TEXAS STATE VITA

I. Academic/Professional Background

A. Kristy Lynn Daniel (née Halverson) **Title: Associate Professor**

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San Marcos, TX 78666
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B. Educational Background

Degree	*Year*	*University*	*Major*
Ph.D.	2009	University of Missouri	Curriculum and Instruction – Science Education

Dissertation: *Investigating the Development and Use of Representations by Undergraduates in a Plant Systematics Course* (Co-Chairs: Drs. Sandra Abell & Patricia Friedrichsen)

M.S.	2005	Iowa State University	Ecology, Evolution, and Organismal Biology

Thesis: *Intraspecific Plant Polyploidy Effects on Goldenrod Insect Herbivores* (Chair: Dr. John Nason)

B.A.	2002	Westminster College	Biology

C. University Experience

** Institutions Abbreviated: Texas State University (TXST); University of Southern Mississippi (USM); University of Missouri (MU); Iowa State University (ISU); Westminster College (WCMO)*

Position	*University*	*Dates*
Associate Professor	TXST	2018-Present
Assistant Professor	TXST	2015-2018
Assistant Professor	USM	2009-2015
**Recommended for Tenure and Promotion effective August 17, 2015*		
Research Investigator	MU	2007-2009
Improving Phylogenetic Thinking in Biology Undergraduates. Supervisors: Dr. Sandra Abell, Dr. Patricia Friedrichsen, and Dr. J. Chris Pires		
Graduate Teaching Assistant	MU	2007-2009
Graduate Instructor	MU	2006-2007
Adjunct Instructor	WCMO	2006
Adjunct Instructor	MU	2006
Graduate Research Assistant	MU	2005-2009
2007-2009: Decision Making about Biotechnology Issues. Supervisor: Dr. Marcelle Siegel		
2007-2008: Equitable Assessment for English Learners. Supervisor: Dr. Marcelle Siegel		
2005-2007: Supporting Career Changers. Supervisors: Susan White and Dr. Sandra Abell		
2005-2006: Evaluation of Professional Development Projects. Supervisor: Dr. Sandra Abell		
Biological Science Tutor	MU	2005-2007
Biology Lab Coordinator Assistant	ISU	2005
Research Investigator	ISU	2003-2005
Plant Polyploid Effects on Goldenrod Insect Herbivores. Supervisor: Dr. John Nason		
Graduate Instructor	ISU	2003-2005
Undergraduate Instructor	WCMO	1998-2001

D. Relevant Professional Experience

Position	*Entity*	*Dates*
Contributor-BIO Concepts Course	Wiley Publishing	2014
Naturalist	MO Dept. of Natural Resources	2001
Substitute Teacher	Fulton School District	2000-2003
Field Botanist	MO Dept. of Conservation	2000

E. Other Professional Credentials

2022	Certified Interpretive Guide Trainer, National Association for Interpretation (expires 3/7/2026)
2021	Certified Interpretive Guide, National Association for Interpretation (expires 3/11/2025)
2020	Office of Distance and Extended Learning - Teaching Online at Texas State
2017-Current	Master Naturalist, Hays County Chapter
2017-Current	TXST Service-Learning Fellow
2010	CITI Completion Certificate (expires 7/15/2023)
2016	Survival Sign Language
2015	LGBTIQ Allies Training
2015	Developing Assessment Methods & Measures
2013	Scientific Teaching
2011	National Science Foundation, Science: Becoming the Messenger
2011	Quality Enhancement Program Writing and Speaking Pedagogy
2011	USM, Faculty Fellow Service-Learning
2009	College Teaching Certificate
2009	Connecting Undergraduates to the Enterprise of Science

II. TEACHING

A. Teaching Honors and Awards:

Teaching Award of Honor. (2020). This prestigious award from the TXST Alumni Association recognizes, encourages, and rewards superior Texas State classroom teachers, including professors, lecturers, associate professors, assistant professors, and instructors. This year, the award was given in recognition of exemplary service during the COVID-19 crisis in Spring 2020. TXST.

Alpha Chi Favorite Professor. (2018). This is a student-nominated honor for faculty, TXST.

Excellence in University Teaching. (2015). Each year the university awards this honor to one USM faculty member each year with a record of exceptional teaching.

Honorary Guest Coach. (Basketball, December 2014; Football, October 2014). This is a student nominated honor for faculty, USM.

Robert Frank Fellowship. (AY 2007-2008). Each year MU's College of Education awards one MU graduate student with an exemplary academic and research record an annual scholarship to support future research endeavors.

John Carlock Award. (October 2006; October 2007). Each year, the Association of College and University Biology Educators organization selects an outstanding graduate student who shows high potential for success in career instructing college biology.

Teaching Excellence Award. (2005). Each year ISU annually recognizes the top 10% of graduate instructors on campus, based upon student evaluations and peer observation.

B. <u>Courses Taught:</u>

TXST - BIO 1421: Modern Biology II; BIO 3406: Economic Botany (*emergency replacement instructor*); BIO 4319: Biological Resources: Conservation and Planning; BIO 4350T/5340T/4328: Field Biology of Ireland; BIO 4350X/4327: Issues in Irish Biodiversity and Conservation; BIO 4400/5400: Plants Important to Wildlife; BIO 5100/7100: Professional Development; BIO 5399: Thesis; BIO 7102: Seminar in Aquatic Resources (Science and Society; Scientific Writing; Research Essentials); BIO 7114/7214/7314: Research Experience; BIO 7303: Research; BIO 7310: Global Aquatic Resources; BIO 7360X/7300: Communicating Science; BIO 7360Z/7301: College Science Teaching; BIO 7361A: Discipline-Based Educational Research Methods; HON 2303D: Everyday Biology

USM - BSC 103: Biology and Society; BSC 111: Principles of Biology II; BSC 423/523: Science and Society; BSC 497: Senior Capstone in Biological Sciences; BSC 492: Special Problems (Senior Honor's Thesis); BSC 404/LCA & 504/LCA: Ireland Biology Field Experience; BSC 600: Professional Development for Biology Teaching Assistants; BSC 691: Research; BSC 692: Special Problems (Learning and Teaching with Visualizations in Biology Education); BSC 698: Thesis; BSC 791: Research in Biology; BSC 792: Special Problems (Learning to Lecture; Grant Writing); BSC 898: Dissertation; SME 601: Science, Mathematics, and Technology Education in Contemporary Perspective; SME 691: Research Practicum in Science and Mathematics Education; SME 703: Foundations of Science and Mathematics Education; SME 761: Qualitative Educational Research Design; SME 762: Qualitative Educational Research Practicum; SME 789: Seminar in Science and Mathematics Education; SME 791: Research in Science Education; SME 792: Special Problems (Human Learning; Learning and Teaching with Visualizations in Biology Education; Visualizations in Biochemistry); SME 797: Independent Study; SME 898: Dissertation

MU - BIO SC 1010: General Principles and Concepts of Biology; BIO SC 1500: General Biology Lab; BIO SC 3100: Community Biology; BIO SC 3210: Plant Systematics Lab

ISU - BIO 201L: Principles of Biology I Lab; BIO 202L: Principles of Biology II Lab

WCMO - BIO 107: Introduction to Biological Principles Lab; BIO 110: Biodiversity; BIO 110L: Biodiversity Lab; BIO 220: Evolution; ENV 105: Introduction to Environmental Science; WSM 101: Westminster Seminar: Human Evolution

C. <u>Graduate Theses/Dissertations, Honors Theses, or Exit Committees:</u>

(** indicates K.L. Daniel – major professor*)

Student Name, School	*Year*	*Degree*
*Mallika Saha, TXST	Accepted	M.S. Biology
*Carolyn Jess, TXST	Accepted	M.S. Biology

*Caitlin Campbell (née Lakey), TXST In progress Ph.D. Aquatic Resources and Integrated Biology

Hamza Malik, UMassD In progress Ph.D. STEM Education
Research Question: What are the Roles of Educators from an Environmental Education Center in the Context of In-School and Out-of-School Settings?

*Ryan Spencer, TXST In progress Ph.D. Aquatic Resources and Integrated Biology
Impacts of Place-Based Pedagogy and Environmental Mindfulness at an Informal Science Institution

Jared Messick, TXST In progress Ph.D. Aquatic Resources and Integrated Biology

Brooke Laycock, TXST In progress M.S. Wildlife Ecology

*Rachel Seets (née Lincoln), TXST In progress M.S. Biology
An examination of best practices and impact of an outdoor science inquiry with elementary students

Chrissy White, TXST In progress M.S. Geography

*Miranda Wait, TXST In progress M.S. Wildlife Biology
Connecting Interest in and Awareness of the Environment with an Informal Experience

*Jenn Idema, TXST 2021 Aug Ph.D. Aquatic Resources and Integrated Biology
Exploring the Impacts of Socioscientific Environmental Issues Through Aquarium Exhibits
Celebrity Classic Scholar, 2019-2020 Outstanding Graduate Student at the doctoral level in the College of Science and Engineering, Project Funded in part by the TXST Doctoral Research Support Fellowship - Spring 2020 Award ($5000)

*Myra McConnell, TXST 2021 Aug M.S. Biology
An In-depth Investigation into a Faculty's Development of an Active-Learning Course
Project Funded in part by the TXST Thesis Research Support Fellowship - Fall 2020 ($1890)

Libby Pratt, TXST 2021 May M.S. Wildlife Ecology
Analysis of Drivers of Spring Alligator Hunting in Texas and Policy Implications

*Victoria Reyes, TXST 2020 Dec B.S. Biology (Honor's Thesis)
Family Interpretation of Conservation Messaging in an Aquarium
SURE Fellow Summer 2019, Project Funded in part by the Tri Beta Research Conference

*Bria Marty, TXST 2020 Aug M.S. Biology
Assessing Public Perceptions of Spiders and Identifying Trends in Community Science Participation
Project Funded in part by the TXST Thesis Research Support Fellowship - Spring 2020 ($1250)

Jared Messick, TXST 2020 Aug M.S. Wildlife Ecology
Determinants of Endangered Species Stewardship by Private Landowners

*Zach Nolen, TXST 2019 Aug Ph.D. Aquatic Resources and Integrated Biology
A Consideration into Ways Biology-Based Student Organizations Facilitate Participation in STEM
Project Funded in part by the TXST Doctoral Research Support Fellowship - Fall 2017 Award ($5000)

Jacqueline Samuel, USM 2019 Aug Ph.D. Science and Mathematics Education
Developing a Theoretical Framework for Visualization-Based Pedagogical Content Knowledge (V-PCK) Based on Middle School Teachers' Views and Uses of Visualizations as an Instructional Tool

*Antonia MacCrossan, TXST 2019 May B.S. Biology (Honor's Thesis)
Student Hormonal Responses in Two Learning Environments

*Austin Wilkes, OK State U 2019 May B.S. Integrative Biology (Honor's Thesis – co-advisor)
The Relationship between Religiosity and Acceptance of Evolutionary Theory among Students in an Introductory Zoology Course

Izaak DeLeon, TXST 2018 Dec M.S. Biology
Exploring Latino Parent Attitudes Toward Science, Involvement in Science, and Perceptions of Value and Comfort of Family Science Events

*Sara Salisbury, TXST 2018 Aug M.S. Biology
An Investigation of Preservice Teachers' Engagement and Perceptions of Science Learning in Outdoor Learning Environments

*Leah Cuddeback, TXST 2018 May B.S. Biology (Honor's Thesis – co-advisor)
Lions and Tigers and Teens: Exploring Volunteer Influences at the Saint Louis Zoo

*E. Austin Leone, TXST 2017 May M.S. Biology
An Investigation of Relationships between Student Acceptance of Evolution, Tree-Thinking, and Eye Movement among different Instructional Interventions

*Jeremy Norris, USM 2016 May B.S. Biology (Honor's Thesis – Co-Advisor)
Validity and Reliability Evaluation of an Instrument Measuring Plant Blindness

*Jennifer Mraz, USM 2015 Dec Ph.D. Biological Sciences
Identities and Motives of Naturalist Development Program Attendees and their Relation to Professional Careers

*Chandrani Mishra, USM 2015 Dec Ph.D. Biological Sciences
Investigating the Impact of Reflexive Practices on College Students in a Science Laboratory Course

*Aubin St. Clair, USM 2015 Aug M.S. Biological Sciences
Naturalists' Perspectives on the Use of Mobile Technology during a Nature Hike

*Carrie Jo Boyce, USM 2015 Aug Ph.D. Biological Sciences
Investigating How Students Communicate Tree-Thinking

