Reed M. Stubbendieck

Assistant Professor

Department of Microbiology and Molecular Genetics, Oklahoma State University

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Education_____

Ph.D. Genetics	2017
Texas A&M University	College Station, TX
Adviser: Dr. Paul Straight, Ph.D.	
• Dissertation: Discovering Linearmycins in Bacterial Competition: Lysis, Autolysis, and R	esistance
Certificate - Microbial Specialised Metabolites: Origins and Applications	2014
John Innes Centre/Rudjer Bošković Summer School in Applied Molecular Microbiology	Dubrovnik, Croatia
B.S. Biochemistry & Biological Sciences	2011
University of Nebraska-Lincoln	Lincoln, NE
Experience	
Assistant Professor	2022-Present
Oklahoma State University - Department of Microbiology and Molecular Genetics	Stillwater, OK
Postdoctoral Research Associate	2017-2022
University of Wisconsin-Madison - Department of Bacteriology	Madison, WI
Adviser: Dr. Cameron Currie, Ph.D.	
Graduate Research Associate	2012-2017
Texas A&M University - Department of Biochemistry & Biophysics	College Station, TX
Adviser: Dr. Paul Straight, Ph.D.	
Post-Baccalaureate Research Assistant	2011
University of Nebraska-Lincoln - Department of Biochemistry	Lincoln, NE
Adviser: Dr. Cheryl Bailey, Ph.D.	
Undergraduate Research Assistant	2008-2011
University of Nebraska-Lincoln - Department of Biological Sciences	Lincoln, NE
Adviser: Dr. Eileen Hebets, Ph.D.	
Support	
Grants	
Identification of Anti-Staphylococcus aureus Metabolites Produced by Dolosigranulum	2024 Procent
<i>pigrum</i> from the Human Nose	2024-Present
National Institute of Allergy and Infectious Diseases	1R03AI182770-01

- Role: PI
- Award: \$136,056

Characterizing Pathogen-Mediated Production of Secondary Metabolites in the Human	2024 Dresent
Aerodigestive Tract Microbiome	2024-Present
NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES	1P20GM152333-01

- Role: RPL
- Award: \$1,003,298
- NIH Centers of Biomedical Research Excellence Program Phase I for the Oklahoma Center for Microbiome Research
- Oklahoma State University Press Release

Identification of Antimicrobial Peptides against <i>Staphylococcus aureus</i> Produced by <i>Dolosigranulum pigrum</i> in the Nose	2023
Oklahoma Center for Respiratory and Infectious Diseases Pilot Project Grant	
• Role: Pl	
• Award: \$100,000 (Declined)	
Discovering Mechanisms of <i>Staphylococcus aureus</i> Inhibition by Commensal Dolosigranulum pigrum	2023-2024
Oklahoma State University College of Arts and Sciences Research Program Seed Grant	
• Role: Pl • Award: \$10,000	
Determining the Role of Siderophores from Brown-Rot Fungi in Copper Tolerance	2020-2022
United States Department of Agriculture Forest Service	MSN244765
 Roles: preliminary data, analysis, and writing Award: \$10,000 	
COVID-19 and the Nasal Microbiome: Potential Marker of Disease Outcomes and Novel Antivirals	2020-2021
Wisconsin Partnership Program	WPP4658
 Roles: project inception, writing, analysis, and management Award: \$49,452 	
Identification of Novel MDR Antimicrobials from Human Microbiome Symbioses	2019-2022
National Institute of Infectious Diseases Centers of Excellence for Translational Research	5U19AI142720-03 7250
 Roles: project inception, preliminary data, analysis, and writing Award: \$1,027,237 	
Fellowships & Scholarships	
 Postdoctoral Fellowship in Computation and Informatics in Biology and Medicine National Library of Medicine Part of: T15 LM007359 Award: \$103,564 	2018-2020
Nebraska Institutional Development Award Program Networks of Biomedical Research Excellence Scholarship National Institutes of Health	2008-2011
 Part of: P20 RR016469 Award: \$10,450 	
Nebraska Undergraduate Creative Activities and Research Experience Scholarship	2009-2010
UNIVERSITY OF INEBRASKA-LINCOLN	
• WM9LOT: 21000	

Publications.

*, indicates co-first authorship. †, indicates corresponding author. <u>underline</u>, indicates mentees/trainees

PEER-REVIEWED PUBLICATIONS

- 1. <u>Niladri Bhowmik</u>, **Reed M. Stubbendieck†**. (2025). *Achromobacter* spp.: Emerging Pathogens in the Cystic Fibrosis Lung. *PLOS Pathogens*. doi: **10.1371/journal.ppat.1013067**
- 1. **Reed M. Stubbendieck**, Jillian H. Hurst, Matthew S. Kelly. (2024). *Dolosigranulum pigrum*: a promising nasal probiotic candidate. *PLOS Pathogens*. doi: **10.1371/journal.ppat.1011955**.
- Rauf Salamzade, J.Z. Alex Cheong, Shelby Sandstrom, Mary Hannah Swaney, **Reed M. Stubbendieck**, Nicole Lane Starr, Cameron R. Currie, Anne M. Singh, Lindsay Kalan. (2023). Evolutionary investigations of the biosynthetic diversity in the skin microbiome using *lsa*BGC. *Microbial Genomics*. doi: 10.1099/mgen.0.000988.

