

CURRICULUM VITAE

Aaron Matthew Lynne

ADDRESS

Work


Department of Biological Sciences
Sam Houston State University


CURRENT POSITION

Professor, Department of Biological Sciences, Sam Houston State University,
Huntsville, TX 77380, August 2020 – present.

Chair, Department of Biological Sciences, Sam Houston State University,
Huntsville, TX 77380, August 2020-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

SHSU Faculty Excellence in Scholarly and Creative Accomplishments, 2019

SHSU College of Science and Engineering Technology Faculty Award for
Excellence in Research, 2018

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*.

Identification of novel antibiotics from soil bacteria.

TEACHING AND ACADEMIC WORK EXPERIENCE

Chair, Department of Biological Sciences, Sam Houston State University, Huntsville, TX 77341, August 2020 – Present

Professor, Department of Biological Sciences, Sam Houston State University, Huntsville, TX 77341, August 2020 – Present

Assistant Chair, Department of Biological Sciences, Sam Houston State University, Huntsville, TX 77380, August 2017 – August 2020.

Associate Professor, Department of Biological Sciences, Sam Houston State University, Huntsville, TX 77341, August 2014 – August 2020.

Assistant Professor, Department of Biological Sciences, Sam Houston State University, Huntsville, TX 77341, August 2008-August 2014.

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.

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

COURSES TAUGHT

Introductory Applied Microbiology
General Microbiology
Medical Microbiology
Molecular Biology
Virology
Molecular Pathogenesis
Metagenomics
Microbial Ecology
Biology Seminar
Seminar in Biology Research
Human Anatomy and Physiology
Health Science Physiology
Honor's Seminar – Decision Making
Honor's Seminar – Science and Movies
Honor's Seminar – The Beginning

COMMITTEE EXPERIENCE

Chair, SHSU Department of Biological Sciences Budget Committee, 2020 – present.

Chair, SHSU Department of Biological Sciences Joey Harrison Research Award, 2016 – present.

Member, SHSU College of Osteopathic Medicine Research Committee, 2019-present.

Chair, SHSU Department of Biological Sciences Biomedical Sciences Degree Review Committee, 2018-present.

Chair, SHSU Department of Biological Sciences Biology Degree Review Committee, 2018-present

Member, SHSU Department of Biological Sciences Administrative Associate Search Committee, 2019

Member, SHSU Department of Biological Sciences Administrative Assistant Search Committee, 2018

Member, SHSU Department of Biological Sciences Assistant to the Chair Search Committee, 2018

Chair, SHSU Department of Biological Sciences Microbiologist Search Committee, 2017.

Member SHSU Medical School Evaluation Committee, 2016-present. Chair 2020-present

Member, SHSU Standing Faculty Tenure Committee, 2015-2018. Chair 2016-2017

Member, SHSU Department of Biological Sciences Budget Committee, 2013-present

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- 2013

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, 2015- 2020, Chair 2018-2020

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 2011-2013

Member, SHSU Department of Biological Sciences Space Utilization Committee,
2008- present, Chair 2011 -2012, 2015-2018

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

REVIEWER EXPERIENCE

Journals

Editorial Board Member, *Journal of Microbiology and Biology Education* 2011-
2020

Editorial Board Member, Antimicrobials, Resistance, and Chemotherapy,
Frontiers in Microbiology, 2021-present

Ad hoc reviewer, *Microorganisms*

Ad hoc reviewer, *PLoS One*

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*

Ad hoc reviewer, *Frontiers in Microbiology*

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.

Texas Academy of Sciences, 2018-present

GRADUATE STUDENTS DIRECTION

Major Professor

Max Lannom, M.S. Tentative graduation Dec 2023. Thesis title “Dissolved Organic Carbon as a Driver of Microbial Diversity”

Adalia Brixen, M.S. Tentative graduation Aug 2023. Thesis title “Soil Microbiome Succession of Cadaver Islands in Southeast Subtropical Texas”

Veronica Rodriguez, M.S. Tentative graduation Aug 2023. Thesis title “Characterization of Plasmids in *Salmonella enterica* human clinical isolates.”