Mounir Saleh, USM 2015 May Ph.D. Science and Mathematics Education

Moving College Students to a Better Understanding of Substrate Specificity of Enzymes through Utilizing Multimedia Pre-Training and an Interactive Enzyme Model

*Ashleigh Davis, USM 2014 May B.S. Psychology (Honor's Thesis)
A Look into Informal Science Education and Students with Individual Education Plans

*Donaven McLaurin, USM 2013 May B.S. Biological Sciences (Honor's Thesis)
Using Manipulative Models to Develop Tree-Thinking
McNair Scholar

*Jill Maroo, USM 2013 May Ph.D. Science and Mathematics Education
Nursing Students' Attitudes toward Science in the Nursing Curricula

Angela Bruni, USM 2013 May Ph.D. Science and Mathematics Education
Dialogue as a Tool for Meaning Making

John Parr, USM 2013 May Ph.D. Science and Mathematics Education
View of Socioscientific Issues among Educators: The Willingness of Teachers to Accept SSI into the Classroom and the Reasoning Underlying those Beliefs

J. Lynn Singletary, USM 2013 May Ph.D. Science and Mathematics Education
The Role of Service-Learning in College Students' Environmental Literacy: Content Knowledge, Attitudes, and Behaviors

Vivian Smith, USM 2013 May Ph.D. Science and Mathematics Education
Science Fair: is it Worth the Work? A Qualitative Study on Deaf Students' Perceptions and Experiences Regarding Science Fair in Primary and Secondary School

Visiting Scholar
Sokha Kheam, Fulbright Professor U.S.-ASEAN Visiting Scholars Initiative, Cambodia, 2016
Inga Ubben, Ph.D. Student, Humboldt Universität zu Berlin, Germany, 2015

Masters – Non-Thesis

Sharon Savage, TXST	2021 May	M.S. Sustainable Studies
Project: *Divergent: Dialogues with Artists about Earth*		
*Travis Acosta, TXST	2018 May	M.S. Biology
Brody Hutchinson, USM	2015 Dec	M.S. Science and Mathematics Education
Valerie Cook, USM	2015 May	M.S. Science and Mathematics Education
Kylee Dueitt, USM	2014 May	M.S. Science and Mathematics Education
Mark Holcomb, USM	2012 Aug	M.S. Science and Mathematics Education
*Jennifer Lawrence, USM	2012 May	M.S. Science and Mathematics Education
*Carrie Jo Boyce, USM	2010 Dec	M.S. Science and Mathematics Education

Other Students
Supervisor, Undergraduate Students (Non-Thesis Research):
Michelle Nguyen, TXST; Lyric Pullman, TXST; Jackie Baez, TXST; Dominique Ocampo, TXST (SURE program); Arianna Corral, TXST; Ryan Ament, TXST; Victoria Reyes, TXST (SURE program); Kaitlin Villarreal, TXST; Sierra Roman Hicks, TXST; Brittney Covington, TXST; Gabrielle Payne, TXST; Karen Alvarado Rodriguez, TXST; Sandra Bohn, USM; Izaak DeLeon, TXST; Antonia MacCrossan, TXST; Megan Pallo,

MU; Lauren Pittman, USM; Matthew Planchard, USM; Karina Salinas, TXST; Katherine Stefanik, TXST

Mentor, Graduate Student Research (Non-Thesis Research):

Rebecca Cavalier, TXST; Laila Ali, USM; Houbin Fang, USM; Soo Ha, Purdue University; Suzanne Jennings, USM; Sara Johnson, USM; Xiaolan Li, USM; Camillia Matuk, Northwestern University; Kathryn Parsley, TXST; Nasser Syed, USM; Lance Vikaros, Columbia University; Emily Walter, MU; Aresia Watson, USM; Stephanie Williams, USM

D. Courses Prepared and Curriculum Development:

Faculty-Led Study Abroad Program (TXST) – Biology in Ireland
BIO 4350T/5350T/4328/5328 (TXST): Ireland Biology Field Experience
BIO 4350X/5350X/4327/5327 (TXST): Issues in Irish Biodiversity and Conservation
BIO 4350Z/5350Z (TXST): Diversity and Cultural Impact of Geoparks
BIO 4400/5400 (TXST): Plants Important to Wildlife
BIO 7361A (TXST): Discipline-Based Educational Research Methods
BIO 7360Z/7301 (TXST): College Science Teaching
BIO 7360X/7300 (TXST): Communicating Science
BSC 404/504/L (USM): Ireland Biology Field Experience – Course Abroad
HON 2303D (TXST): Everyday Biology
SME 761 & 762 (USM): Qualitative Educational Research Design and Practicum Series
Special Topics Developed (USM): Human Learning, Learning to Lecture, Learning and Teaching with Visualizations in Biology, Visualizations in Biochemistry, and Grant Writing

E. Funded External Teaching Grants and Contracts:

Howard Hughes Medical Institute. (2014). *SEA-PHAGES Associate Membership 2015-2016.* Primary Faculty Contact: Maldovi, D.; Alternate Faculty Contact: Sellers, J.M. Originally accepted in 2013 by Faculty Contacts: McLean, T. & **Halverson, K.L.**, Deferred to 2014 (for AY 2015-2016).

F. Submitted, but Not Funded, External Teaching Grants & Contracts

N/A

G. Funded, Internal Teaching Grants & Contracts *($3000.00 Funded)*

Texas State University (AY 2016-2017). *New Study Abroad Program Development Grant – Biology in Ireland.* **PI: Daniel, K.L.** (TXST **$2200 Total**).

Texas State University Program for Excellence in Teaching and Learning (2016). *Professional Development Travel Award.* Recipient: **Daniel, K.L.** (TXST **$800 Total**).

H. Submitted, but Not Funded, Internal Teaching Grants & Contracts

N/A

III. SCHOLARLY/CREATIVE

**All works authored by "Daniel" are credited to TXST, works by "Halverson" are credited to other institutions.*

A. Works in Print

1. Books

a. Scholarly Monographs

N/A

b. Textbooks
N/A

c. Edited Books:
Daniel, K.L. (Ed.) (2018). *Towards a Framework for Representational Competence in Science Education.* Dordrecht, The Netherlands: Springer.

d. Chapters in Books:
9. Idema, J.L. & **Daniel, K.L.** (In Press, 2022). Socioscientific issues and the potential for fostering engagement through exhibits. In Patrick, P. (Ed.) *Applying Learning Theories (Theoretical Frameworks) in Science Research Outside the Classroom: How People Learn Science in Informal Environments* (Chapter 19). Dordrecht, The Netherlands: Springer.

8. **Daniel, K.L**. & Luxford, C. (In Press, 2022). Building your personal pitch using a message framework. In S. Rowland and L. Kuchel (Eds.). *Teaching Science Students to Communicate: A Practical Guide* (Chapter 55). Dordrecht, The Netherlands: Springer Nature.

7. Leone, A.E., **Daniel, K.L.,** French, D., Clough, M. (In Press, 2022). Statements of Critical Significance (SOCS) for communicating succinctly. In S. Rowland and L. Kuchel (Eds.). *Teaching Science Students to Communicate: A Practical Guide* (Chapter 11). Dordrecht, The Netherlands: Springer Nature.

6. Ubben, I., Salisbury, S., & **Daniel, K.L.** (2019). Combining visual and verbal data to diagnose and assess model competence. In A. Upmeier zu Belzen, D. Krüger and J. van Driel (Eds.). *Towards a Competence-based View on Models and Modeling in Science Education* (Chapter 6). Dordrecht, The Netherlands: Springer. (pp.99-115).

5. **Daniel, K.L.**, Bucklin, C.J., Leone, E.A., & Idema, J.L. (2018). Towards a definition of representational competence. In K.L. Daniel (Ed.) *Towards a Framework for Representational Competence in Science Education* (Chapter 1). Dordrecht, The Netherlands: Springer (pp. 3-11).

4. Mishra, C., Clase, K.L., Bucklin, C.J., & **Daniel, K.L.** (2018). Improving students' representational competence through a course-based undergraduate research experience. In K.L. Daniel (Ed.) *Towards a Framework for Representational Competence in Science Education* (Chapter 9). Dordrecht, The Netherlands: Springer (pp. 177-201).

3. Saleh, M.R. & **Daniel, K.L.** (2018). Leveraging on Assessment of Representational Competence to Improve Instruction with External Representations. In K.L. Daniel (Ed.) *Towards a Framework for Representational Competence in Science Education* (Chapter 8). Dordrecht, The Netherlands: Springer (pp. 155-176).

2. Ubben, I., Nitz, S., **Daniel, K.L.**, & Upmeier zu Belzen, A. (2018). Assessing Representational Competence with Eye Tracking Technology. In K.L. Daniel (Ed.) *Towards a Framework for Representational Competence in Science Education* (Chapter 11). Dordrecht, The Netherlands: Springer (pp. 229-245).

1. **Halverson, K.L.** & Friedrichsen, P.M. (2013). Learning tree thinking: Developing a new framework of representational competence. In D.F. Treagust and C.-Y. Tsui (Eds.) *Multiple representations in biology education* (Chapter 10). Dordrecht, The Netherlands: Springer. (pp. 185-202).

2. Articles

a. Refereed Journal Articles:

35. **Daniel, K.L.**, McConnell, M., Schuchardt, A., & Peffer, M.E. (2022). Challenges facing interdisciplinary researchers: Findings from a professional development workshop. *PLOS ONE. 17(4),* e0268234. doi: 10.1371/journal.pone.0267234

34. Marty, B., **Daniel, K.L.**, & Forsythe, M. (Accepted – Jan 2022). Bee time. *Science & Children.*

33. Jenkins, K.P., Mead, L., Baum, D.A., **Daniel, K.L.**, Bucklin, C.J., Leone, E.A., Gibson, J.P., & Naegle, E. (Online First – Mar 2022). Developing the BETTSI: A tree-thinking diagnostic tool to assess individual elements of representational competence. *Evolution.* 1-14. doi:10.1111/evo.14458

32. Daniel, K. L. (2022). Interpreting the Pseudocot Phylogeny. *QUBES Educational Resources.* doi:10.25334/E2AB-YG50

31. Messick, J.A., Serenari, C., **Daniel, K.L.,** Idema, J., & Lute, M. (2021 Online First, Issue out in 2022). Determinants influencing recruitment in the Houston Toad programmatic safe harbor agreement. *Human Dimensions of Wildlife, 27(5).* doi:10.1080/10871209.2021.1959961

30. Jenkins, K., Mead, L., Baum, D., **Daniel, K.L.**, Bucklin, C.J., Leone, E.A., Gibson, J.P. & Naegle, E. (2021). BETTSI - Basic Evolutionary Tree-Thinking Skills Instrument. *QUBES Educational Resources.* doi:10.25334/ZQY1-W289

29. Nolen, Z.L., **Daniel, K.L.,** & Bucklin, C.J. (2021). Perceived benefits from participating in content-based student organizations. *Journal of Student Affairs Research and Practice,* 58(4), 417-429. doi:10.1080/19496591.2020.1796689

28. **Daniel, K.L.** (2020). Recognizing personal challenges to emerge as a stronger teacher. *The American Biology Teacher, 82(4),* 197. doi:10.1525/abt.2020.82.4.197

27. Ashford-Hanserd, S., **Daniel, K.L.**, García, D.M., & Idema, J.L. (2020). Factors that influence persistence of biology majors at a Hispanic Serving Institution. *Journal of Research in Technical Careers, 4,* 47-60. doi:10.9741/2578-2118.1048

26. Leone, E.A., Salisbury, S.L., Nolen, Z.L., Idema, J.L., Parsley, K.M., Stefanik, K.L., & **Daniel, K.L.** (2019). Identifying the breakdowns in how students and faculty interpret course learning objectives. *Bioscene: Journal of College Biology Teaching, 45,* 16-23. ERIC Number: EJ1223956

25. Cuddeback, L.M., Idema, J.L., & **Daniel, K.L.** (2019). Lions, tigers, and teens: Promoting interest in science as a career path through teen volunteering. *International Zoo Educators Journal, 55.* 29-32.

https://www.researchgate.net/publication/337167857_Lions_tigers_and_teens_Promoting_interest_in_science_as_a_career_path_through_teen_volunteering

24. Mraz, J.A., **Daniel, K.L.**, Bucklin, C.J., Mishra, C., Ali, L., & Clase, K.L. (2018). Student identities in authentic course-based undergraduate research experience. *Journal of College Science Teaching, 48,* 68-75. https://www.jstor.org/stable/26491348