- Reed M. Stubbendieck[†], Eishika Dissanayake, Peter M. Burnham, Susan E. Zelasko, <u>Mia I. Temkin</u>, Sydney S. Wisdorf, Rose F. Vrtis, James E. Gern, Cameron R. Currie. (2023). *Rothia* from the human nose inhibit *Moraxella catarrhalis* colonization with a secreted peptidoglycan endopeptidase. *mBio*. doi: 10.1128/mbio.00464-23. Highlighted in mBio and Nature Reviews Microbiology.
- Eishika Dissanayake*, Rebecca A. Brockman-Schneider*, **Reed M. Stubbendieck**, Britney A. Helling, Zhumin Zhang, Yury A. Bochkov, Charmaine Kirkham, Timothy F. Murphy, Carole Ober, Cameron R. Currie, James E. Gern. (2023). Rhinovirus increases *Moraxella catarrhalis* adhesion to the respiratory epithelium. *Frontiers in Cellular and Infection Microbiology*. doi: 10.3389/fcimb.2022.1060748.
- 5. **Reed M. Stubbendieck†**, Susan E. Zelasko, Nasia Safdar, Cameron R. Currie. (2021). Biogeography of Bacterial Communities and Specialized Metabolism in Human Aerodigestive Tract Microbiology *Spectrum*. doi: **10.1128/Spectrum.01669-21**.
- 6. Ming Tang, Jie Lie, Wenpeng Hou, **Reed M. Stubbendieck**, Han Xiong, Jie Jin, Jiyi Gong, Chen Cheng, Xiaoxin Tang, Yinglong Liu, Zhaofeng Li, Jianfeng Wang, Yin Yi. (2021). Structural variability in the bulk soil, rhizosphere, and root endophyte fungal communities of *Themeda japonica* plants under different grades of karst rocky desertification. *Plant and Soil*. doi: **10.1007/s11104-021-04969-y**.
- 7. **Reed M. Stubbendieck**, Hongjie Li, Cameron R. Currie. (2019). Convergent evolution of signal-structure interfaces for maintaining symbioses. *Current Opinions in Microbiology*. doi: **10.1016/j.mib.2019.10.001**.
- 8. <u>Mia I. Temkin</u>, Caitlin M. Carlson, Aaron L. Stubbendieck, Cameron R. Currie, **Reed M. Stubbendieck†**. (2019). High Throughput Co-culture Assays for Investigation of Microbial Interactions. *Journal of Visualized Experiments*. doi: 10.3791/60275.
- 9. Marc G. Chevrette^{*}, Jennifer R. Bratburd^{*}, Cameron R. Currie, **Reed M. Stubbendieck**[†]. (2019). Experimental Microbiomes: Models Not to Scale. *mSystems*. doi: **10.1128/mSystems.00175-19**.
- 10. **Reed M. Stubbendieck†**, Daniel S. May, Marc G. Chevrette, <u>Mia I. Temkin</u>, Evelyn Wendt-Pienkowski, Julian Cagnazzo, Caitlin M. Carlson, James E. Gern, Cameron R. Currie. (2019). Competition among Nasal Bacteria Suggests a Role for Siderophore-Mediated Interactions in Shaping the Human Nasal Microbiota. *Applied and Environmental Microbiology*. doi: **10.1128/AEM.02406-18**.
- Reed M. Stubbendieck, Dakota J. Brock, Jean-Philippe Pellois, Jason J. Gill, Paul D. Straight. (2018). Linearmycins are lytic membrane-targeting antibiotics. *The Journal of Antibiotics*. doi: 10.1038/s41429-017-0005-z.
- B. Christopher Hoefler*, Reed M. Stubbendieck*, N. Kalyani Josyula, Sabrina M. Moisan, Emma M. Schulze, Paul D. Straight. (2017). A Link between Linearmycin Biosynthesis and Extracellular Vesicle Genesis Connects Specialized Metabolism and Bacterial Membrane Physiology. *Cell Chemical Biology*. doi: 10.1016/j.chembiol.2017.08.008.
- Reed M. Stubbendieck, Paul D. Straight. (2017). Linearmycins Activate a Two-component Signaling System Involved in Bacterial Competition and Biofilm Morphology. *Journal of Bacteriology*. doi: 10.1128/JB.00186-17.
- 14. **Reed M. Stubbendieck**, Carol Vargas-Bautista, Paul D. Straight. (2016). Bacterial Communities: Interactions to Scale. *Frontiers in Microbiology*. doi: **10.3389/fmicb.2016.01234**.
- 15. **Reed M. Stubbendieck**, Paul D. Straight. (2016). Multifaceted Interfaces of Bacterial Competition. *Journal of Bacteriology*. doi: **10.1128/JB.00275-16**.
- 16. **Reed M. Stubbendieck**, Paul D. Straight. (2015). Escape from Lethal Bacterial Competition through Coupled Activation of Antibiotic Resistance and a Mobilized Subpopulation. *PLOS Genetics*. doi: **10.1371/journal.pgen.1005722**.
- 17. **Reed M. Stubbendieck**, Anthony J. Zera, Eileen A. Hebets. (2013). No evidence for a relationship between hemolymph ecdysteroid levels and female reproductive behavior in *Schizocosa* wolf spiders. *The Journal of Arachnology*. doi: **10.1636/B12-71.1**.

