence in Swine and Poultry and Potential Pathogenicity of Such Isolates. J Anim Sci. 86(14 Suppl):E149-62.

Lynne, A.M., Rhodes-Clark, B.S., Bliven, K., Zhao, S. and Foley, S.L. 2008. Antimicrobial Resistance Genes Associated with *Salmonella enterica* serovar Newport Isolates from Veterinary Sources. Antimicrobial Agents and Chemotherapy. 52(1):353-356

Lynne, A.M., Skyberg, J.A., Logue, C.L., Doetkott, C., Foley, S.L., and Nolan, L.K. 2007. Characterization of a Series of Transconjugant Mutants of an Avian Pathogenic *Escherichia coli* Isolate for Resistance to Serum Complement. Avian Diseases 51:771-776.

Johnson, T.J., Kariyawasam, S., Wannemuehler, Y., Mangiamale, P., Johnson, S.J., Doetkott, C., Skyberg, J.A., **Lynne, A.M.** and Nolan, L.K. 2007. Genome Sequence of Avian Pathogenic *Escherichia coli* Strain O1:K1 Shares Strong Similarities with Human ExPEC Genomes. Journal of Bacteriology. 189(8):3228-3236.

Lynne, A.M., Skyberg, J.A., Logue, C.M., and Nolan, L.K. 2007. Detection of Iss and Bor on the Surface of *Escherichia coli*. Journal of Applied Microbiology. 102(3):660-666.

Lynne, A.M., Foley, S.L., and Nolan, L.K., 2006. Characterization of Monoclonal Antibodies Against Avian *Escherichia coli* Iss. Avian Diseases. 50:445-449.

Lynne, A.M., Foley, S.L., and Nolan L.K., 2006. Immune Response to Recombinant *Escherichia coli* Iss Protein in Poultry. Avian Diseases 50:273-276.

Nolan, L.K., Horne, S.M., Giddings, C.W., Foley, S.L., Johnson, T.J., **Lynne, A.M.,** and Skyberg, J., 2003. Resistance to Serum Complement, iss, and

Virulence of Avian *Escherichia coli*. Veterinary Research Communications 27:101-110.

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 Colisepticemic Lesions in Chickens. Avian Disease 46:48-52

BOOK CHAPTERS

Powell, K.E., Garcia, M.C. and **Lynne, A.M.** 2012. Selective Pressure Potential of Antimicrobial Agents to Facilitate Spread of Resistance Plasmids in *Salmonella*. In: *Salmonella: Classification, Genetics and Disease Outbreaks*. Eds. Gotsiridze-Columbus, Nova Publishing Inc., New York.

Garner, A., Bavishi, A., Anderson, C.P., Choudhary, M., and **Lynne, A.M.** 2012. Genome Comparisons of *Salmonella*: Functional Conservation of Genes within Pathogenicity Islands. In *Salmonella: Classification, Genetics and Disease Outbreaks*. Eds. Gotsiridze-Columbus, Nova Publishing Inc., New York.

Foley, S.L, **Lynne A.M.**, Nayak, R., Shukla, S.K. and Johnson, T.J. 2012. Subtyping of Bacterial Foodborne Pathogens: Phenotypic Methods and an Introduction to Molecular Methods In: *Molecular Typing Methods for Tracking Foodborne Microorganisms*. Eds. Foley, S.L., Nayak, R., Johnson, T.J., and Shukla, S. Nova Publishing Inc., New York.

Lynne, A.M., and Louden, B.C. 2012. PCR-based Genotyping: Virulence and Antimicrobial Resistance Genes. In: *Molecular Typing Methods for Tracking Foodborne Microorganisms*. Eds. Foley, S.L., Nayak, R., Johnson, T.J., and Shukla, S. Nova Publishing Inc., New York.

Foley, S. L. Ge, B., Schroeder, C. M., and **Lynne, A. M.** 2011. Pathogen Elimination: Antibiotic and Disinfectant Use and the Development of Resistance. In: *Techniques for the Study of Hospital Acquired Infection*. Eds. Zervos, M., Simjee, S. Chen, A. Y., and Foley, S. L. John Wiley and Sons Publishers, New York.

Foley, S. L, **Lynne, A.M.**, and Nayak, R. 2008. Molecular Typing Methods of Enterobacteriaceae. In: *Molecular Typing in Bacterial Infections*. Eds. McKee, M. and de Fillipis, I. Humana Press, Totowa, NJ. Chapter submitted.