Jonathon Corral, M.S. December 2022. Thesis title “Identification of Homologous Secretion System Genes found in *Pseudomonas* Isolates during Antimicrobial Production”

Rachel Aaron, M.S. December 2022. Thesis title “Microbiome Analysis of Soil after Colonization with Antibiotic Producing *Pseudomonas* Isolate”

Caitlyn Gaffney, M.S. Dec 2020. “Identification of Bacteria and their antimicrobial properties against 5 multi-drug Resistant Salmonella strains from soil samples in the Piney Woods of Texas using comparative genomics”

Cindy Botero, M.S. December 2017. Thesis title “Determining the interactions between serum proteins of the complement system and outer membrane proteins in avian pathogenic *Escherichia coli*”

Lauren Sommer, M.S. May 2017. Thesis title “Evolutionary Analysis of the B56 Subunit of Protein Phosphatase 2A and the effect of cancer-associated PP2A A subunit mutations on the Wnt signaling pathway”

Dawn Burns, M.S. Dec 2016. Thesis title “The Host-Pathogen Interactions between *Salmonella enterica* serovars and Aging *Caenorhabditis elegans*”

Lauren Smith, M.S. May 2016. Thesis title “A Study of the Spatial and Temporal Features of the Human Face Microbiome During Cadaver Decomposition in Southeast Texas”

Keri Powell, M.S. 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

Ally Jackson, M.S.

Molly Sarles, M.S. Tentative graduation Dec 2023 Thesis title “A Comparison of Quantitative Scoring Methodologies for Estimation of Postmortem Interval for Use in Forensic Investigation”

Emily Hayes, M.S. Tentative graduation Dec 2023 Thesis title “Do Cell Culture Conditions or Bisphenol A (BPA) Treatment Affects the Wound Healing Response In Vitro?”

Bethany Walker, M.S. Tentative graduation Dec 2023. Thesis title “The Seasonal Diptera Larval Species Richness During Decomposition and the comparison to current successional models”

Sarah Owen, M.S. Tentative Graduation, May 2023. Thesis title “Colorado Tick Fever Virus Mediated Apoptosis in Human Endothelial Cells”

Megan Burch, M.S., Dec 2022. Thesis title “The Development of a SYBR Green-based RT-qPCR for the Detection and Quantification of Lone Star Virus”

Stephanie Baker, M.S. May 2022. Thesis title “The Quantitative Analysis of Cranial Trauma”

Irma Zia, M.S. Dec 2020. Thesis title “ Effects of Acute and Chronic DBP Exposure on the Inflammatory Response and Wound Healing Process *In Vivo* ”

Christian Mandujano, M.S. May 2020. Thesis title “Investigating The Effects of *Ophryocystis elektroscirrha* On The Monarch Butterfly (*Danaus plexippus*)”

Amanda Walton, M.S. Tentative graduation Dec 2020. Thesis title “TBD”

Jeanette Carlson, M.S. Aug 2020. Thesis title “Environment Influences Early but not Late Recovery of Disrupted Fish Skin Microbiome”

Eliana Stetco, M.S. Dec 2019. Thesis title “*Gambusia affinis* as a model for the investigation of inflammatory Bowel Disease, inflammation, and antibiotic usage: an exploratory study”

Mary Ruble, M.S. May 2018. Thesis title “Microbiome of human femurs during decomposition.” Co-Advising with Dr. Lewis

Dorothy Madamba, M.S. Aug 2017. Thesis Title: Effect of *Ignatzschineria* (Gammaproteobacteria; Xanthomonadales) bacteria on rate of decomposition in mice.

Hannah Johnson, M.S. Aug 2016. Thesis title “Analysis of Au (III) Tolerance in *R. sphaeroides*.”

Raymond Berry, M.S. Aug 2016. Thesis title “The significance of fly-borne bacteria *Ignatzschineria* (Diptera) on decomposition associated with human cadavers” Co-Advising with Dr. Bucheli

Chelcy Brumlow, M.S. Aug 2016. Thesis title “What drives microbiome community composition: An analysis of the skin microbiome community of *Gambusia affinis*”

Keli King, M.S. Aug 2016. Thesis title “Microbiome of flies associated with human cadavers” Co-Advising with Dr. Bucheli

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

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

UNDERGRADUATE STUDENT DIRECTION

Mentor, Christian Monsivias, 2022. Characterization of Antibiotic Producing Bacteria from Soil

Mentor, Lesley Contreras, 2022. Characterization of growth conditions of *Streptomyces* isolates

Mentor, Emily Kelly, 2022. Characterization of Antibiotic Resistance in *Salmonella* Isolates

Mentor, Megan Porrovecchio, 2021-2022. Characterization of Bacteria from Coastal soils for Antibacterial Properties

Mentor, Raven Harston, 2021-2022. Characterization of Bacteria from Coastal soils for Antibacterial Properties

Mentor, Violet Grogg, 2021-2022. Characterization of Bacteria from Coastal soils for Antibacterial Properties

Mentor, Georgeanne Llanes, 2020-2022. Chemical Characterization of Bacteria from Soil for Antibacterial Properties.

Mentor, Jennifer Lopez, 2019- present. Isolation and Identification of *Streptomyces* from Soil for Antibacterial Properties.