BOOK CHAPTERS

1. **Reed M. Stubbendieck**, Paul D. Straight. (2020). Specialized Metabolites for Bacterial Communication. *Comprehensive Natural Products III: Chemistry and Biology*. doi: **10.1016/B978-0-12-409547-2.14803-6**.

Licenses_

Fluorescent-Tagged *Moraxella catarrhalis* For Cell Culture Experiments

WISCONSIN ALUMNI RESEARCH FOUNDATION

Awards PLATFORM PRESENTATION AND POSTER AWARDS **Molecular Genetics of Bacteria and Phages Meeting** 2016 OUTSTANDING POSTER AWARD 24th Annual Texas A&M University Biochemistry & Biophysics Graduate Student Oral 2016 **Research Competition** 1ST PLACE AWARD 1st Annual Texas A&M University Genetics Graduate Student Oral Research Competition 2016 1ST PLACE AWARD **Texas A&M University Genetics Graduate Student Poster Competition** 2016 4TH PLACE AWARD Nebraska's Institutional Development Awards Networks of Biomedical Research 2016 **Excellence Annual Convention Poster Competition** 2ND PLACE AWARD TRAVEL AWARDS **Oklahoma State University College of Arts and Sciences Travel Award** 2023 RECIPIENT • Award: \$1200 **Texas A&M Genetics Graduate Student Association Travel Award** 2016 RECIPIENT • Award: \$500 **Texas A&M Genetics Graduate Student Association Travel Award** 2015 RECIPIENT • Award: \$500 **Texas A&M Biochemistry Graduate Student Association Travel Award** 2014 RECIPIENT • Award: \$500 **Texas A&M Genetics Graduate Student Association Travel Award** 2014 RECIPIENT • Award: \$500 Mentoring_ Oklahoma State University (Current: 7, Total: 20)

Madeline Reichert	2024-Present
Microbiology and Molecular Genetics Ph.D. Student	
Niladri Bhowmik	2023-Present
Microbiology and Molecular Genetics Ph.D. Student	
Rotating Graduate Students (Total: 5)	

Eduardo Tolentino Villalobos

Graduate Students (Current: 2, Total: 2)

MICROBIOLOGY AND MOLECULAR GENETICS M.S. STUDENT

2024

2021

Sanjida Snigdha	2024
Microbiology and Molecular Genetics Ph.D. Student Md Ikram Rafid	2023
Microbiology and Molecular Genetics Ph.D. Student	2023
Niladri Bhowmik Microbiology and Molecular Genetics Ph.D. Student	2023
Yashi Batra	2023
Microbiology and Molecular Genetics Ph.D. Student	

Undergraduate Students (Current: 3, Total: 12)

Seth Bowles	2025-Present
Sydney Morabbi	2024-Present
Hariette Diarra	2024
Elixiva Marcum	2024-Present
Jonathan Lee	2023-2024
Kalen Strunk	2023-2024
Madeline Reichert	2023-2024
Helen Zaghloul	2023
Addison Browning	2023
Reagan Decker	2022-2023
Luke Myers	2022-2023
Claire Daniel	2022-2023
Other Staff (Current: 2, Total: 3)	
Elixiva Marcum	2024
LABORATORY TECHNICIAN	
Akram Al Daeriwsh	2024-Present
LABORATORY LECHNICIAN Mercedes Pérez-Pérez	2023-Present
Lab Manager	2020 / / 636/14
University of Wisconsin-Madison (Total: 7)	
Rotating Graduate Students (Total: 3)	
Susan Zelasko	2018

MICROBIOLOGY DOCTORAL TRAINING PROGRAM M.D./PH.D. STUDENT

Kirsten Gotting

GENETICS PH.D. STUDENT

Lauren Lucas

MICROBIOLOGY DOCTORAL TRAINING PROGRAM PH.D. STUDENT

2017

2017

Undergraduate Students (Total: 4)	
Kristi Hetchler 201	9-2020
• Project Title: Detecting and Determining Mode of Action of Bacteria that Inhibit <i>Moraxella catarrhalis</i> Stress Response Promoters	Using
Timothy Davenport 201	9-2020
• Project Title: Sticking Our Noses in Moraxella catarrhalis Sensitivity to the Human Nasal Microbiome	
Quin Perrault	2019
Project Title: The Susceptibility of Nasal Bacteria to Lysozyme	
Mia Temkin 201	8-2019
• Thesis Title: Investigating the inhibition of Moraxella catarrhalis by the nasal microbiota	
Texas A&M University (Total: 14)	
Rotating Graduate Students (Total: 10)	
Paul Merlau Biochemistry & Biophysics Ph.D. Student	2016
Neha Deshpande	2016
BIOCHEMISTRY & BIOPHYSICS PH.D. STUDENT	
Huajun Han Biochemistry & Biophysics Ph.D. Student	2015
Donna Iadarola Biochemistry & Biophysics Ph.D. Student	2015
Ishita Chandel Biochemistry & Biophysics Ph.D. Student	2015
John Mosior Biochemistry & Biophysics Ph.D. Student	2015
Dakota Brock Biochemistry & Biophysics Ph.D. Student	2014
Chengxi Zhang Biochemistry & Biophysics Ph.D. Student	2014
Yue Xing Genetics Ph.D. Student	2013
Diana Medina Genetics Ph.D. Student	2013
Undergraduate Students (Total: 4)	
Paolo Giovanelli	2016
• Thesis Title: Isolation and partial characterization of a specialized metabolite that induces sliding motil <i>Bacillus subtilis</i>	ity in
Yifan Ma	2016
Roosheel Patel 201	3-2015