PUBLISHED ABSTRACTS

Baker, J., Haarmann, D., Alicki, E.R. Petrosino, J., Bucheli, S.R. and **Lynne, A.M.** Microbiome of Human Decomposition. Proceedings of ASM General Meeting, Denver, CO. May 2013.

Powell, K.E. and **Lynne A.M.** A Comparative Analysis of Host-Pathogen Interactions Among Several *Salmonella* Serovars and *Caenorhabditis elegans*. Proceedings of ASM General Meeting, Denver, CO. May 2013.

Han, J., **Lynne, A.M.**, David, D., Tang, H., Nayak, R., and Foley, S.L., Comparative Analysis of Incompatibility Group FIB Plasmids from Multidrug Resistant *Salmonella enterica* Serotype Heidelberg Isolates. Proceedings of ASM General Meeting, San Francisco, CA 94102. June 2012.

Haarmann, D.P. and **Lynne, A.M.** Characterization of a Novel IncFIB Virulence Plasmid in *Salmonella enterica* serovar Typhimurium. Proceedings of ASM General Meeting. San Francisco, CA 94102. June 2012

Foley, S.L., Han, J., **Lynne, A.M.**, and David, D.E., Plasmid Mediated Antimicrobial Resistance in *Salmonella enterica* Serovar Dublin. Proceedings of 2nd ASM Conference on Antimicrobial Resistance in Zoonotic Bacteria and Foodborne Pathogens in Animals, Humans, and the Environment. Toronto, Canada. June 2010.

Foley, S.L., David D.E. and **Lynne A.M.** Sequencing from a Multidrug Resistant *Salmonella enteric* Serotype Heidelberg Isolate from Turkey. Proceedings of ASM General Meeting. Philadelphia, PA May 2009.

Lynne, A.M., Foley, S.L., Kariyawasam, S., and Nolan, L.K. Recombinant Iss as a Vaccine for Avian Colibacillosis. Proceedings of AVMA/AAAP. New Orleans, LA, July 2008.

Lynne, A.M., and Foley S.L. 2008. Sequencing a VirB/D4 Containing Plasmid from *Salmonella enterica* serovar Heidelberg Isolate. Proceedings of ASM General Meeting. Boston, MA, June 2008

Kaldhone, P.R., Nayak, R., **Lynne, A.M.**, White, D.G., Logue, C.M., and Foley, S.L.. 2007. Characterization of Antimicrobial Resistance in *Salmonella enterica* serovar Heidelberg from Turkey Associated Sources. Proceedings of NCASM Annual Meeting. Marshfield, WI, Oct 2007.

Dorsey, L.L., **Lynne, A.M.**, David, D. and Foley, S.L. 2007. Antimicrobial Resistance with Host-adapted *Salmonella enterica*. Proceedings of NCASM Annual Meeting. Marshfield, WI, Oct 2007.

Lynne, A.M., and Foley, S.L. 2007. Plasmid Mediated Antibiotic Resistance in *Salmonella enterica* serovar Heidelberg from Turkeys. Proceedings of AVMA/AAAP Annual Meeting. Washington, DC, July 2007.

Lynne, A.M., Logue, C.M. and Nolan, L.K. 2006. Detection of Iss on the Surface of *Escherichia coli*. Proceeding of AVMA/AAAP Annual Meeting, Honolulu, HI, July 2006.

Lynne, A.M. and Nolan, L.K. 2004. Production of Monoclonal Antibodies Against Avian *Escherichia coli* Iss. Proceedings of CRWAD Annual Meeting, Chicago, IL, November 2004.

Lynne, A.M., Foley, S.L., Powell, K., Linz, P., and Nolan L.K. 2004. Immune Response to *Escherichia coli* Iss in Poultry. Proceeding of NCAD Annual Meeting, Ames, IA, October 2004.

Lynne, A.M., Horne, S.M., Foley S.L., and Nolan, L.K. 2002. Production of Monoclonal Antibodies Against Avian *Escherichia coli* Iss. Proceeding of AVMA/AAAP Annual Meeting, Nashville, TN, July 2002.

Lynne, A.M., Horne, S.M., Giddings, C.W., Nolan, L.K. 2001. Screening a Genomic Library of a Virulent Avian *Escherichia coli* Isolate for *iss*. Proceeding of AVMA/AAAP Annual Meeting, Boston, MA, July 2001.