23. Bucklin, C.J. & **Daniel, K.L.** (2017). Using word associations as a formative assessment for understanding phylogenetics. *The American Biology Teacher, 79(8),* 668-670. doi:10.1525/abt.2017.79.8.668

22. **Daniel, K.L.** & Mishra, C. (2017). Student outcomes from participating in an international STEM service-learning course. *SAGE Open. January-March,* 1-11. doi:10.1177/2158244017697155

21. **Daniel, K.L.** (2016). Impacts of active learning on student outcomes in large lecture biology courses. *The American Biology Teacher, 78(8),* 651-655. doi:10.1525/abt.2016.78.8.651

20. Moore, A.D., **Daniel, K.L.**, & Thomas, A.K. (2016). Engaging students with ADHD through a nature hike. *American Journal of Undergraduate Research, 13,* 73-80. *http://www.ajuronline.org/uploads/Volume_13_2/AJURJune2016pp73to80.pdf*

19. Planchard, M., **Daniel, K.L.**, Maroo, J., Mishra, C., & McLean, T. (2015). Homework, motivation, and achievement in a college genetics course. *Bioscene, 41(2),* 11-18. http://files.eric.ed.gov/fulltext/EJ1086528.pdf

18. Boyce, C.J., Mishra, C., **Halverson, K.L.** & Thomas, A.K. (2014). Getting students OUTSIDE: Using technology as a way to stimulate engagement. *Journal of Science Education and Technology, 23,* 815-826. doi:10.1007/s10956-014-9514-8

17. Siegel, M., Menon, D., Sinha, S., Promyod, N., Wissehr, C., & **Halverson, K.L.** (2014). Equitable written science assessments for English language learners: How scaffolding helps. *Journal of Science Teacher Education, 25(6),* 681-708. doi:10.1007/s10972-014-9392-1

16. McLaurin, D., **Halverson, K.L.**, & Boyce, C.J. (2013). Using Manipulative Models to Develop Tree-Thinking. *Biology International – The International Union of Biological Sciences (IUBS), 54,* 108-121. http://www.iubs.org/fileadmin/user_upload/Biology-International/BI/BI_Numero_54.pdf

15. Walter, E.M., **Halverson, K.L.**, & Boyce, C.J. (2013). Investigating the relationship between college students' acceptance of evolution and tree thinking understanding. *Evolution: Education, and Outreach, 6,* 26. doi:10.1186/1936-6434-6-26

14. **Halverson, K.L.**, Boyce, C.J., & Maroo, J.D. (2013). Order matters: Pre-assessments and student generated representations. *Evolution: Education and Outreach, 6,* 24. doi:10.1186/1936-6434-6-24

13. Witzig, S., **Halverson, K.L.,** Siegel, M.A., & Freyermuth, S.K. (2011). The interface of opinion, understanding, and evaluation while learning about a socioscientific issue.

International Journal of Science Education, 35(15), 2483-2507. doi:10.1080/09500693.2011.600351

12. **Halverson, K.L.,** Pires, J.C., & Abell, S.K**.** (2011). Exploring the complexity of tree thinking expertise in an undergraduate plant systematics course. *Science Education, 95(5),* 794-823. doi:10.1002/sce.20436

11. **Halverson, K.L.** (2011). Improving tree-thinking one learnable skill at a time. *Evolution: Education and Outreach, 4,* 95-106. doi:10.1007/s12052-010-0307-0

10. Siegel, M.A., **Halverson, K.L.,** Freyermuth, S.K., & Clark, C.G. (2011). Beyond grading: A series of rubrics for science learning. *The Science Teacher, 78(1),* 28-33. http://learningcenter.nsta.org/files/tst1101_28.pdf

9. **Halverson, K.L.,** Siegel, M.A., & Freyermuth, S.K. (2010). Non-Science majors' critical evaluation of websites in a biotechnology course. *Journal of Science Education and Technology, 19(6),* 612-620. doi:10.1007/s10956-010-9227-6

8. **Halverson, K.L.,** Freyermuth, S.K., Siegel, M.A., & Clark, C.G. (2010). What undergraduates misunderstand about stem cell research. *International Journal of Science Education, 32(17),* 2253-2272. doi:10.1080/09500690903367344

7. Concannon, J., Siegel, M.A., **Halverson, K.L.,** & Freyermuth, S.K. (2010). College students' conceptions of stem cells, stem cell research, and cloning. *Journal of Science Education and Technology, 19,* 177-186. doi:10.1007/s10956-009-9190-2

6. **Halverson, K.L.** (2010). Using pipe cleaners to bring the tree of life to life. *The American Biology Teacher, 72(4),* 223-224. doi: http://dx.doi.org/10.1525/abt.2010.72.4.4

5. **Halverson, K.L.** & Lankford, D.M. (2009). Science galls me: What is a niche anyway? *The American Biology Teacher, 71(8),* 483-491. doi: http://dx.doi.org/10.1662/005.071.0807

4. **Halverson, K.L.,** Siegel, M.A., & Freyermuth, S.K. (2009). Lenses for framing decisions: Undergraduates' decision making about stem cell research. *International Journal of Science Education, 31(9),* 1249-1268. doi:10.1080/09500690802178123

3. Siegel, M., Wissehr, C.F., & **Halverson, K.L.** (2008). Sounds like "success:" A framework for equitable assessment. *The Science Teacher, 75 (3),* 43-46. http://learningcenter.nsta.org/files/tst0803_43.pdf

2. **Halverson, K.L.,** Heard, S.B., Nason, J.D., & Stireman, J.O. (2008). Differential attack on diploid, tetraploid, and hexaploid *Solidago altissima* L. by five insect gallmakers. *Oecologia, 154,* 755-761. doi:10.1007/s00442-007-0863-3

1. **Halverson, K.L.,** Heard, S.B., Nason, J.D., & Stireman, J.O. (2008). Origins, distribution and local co-occurrence of polyploidy cytotypes in *Solidago altissima* (Asteraceae). *American Journal of Botany, 95,* 50-58. doi: 10.3732/ajb.95.1.50

b. Non-refereed Articles:

Maroo, J. & **Halverson, K.L.** (2011). Tree-Thinking: A branch of mental rotation. *Synergy: Different Entities Cooperating for a Final Outcome, 2*(2), 53-59.

Boyce, C.J. & **Halverson, K.L.** (2011). Understanding evolution and evidentiary support. *Synergy: Different Entities Cooperating for a Final Outcome, 2*(2), 101-107.

3. <u>Conference Proceedings</u>

a. Refereed Conference Proceedings:

38. Ashford-Hanserd, S., **Daniel, K.L.**, & Garcia, D.M. (2022, April). Exploring STEM success skills of minority STEM majors at an HSI. *Proceeding of the American Educational Research Association Annual International Conference,* San Diego, CA.

37. Ashford-Hanserd, S., **Daniel, K.L.,** Garcia, D.M., Lerma, Y., & Pedroso, R. (2021, March). Influences on historically underrepresented minority students' decisions to enroll and persist in STEM majors. *Proceeding of the NARST Annual International Conference*, Orlando, FL.

36. Ocampo, D., Idema, J, & **Daniel, K.L.** (2021, March). Exploring the presentation of climate change through virtual aquarium exhibits. *Proceeding of the NARST Annual International Conference*, Orlando, FL.

35. Idema, J.L, Reyes, V., & **Daniel, K.L.** (2020, October). Using socioscientific issues as a model for fostering visitor engagement. *Proceedings of the 25th bi-annual conference of International Zoo Educators Association,* San Diego, CA.

34. Idema, J., **Daniel, K.L.,** Ashford-Hanserd, S., & García, D. (2020, March). Factors influencing Biology majors' persistence in their degree. *Proceeding of the NARST Annual International Conference,* Portland, OR. **Conference canceled due to COVID-19 pandemic.*

33. Reyes, V., Idema, J., & **Daniel, K.L.** (2020, March). Family interpretations of conservation messaging at an aquarium exhibit. *Proceeding of the NARST Annual International Conference,* Portland, OR. **Conference canceled due to COVID-19 pandemic.*

32. Bucklin, C.J., **Daniel, K.L.,** & Nolen, Z.L. (2019, April). Introductory biology majors understanding of phylogenies after variable intervention types. *Proceeding of the annual meeting of the American Educational Research Association,* Toronto, Canada.

31. **Daniel, K.L.**, Leone, E.A., & Bucklin, C.J. (2019, April). Developing a tree-thinking diagnostic test to assess individual elements of representational competence. *Proceeding of the annual meeting of the American Educational Research Association,* Toronto, Canada.

30. Salisbury, S. & **Daniel, K.L.** (2019, March). Preservice Teacher Engagement during a Nature-Based Fieldtrip. *Proceeding of the NARST Annual International Conference,* Baltimore, MD.

29. Idema, J.L., Nolen, Z.L., Leone, E.A., Parsley, K.M., Salisbury, S., & **Daniel, K.L.** (2017, November). Comparing learning objective communication between professors and

students in the classroom. *Proceedings of the Research Symposium for the National Association of Biology Teachers Annual Meeting,* St. Louis, MO.

28. Bucklin, C.J. & **Daniel, K.L.** (2017, April). Changes in students' phylogenetic tree-reading: A quasi-experimental design study. *Proceeding of the NARST Annual International Conference,* San Antonio, TX.

27. **Daniel, K.L.** & Mishra, C. (2016, April). Investigating the role of reflexive practices in a science laboratory course. *Proceeding of the NARST Annual International Conference,* Baltimore, MD.

26. **Daniel, K.L.** (2015, September). Impacts of collaborative active learning in a large lecture setting. *Proceedings of the biennial meeting of the European Science Education Research Association,* Helsinki, Finland.

25. **Daniel, K.L.** & Clase, K.L. (2015, September). Teaching systems biology through a course based undergraduate research experience. *Proceedings of the biennial meeting of the European Science Education Research Association,* Helsinki, Finland.

24. St. Clair, A., **Halverson, K.L.**, Thomas, A.K., & Boyce, C.J. (2015, April). Dividing attention participation to support informal learning. *Proceeding of the NARST Annual International Conference,* Chicago, IL.

23. **Halverson, K.L.** & Clase, K.L. (2014, June). Using classroom-based authentic research experiences to foster scientific thinking and representational competence. *Proceeding of the annual meeting of the International Conference of the Learning Sciences,* Boulder, CO.

22. Boyce, C.J., Mishra, C., **Halverson, K.L.**, & Thomas, A.K. (2014, April). Getting students OUTSIDE: Using technology as a way to stimulate engagement. *Proceeding of the NARST Annual International Conference,* Pittsburg, PA.

21. Maroo, J. & **Halverson, K.L.** (2014, April). Nursing students' attitudes toward science: A modification of the Scientific Attitude Inventory II (SAI II). *Proceeding of the NARST Annual International Conference,* Pittsburg, PA.

20. Clase, K., & **Halverson, K.L.** (2013, September). Using technology to facilitate science learning and community development. *Proceedings of the biennial meeting of the European Science Education Research Association,* Nicosia, Cyprus.

19. McLaurin, D.C., **Halverson, K.L.**, Boyce, C.J. (2013, April). Using manipulative models to develop tree-thinking. *Proceeding of the NARST Annual International Conference,* Rio Grande, Puerto Rico.

18. Saleh, M.R., **Halverson, K.L.,** Gearity, B. (2013, April). Moving students to a better understanding of enzyme specificity. *Proceeding of the NARST Annual International Conference,* Rio Grande, Puerto Rico.

17. Samuel, J. & **Halverson, K.L.** (2013, April). Factors influencing middle school teachers' planning and facilitation of visualization-based instruction. *Proceeding of the NARST Annual International Conference,* Rio Grande, Puerto Rico.

16. **Halverson, K.L.,** Walter, E., & Boyce, C.J. (2012, March). Investigating the relationship between college students' acceptance of evolution and tree thinking understanding**.** *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Indianapolis, IN.

15. Clase, K.L., **Halverson, K.L.,** Bohn, S., & Heyden, R. (2012, March). Using Second Life in a formal STEM classroom to learn how to represent annotated genomes and develop a sense of community. *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Indianapolis, IN.

14. Boyce, C.J., Maroo, J., & **Halverson, K.L.** (2011, April). The influence of task order on student responses on a tree thinking pretest. *Proceedings of the annual meeting of the American Educational Research Association,* New Orleans, LA.

13. Boyce, C.J., & **Halverson, K.L.** (2011, April). Understanding evolution and evidentiary support. *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Orlando, FL.