• Thesis Title: In vivo transposon mutagenesis of Streptomyces sp. Mg1

Daniel Labuz

NATIONAL SCIENCE FOUNDATION RESEARCH EXPERIENCES FOR UNDERGRADUATES STUDENT

• **Project Title:** Transposon mutagenesis to identify *Bacillus subtilis* resistance to lytic/degradative activity

2018-2019

2011

UNIVERSITY OF NEBRASKA-LINCOLN (TOTAL: 1)

Undergraduate Students (Total: 1)

Travis Jensen

• **Project Title:** A Simplistic Bioinformatics Approach to Clade Identification in *Chlorella*-like Green Algae

Teaching_

Courses	
Oklahoma State University	
Microbial Diversity, Ecology, and Evolution	2025-Present
PRIMARY INSTRUCTOR	MICR 4013/5013
Microbes: Friends or Foes	2023-Present
Primary Instructor	MICR 3103 (N)
Seminar	2023-2024
Primary Instructor	MICR 5160
Special Problems: Research	2022-Present
Primary Instructor	MICR 4990
Texas A&M University	
Comprehensive Genetics Laboratory for Non-Majors and Majors	2015-2016
LABORATORY INSTRUCTOR	GENE 311 & 312
Comprehensive Genetics Laboratory for Non-Majors and Majors	2011-2012
LABORATORY INSTRUCTOR	GENE 301 & 302
University of Nebraska-Lincoln	
Independent Research in Bioinformatics	2010-2011
Teaching Assistant	BIOC 498
Biochemistry I	2010-2011
Teaching Assistant	BIOC 431
General Chemistry I and II	2009-2011
Undergraduate Teaching Assistant Corps	CHEM 109-110
Organismal Biology Laboratory	2009
LABORATORY INSTRUCTOR	BIOS 103
GUEST LECTURES	
Advanced Honors Experience in Chemistry	2023
OKLAHOMA STATE UNIVERSITY	CHEM 3890

- Instructor: Dr. David Miller
- Lecture: Antibiotics and the Microbiome

The Role of the Human Microbiome in Health and Disease	2021
University of Wisconsin-Madison	MMI 902
 Instructor: Dr. Lindsay Kalan Lecture: Airway Microbiomes 	
Introduction to Biomedical Engineering	2019
University of Central Oklahoma	BME 1311
 Instructor: Dr. Scott Mattison Lecture: Antibiotics: From Below Your Toes to Inside Your Nose 	
Diversity, Ecology, and Evolution of Microorganisms	2018-2019
University of Wisconsin-Madison	MICRO 450
 Instructors: Drs. Cameron Currie & Federico Rey Lecture: Community Ecology and Microbial Interactions 	

Service_

PEER REVIEW

Ad Hoc Peer Reviewer for Applied and Environmental Microbiology, Frontiers in Bacteriology, Frontiers in Microbiology, International Journal of Systematic and Evolutionary Microbiology, Journal of Bacteriology, Journal of Visualized Experiments, Microbial Genomics, Microbiology Spectrum, mSystems, PeerJ, Scientific Reports, Trends in Microbiology, and World Journal of Microbiology and Biotechnology (see **Web of Science** for a full list of verified reviews).

EDITORIAL ROLES

Frontiers in Bacteriology	2022-Present
Review Editor	
ADVISING ROLES	
American Medical Student Association (Pre-Med) - Oklanoma State University Co-Adviser	2023-Present
Judging	
Oral Presentation Judge at the 9th Conference on Beneficial Microbes	2024
Student Dissertation & Thesis Committees	
Oklahoma State University (Current: 7, Total: 8)	
Lou Vanhauwaert	2025-Present
BIOCHEMISTRY AND MOLECULAR BIOLOGY PH.D. STUDENT	
Rashna Sharmeen Shama	2024-Present
Microbiology and Molecular Genetics M.S. Student	
Bableen Kaur	2024-Present
Microbiology and Molecular Genetics Ph.D. Student	
Abigail Meek	2023
Microbiology and Molecular Genetics Accelerated M.S. Student	
Mehraj Ansari	2023-Present
Microbiology and Molecular Genetics Ph.D. Student	
Himidu Pitigala Arachchilage	2023-Present
Integrative Biology Ph.D. Student	