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. 2001. Virulence Factors Occurring Among Avian *Escherichia coli* Isolates from Septicemia and Cellulitis. Proceedings of AVMA/AAAP Annual Meeting, Salt Lake City, UT, July 2000.

PRESENTATIONS

Haarmann, D.E., Hyde, E.R., Bucheli, S.R., Petrosino, J.F., and **Lynne, A.M.** A Preliminary Study of Shifting Bacterial Communities During Human Cadaver Decomposition in Southeast Texas. ASM Texas Branch Fall Meeting. New Orleans, LA. November 2013.

Powell, K.E. and **Lynne, A.M.** A Comparative Analysis of Host-Pathogen Interactions Among Several *Salmonella* Serovars and *Caenorhabditis elegans*. ASM Texas Branch Fall Meeting. New Orleans, LA. November 2013.

Fisher, D.M., Smith, L.R, Haarmann, D.P., and **Lynne, A.M.** Characterization of Antimicrobial Resistance Phenotypes in *Salmonella enterica* serovar Typhimurium from Human Isolates. ASM Texas Branch Fall Meeting. New Orleans, LA. November 2013.

Smith, L.R., Fisher, D.M, Haarmann, D.P., and **Lynne, A.M.** Characterization of Antimicrobial Resistance Genes in *Salmonella enterica* serovar Typhimurium

from Human Isolates. ASM Texas Branch Fall Meeting. New Orleans, LA. November 2013.

Baker, J., Haarmann, D., Alicki, E.R. Petrosino, J., Bucheli, S.R. and **Lynne, A.M.** Microbiome of Human Decomposition. ASM General Meeting, Denver, CO. May 2013.

Powell, K.E. and **Lynne A.M.** A Comparative Analysis of Host-Pathogen Interactions Among Several *Salmonella* Serovars and *Caenorhabditis elegans*. ASM General Meeting, Denver, CO. May 2013.

Baker, J., Haarmann, D., Alicki, E.R. Petrosino, J., Bucheli, S.R. and **Lynne, A.M.** Microbiome of Human Decomposition. ASM Texas Branch Fall Meeting. Waco TX 76798 . October 2012.

Haarmann, D.P. and **Lynne, A.M.** Characterization of a Novel IncFIB Virulence Plasmid in *Salmonella enterica* serovar Typhimurium. ASM Texas Branch Fall Meeting. Waco TX 76798 . October 2012.

Han, J., **Lynne, A.M.**, David, D., Tang, H., Nayak, R., and Foley, S.L., Comparative Analysis of Incompatibility Group FIB Plasmids from Multidrug Resistant *Salmonella enterica* Serotype Heidelberg Isolates. ASM General Meeting, San Francisco, CA 94102. June 2012.

Haarmann, D.P. and **Lynne, A.M.** Characterization of a Novel IncFIB Virulence Plasmid in *Salmonella enterica* serovar Typhimurium. ASM General Meeting. San Francisco, CA 94102. June 2012

Lynne, A.M. Laboratory Exercise to Facilitate Active Research Style Learning. ASM Conference for Undergraduate Educators, San Mateo, CA 94402, June 2012

Lynne, A.M. The Microbiome of Death: Microbial Biodiversity of Human Decomposition. North Dakota State University, Fargo, ND 58105. April 2012.

Arnold, A.D. and **Lynne, A.M.** Bacterial Analysis of Bone and Raw Food Diets for Pets. SHSU Undergraduate Research Symposium, Huntsville, TX 77341. April 2012

Haarmann, D.P., Bucheli, S.R. and **Lynne, A.M.** Metagenomic Analysis of Human Body Decomposition. Texas Branch ASM Spring Meeting, New Braunfels, TX 78132. March 2012.

Arnold, A.D. and **Lynne, A.M.** Bacterial Analysis of Bone and Raw Food Diets for Pets. Texas Branch ASM Fall Meeting. Arlington, TX 76019. November 2011.

Garcia, M., Kershaw, K., and **Lynne, A.M.** Selective Pressure Potential of Antimicrobial Agents to Facilitate Spread of Resistance Plasmids in *Salmonella enterica*. Texas Branch ASM Fall Meeting. Arlington, TX 76019. November 2011.