12. Fang, H., **Halverson, K.L.,** Williams, S.P., & Li, X. (2011, April). Using discussion in online and traditional college courses. *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Orlando, FL.

11. Johnson, S., Maroo, J., & **Halverson, K.L.** (2011, April). Classification of undergraduate alternative conceptions of the Tricarboxylic Acid Cycle. *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Orlando, FL.

10. Maroo, J., & **Halverson, K.L.** (2011, April). A mental mobile: Using branch rotation to solve the puzzle, "Are these trees the same?" *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Orlando, FL.

9. Parr, J., Syed, N., & **Halverson, K.L.** (2011, April). Non-Science majors' perceptions of integrating SSI instruction into high school curricula. *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Orlando, FL.

8. Planchard, M., **Halverson, K.L,** Maroo, J., & McLean, T. (2011, April). Homework, motivation, and achievement in a college genetics course. *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Orlando, FL.

7. Sinha, S., Menon, D., Siegel, M.A., Promyod, N., Wissehr, C.F., & **Halverson, K.L.** (2011, April). Assessments for English language learners: How scaffolding helps. *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Orlando, FL.

6. **Halverson, K.L.** (2010, June). Improving undergraduates' approaches to understanding tree thinking. *Proceedings of the annual meeting of the International Conference of Learning Sciences,* Chicago, IL.

5. **Halverson, K.L.** (2010, March). Exploring the link between mental rotation and college student learning with phylogenetic trees. *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Philadelphia, PA.

4. Concannon, J., Siegel, M.A., Freyermuth, S.K., & **Halverson, K.L.** (2009, April). College students' conceptions of stem cells, stem cell research, and cloning. *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Garden Grove, CA.

3. **Halverson, K.L.,** Abell, S.K., Friedrichsen, P.M., & Pires, J.C. (2009, April). Testing a model of representational competence applied to phylogenetic tree thinking. *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Garden Grove, CA.

2. **Halverson, K.L.,** Pires, J.C., & Abell, S.K. (2008, March). Undergraduates' abilities to use representations in biology: Interpreting phylogenetic tree thinking. *Proceedings of the Annual Meeting of the National Association for Research in Science Teaching,* Baltimore, MD.

1. **Halverson, K.L.,** Siegel, M.A., & Freyermuth, S.K. (2008, March). Socioscientific decision making: Undergraduates' perspectives on stem cell research. *Proceedings of the annual meeting of the American Education Research Association,* New York, NY.

4. Abstracts

Rubino, E.C., Messick, J.A., Serenari, C., **Daniel, K.L.**, Bates, E., & Crump, P. (2022). Testing communication strategies to increase Houston toad Safe Harbor Agreement enrollment. *The Wildlife Society.*

Messick, J. A., Serenari, C., **Daniel, K.L.**, Idema, J., & Lute, M. (2021). Determinants influencing recruitment in the Houston Toad programmatic safe harbor agreement. *The Wildlife Society*, 256.

Oyejide, K., Hanna, J., **Daniel, K.L.**, & Huertas, M. (2020). Can classrooms have an impact on student stress? *The FASEB Journal*, *34*, 1-1. https://doi.org/10.1096/fasebj.2020.34.s1.09834

Clase, K.L., **Halverson, K.L.**, Rickus, J., & Heyden, R. (2012). Integrating emerging technologies into formal education for assessment. *The FASEB Journal*, *26*, 519.1. https://doi.org/10.1096/fasebj.26.1_supplement.519.1

5. Reports: *(Non-refereed)*

Daniel, K.L., Tucker, A., & Harp, D. (2022, April). *Academic program reviewer's report: Biological sciences.* Commerce, TX: Texas A&M University-Commerce.

Serenari, C., Rubio, E., **Daniel, K.L.**, & Messick, J. (2021). *Testing communication strategies to increase Houston toad Safe Harbor Agreement enrollment: Interim performance report.* San Marcos, TX: Texas State University.

Ashford-Hanserd, S., **Daniel, K.L.**, Garcia, D. & Pedroso, R. (2020). *ACCEYSS NSF project outcomes report.* San Marcos, TX: Texas State University.

Messick, J., Lute, M., Serenari, C., Idema, J., **Daniel, K.**, Covington, B., Payne, G., & Forstner, M. (2019). *Investigating determinants influencing recruitment into Houston Toad Safe Harbor Agreements.* San Marcos, TX: Texas State University.

Daniel, K.L. (2015). *OUTSIDE: Over, under, and through: Students informally discover the environment - NSF Outcomes and Final Project Report.* Hattiesburg, MS: Department of Biological Sciences, USM.

Halverson, K.L. (2014). *OUTSIDE: Over, under, and through: Students informally discover the environment - NSF Second Annual Project Report.* Hattiesburg, MS: Department of Biological Sciences, USM.

Halverson, K.L. (2013). *OUTSIDE: Over, under, and through: Students informally discover the environment - NSF First Annual Project Report.* Hattiesburg, MS: Department of Biological Sciences, USM.

Abell, S., Cole, J., Ehlert, M., Lannin, J., Marra, R., **Halverson, K.,** Hutchins, K., Lee, M., Park Rogers, M. Wang, C. (2006). *Missouri Department of Higher Education Improving Teacher Quality Grants: Cycle 3 External Evaluation Report*. Columbia, MO: Science Education Center, MU.

Abell, S., Cole, J., Ehlert, M., Marra, R., Brown, P., **Halverson, K.,** Hutchins, K., Lee, M., Musikul, K., Park Rogers, M., Wang, C. (2005). *Missouri Department of Higher Education Improving Teacher Quality Grants: Cycle 2 External Evaluation Report*. Columbia, MO: Southwestern Bell Science Education Center, MU.

6. Book Reviews:

Halverson, K.L. (2013). Tree-Thinking: An Introduction to Phylogenetic Biology [Book Review]. *Reports of the National Center for Science Education, 35*, 7.1-7.3.

7. Other Works in Print:

Daniel, K.L. (2021, March 12). Mastering the puzzle of working with an interdisciplinary team: The good, the bad, and the awesome. *BRIDGES.* https://bridges.wp.txstate.edu/2021/03/12/mastering-the-puzzle-of-working-with-an-interdisciplinary-team-the-good-the-bad-and-the-awesome/

Thomas, A.K. & **Halverson, K.L.** (2012). *Go to Lake Thoreau [iPad app]*. Available from https://itunes.apple.com/us/app/go-to-lake-thoreau/id593032744?mt=8

B. <u>Works not in Print</u>

1. Papers Presented at Professional Meetings:

Lincoln Seets, R.M & **Daniel, K.L.** (2022, Nov). *Culturally responsive design techniques*. Presentation at the annual meeting of the National Association for Interpretation Conference. Cleveland, OH.

Lincoln Seets, R., & **Daniel, K.L.** (2022, March). *Build your own culturally responsive outdoor science activity.* Presentation at the annual meeting of the Texas Informal Science Education Association, Austin, TX.

Marty, B., & **Daniel, K.L.** (2022, March). *Assessing Public Perceptions of Spiders and Identifying Trends in Community Science Participation.* Presentation at the annual meeting of the Texas Informal Science Education Association, Austin, TX.

Daniel, K.L., McConnell, M., Schuchardt, A. & Peffer, M. (2022, January). *Challenges facing interdisciplinary collaboration*. Oral presentation at the annual meeting of SABER West, Irvine, CA.

Daniel, K.L. & Schuchardt, A. (2022, January). *Spotting sensemaking distinctions when visually considering equations in biology.* Roundtable presentation at the annual meeting of SABER West, Irvine, CA.

McConnell, M. & **Daniel, K.L.** (2021, November). *Exploring how a faculty member transitioned an active-learning biology course to emergency remote teaching (ERT).* Poster presentation at the annual meeting of the National Association of Biology Teachers, Atlanta, GA.

Lincoln Seets, R. & **Daniel, K.L.** (2021, November). *Influence of visual scaffolding on comprehension and completion in an outdoor elementary science inquiry.* Poster presentation at the annual meeting of the National Association of Biology Teachers, Atlanta, GA.

Galko, I., **Daniel, K.L.,** Reyes, V., Galko, K., & Idema, J. (2021, September). *Preparing families to act as stewards to combat climate change and restore ocean health.* Presentation at the IUCN World Conservation Congress 2020 Forum, Marseille, France.

Daniel, K.L. (2021, June). *Seeing the forest and the trees: Assessing tree thinking.* Presentation during the Tree Thinking: Have We Met the Challenge Society for the Study of Evolution Education Symposium, Virtual Meeting.

Ashford-Hanserd, S., **Daniel, K.L.**, Garcia, D.M., Lerma, Y., & Pedrosos, R. (2021, April). *Influences on Black and Hispanic STEM Majors' Decisions to Enroll and Persist at an HSI.* Roundtable presentation at the annual meeting of the American Educational Research Association, Virtual Meeting.

Idema, J.L., **Daniel, K.L.**, & Ocampo, D. (2021, January). *Exploring climate change messaging in virtual aquarium exhibits.* Roundtable presentation at the annual meeting of the Society for the Advancement of Biology Education Research West, Virtual Meeting.

Lincoln, R. & **Daniel, K.L.** (2021, January). *Influence of visual scaffolds on outdoor science inquiry.* Roundtable presentation at the annual meeting of the Society for the Advancement of Biology Education Research West, Virtual Meeting.

McConnell, M. & **Daniel, K.L.** (2021, January). *A case study following development and implementation of a new active learning biology course.* Roundtable presentation at the

annual meeting of the Society for the Advancement of Biology Education Research West, Virtual Meeting.

Spencer, R, **Daniel, K.L.,** Forsythe, M, & Witzig, S. (2021, January). *Education and environmental mindfulness at informal learning centers.* Roundtable presentation at the annual meeting of the Society for the Advancement of Biology Education Research West, Virtual Meeting.

Reyes, V.J., Idema, J.L., & **Daniel, K.L.** (2020, April). *Family interpretation of conservation messaging.* Presentation at the TriBeta District Convention, Cedar Hill, TX. **In person conference canceled due to COVID-19 pandemic*

Reyes, V.J., Idema, J.L., & **Daniel, K.L.** (2020, March). *Family interpretation of conservation messaging.* Poster presented at the Women in Science and Engineering, San Marcos, TX.

Ashford-Hanserd, S.N., **Daniel, K.L.**, Garcia, D., & Lee, B. (2020, February). *ACCEYSS: An evidence-based informal K-12 STEM curriculum framework for community organizations.* Poster presentation at the annual meeting of the Texas Informal Science Education Association. Waco, TX.

Idema, J.L. & **Daniel, K.L.** (2020, February). *Leaping the hurdles of data collection in informal science institutions.* Presentation at the annual conference of the Texas Informal Science Education Association, Waco, TX.

Marty, B.N. & **Daniel, K.L.** (2020, February). *Perceptions of spiders after participating in a community science activity.* Presentation at the annual conference of the Texas Informal Science Education Association, Waco, TX.

Reyes, V.J., Idema, J.L., & **Daniel, K.L.** (2020, February). *Family interpretation of conservation messaging.* Poster presented at the annual meeting of the Texas Informal Science Education Association, Waco, TX.

Mac Crossan, A.C., **Daniel, K.L.**, Oyejide, K.O., & Huertas, M. (2019, November). *Student hormonal stress responses in two learning environments.* Poster presented at the annual meeting of the National Association for Biology Teachers, Chicago, IL.

Marty, B. & **Daniel, K.L.** (2019, November). *A research-based design approach to creating a citizen science household spider observation activity.* Poster presented at the annual meeting of the National Association for Biology Teachers, Chicago, IL. ****Won second prize in the Four-Year College and University Section Student Poster competition.**

Nolen, Z.L. & **Daniel, K.L.** (2019, November). *Student reported benefits from participating in biology-based student organizations.* Poster presented at the annual meeting of the National Association for Biology Teachers, Chicago, IL.

Reyes, V.J., Idema, J.L., & **Daniel, K.L.** (2019, August). *Family interpretation of conservation messaging.* Poster presented at the Undergraduate Research Symposium, San Marcos, TX. ****Won first prize in the SURE Poster competition.**

Idema, J. & **Daniel, K.L.** (2019, August). *Exploring the presentation of climate change in aquarium exhibits.* Presentation at the biennial meeting of the European Science Education Research Association, Bologna, Italy.

Leone, E.A. & **Daniel, K.L.** (2019, August). *Teaching the tree of life to undergraduate students.* Presentation at the biennial meeting of the European Science Education Research Association, Bologna, Italy.