Autumn Hansen	2023-Present
Microbiology and Molecular Genetics M.S. Student	
Damilare Ajagbe	2022-Present
Microbiology and Molecular Genetics Ph.D. Student	
Outreach	
Microbial Matters	2025
Podcast Interview	
• Episode 88: Microbial Interactions in Cystic Fibrosis. Please see here for the episode.	
Latin American Natural Product Genome Mining Workshop	2024
Centro de Investigación en Matemáticas	
 Roles: Organizer and Faculty Instructor Topics: Introduction to Natural Product Biosynthesis & Ecology and Evolution of Natural Products 	
The Latin American Natural Product Genome Mining Workshop aims to engage with early career researchers ac	ross Latin America interested in
natural products, their regulation and biosynthesis in an ecological context. For more information please see h	ere.
Skype a Scientist	2018-2022
Online	
I met with K-12 classes virtually across the United States for informal conversations about how microbiology in students' questions about careers in STEM fields.	fluences our lives and to answer
Wisconsin Science Expeditions	2017-2022
The Currie Laboratory - Univeristy of Wisconsin-Madison	
Using interactive activities and a living display of a fungus-farming ant colony, members of the Currie laborator community about symbiosis between animals and microbes, antimicrobial drug discovery, and the developme	y educate the Madison ent of biofuels.
Scientific Sidequests	2018-2019
I contributed articles to a blog called Scientific Sidequests that focused on explaining scientific concepts to a la popular culture.	y audience using examples from
Nebraska Science Olympiad	2011
Science Olympiad	
I generated and reviewed questions for the blology section of the Nebraska Science Olympiad contest.	0000 0011
Upward Bound	2009-2011
As a member of the Hebets laboratory. I was part of a university program that invited low-income first-generation	on high school students to
participate in summer research experiences with the goal of helping students recognize their potential and enc STEM education.	ourage them to pursue future
Professional Activities	
Platform Presentations & Seminars	
Murray State University	2025
Department of Biology	
• Talk Title: Interactions Mediated By Secondary Metabolism in Aerodigestive Tract Mic	crobiomes
Oklahoma State University University for Health Sciences	2025
School of Biomedical Sciences	
• Talk Title: Interactions Mediated By Secondary Metabolism in Aerodigestive Tract Mic	crobiomes
Oklahoma State University	2025
Department of Biochemistry and Molecular Biology Seminar Series	
• Talk Title: Interactions Mediated By Secondary Metabolism in Aerodigestive Tract Mic	crobiomes
Oklahoma State University	2024

DEPARTMENT OF MICROBIOLOGY AND MOLECULAR GENETICS SEMINAR SERIES

• Talk Title: Interactions Mediated By Secondary Metabolism in Aerodigestive Tract Microbiomes

University of Kansas	2024
Chemical Biology Symposium	
• Talk Title: Bacterial Competition in the Aerodigestive Tract: Antibiotics, Probiotics, and Beyond	
Oklahoma State University INTERACT SYMPOSIUM	2024
• Talk Title: Bacterial Competition in the Aerodigestive Tract: Antibiotics, Probiotics, and Beyond	
Centro de Investigación en Matemáticas Latin American Natural Product Genome Mining Workshop Talla Titles. De starial latore stigne and Casar dama Matche aligne the Llumere Asna disective Treat	2024
• Talk Title: Bacterial Interactions and Secondary Metabolism the Human Aerodigestive Tract	
Oklahoma State University Oklahoma Center for Microbiome Research	2024
• Talk Title: Bacterial Competition as a Means To Identify Antimicrobials from the Human Microbiome	
Oklahoma State University	2024
Oklahoma Center for Respiratory and iseases	
• Talk Title: Bacterial Competition as a Means To Identify Antimicrobials from the Human Microbiome	
University of Oklahoma Health Sciences Center	2023
DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY	
• Talk Title: Actinobacteria Mediate Pathogen inhibition and non competition in the Nose	
Southern Methodist University Department of Earth Sciences Seminar Series	2023
• Talk Title: Actinobacteria Mediate Pathogen Inhibition and Iron Competition in the Nose	
Society for Industrial Microbiology and Biotechnology Annual Meeting	2023
 CONFERENCE PRESENTATION Talk Title: Mining for Gold: Uncovering Biosynthetic Gene Clusters in the Human Nose, Mouth, and Beyond Invited Speaker 	d
University of Central Oklahoma	2023
 TRI-CENTER SYMPOSIUM Talk Title: The Nose Knows: Commensal Actinobacteria as an Alternative to Traditional Antimicrobials Invited Keynote Speaker 	
University of Oklahoma	2023
Department of Microbiology and Plant Biology Seminar Series	
• Talk Title: Actinobacteria Mediate Pathogen Inhibition and Iron Competition in the Nose	
Texas A&M University	2022
GENETICS AND GENOMICS SEMINAR SERIES Talk Title: Actinobacteria Compete for Iron and Reduce Pathogen Colonization in the Human Nose 	
International Society for the Biology of Actinomycetes	2022
Conference Presentation	LOLL
• Talk Title: Actinobacteria Reduce Pathogen Colonization in the Human Nose	
Oklahoma State University Department of Microbiology and Molecular Genetics Seminar	2022
• Talk Title: Microbial Competition: From Beneath Your Toes to Inside Your Nose	
Auburn University	2021
DEPARTMENT OF CHEMISTRY & BIOCHEMISTRY SEMINAR	
• Talk Title: Natural Products in Microbial Competition: From Beneath Your Toes to Inside Your Nose	
University of Wisconsin-Milwaukee	2021
Department of Biological Sciences Seminar	
• Talk Title: Bacterial Competition: From Beneath Your Toes to Inside Your Nose	