Haarmann, D.P. and **Lynne, A.M.** Characterization of a Novel IncFIB Virulence Plasmid in *Salmonella enterica* serovar Typhimurium. Texas Branch ASM Fall Meeting. Arlington, TX 76019. November 2011

Bucheli, S.R. and **Lynne, A.M.** Writing in Biology. College of Humanities and Social Sciences Annual Teaching Conference. Huntsville, TX 77341. August 2011.

Garcia, M. and **Lynne, A.M.** Bacteriological Examination of Raw Pet Foods. SHSU Undergraduate Research Symposium, Huntsville, TX 77341. April 2011.

Garcia, M. and **Lynne, A.M.** Bacteriological Examination of Raw Pet Foods. Beta Beta Beta Annual Research Symposium, Kingston, OK 73439. April 2011.

Garcia, M. and **Lynne, A.M.** Bacteriological Examination of Raw Pet Foods. SHSU Biological Sciences Research Symposium, Huntsville, TX 77341. April 2011.

Kershaw, K., and **Lynne, A.M.** Selective Pressure Potential of Antimicrobial Agents to Facilitate Spread of Resistance Plasmids. SHSU Biological Sciences Research Symposium, Huntsville, TX 77341. April 2011.

Garcia, M. and **Lynne, A.M.** Bacteriological Examination of Raw Pet Foods. Texas Branch ASM Spring Meeting. New Braunfels, TX 78132. March 2011.

Kershaw, K., and **Lynne, A.M.** Selective Pressure Potential of Antimicrobial Agents to Facilitate Spread of Resistance Plasmids. Texas Branch ASM Spring Meeting. New Braunfels, TX 78132. March 2011.

Louden, B.C., Bucheli, S.R. and **Lynne, A.M.** Metagenomic Analysis of Human Decomposition. Texas Branch ASM Spring Meeting. New Braunfels, TX 78132. March 2011.

Lynne, A.M. Antimicrobial Resistance and Virulence Plasmids of *Salmonella*. Texas Branch ASM Spring Meeting. New Braunfels, TX 78132. March 2011.

Louden, B.C., Bucheli, S.R. and **Lynne, A.M.** Metagenomic Analysis of Human Decomposition. Microbial Genomics and Metagenomics Workshop. Walnut Creek, CA. October 2010.

Foley, S.L., Han, J., **Lynne, A.M.**, and David, D.E., Plasmid Mediated Antimicrobial Resistance in *Salmonella enterica* Serovar Dublin. 2nd ASM Conference on Antimicrobial Resistance in Zoonotic Bacteria and Foodborne Pathogens in Animals, Humans, and the Environment. Toronto, Canada. June 2010.

Garner, A., Anderson, C.P., Bavishi, A., Choudhary, M., and **Lynne, A.M.** Genome Analysis of *Salmonella* Serovars: A Step Towards Understanding Differences in Pathogenicity and Host Specificity. Texas Branch ASM Spring Meeting. New Braunfels, TX 78132. April 2010.

McNair, R.L., Kershaw, K., and **Lynne, A.M.** Plasmid Replicon Typing of *Salmonella enterica*. Texas Branch ASM Spring Meeting. New Braunfels, TX 78132. April 2010.

Garner, A., Anderson, C.P., Bavishi, A., Choudhary, M. and **Lynne, A.M.** *Salmonella* Genome Comparisons: Evolution of Serovar Pathogenicity and Host Adaptation. Texas Branch ASM Fall Meeting. Tyler, TX. November 2009.

Foley, S.L., David D.E. and **Lynne A.M.** Sequencing from a Multidrug Resistant *Salmonella enteric* Serotype Heidelberg Isolate from Turkey. ASM General Meeting. Philadelphia, PA May 2009.

Lynne, A.M. Genetic Characterization of Antimicrobial Resistance in *Salmonella* serotypes from Food Animals. Lone Star College. The Woodlands, TX. April 2009.

Anderson, C. P., Bavishi, A., Choudhary, M., and **Lynne, A.M.** Genome Analysis of Three Strain of *Salmonella enterica*. Texas Branch ASM Spring Meeting. New Braunfels, TX. April 2009.

Lynne, A.M., Foley, S.L., Kariyawasam, S., and Nolan, L.K. Recombinant Iss as a Vaccine for Avian Colibacillosis. AVMA/AAAP. New Orleans, LA. July 2008.

Lynne, A.M., and Foley, S.L. Sequencing of a VirB/D4 Type IV Secretion System Containing Plasmid from *Salmonella enterica* Serotype Heidelberg. ASM General Meeting. Boston, MA. June 2008.