Daniel, K.L., Mac Crossan, A.C., & Huertas Pau, M. (2019, August). *Student hormonal stress responses in two learning environments. Presentation at the biennial meeting of the European Science Education Research Association,* Bologna, Italy.

Covington, B., **Daniel, K.L.**, Payne, G., Messick, J., & Serenari, C. (2019, May). *Using a social media campaign to boost the visibility of endangered toad conservation.* Poster presented at the annual meeting of the Society for Freshwater Sciences, Salt Lake City, UT.

Nolen, Z.L., & **Daniel, K.L.** (2019, February). *A step towards increasing undergraduate perceived cohesion to science.* Presentation at the 26th annual Texas State University Department of Biology Student Colloquium. San Marcos, TX.

Marty, B.N. & **Daniel, K.L.** (2019, February). *Assessing public perceptions of arachnids and identifying trends through citizen science.* Poster presentation at the annual meeting of the Texas Informal Science Education Association, Rockport, TX.

Idema, J., **Daniel, K.L.**, & Patrick, P. (2019, February). *Talking conservation: Exploring the influence of zoo educators on visitor conversations.* Poster presentation at the annual meeting of the Texas Informal Science Education Association, Rockport, TX.

Cuddeback, L. & **Daniel, K.L.** (2019, February). *Lions and tigers and teens: Investigating volunteer experiences in informal science education.* Poster presentation at the annual meeting of the Texas Informal Science Education Association, Rockport, TX.

Ashford, S., **Daniel, K.L.**, & Garcia, D. (2019, February). *Working collaboratively to improve ACCEYSS to informal STEM programming.* Poster presentation at the annual meeting of the Texas Informal Science Education Association, Rockport, TX.

Mishra, C., **Daniel, K.L.**, & Clase, K.L. (2018, December). *Understanding the role of self-reflection in a course-based undergraduate research experience.* Presentation at the annual meeting of the American Society for Cell Biology. San Diego, CA.

Guutierrez Mannix, M.P., Ashford, S., **Daniel, K.L.**, Garcia, D., & Vannella, M. (2018, November). *Factors that influence persistence among students of color in K-16 STEM education.* Presentation at the tenth annual Texas State University International Research Conference for Graduate Students. San Marcos, TX.

Nolen, Z.L., & **Daniel, K.L.** (2018, November). *Determining how biology-based student organizations meet affinity group criteria.* Poster presented at the annual national meeting of the National Association of Biology Teachers. San Diego, CA.

Salisbury, S.L. & **Daniel, K.L.** (2018, November). *Preservice teacher engagement during outdoor learning experiences.* Poster presented at the annual national meeting of the National Association of Biology Teachers. San Diego, CA.

Leone, E.A. & **Daniel, K.L.** (2018, July). *Do we really speak for the trees? Comparing instructional methods about phylogenetic tree diagrams in an introductory biology course for biology majors.* Poster presented at the annual meeting of the Society for the Advancement of Biology Education Research. Minneapolis, MN.

Nolen, Z.L., & **Daniel, K.L.** (2018, July). *Comparing perceptions of social media among biology and non-biology majors.* Roundtable presented at the annual meeting of the Society for the Advancement of Biology Education Research. Minneapolis, MN.

Salisbury, S.L., & **Daniel, K.L.** (2018, March). *Exploring engagement and views of using nature to teach science.* Poster presented at the annual Women in Science and Engineering Conference, San Marcos, TX.

Salisbury, S.L., & **Daniel, K.L.** (2018, February). *Exploring engagement and perceptions of learning science in nature.* Oral presentation at the annual Texas State University Biology Department Colloquium, San Marcos, TX.

Leone, E.A., & **Daniel, K.L.** (2017, November). *Comparing instructional approaches using the tree of life and student learning outcomes.* Poster presented at the annual national meeting of the National Association of Biology Teachers. St. Louis, MO. ****Won first prize in the Four-Year College and University Section Student Poster competition.**

Nolen, Z.L., & **Daniel, K.L.** (2017, November). *An investigation into how students perceive the use of social media in the science classroom.* Poster presented at the annual national meeting of the National Association of Biology Teachers. St. Louis, MO. ****Won third prize in the Four-Year College and University Section Student Poster competition.**

Salisbury, S. & **Daniel, K.L.** (2017, November). *Preservice teacher engagement and perceptions of informal, outdoor learning environments.* Poster presented at the annual national meeting of the National Association of Biology Teachers. St. Louis, MO. ****Won second prize in the Four-Year College and University Section Student Poster competition.**

Nolen, Z.L., & **Daniel, K.L.** (2017, November). *Measuring students' perceptions of social media in science courses.* Paper presented at the ninth annual Texas State University International Research Conference for Graduate Students. San Marcos, TX.

Daniel, K.L. & Leone, E.A. (2017, June). *Student visual interpretations of a cladogram.* Poster presented at the AP Biology Posters on the Prairie Symposium. Kansas City, MO.

Salisbury, S.L., **Daniel, K.L.**, & Thomas, A.K. (2017, April) *Harnessing the power of iPads OUTSIDE.* Poster presentation at the Women in Science and Engineering Conference. San Marcos, TX. ****Won Best Poster competition.**

Leone, E.A. & **Daniel, K.L.** (2017, April*). Identifying visual approaches to tree-thinking.* Poster presented at the 2017 Women in Science and Engineering Conference. San Marcos, TX.

Leone, E.A. & **Daniel, K.L.** (2017, February). *An investigation of tree-thinking outcomes from different instructional methods.* Oral Presentation at the annual Texas State University Biology Department Colloquium. San Marcos, TX. ****Won Best Masters Student Presentation competition.**

Salisbury, S. L., **Daniel, K. L.**, & Thomas, A. K. (2017, February) *Harnessing the power of iPads OUTSIDE.* Poster presentation at the Informal Science Education Association of Texas Annual Conference. New Braunfels, TX.

Bucklin, C.J. & **Daniel, K.L.** (2016, November). *To use or not to use a virtual lab.* Poster presented at the Walter Maxwell Gibson College of Science & Engineering Eighth Annual Undergraduate Research Symposium. Cedar City, UT.

Leone, E.A. & **Daniel, K.L.** (2016, November). *Living on a prayer? How religiosity and evolution acceptance interact in a study abroad program in Cambodia.* Paper presented at the eighth annual Texas State University International Research Conference for Graduate Students. San Marcos, TX.

Nolen, Z.L., **Daniel, K.L.**, Salinas, K., Alvarado Rodriguez, K. (2016, November). *Do students want to use social media? Assessing students' perceptions of social media in the classroom.* Paper presented at the eighth annual Texas State University International Research Conference for Graduate Students. San Marcos, TX. ****Won Best Doctoral Student Paper competition.**

Wilkes, A., French, D., **Daniel, K.L.**, & Moore, M. (2016, November). *The relationship between religiosity and acceptance of evolutionary theory among students in an introductory zoology course.* Poster presented at the annual national meeting of the National Association of Biology Teachers. Denver, CO. ****Won first prize in the Four-Year College and University Section Student Poster competition.**

Salinas, K., Alvarado Rodriguez, K., Nolen, Z.L., & **Daniel, K.L.** (2016, November). *Using investigating social media in biology in effort to increase student interest in science.* Poster presented at the annual national meeting of the National Association of Biology Teachers. Denver, CO.

Alvarado Rodriguez, K., Salinas, K., Nolen, Z.L., & **Daniel, K.L.** (2016, November). *An Investigation on how social media use impacts undergraduate interest in science careers.* Poster presented at the annual national meeting of the National Association of Biology Teachers. Denver, CO.

Leone, E.A. & **Daniel, K.L.** (2016, November). *Comparing perspectives of evolution acceptance between students from the United States and Cambodia.* Poster presented at the National Association of Biology Teachers. Denver, CO.

Nolen, Z. L., **Daniel, K. L.**, Salinas, K., & Alvarado Rodriguez, K. (2016, November). *Do students want to use social media? Assessing students' perceptions of social media in the classroom.* Poster presented at the annual national meeting of the National Association of Biology Teachers. Denver, CO.

Nolen, Z.L. & **Daniel, K.L.** (2016, July). *Creating and testing a reliable instrument for assessing students' perceptions of social media in higher education.* Poster presentation at the annual meeting of the Society for the Advancement of Biology Education Research. Minneapolis, MN.

Daniel, K.L., Leone, E.A., Komogortsev, O., & Abdulin, E. (2016, June). *Identifying visual approaches to tree-thinking.* Poster presentation at the annual Evolution Meetings. Austin, TX.

Nolen, Z.L., **Daniel, K.L.**, & Leone, E.A. (2016, February). *Using social media to increase elementary education students' perceptions and knowledge of science.* Poster presented at the 21st annual Texas State University Department of Biology Student Colloquium. San Marcos, TX.

Daniel, K.L. (2015, November). *Generating student-focused active learning environments in lecture settings.* Oral presentation at the annual meeting of the National Association of Biology Teachers, Providence, RI.

Boyce, C.J., & **Daniel, K.L.** (2015, November). *Phylogenetic word association.* Poster presented at the annual meeting of the National Association of Biology Teachers, Providence, RI.

Ubben, I., Nitz, S., Upmeier zu Belzen, A. & **Daniel, K.L.** (2015, November). *Interpreting models of evolution – The case of phylogenetic trees.* Poster presented at the annual meeting of the National Association of Biology Teachers, Providence, RI.

Mishra, C., **Daniel, K.L.,** & Clase, K.L. (2015, November). *Role of reflexivity on students' outcomes in a college science laboratory course.* Poster presented at the annual meeting of the National Association of Biology Teachers, Providence, RI.

Mraz, J.M., **Daniel, K.L.,** & Thomas, A.K. (2015, November). *OUTSIDE naturalist development workshop: Identities of participants and their relation to volunteer motives.* Poster presented at the annual meeting of the National Association of Biology Teachers, Providence, RI.

St. Clair, A., **Daniel, K.L.,** & Thomas, A.K. (2015, November). *How naturalists use mobile technology to support participation during a nature hike.* Poster presented at the annual meeting of the National Association of Biology Teachers, Providence, RI.

Boyce, C.J., **Halverson, K.L.,** & Thomas, A.K. (2015, May). *Engaging students in outside science learning.* Oral presentation at VI-EPSCoR Conference, St. Thomas, VI.

Thomas, A.K., McWhorter, M.S., & **Halverson, K.L.** (2014, November). *Professional development for naturalists-in-training.* Poster presented at the annual meeting of the National Association of Biology Teachers, Cleveland, OH.

Mishra, C., **Halverson, K.L.**, & Gearity, B.T. (2014, November). *Investigating the impacts of an international STEM service-learning course on college students.* Poster presented at the annual meeting of the National Association of Biology Teachers, Cleveland, OH. ****Won third prize in the Four-Year College and University Section Student Poster competition.**

Mraz, J.A., Mishra, C., **Halverson, K.L.**, Boyce, C.J., & Ali, L. (2014, November). *An authentic undergraduate research experience: Development and maintenance of student identities.* Poster presented at the annual meeting of the National Association of Biology Teachers, Cleveland, OH.

Jenkins, K., Mead, L., **Halverson, K.L.**, Baum, D., & Boyce, C.J. (2014, November). *Seeing the forest by interpreting the trees: An assessment instrument for evaluating undergraduate student understanding of evolutionary trees.* Poster presented at the annual meeting of the National Association of Biology Teachers, Cleveland, OH.

Mead, L., Baum, D. Jenkins, K., & **Halverson, K.L.** (2014, June). *Seeing the forest by interpreting the trees: An assessment instrument for evaluating undergraduate student understanding of evolutionary trees.* Poster presentation at the annual meeting of the Society for the Study of Evolution, Raleigh, NC.

Mraz, J., Boyce, C.J., **Halverson, K.L.**, & Clase, K.L. (2013, November). *Student reflections on using the virtual learning environment second life in combination with classroom instruction*. Poster presented at the annual meeting of the National Association of Biology Teachers, Atlanta, GA.

McWhorter, M.S., Thomas, A.K., & **Halverson, K.L.** (2013, November). *A quantitative analysis of a hike in the woods: Preliminary results of what students learn OUTSIDE.* Poster presented at the annual meeting of the National Association of Biology Teachers, Atlanta, GA. ****Won third prize in the Four-Year College and University Section Student Poster competition.**

Boyce, C.J., Mishra, C., **Halverson, K.L.**, & Thomas, A.K. (2013, November). *Investigating students' use of technology to explore nature.* Poster presented at the annual meeting of the National Association of Biology Teachers, Atlanta, GA.