Mentor, Amanda Allen 2018-2019. Characterization of Bacteria from Soil for Antibacterial Properties

Mentor, Rachel Aaron, 2018-2019. Characterization of Bacteria from Soil for Antibacterial Properties

Mentor, Samantha McBride 2018-2019. Characterization of Antimicrobial Resistance Genotypes from Clinical Isolates of *Salmonella enterica* serovar Typhimurium.

Mentor. Trisha Brewer 2018. Characterization of Antimicrobial Resistance Genotypes from Clinical Isolates of *Salmonella enterica* serovar Heidelberg.

Mentor, Joshua Mitchell 2018. Production and Purification of Antibiotics from Soil Bacteria.

Mentor, Brittany Ham 2017-2018. Genetic Characterization of *Salmonella enterica* clinical isolates.

Mentor, Veronica Rodriguez 2017-2018. Plasmid Replicon Typing in *Salmonella enterica*.

Mentor, Heather Deel, 2015-2017, The Core Microbiome Associated with Human Cadavers During Decomposition.

Mentor, Kristyn Olsen, 2015-2016, project: Effects of Postmortem Storage Conditions of Shifting Skin Bacterial Communities during Human Cadaver Decomposition in Southeast Texas

Mentor, Blake Munoz, 2015-2016, project: Succession of soil bacterial communities during human cadaver decomposition in southeast Texas.

Mentor, Matthew Greenwood, 2014- 2015, project: A Preliminary Study of Season Effect on Bacterial Communities During Human Cadaver Decomposition in South East Texas

Mentor, Zach Lueck, 2014-2015, project: A Preliminary Study of Shifting Oral and Fecal Bacterial Communities During Human Cadaver Decomposition in Southeast Texas

Mentor, Laura Paez, 2014-present, project: A Preliminary Study of Shifting Skin Bacterial Communities During Human Cadaver Decomposition in Southeast Texas.

Mentor, Dalton Plummer, 2014-present, project: A Preliminary Study of Shifting Oral and Fecal Bacterial Communities During Human Cadaver Decomposition in Southeast Texas

Mentor, Jacqueline Vazquez, 2014-present, project: A Study of Shifting Bacterial Communities during Human Cadaver Decomposition in Southeast Texas: A Male and Female Comparison.

Mentor, Christine Woelfel-Monsivais, 2014-present, project: A Preliminary Study of Season Effect on Bacterial Communities During Human Cadaver Decomposition in South East Texas.

Mentor, Afifa Perkins, 2013-2014, project: Plasmid Incompatibility Groups in *Salmonella* from Human Origin.

Mentor, Nwakaego Amaechina, 2013- 2014: Metagenomic Analysis of Human Decomposition

Mentor, Dawn Fisher, 2013-2014, project: Characterization of Antimicrobial Resistance in *Salmonella enterica* serovar Heidelberg isolates from Human Origin

Mentor, Lauren Smith, 2013-2014, project: Characterization of Antimicrobial Resistance in *Salmonella enterica* serovar Typhimurrium isolates from Human Origin.

Mentor, Christopher Crocket, 2012-2013, 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 Typhimurium 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 Typhimurium.

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

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

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) 2008-2014, 2022-present

GRANTS RECEIVED AND PENDING

PI, Microbiome analysis of cholate-capped manganese ferrite nanoparticles as organometallic-control agents against the rice pathogen *Xanthomonas oryzae* pv. *oryzae* and *X. oryzae* pv. *oryzicola*. USDA/APHIS. PTN21184, \$95,935 Mar 2022 – Feb 2023

Co-PI, Environmental Influences of Horses on Pastureland in Walker County, TX. COSET Summer Grant. \$2,500.00.

Co-PI, Continued screening of novel antibacterial producing soil isolates as bio-control agents against the rice pathogen *Xanthomonas oryzae* pv. *oryzae* and *X. oryzae* pv. *Oryzicola*. USDA Farm Bill. \$92,120. Mar 2021 – Feb 2022.

Co-PI, Screening of novel antibacterial producing soil isolates as bio-control agents against the rice pathogen *Xanthomonas oryzae* pv. *oryzae* and *X. oryzae* pv. *oryzicola*. USDA Farm Bill. \$97,741. Mar 2020 – Feb 2021

Co-PI, Brown-Rice, K. (PI), Bechelli, JR (PI), Harper, J (Co-PI) **Lynne, AM** (Co-PI), and Henderson (Co-PI). Investigating Scholastic Performance, Emotional and Social Functioning, and Biomarkers of College Students of Alcoholic Parents. SHSU Interdisciplinary Research Grant. \$19, 976 June 2019 – May 2020. Submitted Dec 2018. Funded.