Lynne, A.M. Genetic Characterization of Antimicrobial Resistance in *Salmonella* serotypes from Food Animals. Coastal Carolina University, Conway SC. Mar 2008.

Lynne, A.M. Genetic Characterization of Antimicrobial Resistance in *Salmonella* serotypes from Food Animals. University of Wisconsin-River Falls, River Falls, WI. Mar 2008.

Lynne, A.M. Recombinant DNA Technology. Indiana University East. Richmond, IN. Feb 2008.

Lynne, A.M. Genetic Characterization of Antimicrobial Resistance in *Salmonella* serotypes from Food Animals. Sam Houston State University. Huntsville, TX. Feb 2008.

Lynne, A.M. Genetic Characterization of Antimicrobial Resistance in *Salmonella* serotypes from Food Animals. Eastern Illinois University. Charleston, IL. Jan 2008.

Lynne, A.M. Characterization of Antimicrobial Resistance in *Salmonella* serotypes from Animals. Purdue University Calumet. Hammond, IN. Dec 2007.

Kaldhone, P.R., Nayak, R., **Lynne, A.M.**, White, D.G., Logue, C.M., and Foley, S.L. Characterization of Antimicrobial Resistance in *Salmonella enterica* serovar Heidelberg from Turkey Associated Sources. NCASM Annual Meeting. Marshfield, WI, Oct 2007.

Dorsey, L.L., **Lynne, A.M.**, David, D. and Foley, S.L. Antimicrobial Resistance with Host-adapted *Salmonella enterica*. NCASM Annual Meeting. Marshfield, WI, Oct 2007.

Lynne, A.M., and Foley, S.L. Plasmid Mediated Antibiotic Resistance in *Salmonella enterica* serovar Heidelberg from Turkeys. AVMA/AAAP Annual Meeting. Washington, DC, July 2007

Lynne, A.M., Logue, C.M. and Nolan, L.K. Detection of Iss on the Surface of *Escherichia coli*. AVMA/AAAP Annual Meeting, Honolulu, HI, July 2006

Lynne, A.M. and Nolan, L.K. Production of Monoclonal Antibodies Against Avian *Escherichia coli* Iss. CRWAD Annual Meeting, Chicago, IL, November, 2004

Lynne, A.M., Foley, S.L., Powell, K., Linz, P., and Nolan L.K. Immune Response to *Escherichia coli* Iss in Poultry. NCAD Annual Meeting, Ames, IA, October, 2004.

Lynne, A.M. and Nolan, L.K. Iss Based Control Strategies for Colibacillosis. CATT Spring Symposium, Fargo, ND, April 2004.

Lynne, A.M., Horne, S.M., Foley S.L., and Nolan, L.K. Production of Monoclonal Antibodies Against Avian *Escherichia coli* Iss. AVMA/AAAP Annual Meeting, Nashville, TN, July 2002.

Lynne, A.M., Foley, S.L., and Nolan, L.K. Production of Monoclonal Antibodies Against Avian *Escherichia coli* Iss. CATT Spring Symposium, Fargo, ND, April 2002.

Lynne, A.M., Horne, S.M., Giddings, C.W., and Nolan, L.K. Screening a Genomic Library of a Virulent Avian *Escherichia coli* Isolate for *iss*. AVMA/AAAP Annual Meeting, Boston, MA, July 2001.

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. Comparison of Virulence Factors in *Escherichia coli* Associated with Cellulitis or Colisepticemia in Chickens. AVMA/AAAP Annual Meeting, Salt Lake City, UT, July 2000.

Aaron M. Lynne

REFERENCES

Lisa K. Nolan, Ph.D., D.V.M.
Dean
College of Veterinary Medicine
Iowa State University
Ames, IA 50011
515-274-3534
lknolan@iastate.edu

Steven L. Foley, Ph.D.
Division of Microbiology
National Center for Toxicological Research
U.S. Food and Drug Administration
3900 NCTR Road
Jefferson, AR 72079
Phone: (870) 543-7547
steven.foley@fda.hhs.gov

Catherine Logue, Ph.D.
Professor
Department of Veterinary Microbiology and Preventive Medicine
Iowa State University
Ames, IA 50011
cmlogue@iastate.edu

Heidi Super, Ph.D.
Associate Professor
Biology Department
Minot State University
500 University Avenue West
Minot, ND 58707
701-858-3079
superh@minotstateu.edu