

T. Marie Tipps
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Education:

Bachelor of Science in Biology 2010 Angelo State University
Minor in Chemistry

Master of Science in Biology 2012 Angelo State University
Thesis: Morphological and molecular variation in Townsend's big-eared bat (*Corynorhinus townsendii*) in West Texas

University Experience:

- *Lecturer/General Biology Lab Coordinator*, Department of Natural Sciences, Texas A&M University-San Antonio (August 2021-present)
- *Adjunct Instructor*, Department of Science and Mathematics, Texas A&M University-San Antonio (June 2014-August 2021)
- *Laboratory Manager*, Department of Science and Mathematics, Texas A&M University-San Antonio (August 2013-August 2021)
- *Teaching Assistant*, Department of Biology, Angelo State University (Fall 2010-Spring 2012)

Professional Experience:

- *EcoHealth Net Research Exchange Program*, EcoHealth Alliance, New York, NY (August-November 2012)
- *Collections Assistant*, Angelo State Natural History Collection, Angelo State University, San Angelo, TX (November 2007-August 2012)
- *Research Assistant*, Ammerman Molecular Research Lab, Angelo State University, San Angelo, TX (September 2008-August 2009)
- *Bird Department Intern*, San Antonio Zoo, San Antonio, TX (Summer 2007)

TEACHING

Courses Taught

- Animal Nutrition (BIOL 3303); Online; Spring 2025
- Mammalogy Lecture & Lab (BIOL 4429); F2F/Online; Spring 2021, Fall 2024-present
- Evolution Lab (BIOL 3402); Online; Spring 2024
- Cell Biology Lecture (BIOL 2431); F2F; Fall 2022-Fall 2023
- Life Sciences II (BIOL 1309); F2F; Summer 2022
- General Biology II Lecture (BIOL 1307); F2F; Spring 2022-present
- General Biology I Lecture (BIOL 1306); F2F; Fall 2021-present
- Genetics Lecture (BIOL 2411); F2F/Online; Spring 2020-Spring 2024
- Animal Physiology Lecture & Lab (BIOL 3408); F2F/Online/Hybrid; Summer 2021
- General Biology II Lab (BIOL 1107); F2F/Hybrid; Spring 2019-present
- Introduction to Microbiology Lecture & Lab (BIOL 2421); F2F/Online; Fall 2019-present
- History of Biology (BIOL 4356/3302); F2F/Online; Summer 2018-present
- Life Sciences I Lecture (BIOL 1308); F2F/Online; Spring 2018-present
- General Biology I Lab (BIOL 1106); F2F/Hybrid; Fall 2018-present
- Genetics Lab (BIOL 2411); F2F; Summer 2014-Summer 2018

Curriculum Development

- New Textbook Curriculum Alignment: General Biology I Lecture; Credits: 3 (Fall 2024)
 - Adjusted course objectives to align with new textbook learning outcomes
 - Identified learning goals for each chapter and disseminated to new faculty
- Course Re-design: Mammalogy Lecture and Lab; Credits: 4 (Fall 2024)
 - Re-designed to adapt to modern approaches of active and hands-on learning than previously able to do when taught online
- Learning Community – Pre-Health (Fall 2023-Fall 2024)
 - Developed a career-focused learning community with Algebra and First Year Seminar professors; required meeting once per month and developing co-curricular activities that spanned the three courses
 - One Biology class fed into two FYS/Algebra courses – two assignments were created to stay in line with both sections of the Learning Community
- Course Re-design: Introduction to Microbiology Lecture & Lab; Credits: 4 (Summer 2024)
 - Course has been taught before with a different book and different modality; switched to online modality for lecture; developed several exercises specifically to engage students online
- New Course Proposal: BIOL 1108 Introduction to Life Sciences I Laboratory; Credits: 1 (Spring 2024)
 - This course is designed to fulfill the lab requirement for non-science major students as an alternative to the general biology course for science majors. It complements the BIOL 1308 Introduction to Life Sciences I for Non-Science Majors lecture course, with laboratory activities specifically tailored for non-science majors.
- Laboratory Activity Collaboration – Mini-CURE with Trinity University (Fall 2023)
 - Students from both universities collaborated to develop and answer a question about antibiotic-resistant genes found in bacteria in the soil areas near their respective universities

Professional Development:

- Accepted into the second cohort of the Biology Core Concept Teaching Tools Project (November 2024)
 - Project is designed to help create and assess teaching tools for use in general Biology classrooms; will develop and use teaching tools over the course of 2025
- iClicker Training – August 2024
- Attended Association for Biological Laboratory Experience Conference (Summer 2024)
 - Presented lessons learned from the Mini-CURE collaboration with Trinity University from Fall 2023
 - Learned several new lab techniques to update and change current laboratory curriculum in the classroom.
- Center of Academic Development Online Teaching Workshops (April/May 2024)