Co-PI, Human Decomposition: Effect of Indoor Versus Outdoor Decomposition on the Microbiome of Human Cadavers and Implications for Future Forensic Research. National Institute of Justice Research and Development in Forensic Science for Criminal Justice Purposes. Award # 2019-DU-BX-0025. \$808,296. Funded Jan 2020-Dec 2023. \$808,296.

Co-PI. Estimating the postmortem interval of human skeletal remains using rapid, inexpensive microbiome tools. National Institute of Justice Research and Development in Forensic Science for Criminal Justice Purposes. Award # 2019-DU-BX-0010 \$390,748 Funded Jan 2020-Dec 2023

PI. Caregiver Relationship and Gut Microbiome. SHSU Interdisciplinary Research Grant. \$16,000 Funded Sept 2019 –Aug 2020.

PI Microbiome of Bone for Determining PMI. SHSU Enhancement Research Grant. \$15,000. Funded June 2016- May 2017.

Co-PI, Microbial clocks for estimating the postmortem interval of human remains at three anthropological research facilities. Nation Institute of Justice Basic Scientific Research to Support Forensic Science for Criminal Justice Purposes, \$863,485 Award # 2015-DN-BX-K016 Funded January 2016- December 2017.

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

Deel, H.L., Montoya, S., King, K., Emmons, A.L., Huhn, C., **Lynne, A.M.**, Metcalf, J.L., and Bucheli, S.R. (2022) The Microbiome of Blow Fly Organs and Fly-human Microbial Transfer During Decomposition. Forensic Science International. 340 111425 <https://doi.org/10.1016/j.forsciint.2022.111425>

Deel, H., Emmons, A.L., Kiely, J., Damann, F.E, Carter, D.O., **Lynne, A.M.**, Knight, R., Xu, Z.Z., Bucheli, S.R., and Metcalf, J.L. (2021) A Pilot Study of Microbial Succession in Human Rib Skeletal Remains during Terrestrial Decomposition. Msphere 6:4 e00455-21.

Belk, A., Xu, Z.Z., Carter, D.O., **Lynne, A.M.**, Bucheli, S.R., Knight, R., and Metcalf, J.L. 2018. Microbiome Data Accurately Predicts the Postmortem Interval Using Random Forest Regression Models. Genes. 9(104) DOI:10.3390/genes9020104

Burns, D.M.F., Harper, J.M., and **Lynne, A.M.** 2017. Age Does Not Affect the Induction of Mortality by the Foodborne Pathogen *Salmonella enterica* in *Caenorhabditis elegans*. Advances in Microbiology. DOI: [10.4236/aim.2017.710054](https://doi.org/10.4236/aim.2017.710054)

Bucheli, S.R. and **Lynne, A.M.**, 2016. The Microbiome of Human Decomposition: Studying microbial communities involved at every stage of cadaver decomposition is leading to a more precise understanding of the overall process. Microbe. 11(4):165-171.

Lynne, A.M., Foley, S.L. and Han, J. 2016. *Salmonella*: Properties and Occurrence. Encyclopedia of Food and Health. <https://doi.org/10.1016/B978-0-12-384947-2.00608-5>

Metcalf, J.L., Xu, Z.Z., Weiss, S., Lax, S., Van Treuren, W., Hyde, E.R., Song, S.J., Amir, A., Laresen, P., Sangwan, N., Haarmann, D.P., Humphrey, G.C., Ackerman, G., Thompson, L.R., Lauber, C., Bibat, A., Nicholas, C., Gebert, M.J.,

Petrosino, J.F., Reed, S.C., Gilbert, J.A., **Lynne A.M.**, Bucheli, S.R., Carter, D.O., and Knight, R. 2015. A Universal Clock for Estimating the Postmortem Interval. Science. DOI 10.1126/science.aad2646

Hyde, E.R., Haarmann, D.P., Petrosino, J.F., **Lynne, A.M.**, and Bucheli, S.R., 2014. Initial Insights into Bacterial Succession During Human Decomposition. International Journal of Legal Medicine. DOI 10.1007/s00414-014-1128-4

Zhang, X., Glennie, C.L., Bucheli, S.R., and **Lynne, A.M.** 2014. Terrestrial Laser Scanning and a Degenerated Cylinder Model to Determine Gross Morphological Change of Cadavers under Conditions of Natural Decomposition. Forensic Science International. 241:35-45.

Bucheli, S.R., Z. Pan, C.L. Glennie, **A.M. Lynne**, D.P. Haarmann, J.M. Hill. 2014. Terrestrial Laser Scanning to Model Sunlight Irradiance on Cadavers Under Conditions of Natural Decomposition. International Journal of Legal Medicine. 128(4):725-732.

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.