Samuel, J.Y. & **Halverson, K.L.** (2013, July). *Middle school teachers' experiences and viewpoints of visualizations as an instructional tool.* Poster presented at the biennial meeting of the Gordon Research Conference –Visualizations in Science and Education, Smithfield, RI.

Saleh, M.R., **Halverson, K.L.**, Gearity, B. (2013, July). *Moving students to a better understanding of enzyme specificity.* Poster presented at the biennial meeting of the Gordon Research Conference –Visualizations in Science and Education, Smithfield, RI.

Clase, K., **Halverson, K.L.,** Boyce, C.J., Heyden, R., Rickus, J., Klyczek, K., Mogen, K., Bonilla, J. (2013, July). *Building faculty and student collaborations with virtual learning environments.* Poster presented at the biennial meeting of the Gordon Research Conference –Visualizations in Science and Education, Smithfield, RI.

Clase, K., **Halverson, K.L.,** Boyce, C.J., Heyden, R., Rickus, J., Klyczek, K., Mogen, K., & Bonilla, J. (2013, July). *Developing a research community to enhance student learning and engagement through the use of emerging technologies.* Poster presented at the annual meeting of the Society for the Advancement of Biology Education Research, Minneapolis, MN.

Boyce, C.J. & **Halverson, K.L.** (2013, March). Word association and mental recall: An evolution formative assessment. Poster presentation at the Graduate Student Research Symposium, Hattiesburg, MS. ****Won Department Award, Graduate Student Research Symposium Student Poster competition.**

McLaurin, D.C, **Halverson, K. L.**, & Boyce, C. J. (2013, March). *Using Manipulative Models to Develop Tree Thinking*. Poster presented at Statewide Inaugural Collaborative Honors College Conference, Starkville, MS. ****Won Visual Display Award for the Social Sciences Division.**

McLaurin, D.C, **Halverson, K. L.**, & Boyce, C. J. (2013, February). *Using Manipulative Models to Develop Tree Thinking*. Paper presented at Louis Stokes Mississippi Alliance for Minority Participation Research Symposium, Jackson, MS.

McLaurin, D.C, **Halverson, K. L.**, & Boyce, C. J. (2012, November). *Using Manipulative Models to Develop Tree Thinking*. Poster presentation at 13th Annual McNair Scholars Research Symposium, Hattiesburg, MS.

McLaurin, D.C, **Halverson, K. L.**, & Boyce, C. J. (2012, November). *Using Manipulative Models to Develop Tree Thinking*. Poster presentation at 21st Annual Ronald E. McNair Research Conference and Graduate Fair, Lake Geneva, WI.

Treagust, D.F., Tsui, C.-Y., Yarden, A., Griffard, P., **Halverson, K.L.**, Shoenborn, K., Schwartz, R.S., Wong, S.L., Buckley, B.C., Niebert, K., & Anderson, T. (2012, March). Strand Sponsored Session – *How best can multiple external representations be harnessed for improving learning in biology?* Oral presentation at the annual meeting of the National Association for Research in Science Teaching, Indianapolis, IN.

Clase, K.L., **Halverson, K.L.,** Rickus, J., & Heyden, R. (2012, April). *Integrating emerging technologies into formal education for assessment*. Oral presentation at the annual meeting for Experimental Biology, San Diego, CA.

Halverson, K.L. & Boyce, C.J. (2011, October). C*itizen science and society.* Oral presentation at the annual meeting of the National Association of Biology Teachers, Anaheim, CA.

Clase, K.L., **Halverson, K.L.**, Heyden, R. (2011, July). *Immersing STEM students into an interactive virtual experience using Second Life to visualize genomes.* Poster presentation at the biennial meeting of the Gordon Research Conference –Visualizations in Science and Education, Smithfield, RI.

Maroo, J.D., & **Halverson, K.L.** (2011, April). *Tree thinking: A branch of mental rotation.* Poster presented at the Student Research Colloquium, Hattiesburg, MS.

Maroo, J.D., Boyce, C.J., & **Halverson, K.L.** (2011, March). *Student responses influenced by task order on a tree thinking pretest.* Poster presented at the Graduate Student Research Symposium, Hattiesburg, MS. ****Won Department Award, Graduate Student Research Symposium Student Poster competition.**

Singletary, L., Bruni, A., & **Halverson, K.L.** (2011, February). *A look at college students' remembering and understanding of DNA, genes, traits, and proteins and how these concepts relate to one another*. Oral presentation at the annual meeting of the Mississippi Academy of Sciences, Hattiesburg, MS.

Maroo, J.D., Johnson, S.L., & **Halverson, K.L.** (2011, February). *Identifying college students' alternative ideas about cellular respiration.* Poster presented at the annual meeting of the Mississippi Academy of Sciences, Hattiesburg, MS.

Boyce, C.J, & **Halverson, K.L.** (2011, February). *Examining the impact of task order on a tree thinking pretest.* Poster presented at the annual meeting of the Mississippi Academy of Sciences, Hattiesburg, MS.

Planchard, M., **Halverson, K.L.,** Maroo, J. & McLean, T. (2010, November). *Why do students do their homework (or not)? An exploration of student motivation in an undergraduate genetics course.* Poster presented at the annual meeting of the National Association of Biology Teachers, Minneapolis, MN.

Maroo, J., Johnson, S., & **Halverson, K.L.** (2010, November). *Identifying college students' alternative ideas about cellular respiration.* Poster presented at the annual meeting of the National Association of Biology Teachers, Minneapolis, MN.

Boyce, C.J., & **Halverson, K.L.** (2010, November). *Examining the impact of task order on a tree thinking pretest.* Poster presented at the annual meeting of the National Association of Biology Teachers, Minneapolis, MN. ****Won Vernier Student Travel Award to present research at the Four-Year College and University Section Student Poster competition.**

Halverson, K.L. (2009, November). *Pipe cleaner phylogeny: Tree thinking made easy.* Oral presentation presented at the annual meeting of the National Association of Biology Teachers, Denver, CO.

Halverson, K.L., Abell, S.K., Friedrichsen, P.M., & Pires, J.C. (2009, July). *Understanding how undergraduates make sense to a visual approach to plant systematics.* Poster presentation at the biennial meeting of the Gordon Research Conference –Visualizations in Science and Education, Oxford, UK.

Krueger, J., Lloyd, E., Siegel, M., Wissehr, C., & **Halverson, K.L.** (2009, April). *Equitable science assessments for English language learners.* Poster presented at Undergraduate Research Day at the Capitol, Jefferson City, MO.

Halverson, K.L. (2008, October). *Using hypothetical flowering plants to develop fundamental phylogenetic tree-reading and tree-building skills*. Oral presentation at the annual meeting of the National Association of Biology Teachers, Memphis, TN.

Lankford, D.M., & **Halverson, K.L.** (2008, October) *Five steps: Developing problem-based learning lessons to investigate biology concepts.* Oral presentation at the annual meeting of the National Association of Biology Teachers, Memphis, TN.

Halverson, K.L., Siegel, M.A., Clark, C., & Freyermuth, S. (2008, October) *What do undergraduates misunderstand about stem-cell research?* Oral presentation at the annual meeting of the National Association of Biology Teachers, Memphis, TN.

Halverson, K.L., Pires, J.C., & Abell, S.K. (2008, June). *"Tree thinking" issues: Undergraduates' reasoning about phylogenies.* Oral presentation at the annual meeting of the Society for the Study of Evolution, Minneapolis, MN.

Halverson, K.L., Nason, J.D., & Stireman, J.O. (2008, February). *Plant polyploidy effects on goldenrod insect herbivores*. Poster presented at Evolution at work: Celebrate Charles Darwin's contributions to biology on his 199th birthday, Columbia, MO.

Halverson, K.L. (2007, November). *It's getting hot in here.* Oral presentation at the annual meeting of the National Association of Biology Teachers Conference, Atlanta, GA.

Halverson, K.L., Siegel, M.A., & Freyermuth, S.K. (2007, October). *Using biotechnology research to teach biology to undergraduates.* Oral presentation at the annual meeting of the Association of College and University Biology Educators, Dubuque, IA.

Halverson, K.L., & Lankford, D.M. (2007, April). *Science galls me: What is a niche anyway?* Oral presentation at the annual meeting of the National Science Teachers Association Conference, St. Louis, MO.

Halverson, K.L., et al. (2007, February). *Learning dialogues: Teachers, tutors, students, staff.* Oral presentation at the Teacher Renewal Conference, Columbia, MO.

Halverson, K.L., Nason, J.D., & Stireman, J.O. (2005, April). *Plant polyploidy effects on goldenrod insect herbivores*. Poster presented at the annual meeting of the Center for Community Genetics 2005 Symposium, Minneapolis, MN.

Halverson, K.L., Nason, J.D., & Stireman, J.O. (2005, April). *Plant polyploidy effects on goldenrod insect herbivores*. Poster presented at the Women in Biological Sciences Symposium, Ames, IA.

Halverson, K.L. (2004, December). *Polyploidy as a source of herbivore resistance in tall goldenrods (Solidago altissima)*. Oral presentation at the Community Ecology Seminar, Ames, IA.

Halverson, K.L. (2004, November). *Polyploidy as a source for non-uniform host use as seen with phytophagous insects on tall goldenrods (Solidago altissima)*. Oral presentation at the Brown Bag Seminar Series, Ames, IA.

Halverson, K.L. (2004, June). *Plant polyploidy effects on goldenrod insect herbivores*. Oral presentation at the annual meeting of the Society for the Study of Evolution, Fort Collins, CO.

Gifford, M., **Halverson, K.,** Hawley, M., & Donnelly, K. (1998, December). *Investigations into the effects of riparian vegetation on aquatic invertebrates.* Oral presentation at the Ecology Seminar, Westminster College, Fulton, MO.

2. Invited Talks, Lectures, and Presentations:

Daniel, K.L. (2022, January). *Introductory principles of ecology.* Oral presentation for the Hays Country Master Naturalist Training Class, San Marcos, TX.

Daniel, K.L. (2022, January). *Intro to plants and naming.* Oral presentation for the Hays Country Master Naturalist Training Class, San Marcos, TX.

Daniel, K.L. (2022, January). *Volunteers as teachers.* Oral presentation for the Hays Country Master Naturalist Training Class, San Marcos, TX.

Daniel, K.L. (2021, December). *Using eye-tracking to better understand student thinking.* Oral presentation for the Biology Teaching and Learning Departmental Meeting, Minneapolis, MN.

Daniel, K.L. (2021, October). *An introduction to eye-tracking methods for science education sensemaking research.* Oral presentation for the Schuchardt Research Group Meetings, Minneapolis, MN.

Daniel, K.L. (2021, August). *Talking with the public about phytoremediation.* Oral presentation for the Floods and Phytoremediation Forum, Kingswood, TX.

Daniel, K.L. (2021, July). *Academic research posters: A refresher.* Oral presentation for the STEM Undergraduate Research Experience workshop, San Marcos, TX.

Daniel, K.L. (2021, June). *How to present an academic research poster.* Oral presentation for the STEM Undergraduate Research Experience workshop, San Marcos, TX.

Daniel, K.L. (2021, June). *Communicating science to the general public.* Oral presentation for the STEM Undergraduate Research Experience workshop, San Marcos, TX.

Daniel, K.L. (2021, February). *Can you spot the danger?* Virtual presentation for the Hill Country Chapter of the Native Plant Society of Texas, San Marcos, TX.

Daniel, K.L. (2020, June). *Communicating science to the general public.* Oral presentation for the STEM Undergraduate Research Experience workshop, San Marcos, TX.
**Presentation moved to virtual format due to COVID-19 pandemic.*

Daniel, K.L. (2019, September). *Galls: A plant-insect interaction.* Oral presentation for the Texas Outdoor Women Network, San Marcos, TX.

Daniel, K.L. (2019, May). *How to present an academic research poster.* Oral presentation for the STEM Undergraduate Research Experience workshop, San Marcos, TX.

Daniel, K.L. (2019, May). *Communicating science to the general public.* Oral presentation for the STEM Undergraduate Research Experience workshop, San Marcos, TX.

Daniel, K.L. (2019, April). *All About Plant: Botany 101.* Oral presentation for the Hays County Master Naturalists Training Course, San Marcos, TX.