SERVICE

University-Level Service

- Member, Learning Community Advisory Committee (March 2024-present)

College-Level Service

- Pre-Vet Advisor, Health Professions Advisory Committee (Fall 2023-present)
- Interview Committee, Health Professions Advisory Committee (Spring 2024-present)

Department-Level Service

- Volunteer, Jaguar Days (Fall 2022-Spring 2024)

Program-Level Service

- Adjunct Hiring Committee (Summer 2024-present)
- Volunteer, Faculty Lunch-New Student Orientation (Summer 2024)
- Population Geneticist Hiring Committee (Spring 2024)
- Genetics Lab Coordinator (Fall 2023-Spring 2024)
- Scheduling Coordinator (Spring 2023-present)
- Life Sciences I Coordinator (Fall 2021-present)
- General Biology I Lecture Coordinator (Fall 2021-present)

Service to the Community

- Co-Director, Science Olympiad (March 2024-present)
- Presenter, ASPIRE Summer Camp, Texas A&M-San Antonio (Summer 2023-present)
- Judge, John Jay High School Science Fair (Fall 2023)
- Judge, Alamo Regional Science Fair (Fall 2021-present)
- Event Coordinator, Science Olympiad (March 2014-March 2024)

Awards:

College of Arts & Sciences 2023 Outstanding Faculty Award for Service, Non-Tenure line

Presentations:

2024	D. Palow and T.M. Tipps Lessons learned from a cross-town collaborative CURE implementation: Challenges of inter-institutional and multiple skill level collaborations among students.
2011-2012	T.M. Tipps and L.K. Ammerman. Morphological and Molecular Variation in Townsend's Big-eared Bat (<i>Corynorhinus townsendii</i>) in west Texas.
2010	T.M. Tipps and L.K. Ammerman. Five new county records of bats (Vespertilionidae and Molossidae) in Texas identified using molecular and morphological techniques. Texas Society of Mammalogists, Texas Tech Biological Station, Junction, TX
2010	T.M. Tipps and L.K. Ammerman. A molecular approach to the position of <i>Cheiromeles</i> (Chiroptera: Molossidae).
2009-2010	L.K. Ammerman, D.N. Lee, and T.M. Tipps . Molecular phylogeny of the family Molossidae.
2009	T. M. Tipps , D.N. Lee, and L.K. Ammerman. Optimizing PCR conditions in DMP1 for phylogenetic analysis of molossid genera.

Publications:

Anthony, S. J., R. Ojeda-Flores, O. Rico-Chávez, I. Navarrete-Macias, C. M. Zambrana-Torrelío, M. K. Rostal, J. H. Epstein, **T. M. Tipps**, E. Liang, M. Sanchez-Leon, J. Sotomayor-Bonilla, R. Ávila, R. Medellín, T. Goldstein, G. Suzán, P. Daszak, and W. I. Lipkin, Coronaviruses in bats from Mexico. Journal of General Virology. 94: 1028-1038

Tipps, T. M., B. Mayes, and L. K. Ammerman. Acceted. New county records for six species of bats (Vespertilionidae and Molossidae) in Texas. Texas Journal of Science 63(2): 141-152

Ammerman, L. K., D. N. Lee, and **T. M. Tipps**. Accepted. Molecular phlogenetic insights into the evolution of free-tailed bats in the subfamily Molossinae (Molossidae: Chiroptera). Journal of Mammalogy 93:12-28.

Research Grants

- 2009-2010 **T.M. Tipps** and L.K. Ammerman. A molecular approach to the phylogenetic position of *Cheiromeles* (Molossidae: Chiroptera) - Carr Academic Research Grant \$300; Tri-Beta Research Grant \$650; Texas Academy of Science \$2000
- 2010-2011 **T.M. Tipps** and L.K. Ammerman. Investigating an unusual population of Townsend's big-eared bat in the southwestern U.S. using genetic data; Carr Academic Research Grant \$500; Texas Academy of Science \$1250; Head of the River Ranch Grant \$1000

Computer Skills:

Genetic Analysis: Sequencher, MEGA5, PAUP 4.0, Modeltest, Mr. Bayes, Geneious, Genetic Analysis Systems for Beckman Coulter

General: Windows and Apple Platforms, Microsoft Office (including Access and Publisher), R for statistical analysis, SYSTAT statistical program, Blackboard Ultra Academic Suite, Adobe Acrobat, Specify 5-Biodiversity Collections Software, CourseLeaf,

Professional Membership:

Association for Biology Laboratory Education – 2023-present
American Society of Mammalogists – 2011-Present
Southwestern Association of Naturalists – 2008-Present
Texas Society of Mammalogists – 2008-Present
North American Society for Bat Research – 2009-2016
Texas Academy of Science – 2010-2013