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BOOK CHAPTERS

Deel, H., Bucheli, S.R., Belk, A., Ogden, S., **Lynne, A.M.**, Carter, D.O., Knight, R. and Metcalf, J.L. 2019. Using Microbiome Tools for Estimating the Postmortem Interval. In *Microbial Forensics*. 3rd Ed. Eds. Budowle, Schutzer, Breeze, Keim, and Morse. Academic Press, Burlington MA 01803

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PRESENTATIONS

Lynne, A.M., The Living Dead: The Microbiome of Human Cadavers and Its Forensic Implications. University of Massachusetts – Amherst. Amherst, MA, Mar 2022.

Porter, R., Gomez, J., Burch, M., Salazar, L.M., Russel, A. Juarez-Casillas, S., Means, G., **Lynne, A.M.**, Bechelli, J. Bacterial community Profiling of *Ixodes scapularis* Ticks from Western New York, USA. Texas Academy of Science Annual Meeting, Clear Lake, TX. Feb 2022

Onyoni, F., Martinez, A., Gaffney, C., **Lynne, A.M.**, and Bechelli, J. Plasmid Mediated Antibiotic-Resistant Environmental Enterobacteriaceae. American Society for Microbiology Texas Branch virtual spring meeting. March 2021.

Allen, A., Aaron, R., and **Lynne, A.M.** Characterization of Bacteria from Soil for Antibacterial Properties. American Society for Microbiology Texas Branch fall meeting. San Antonio, TX Nov 2019.

Gaffney, C., Onyoni, F. Bechelli, J., and **Lynne, A.M.** Identification of Bacteria and their Antimicrobial Properties against 5 Multi-Drug Resistant Strains from Soil Samples in the Piney Woods of Texas. American Society for Microbiology Texas Branch fall meeting. San Antonio, TX Nov 2019.

Lynne, A.M., The Living Dead: The Microbiome of Human Cadavers and Its Forensic Implications. Eastern Connecticut State University. Willimantic, CT, Oct 2018.

Lynne, A.M., Ruble, M.N., and Lewis P.J. Bacterial Succession Inside Marrow-containing Bones as a Tool for Estimating PMI. American Association of Physical Anthropologists, April 11-14 2018.

Lynne, A.M., The Living Dead: The Microbiome of Human Cadavers and Its Forensic Implications. Iowa State University. Ames, IA, Mar 2018.

Metcalf, J.L., **Lynne, A.M.**, and Kiely, J.R. Using Microbial Clocks in Human Cadaver Ribs as a Postmortem Tool. AAFS Annual Scientific Meeting. Seattle, WA, Feb 2018

Lynne, A.M.*, Bucheli, S.R. The Microbiome of Human Cadavers can Provide an Estimate of the Postmortem Interval. American Society for Microbiology General Meeting, New Orleans, LA, May 2017

Bucheli, S.R.*, **Lynne, A.M.**, King, K., and Berry, R. The Microbiome of Forensically Significant Flies (Diptera) Associated with Human Decomposition.

American Society for Microbiology General Meeting, New Orleans, LA, May 2017

Vasquez, J.K*, Bucheli, S.R., and **Lynne, A.M.**, Succession of Soil Related Bacterial Communities During Human Cadaver Decomposition in Southeast Texas. American Society for Microbiology General Meeting, New Orleans, LA, May 2017

Hathaway, A., Bucheli, S.R., and **Lynne, A.M.**, Fresh and Frozen Cadavers and Their Impact of Forensic Science. ASM Texas Branch Spring Meeting, New Braunfels, TX Mar 2017.

Deel, H.L., **Lynne, A.M.**, and Bucheli, S.R. Bacterial Composition During Human Cadaver Decomposition in Southeast Texas. ASM Texas Branch Spring Meeting, New Braunfels, TX Mar 2017

Carroll, Z., Petrosino, J.F., Bucheli, S.R., Choudhary, M., and **Lynne, A.M.**, Seasonal Differences in Microbial Succession during Decomposition in Southeast Texas. ASM Texas Branch Spring Meeting, New Braunfels, TX Mar 2017.

Madamba, D., **Lynne, A.M.**, and Bucheli, S.R. Effect of *Ignatzschineria* (Gammaproteobacteria; Xanthomonadales) bacteria on rate of decomposition in mice. ASM Texas Branch Fall Meeting, Dallas, TX Nov 2016.

Quatch, P.H. and **Lynne, A.M.**, Determining Antimicrobial Resistance Genotypes of *Salmonella enterica* serovar Heidelberg Isolated from Human Patients. ASM Texas Branch Fall Meeting, Dallas, TX Nov 2016.