University of North Carolina Chapel Hill	2021
Talk Title: Competition and Specialized Metabolism Shape Bacterial Communities in Aerodiges	tive Tract Micro-
• Invited Speaker	
Online Due to COVID-19 Pandemic	
University of Wisconsin-Madison	2020
COMPLITATION AND INFORMATICS IN BIOLOGY AND MEDICINE SEMINAR SERIES	2020
• Talk Title: Aerodigestive Tract Microbiomes Possess Extensive and Varied Potential for Specializ	ved Metabolism
Online Due to COVID-19 Pandemic	
National Library of Medicine Informatics Training Conference	2020
Hosted at Oregon Health and Sciences University	
• Talk Title: Investigating the Antibiotic Biosynthetic Potential of the Aerodigestive Tract Microbio	ome
Online Due to COVID-19 Pandemic	
Prokaryotic Pathogens Seminar Series	2020
Online	
• Talk Title: Competition among Nasal Bacteria Suggests a Role for Siderophore-Mediated Interac	tions in Shaping
the Human Nasal Microbiota	_
Rutgers University	2019
Symposium Celebrating 75 th Anniversary of Discovery of Streptomycin	
• Talk Title: Ants, Agriculture, and Antibiotics: Drugs from Bugs of Bugs and Beyond	
Keynote Speaker	
University of Wisconsin-Madison	2018
Computation and Informatics in Biology and Medicine Seminar Series	
• Talk Title: Microbial Competition from Below Your Toes to Inside Your Nose	
Conference on Beneficial Microbes	2018
Hosted at the University of Wisconsin-Madison	
• Talk Title: Bacterial Competition Mediated by Siderophore Production from the Human Nasal N	/icrobiota
Texas A&M University	2016
Student Research Week	
• Talk Title: Crisis Control: Adaptation to Microbial Competition	
Texas A&M University	2016
24 TH Annual Biochemistry & Biophysics Graduate Student Oral Research Competition	2010
• Talk Title: Escape from Lethal Bacterial Competition through Coupled Activation of Antibiotic I	Resistance and a
Mobilized Subpopulation	
• 1 st Place Award	
Texas A&M University	2016
1 st Annual Genetics Graduate Student Oral Research Competition	
• Talk Title: Escape from Lethal Bacterial Competition through Coupled Activation of Antibiotic F	Resistance and a
Mobilized Subpopulation	
• 1 st Place Award	
Texas A&M University	2015
Genetics Graduate Student Seminar Series	
• Talk Title: Escape from Lethal Bacterial Competition through Coupled Activation of Antibiotic F	Resistance and a
Mobilized Subpopulation	
Texas A&M University	2015
BIOCHEMISTRY GRADUATE STUDENT SEMINAR SERIES	
• Talk Title: Chemical Genetic Approach to Understanding Lysis and Degradation of Bacillus sul	btilis by Strepto-
muces sp. Mg1	

Texas A&M University 20. F TH ANNUAL A. L. SCOTT SYMPOSIUM FOR EXCELLENCE IN PROLOCICAL CUENICTRY 20.	13
 Talk Title: Lysis and Degradation of <i>Bacillus subtilis</i> in Competition with <i>Streptomyces</i> sp. Mg1 	
Nebraska Academy of Sciences 201	10
Talk Title: The Relationship between 20-Hydroxyecdysone and Reproductive Behavior and Physiology in Wo Spiders	olf
Nebraska's Institutional Development Award Networks of Biomedical Research Excellence	09
ANNUAL RESEARCH CONFERENCE • Talk Title: Radioimmunological Determination of Ecdysteroid Titers in <i>Schizocosa</i> Wolf Spiders	
Nebraska Academy of Sciences 200	09
Talk Title: The Effect of 20-Hydroxyecdysone in <i>Schizocosa</i> Wolf Spiders	
Poster Presentations	
Oklahoma Center for Respiratory and Infectious Diseases 202 ANNUAL SYMPOSIUM 202	25
Poster Authors: Niladri Bhowmik, Reagan S. Decker, Helebn Zagloul, Akram Al Daerwish, Mercedes Pérez-Pérez, Reed M. Stubbendieck	
• Poster Title: Secondary Metabolite-Mediated Interactions Between Achromobacter dolens and Pseudomona aeruginosa	7S
Oklahoma Center for Respiratory and Infectious Diseases 202 ANNUAL SYMPOSIUM 202	25
 Poster Authors: Madeline Reichert, Mercedes Pérez-Pérez, Luke J. Myers, James E. Gern, Matthew S. Kelly, Ree M. Stubbendieck 	d
• Poster Title: The Nasal Mutualist <i>Dolosigranulum pigrum</i> Inhibits Respiratory Pathobionts Through Secondar Metabolite Production	ſy
Oklahoma Center for Respiratory and Infectious Diseases 202 ANNUAL SYMPOSIUM 202	25
 Poster Authors: Elixiva Marcum, Sydney Morabbi, Akram Al Daerwish, Reagan S. Decker, Niladri Bhowmik, Ree M. Stubbendieck 	d
• Poster Title: Using Microbial Competition in the Cystic Fibrosis Lung to Identify Antibiotic Activity	
American Society for Microbiology Missouri Valley Branch Meeting 202 ANNUAL MEETING 202	25
Poster Authors: Niladri Bhowmik, Reagan S. Decker, Helebn Zagloul, Akram Al Daerwish, Mercedes Pérez-Pérez	z,
 Poster Title: Secondary Metabolite-Mediated Interactions Between Achromobacter dolens and Pseudomonc aeruginosa 2nd Place Award 	75
American Society for Microbiology Missouri Valley Branch Meeting 202 202 202	25
 • Poster Authors: Madeline Reichert, Mercedes Pérez-Pérez, Luke J. Myers, James E. Gern, Matthew S. Kelly, Ree M. Stubbendieck 	d

• **Poster Title:** The Nasal Mutualist *Dolosigranulum pigrum* Inhibits Respiratory Pathobionts Through Secondary Metabolite Production