Daniel, K.L. (2019, April). *Science practitioners engaging in and explaining research as scholars (SciencePEERS).* Oral presentation for the Interdisciplinary Colloquium Series

for the Kaput Center for Research and Innovation in STEM Education, Dartmouth, MA. http://kaputcenter.org/2019/04/2018-2019-colloquium-series-kristy-daniel/

Daniel, K.L. (2018, April). *The biologist of tomorrow.* Panelist presentation for the Toward a Vision of Diversity in Science and Society symposium, San Marcos, TX.

Daniel, K.L. (2018, May). *Communicating science to the general public.* Oral presentation for the STEM Undergraduate Research Experience workshop, San Marcos, TX.

Daniel, K.L. (2017, April). *All About Plant: Botany 101.* Oral presentation for the Hays County Master Naturalists Training Course, San Marcos, TX.

Daniel, K.L. (2016, November). *Giving scientific presentations.* Oral presentation for the Wildlife Society Student Chapter Undergraduate Research Meeting. San Marcos, TX.

Daniel, K.L. (2016, October). *Seeing to Learn: Investigating Visual Approaches to Interpreting Diagrams.* Oral presentation for the University of Texas Tyler Department of Biology Seminar Series, Tyler, TX.

Daniel, K.L. (2015, February). *Capturing phylogenetic learning gains in the university classroom.* Oral presentation for the Department of Biology at Texas State University, San Marcos, TX.

Halverson, K.L. (2014, October). *Engaging students in OUTSIDE science learning.* Oral presentation for the Department of Biological and Molecular Biology at Montclair State University, Montclair, NJ.

Halverson, K.L. (2014, September). *Engaging students in OUTSIDE science learning.* Oral presentation at the USM Biological Sciences Departmental Seminar Series, Hattiesburg, MS.

Halverson, K.L. (2014, August). *Over, under, and through: Students informally discover the environment.* Poster presentation at the National Science Foundation Advancing Informal STEM Learning Program Principal Investigator Meeting, Washington, D.C.

Halverson, K.L. (2014, February). *Seeing the forest for the trees: Using tree-thinking to understand evolution.* Oral presented during the Darwin Day Teaching Workshop, USM, Hattiesburg, MS.

Boyce, C.J., Mishra, C., **Halverson, K.L.**, & Thomas, A.K. (2013, November). *Exploring students' connections with nature & technology.* Oral presentation at the E3 Seminar, USM, Hattiesburg, MS.

Clase, K., **Halverson, K.L.**, Heyden, R., & Rickus, J. (2013, August). *Multidisciplinary effort to address education in new biology.* Oral presentation at the AAAS sponsored conference Vision & Change in Undergraduate Biology Education, Washington, DC.

Halverson, K.L. & Thomas, A. (2012, November). *Creating OUTSIDE learning opportunities at the Lake Thoreau Environmental Center.* Oral presentation at the E3 Seminar, USM, Hattiesburg, MS.

Halverson, K.L. & Clase, K. (2012, November). *Exploring the possibilities of new Collaborations and Virtual Learning Environments.* Oral presentation at the PIBERG Seminar, Purdue University, West Lafayette, IN.

Halverson, K.L. (2012, September). *Play to learn phylogenetics in the classroom.* Oral presentation at the Department of Costal Sciences Seminar Series, USM Gulf Coast Research Lab, Ocean Springs, MS.

Halverson, K.L. (2012, September). *Play to learn phylogenetics in the classroom.* Oral presentation at the Department of Biological Sciences Seminar Series, Mississippi State, Starkville, MS.

Clase, K.L., Boyce, C.J., Ha, S.J., **Halverson, K.L.**, Heyden, R., & Rickus, J. (2012, June). *Promoting systems thinking through an authentic research environment.* Oral presentation at Introductory Biology Project (IBP) Summer Conference: Implementing Vision and Change at the Introductory Biology Level, Washington D.C.

Halverson, K.L. (2011, November). *Mirror, mirror on the wall, who's learning through service most of all?* Oral presentation at the E3 Seminar, USM, Hattiesburg, MS.

Mower, T., & **Halverson, K.L.** (2011, October). *Research Committee Workshop.* Oral presentation at the National Association of Biology Teachers, Anaheim, CA.

Halverson, K.L. (2011, August). *Motivating students to learn and think.* Oral presentation at the College of Science and Technology Teaching Assistant Workshop, USM, Hattiesburg, MS.

Halverson, K.L. (2010, September). *Research and career opportunities in biology education.* Oral Presentation at the First Year Foundations Biology Course, Hattiesburg, MS.

Halverson, K.L. (2008, December). *Making sense of phylogenetic representations: Understanding undergraduates' ideas about tree thinking*. Oral presentation at the Department of Biological Sciences Seminar Series, Hattiesburg, MS.

Halverson, K.L. (2008, November). *A dissertation path from pilot to pub: A study of undergraduates' understanding of biological representations.* Oral presentation at the Science and Mathematics Education Colloquium, Columbia, MO.

Pires, J.C., & **Halverson, K.L.** (2008, November). *Darwin's neglected idea: How does evolution prune the family tree?* Oral presented at Saturday Morning Science, Columbia, MO.

3. Consultancies:

Research Consultant, *Quantitative Assessment: Diagnostics Instrument Development for Tree-Thinking.* Duke University & National Evolutionary Synthesis Center. 2013
Assessment Consultant, Linn State Technical College 2011
Graphic Content Consultant, New England Aquarium Evolution of Fishes Panel 2011

4. Workshops:

National Association for Interpretation Certified Interpretive Guide Workshop for Minding the Hill Country. (2022, May). Texas State University and Hays County Master Naturalist Workshop, San Marcos, TX.

Bridging Disciplines to Bring Research into Biology Classrooms. (2021, November). National Association of Biology Teachers. Atlanta, GA.

Qualitative Research Question + Data Analysis. (2021, March). Thomas Lab at the University of Loyola-New Orleans, New Orleans, LA. **Workshop presented virtually due to COVID-19 pandemic.*

ACCEYSS Fall Summit: Closing the STEM Equity Gap in Black and Brown Communities. (2020, November). San Marcos, TX. **Workshop presented virtually due to COVID-19 pandemic.*

Minding the Hill Country Volunteer Advanced Training: Spider Friends and Good Gall-y. (2020, July). Hays County Master Naturalist Project-Specific Workshop, San Marcos, TX. **Workshop presented virtually due to COVID-19 pandemic.*

Improving science education through interdisciplinary collaborations between learning sciences and discipline-based education research: A workshop for new and established interdisciplinary researchers. (2020, June). International Conference of the Learning Sciences. Nashville, TN. **Workshop presented virtually due to COVID-19 pandemic.*

9th Annual USDA Caminos Graduate Fellows Career Preparation Institute Science Communication Workshop. (2020, March). American Association of Hispanics in Higher Education (AAHHE), Costa Mesa, CA.

NABT Student Workshop: Poster Presentation Practice Session. (2019, November). National Association for Biology Teachers, Chicago, IL.

ACCEYSS Fall Summit. (2019, October). Star Park, San Marcos, TX.

8th Annual USDA Caminos Graduate Fellows Career Preparation Institute Science Communication Workshop. (2019, February). American Association of Hispanics in Higher Education (AAHHE), Costa Mesa, CA.

7th Annual USDA Caminos Graduate Fellows Career Preparation Institute Science Communication Workshop. (2018, March). American Association of Hispanics in Higher Education (AAHHE), Irvine, CA.

ACCEYSS Fall Summit. (2018, October). San Marcos, TX.

RADIANS Workshop: Nature of Science. (2017, October). Texas State University, San Marcos, TX.

Faculty Showcase: Do Your Students Get It? Find out with Student Response Systems. (2016, November). Texas State University, San Marcos, TX.

OUTSIDE Professional Development Workshop for Naturalist Volunteers: Explore the Plants. (2014, January). Lake Thoreau Environmental Center, Hattiesburg, MS.

OUTSIDE Professional Development Workshop for Naturalist Volunteers: Meet the Wildlife. (2013, September). Lake Thoreau Environmental Center, Hattiesburg, MS.

Mississippi Science Olympiad Coaches Workshop. (2013, September). Hattiesburg, MS.

OUTSIDE Professional Development Workshop for Naturalist Volunteers: Walk the Trail. (2013, January). Lake Thoreau Environmental Center, Hattiesburg, MS.

Mississippi Science Olympiad Coaches Workshop. (2012, September). Hattiesburg, MS.

5. <u>Other Works not in Print:</u>

a. Works "submitted" or "under review"

Lincoln Seets, R.M., Forsythe, M., Williamson, P. & **Daniel, K.L.** (Under Review – Jun 2022). Influence of visual scaffolding on science practices in an elementary outdoor science investigation. *Submitted to Journal of Outdoor and Environmental Education.*

Campbell, C., Nolen, Z., & **Daniel, K.L.** (Under Review – Jun 2022). Developing and testing an instrument to assess student perceptions of social media use in the science classroom. *Submitted to Computers & Education.*

Ashford-Hanserd, A., **Daniel, K.L.**, Garcia, D.M., Lerma, Y., & Belcher, S. (Under Review – Jan 2022). Factors that influence underrepresented minority students' decisions to enroll and persist in STEM majors. *Submitted to Journal of STEM Education Research.*

McConnell, M., **Daniel, K.L.**, Williamson, P.S., & Davenport, R.A. (Under Review – Dec 2021. Exploring how a faculty member transitioned an active-learning biology course to emergency remote teaching. Submitted to *Journal of College Science Teaching*.

Pratt, E.N., Serenari, C., & **Daniel, K.L.** (Under Review – Oct 2021). Modeling hunter opposition to alligator hunting season termination. *Submitted to Wildlife Biology.*

Pratt, E.N., Serenari, C., Rubino, E.C., & **Daniel, K.L.** (Under Review – June 2021). Potential for conflict and principle-policy paradox among spring alligator hunters in Texas. *Submitted to Human-Wildlife Interactions.*

b. Works "in progress"

McConnell, M., **Daniel, K.L.,** Williamson, P.S., & Davenport, R.A. (In preparation). A case study: Faculty development and implementation of a new active learning biology course.

Salisbury, S., Forsythe, M., & **Daniel, K.L.** (In Revision). Preservice teachers' engagement during an outdoor informal science learning experience. S*ubmitted to Journal of Science Teacher Education.*

Marty, B.N., **Daniel, K.L.** & Maroo, J. (In Revision). Public perceptions of spiders and identifying trends in citizen science participation. *Submitted to Citizen Science in Higher Education.*

Nolen, Z.L., Close, E.W., & **Daniel, K.L.** (In Revision). Academic affinity: Assessing the characteristics of biology-based student organizations.

Idema, J.L., & **Daniel, K.L.** (In preparation). Communicating climate change: Exploring the use of a socioscientific issue through aquarium exhibits. *To be submitted to the Journal of Interpretation Research.*

Idema, J.L., Ocampo, D., Forsythe, M.E., & **Daniel, K.L.** (In preparation). Climate change in a virtual world: Exploring socioscientific issue communication in online aquarium exhibits. *To be submitted to the Journal of Informal Science Education Research.*

Daniel, K.L., Leone, E.A., & Bucklin, C.J. (In preparation). Comparing measured outcomes across tree-thinking interventions. *To be submitted to American Biology Teacher.*

Daniel, K.L., Thomas, A.K., St. Clair, A, Salisbury, S., & Bucklin, C.J. (In preparation). Identifying the roles of attention participation frames in an informal nature experience. To be submitted to *Research in Science Education*.

Daniel, K.L. & Luxford, C. (In preparation). Efficacy in Communicating Science with Visualizations (ECSV). To be submitted to *Science Education*.

Leone, E.A. & **Daniel, K.L.** (In preparation). The interplay among acceptance of evolution, tree-thinking, and eye movement. *To be submitted to Evolution Education and Outreach.*

Reyes, V., Idema, J., & **Daniel, K.L.** (In preparation). Family interpretations of conservation messaging presented in an aquarium. *To be submitted to Visitor Studies.*

Daniel, K.L., Covington, B., Payne, G., Messick, J., & Serenari, C. (In preparation). Online campaigns spread visibility of conservation projects through social networks.

McConnell, M., Mac Crossan, A., Messick, J., Cavalier, R. Pratt, E., Spencer, R., Marty, B., Johnson, R., Williamson, P., & **Daniel, K.L.** (In preparation). The role of undergraduate research on retention in the College of Science and Engineering.

Pullman, L., McConnell, M., Idema, J. Ament, R., Spencer, R, Marty, B, & **Daniel, K.L.** (In preparation). A speaking formula that bridges communication between scientists and laymen audiences.