Vasquez, J.K, Petrosino, **Lynne A.M.**, and Bucheli, S.R. A Study of Shifting Bacterial Communities during Human Cadaver Decomposition in Southeast Texas: A Male and Female Comparison. ASM Texas Branch Fall Meeting, Dallas, TX Nov 2016.

Munoz, B., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** Succession of soil bacterial communities during human cadaver decomposition in southeast Texas. ASM Texas Branch Fall Meeting, Dallas, TX Nov 2016.

Lyles, C.W., Bucheli, S.R. and **Lynne, A.M.**, A Study of Shifting Bacterial Communities during Human Cadaver Decomposition in Southeast Texas: A Comparison of Burnt vs. Non-Burnt Cadavers. ASM Texas Branch Fall Meeting, Dallas, TX Nov 2016.

Deel, H., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.**, The Core Microbiome associated with Human Decomposition. ASM Texas Branch Fall Meeting, Dallas, TX Nov 2016.

Burns, D.M.F., Harper, J.M. and **Lynne, A.M.**, Does Age Effect Salmonella enterica Induced Mortality in Caenorhabditis elegans? ASM Texas Branch Fall Meeting, Dallas, TX Nov 2016.

Bucheli, S.R., and **Lynne, A.M.**, The Living Dead. Disney's Animal Kingdom. Orlando, FL. September 2016.

Walker, B., Bucheli, S.R., and **Lynne, A.M.** The Feeding Behavior of Forensically Significant Coleptera and its Effect on their Gut Microbiota. International Conference of Entomology. Orlando, FL. September 2016.

Bucheli, S.R., **Lynne, A.M.**, King, K., Smith, L., Haarmann, D., Berry, R. Fly-Bacteria Interactions on Human Cadavers During Decomposition. International Conference of Entomology. Orlando, FL. September 2016.

Deel, H., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.**, The Core Microbiome associated with Human Decomposition. Tri-Beta South Central Regional Convention. Cedar Hill, TX April 2016/

Woelfel-Monsivais, C.H., Greenwood, M.J., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A seasonal comparison of shifting bacterial communities during human cadaver decomposition in southeast Texas. ASM Texas Branch Spring Meeting. New Braunfels TX, April 2016.

Vasquez, J.K., Petrosino, **Lynne A.M.**, and Bucheli, S.R. A Study of Shifting Bacterial Communities during Human Cadaver Decomposition in Southeast Texas: A Male and Female Comparison. ASM Texas Branch Spring Meeting. New Braunfels TX, April 2016.

Paez, L.M., Smith, L.R., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** Study of shifting oral and fecal skin bacterial communities during human cadaver decomposition in southeast Texas. ASM Texas Branch Spring Meeting. New Braunfels TX, April 2016.

Olsen, K.M., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** Effects of Postmortem Storage Conditions on Shifting Skin Bacterial Communities during Human Cadaver Decomposition in Southeast Texas. ASM Texas Branch Spring Meeting. New Braunfels TX, April 2016.

Munoz, B., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** Succession of soil bacterial communities during human cadaver decomposition in southeast Texas. ASM Texas Branch Spring Meeting. New Braunfels TX, April 2016.

Smith, L.R., Petrosino, J.F., Bucheli, S.R. and **Lynne, A.M.** A Study of the Spatial and Temporal Features of the Human Face Microbiome during

Decomposition in Southeast Texas. ASM Texas Branch Spring Meeting. New Braunfels TX, April 2016.

Lynne, A.M., The Living Dead: The Microbiome of Human Cadavers and Its Forensic Implications. University of Tulsa. Tulsa, OK, April 2016.

Deyne, T.A., Haines, D.C., **Lynne, A.M.**, and Bucheli, S.R. Association Between Volatile Organic Compounds and Microbes Present During the Decomposition of a Cadaver. AAFS Annual Scientific Meeting. Las Vegas, NV. February 2016

Smith, L.R., Petrosino, J.F., Bucheli, S.R. and **Lynne, A.M.** A Preliminary Study of Shifting Bacterial Communities of the Face During Human Cadaver Decomposition in Southeast Texas. AAFS Annual Scientific Meeting. Las Vegas, NV. February 2016

King, K.L, **Lynne, A.M.**, Bucheli, S.R., and Petrosino, J.F. Bacteria Triggering a Preference in Flesh Flies (Diptera: Sarcophagidae) Associated With Human Cadavers. AAFS Annual Scientific Meeting. Las Vegas, NV. February 2016

Lynne, A.M., The Living Dead: The Microbiome of Human Cadavers and Its Forensic Implications. Southeastern Louisiana State University. Hammond, LA, Nov 2015.

Smith, L.R., **Lynne, A.M.**, and Bucheli, S.R., The Living Dead. ASM General Meeting, New Orleans, LA. May 2015.