Annual Meeting

- Poster Authors: Elixiva Marcum, Sydney Morabbi, Akram Al Daerwish, Reagan S. Decker, Niladri Bhowmik, Reed **M. Stubbendieck**
- Poster Title: Using Microbial Competition in the Cystic Fibrosis Lung to Identify Antibiotic Activity

Molecular Genetics of Bacteria and Phages Meeting

UNIVERSITY OF WISCONSIN-MADISON

- Poster Authors: Madeline Reichert, Mercedes Perez Perez, Luke Myers, James E. Gern, Reed M. Stubbendieck
- Poster Title: Genomic Insight Into Mechanisms Underlying Pathobiont Protection by Nasal Probiotic Dolosigranulum pigrum

Conference on Beneficial Microbes

UNIVERSITY OF WISCONSIN-MADISON

- Poster Authors: Niladri Bhowmik, Akram Al Daerwish, Elixiva Marcum, Reed M. Stubbendieck
- Poster Title: Identification of Secondary Metabolites and Biosynthetic Gene Clusters from Cystic Fibrosis Microbiomes

Annual Undergraduate Research Symposium

OKLAHOMA STATE UNIVERSITY

- Poster Authors: Jonathan Lee, Reed M. Stubbendieck
- Poster Title: Investigation of the Effects of L-Lactic Acid on the Pathobiont Moraxella catarrhalis

Oklahoma Center for Respiratory and Infectious Diseases

OKLAHOMA STATE UNIVERSITY

- Poster Authors: Niladri Bhowmik, Reed M. Stubbendieck
- Poster Title: Identification of Secondary Metabolites and Biosynthetic Gene Clusters from Cystic Fibrosis Microbiomes

Molecular Genetics of Bacteria and Phages Meeting

UNIVERSITY OF WISCONSIN-MADISON

- Poster Authors: Reed M. Stubbendieck, Eishika Dissanayake, Peter M. Burnham, Susan E. Zelasko, Mia I. Temkin, Sydney S. Wisdor, Rose F. Vrtis, James E. Gern, Cameron R. Currie
- **Poster Title:** Rothia from the human nose inhibit Moraxella catarrhalis colonization with a secreted peptidoglycan endopeptidase

Conference on Beneficial Microbes

UNIVERSITY OF WISCONSIN-MADISON

- Poster Authors: Reed M. Stubbendieck, Eishika Dissanayake, Peter M. Burnham, Susan E. Zelasko, Mia I. Temkin, Sydney S. Wisdor, Rose F. Vrtis, James E. Gern, Cameron R. Currie
- Poster Title: Human nasal Rothia mitigate Moraxella catarrhalis infection through production of secreted antimicrobial proteins

Computation and Informatics in Biology and Medicine Training Program and the **Bio-Data Science Program Annual Retreat**

UNIVERSITY OF WISCONSIN-MADISON

- Poster Authors: Reed M. Stubbendieck, Mia I. Temkin, Caitlin M. Carlson, James E. Gern, Cameron R. Currie
- Poster Title: Investigating the Human Nasal Cavity Microbiome as a Source of Novel Narrow-Spectrum Antibiotics

Molecular Genetics of Bacteria and Phages Meeting

ANNUAL MEETING

- Poster Authors: Reed M. Stubbendieck, Mia I. Temkin, Caitlin M. Carlson, James E. Gern, Cameron R. Currie
- Poster Title: Digging for Antibiotic Gold from the Human Nasal Cavity Microbiome

2024

2024

2024

2019

2019

2023

2024

2022

Computation and Informatics in Biology and Medicine Training Program and the Bio-Data Science Program Annual Retreat	2018
 Poster Authors: Reed M. Stubbendieck, Daniel S. May, Mard G. Chevrette, Mia I. Temkin, Evelyn Wendt-Pien Julian Cagnazzo, Caitlin M. Carlson, James E. Gern, Cameron R. Currie Poster Title: Bacterial Competition Mediated by Siderophore Production in the Human Nasal Cavity 	kowski,
Madison Microbiome Meeting	2018
 Poster Authors: Reed M. Stubbendieck, Julian Cagnazzo, Caitlin M. Carlson, James E. Gern, Cameron R. C Poster Title: Bacterial Competition Mediated by Siderophore Production in the Human Nasal Cavity 	Currie
 Molecular Genetics of Bacteria and Phages Meeting ANNUAL MEETING Poster Authors: Reed M. Stubbendieck, Paul D. Straight Poster Title: Interface of Specialized Metabolism and Developmental Functions to Promote the Fitness of teria in Competition 	2016 f Bac-
 Outstanding Poster Award 5th Conference on Prokaryotic Cell Biology 	2015
 American Society For Microbiology Poster Authors: Reed M. Stubbendieck, Paul D. Straight Poster Title: Lysis of <i>Bacillus subtilis</i> in Competition with <i>Streptomyces</i> sp. Mg1 	
 Genetics Graduate Program Graduate Research Competition Texas A&M UNIVERSITY Poster Authors: Reed M. Stubbendieck, Paul D. Straight Poster Title: A Mechanism of Resistance in a Model Bacterial Competition 4th Place Award 	2015
 Microbial Specialised Metabolites: Origins and Applications 5TH JOHN INNES-RUDJER BOÅ;KOVIC SUMMER SCHOOL IN APPLIED MOLECULAR MICROBIOLOGY Poster Authors: Reed M. Stubbendieck, Paul D. Straight Poster Title: Chemical Genetic Approach to Understanding Lysis and Degradation of <i>Bacillus subtilis</i> by <i>Str</i> myces sp. Mg1 	2014 °epto-
Microbial Stress Response	2014
 Poster Authors: Reed M. Stubbendieck, Paul D. Straight Poster Title: Chemical Genetic Approach to Understanding Lysis and Degradation of <i>Bacillus subtilis</i> by <i>Str myces</i> sp. Mg1 	repto-
6 th Annual Genetics Graduate Student Association Mini-Symposium	2014
 Poster Authors: Reed M. Stubbendieck, Paul D. Straight Poster Title: Chemical Genetic Approach to Understanding Lysis and Degradation of <i>Bacillus subtilis</i> by <i>Str myces</i> sp. Mg1 	repto-
Genetics Graduate Student Research Competition	2014
 Poster Authors: Reed M. Stubbendieck, Paul D. Straight Poster Title: Chemical Genetic Approach to Understanding Lysis and Degradation of <i>Bacillus subtilis</i> by <i>Str myces</i> sp. Mg1 	repto-
5 th Annual Genetics Graduate Student Association Mini-Symposium	2013
 Poster Authors: Reed M. Stubbendieck, Paul D. Straight Poster Title: Identifying Molecules Responsible for Competitive Lysis and Degradation of <i>Bacillus subtilis</i> 	