Fisher, D.M., Smith, L.R., Haarmann, D.P., and **Lynne A.M.** Characterization of Antimicrobial Resistance Phenotypes and Genotypes in *Salmonella enterica* serovar Typhimurium Human Isolates. ASM General Meeting, New Orleans, LA. May 2015.

Smith, L.R., Petrosino, J.R., Buchlei, S.R., and **Lynne, A.M.** A Preliminary Study of Shifting Bacterial Communities of the Face During Human Cadaver Decomposition in Southeast Texas. ASM General Meeting, New Orleans, LA. May 2015.

King, K., Smith, L.R., Bucheli, S.R., and **Lynne, A.M.** Preference Behavior of Flesh Flies (Diptera; *Sarcophagidae*) Associated with Human Cadavers. ASM General Meeting, New Orleans, LA. May 2015.

Berry III, R., King, K., Haarmann, D., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** Microbiome of Flies (Diptera) Associated with Human Cadavers. ASM General Meeting, New Orleans, LA. May 2015.

Greenwood, M.J., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Season Effect on Bacterial Communities During

Human Cadaver Decomposition in South East Texas. SHSU Undergraduate Research Symposium, Huntsville, TX 77341. April 2015.

Paez, L.M., Vasquez, J.K., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Shifting Skin Bacterial Communities During Human Cadaver Decomposition in Southeast Texas. SHSU Undergraduate Research Symposium, Huntsville, TX 77341. April 2015.

Lueck, Z.T., Plummer, D.A., Haarmann., D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Shifting Oral and Fecal Bacterial Communities During Human Cadaver Decomposition in Southeast Texas. SHSU Undergraduate Research Symposium, Huntsville, TX 77341. April 2015.

Lueck, Z.T., Plummer, D.A., Haarmann., D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Shifting Oral and Fecal Bacterial Communities During Human Cadaver Decomposition in Southeast Texas. ASM Texas Branch Spring Meeting. New Braunfels TX, Mar 2015.

Smith, L.R., Haarmann, D.P., Petrosino, J.F., **Lynne, A.M.**, and Bucheli, S.R. A Preliminary Study of Shifting Bacterial Communities of the Face during Human Cadaver Decomposition in Southeast Texas. ASM Texas Branch Spring Meeting. New Braunfels TX, Mar 2015.

King, K., Berry, R., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** Comparison of the Microbiomes of Non-Calliphoridae Flies and Accompanying Cadaver Sites Associated with Human Cadavers. ASM Texas Branch Spring Meeting. New Braunfels TX, Mar 2015.

Woelfel-Monsivais, C.H., Greenwood, M.J., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Season Effect on Bacterial Communities During Human Cadaver Decomposition in South East Texas. ASM Texas Branch Spring Meeting. New Braunfels TX, Mar 2015.

Fisher, D.M., Smith, L.R., Haarmann, D.P., and **Lynne A.M.** Characterization of Antimicrobial Resistance Phenotypes and Genotypes in *Salmonella enterica* serovar Typhimurium Human Isolates. ASM Texas Branch Spring Meeting. New Braunfels TX, Mar 2015.

Vasquez, J.K., Smith, L.R., Petrosino, J.F., **Lynne, A.M.**, and Bucheli, S.R. A Study of Shifting Bacterial Communities during Human Cadaver Decomposition in Southeast Texas: A Male and Female Comparison. ASM Texas Branch Spring Meeting. New Braunfels TX, Mar 2015. **Honorable Mention Undergraduate Poster Award**

Paez, L.M., Vasquez, J.K., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Shifting Skin Bacterial Communities

During Human Cadaver Decomposition in Southeast Texas. ASM Texas Branch Spring Meeting. New Braunfels TX, Mar 2015.

Smith, L.R., Haarmann, D.P., Petrosino, J.F., **Lynne, A.M.**, and Bucheli, S.R. A Preliminary Study of Shifting Bacterial Communities of the Face during Human Cadaver Decomposition in Southeast Texas. The 2014 Biological Sciences Graduate Research Symposium. Huntsville, TX, Dec 2014

Woelfel-Monsivais, C.H., Greenwood, M.J., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Season Effect on Bacterial Communities During Human Cadaver Decomposition in South East Texas. Texas Association of Biological Anthropologists. Huntsville, TX, Nov 2014.

Smith, L.R., Haarmann, D.P., Petrosino, J.F., **Lynne, A.M.**, and Bucheli, S.R. A Preliminary Study of Shifting Bacterial Communities of the Face during Human Cadaver Decomposition in Southeast Texas. Texas Association of Biological Anthropologists. Huntsville, TX, Nov 2014. **Co-First Place Poster Presentation**

Paez, L.M., Vasquez, J.K., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Shifting Skin Bacterial Communities During Human Cadaver Decomposition in Southeast Texas. Texas Association of Biological Anthropologists. Huntsville, TX, Nov 2014. **Co-First Place Poster Presentation**

Lueck, Z.T., Plummer, D.A., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Shifting Oral and Fecal Bacterial Communities During Human Cadaver Decomposition in Southeast Texas Texas Association of Biological Anthropologists. Huntsville, TX, Nov 2014. **Co-First Place Poster Presentation**

Haarmann, D.P., Hyde, E.R., Petrosino, J.F., **Lynne, A.M.**, and Bucheli, S.R. The Fly Associated Bacteria *Ingnatchineria* and *Wohlfahrtiimonas* on Cadavers Through Time. ASM Texas Branch Fall Meeting. Houston TX, Nov 2014. **Second Place Graduate Student Oral Presentation**

Fisher, D.M., Smith, L.R., Haarmann, D.P., and **Lynne A.M.** Characterization of Antimicrobial Resistance Phenotypes and Genotypes in *Salmonella enterica* serovar Typhimurium Human Isolates. ASM Texas Branch Fall Meeting. Houston TX, Nov 2014.

Smith, L.R., Haarmann, D.P., Petrosino, J.F., **Lynne, A.M.**, and Bucheli, S.R. A Preliminary Study of Shifting Bacterial Communities of the Face during Human Cadaver Decomposition in Southeast Texas. ASM Texas Branch Fall Meeting. Houston TX, Nov 2014.

King, K., Berry, R., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** Microbiome of Blow Flies Associated with Human Cadavers. ASM Texas Branch Fall Meeting. Houston TX, Nov 2014.

Berry, R., King, K., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** Microbiome of Blow Flies Associated with Human Cadavers. ASM Texas Branch Fall Meeting. Houston TX, Nov 2014.

Woelfel-Monsivais, C.H., Greenwood, M.J., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Season Effect on Bacterial Communities During Human Cadaver Decomposition in South East Texas. ASM Texas Branch Fall Meeting. Houston TX, Nov 2014.

Paez, L.M., Vasquez, J.K., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Shifting Skin Bacterial Communities During Human Cadaver Decomposition in Southeast Texas. ASM Texas Branch Fall Meeting. Houston TX, Nov 2014.

Lueck, Z.T., Plummer, D.A., Haarmann, D.P., Petrosino, J.F., Bucheli, S.R., and **Lynne, A.M.** A Preliminary Study of Shifting Oral and Fecal Bacterial Communities During Human Cadaver Decomposition in Southeast Texas. ASM Texas Branch Fall Meeting. Houston TX, Nov 2014.

Haarmann, D.P., Hyde, E.R., Petrosino, J.F., **Lynne, A.M.**, and Bucheli, S.R. The Fly Associated Bacteria *Ingnatchineria* and *Wohlfahrtiimonas* on Cadavers Through Time. ASM Texas Branch Fall Meeting. Houston TX, Nov 2014.

Lynne, A.M., The Living Dead: The Microbiome of Human Cadavers and Its Forensic Implications. ASM Texas Branch Fall Meeting. Houston TX, Nov 2014.

Fisher, D.M., Smith, L.R., Haarmann, D.P., and **Lynne A.M.** Characterization of Antimicrobial Resistance Phenotypes and Genotypes in *Salmonella enterica* serovar Typhimurium Human Isolates. Excellence in Basic and Translation Science Research 2014, San Antonio, TX, October 2014.

Fisher, D.M., Smith, L.R., Haarmann, D.P., and **Lynne A.M.** Characterization of Antimicrobial Resistance Phenotypes and Genotypes in *Salmonella enterica* serovar Typhimurium Human Isolates. ASM Texas Branch Spring Meeting. New Braunfels, TX April 2014.

Smith, L.R., Haarman, D.E., Hyde, E.R., Petrosino, J.F., Bucheli, S.R. and **Lynne, A.M.**, A Preliminary Study of Shifting Bacterial Communities During Human Cadaver Decomposition in Southeast Texas. ASM Texas Branch Spring Meeting. New Braunfels, TX April 2014. **Honorable Mention Undergraduate Poster Presentation**

Perkins, A.Z, Haarmann, D.E., and **Lynne A.M.** Replicon Typing of *Salmonella enterica* Typhimurium Human Clinical Isolates. ASM Texas Branch Spring Meeting. New Braunfels, TX April 2014.

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. SHSU Graduate Research Symposium, Huntsville, TX. 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.

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.

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. **Second Place Undergraduate Poster Presentation**

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.

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