Genetics Graduate Student Research Competition	2013
 Poster Authors: Reed M. Stubbendieck, Paul D. Straight Poster Title: Identifying Molecules Responsible for Competitive Lysis and Degradation of <i>Bacillus subs</i> 	tilis
Biochemistry Department Bioinformatics Poster Session	2010
 Poster Authors: Reed M. Stubbendieck, Cheryl P. Bailey Poster Title: Annotation of the CG11148 Isoform Splice Sites and fd19B Gene Location in <i>Drosophila g</i> 	rimshawi
Nebraska's Institutional Development Awards Networks of Biomedical Research Excellence Annual Research Convention	2010
 Poster Authors: Reed M. Stubbendieck, Anthony J. Zera, Eileen A. Hebets Poster Title: Investigating the Functions of Ecdysteroids in <i>Schizocosa</i> Wolf Spiders 2nd Place Award 	
Biochemistry Department Bioinformatics Poster Session	2010
 UNIVERSITY OF NEBRASKA-LINCOLN Poster Authors: Reed M. Stubbendieck, Cheryl P. Bailey Poster Title: Proposed Annotation for an ATP Synthase F0 Subcomplex b Subunit Gene in <i>Cellulomonas</i> 	s flavigena
Undergraduate Creative Activities and Research Experience Annual Poster Session	2010
 • Poster Authors: Reed M. Stubbendieck, Anthony J. Zera, Eileen A. Hebets • Poster Title: The Effect of 20-Hydroxyecdysone in <i>Schizocosa</i> Wolf Spiders 	
Affiliations & Memberships	
 Latin American Natural Product Genome Mining Workshop GUANAJUATO, MEXICO Faculty Instructor (2024-Present) Organizer (2024-Present) 	2024-Present
Oklahoma Center for Microbiome Research	
Oklahoma State University • Research Project Leader (2024-Present) • Member (2024-Present)	2023-Present
Oklahoma Center for Respiratory and Infectious Diseases	
Oklahoma State University Member (2023-Present) 	2023-Present
American Society for Microbiology	
Washington, DC	2014-Present
Member (2014-Fresent)	
 Texas A&M University Member (2012-2017) 	2012-2017
Genetics Graduate Student Association	
Texas A&M University	2011-2017
 President (2013-2014) Treasurer (2012-2013) Member (2011-2017) 	

Professional Development Courses & Workshops Attended	
Raising Resilient Scientists National Institutes of Health	2024
Safe Zone Training	2023
Oklahoma State University - Office of Multicultural Affairs	
Early Career Faculty Program Oklahoma State University - Institute for Teaching and Learning Excellence	2022
Wisconsin Idea STEM Fellows Workshop Morgridge Institute for Research	2020
Deciphering the Microbiome Workshop National Science Foundation	2019
Interacting with the Media: Tips for Scientists Workshop for Postdocs University of Wisconsin-Madison	2019
Delta Internship Seminar Series	2019
University of Wisconsin-Madison - Center for the Integration of Research, Teaching and Learning Course	
Writing Across the Curriculum University of Wisconsin-Madison - Center for the Integration of Research, Teaching and Learning Course	2019
Teaching in an Internationally Diverse Classroom	2018
University of Wisconsin-Madison - Center for the Integration of Research, Teaching and Learning Course	
Did Your Students Learn What You Wanted Them To? Writing Effective/Measurable Learning Outcomes	2018
University of Wisconsin-Madison	
Research Mentorship Series University of Wisconsin-Madison	2018
Project Management Workshop University of Wisconsin-Madison	2018
Applying for NIH K Awards University of Wisconsin-Madison	2018
Microbiota Data Analysis in R University of Wisconsin-Madison - Biotechnology Center	2017
Microbiota Data Analysis in mothur University of Wisconsin-Madison - Biotechnology Center	2017
Assessing Your Transferrable Skills University of Wisconsin-Madison	2017
Mentoring Undergraduates Texas A&M University	2011