Ashford-Hanserd, A., Pedroso, R., Dobbins, L., Conway, A., Blevins, M., **Daniel, K.L.,** & Garcia, D.M. (In preparation). Our collective impact: Implementing the ACCEYSS model to equip minority youth for STEM success.

C. <u>Grants and Contracts</u>

1. Funded External Grants and Contracts ($986,838.00 Funded):

Willett Foundation, Firefly Grant. (April 2022-March 2023). *Project #1903 Minding the Hill Country*. PI: Daniel, K.L. (TXST **$1,080** + $4,700 Matched Costs = **<u>$5,780.00</u> Total**).

Gulf Research Program Early-Career Research (ECR) Fellowship. (September 2021-August 2023). PI: Fuess, L., Mentor: **Daniel, K.L.** (TXST **<u>$76,000</u> Total**).

Texas Parks and Wildlife Department, Section 6 Nontraditional Grant. (January 2021-December 2022). *Testing Communication Strategies to Increase Houston Toad Safe Harbor Agreement Enrollment.* (Award #CA-0001016). PI: Serenari, C., Co-PI: Rubino, E.C., & **Daniel, K.L.** (TXST **<u>$105,000</u> Total**).

National Science Foundation, Division of Biological Infrastructure - Undergraduate Biology Education. (June 2020 – December 2021). *Enhancing Biology Education Research by Bridging Disciplinary Boundaries between Discipline-Based Education Research in Biology and Learning Sciences* (Award #2017278). PI: Peffer, M., Co-Organizers: **Daniel, K.L.** & Schuchardt, A. (U. of Colorado at Boulder **<u>$49,745</u> Total**).

Beta Beta Beta Research Foundation (November 2019 – May 2020). *Family Interpretations of Conservation Messaging Presented in an Aquarium.* PI: **Daniel, K.L.,** Investigator: Reyes, V. (TXST **<u>$350</u> Total**).

National Science Foundation, Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (2019). *NSF INCLUDES DDLP - ACCEYSS: Association of Collaborative Communities Equipping Youth for*

STEM Success. PI: Ashford, S., Co-PIs: **Daniel, K.L.**, Garcia, D.M., & Masino, A. (TXST **$14,999** Supplemental Funding).

National Science Foundation, Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science. (December 2017-November 2020). *ACCEYSS (Association of Collaborative Communities Equipping Youth for STEM Success).* (Award #1764404). PI: Ashford, S., Co-PI: **Daniel, K.L.** and Garcia, D. (TXST **$299,536 Total**).

Texas Parks and Wildlife Department Wildlife Diversity Program Conservation License Plate Grant. (October 2018-August 2019). *Investigating Factors Influencing Recruitment into the Houston Toad Safe Harbor Agreements.* PI: Serenari, C., Co-PIs: **Daniel, K.L.** and Forstner, M.R. (TXST **$29,127 Total**).

Travis Audubon Society & Commons Ford Prairie Committee Vegetation Surveys and Recording Data at the Commons Ford Prairie. (September 2017-May 2020). *Texas State Galling Insect Survey of Commons Ford Prairie.* PI: **Daniel, K.L.** (TXST; Unrestricted Access Approval).

National Science Foundation, Informal Science Education. (September 2012-August 2015). *Over, Under and Through: Students Informally Discover the Environment (OUTSIDE)* (Award #1224051). PI: **Halverson, K.L.**, Subcontractor: Thomas, A.K. (USM **$250,001 Total**).

National Science Foundation, Course, Curriculum, and Laboratory Improvement. (January 2009-December 2013). *Show-me the Evolution! Assessing Effectiveness of a New Teaching Resource* (Award # 0837015). PI: Smith, K., Co-PI: Jenkins, K., Consultant: **Halverson, K.L.** (Duke $150,000 (includes subaward to USM $5572) = **$150,000 Total**).

Howard Hughes Medical Institute. (April 2013). *Understanding how student thinking changes when provided instruction in an authentic research environment within a systems biology project*. PI: Clase, K.L; Co-PI: **Halverson, K.L.** (Purdue **$3850 Total**).

Sigma Xi Delegate Grant Program. (November 2011). Sigma Xi international scientific research society covers travel expenses to attend the annual meeting as a voting delegate. (USM **$1150 Total**).

National Science Foundation, Gordon Research Conference Visionary Grant. (October 2009-August 2010). *Constructing an immersive and interactive virtual experience for biology students linking Second-Life and the Gene-to-Protein Viewer.* PI: Clase, K.L.; Co-PIs: **Halverson, K.L.** & Heyden, R. (USM $3700, Purdue $2300 **= $6000 Total**).

2. Submitted, but not Funded, External Grants and Contracts:

National Science Foundation, Research Coordination Networks (RCN). (Expected Submission 2022, July). *Eye-Tracking Exploration: Formalizing Optic Conventions in Undergraduate Science (EYE: FOCUS)*. PI: **Daniel, K.L.** (TXST $499,983). **PENDING**

National Science Foundation, Science, Technology, Engineering, and Mathematics (STEM) Education Postdoctoral Research Fellowships (STEM Ed PRF). (2022, March). *Modeling tree-thinking: Conceptions of evolutionary relatedness and other factors' influence on*

phylogenetic tree interpretation. PI: Marcroft, T., Sponsoring Researcher: **Daniel, K.L.** (TXST $299, 985). **RECOMMENDED**

National Science Foundation, Advancing Informal Science Learning (AISL). (2022, January). *Minding the Hill Country.* PI: **Daniel, K.L.,** Co-PIs: Forsythe, M., & Williamson, P. (TXST $2,987,196). **PENDING**

National Science Foundation, Vision and Change in Undergraduate Biology Education (V&C). (2021, March). *Collaborative Research: Vision and Change Professional Development across the Faculty Spectrum (V&C ProSpect).* PI: **Daniel, K.L.** Co-PIs: Witzig, S., & Bucklin, C.J. (TXST $680,238 + UMassD $499,620 + SUU $67,688 + UNL $98,498 = $1,346,044 Total).

National Science Foundation, Improving Undergraduate STEM Education: Hispanic-Serving Institutions, Institutional Transformation Project (IUSE: HSI, ITP). (2021, February). *HSI Transforming Institution: Building a Foundation for STEM Success through Early Access to Undergraduate Research.* PI: Williamson, P. Co-PIs: Bolch, K., **Daniel, K.L.**, Luxford, C., & Irvin, J. (TXST $2,999,995).

National Science Foundation, Advancing Informal Science Learning (AISL). (2021, January). *Minding the Hill Country.* PI: **Daniel, K.L.,** Co-PIs: Forsythe, M., Williamson, P., & Rodriquez, D. (TXST $2,999,822).

National Science Foundation, Improving Undergraduate STEM Education: Pathways into the Earth, Ocean, Polar, and Atmopheric & Geospace Sciences – *Informal Networks* (IUSE: GEOPAths – *IN*). (2021, January). *LoQuest: Transforming Local STEM Questions into Global Geoscience Journeys.* PI: Forsythe, M. Co-PIs: **Daniel, K.L.**, & Dussler, R. (TXST $349,648).

National Science Foundation, Improving Undergraduate STEM Education: Education and Human Resources, Engaged Student Learning (IUSE: EHR, ESL). (2020, December). *Collaborative Research: NABT IBEx Community Short Course.* PI: Hiatt, A. Co-PI: **Daniel, K.L.,** Witzig, S., & Reeves-Pipen, J. (UNL $1,001,320 + TXT $487,242 + UMASS-D $491,115 = $1,979,677 Total).

National Science Foundation, Improving Undergraduate STEM Education: Education and Human Resources, Institutional and Community Transformation (IUSE: EHR, ICT). (2020, December). *Collaborative Research: BRIDGES: BRidging InterDisciplinary Gaps in Education Sciences.* PI: Peffer, M. Co-PI: Schuchardt, A. & **Daniel, K.L.** (UCB $1,180,707 + UMN $532,310 + TXT $667,096 = $2,380,113 Total).

National Aeronautics and Space Administration, Teams Engaging Affiliated Museums and Informal Institutions (TEAM II) Remote Opportunities Rapid Response (RORR). (2020, August). *Investigating Our Changing Planet- Meadows Center Eco Explorers*. PI: Wait, M. Co-PIs: **Daniel, K.L.**, Forsythe, M., Lobban, M., & Massey, S., Collaborator: Newman, N., NASA Partners: Ferrell, T., Janney, D., & Taylor, J. (TXST $130,561).

National Science Foundation, Improving Undergraduate STEM Education, Hispanic Serving Institution Program - Implementation and Evaluation Projects, Track 2 (IUSE HSI - IEP

Track 2). (2020, LOI September, Full Submission Due Jan 2021). *Náyade: Learning to Tell Nature's Stories.* PI: **Daniel, K.L.** Co-PIs: Forsythe, M. & Dussler, R. ($500,000).

Spencer Foundation, Special Grant Request. (2020, June). *Ways Informal Science Educators are Responding (WISER) to COVID-19.* PI: Forsythe, S., Co-PIs: **Daniel, K.L.** & Dussler, R. (TXST $49,417).

National Science Foundation, S-STEM. (2020, March). *Facilitating Graduate Student Success through Mentoring, Cohort Identity, and Scholarships.* PI: Luxford, C.J., Co-PIs: **Daniel, K.L.**, Irvin, J., Collins, K., & Paulson, E., (TXST $649,730).

United States Department of Agriculture, Hispanic Serving Institution Education Grant Program (2020, January). *Siempre Adelante: Solving the Maze of Academia.* PI: **Daniel, K.L.**, Co-PIs: Garcia, D.M., Chahin, J., Young, G., Ratcliffe, L., & Bush, J. (TXST $999,008).

National Science Foundation, Advancing Informal Science Learning. (2019, November). *Minding the Hill Country.* PI: **Daniel, K.L.**, Co-PIs: Forsythe, M., Rodriguez, D. & Williamson, P. (TXST $2,999,304).

U.S. Fish and Wildlife Service. (2019, December). *Assessing the impact of disturbance events on freshwater mussels in Central Texas Rivers.* PI: Schwalb, A., Co-PIs: Hardy, T., **Daniel, K.L.**, Seagroves, L., & Gibson, R. (TXST $186,000).

Texas Sea Grant. (2019, June). *Local Climate Change Risk Messaging.* PI: **Daniel, K.L**. Co-PI: Serenari, C. (Full Proposal, $284,158 + $142,080 Matched Costs = $426,238 Total).

National Science Foundation, INCLUDES (2019, April). NSF INCLUDES Alliance: Expanding the ACCEYSS (Activating Communities of Color to Equip Youth for STEM Success) Alliance in U.S. Mega-States. PI: Ashford, S., Co-PIs: **Daniel, K.L.**, Garcia, D.M., & Masino, A. (TXST $2,051,592).

National Science Foundation, S-STEM. (2019, March). *Facilitating Graduate Student Success through Mentoring, Cohort Identity, and Scholarships.* PI: Luxford, C., Co-PIs: Irvin, J., **Daniel, K.L.**, Collins, K., & Paulson, E., (TXST $649,437).

National Science Foundation, Research Coordination Networks. (2019, January). *RCN-UBE Incubator: Interdisciplinary Biology Education Research Group (I-BERG).* PI: Peffer, M., Co-PIs: Schuchardt, A. & **Daniel, K.L.** (TXST $74,989).

Spencer Foundation. (2019, January). *Student Hormonal Stress Responses in Two Learning Environments.* PI: **Daniel, K.L.,** Co-PI: Huertas, M. (TXST $49,809).

National Science Foundation, Advancing Informal Science Learning. (2018, November). *Minding the Hill Country.* PI: **Daniel, K.L.**, Co-PIs: Forsythe, M. & Williamson, P. (TXST $2,990,225).

National Science Foundation, Advancing Informal Science Learning. (2018). *ACCEYSS (Association of Collaborative Communities Equipping Youth for STEM Success) Expansion.* PI: Ashford, S., Co-PIs: Masino, A., **Daniel, K.L.**, & Garcia, D. (TXST $1,149,351).

National Science Foundation, Improving Undergraduate STEM Education – Hispanic Serving Institutions. (2018). *Building Capacity: Developing Potential through the Honors Science Initiative.* PI: Galloway, H., Co-PIs: Brown, D., Betancourt, T., **Daniel, K.L.**, & Close, E. (TXST $1,334,442).

National Science Foundation, Research Coordination Networks. (2018). *RCN-UBE: Interdisciplinary Network for Biology Education Research Group (I-BERG).* PI: Peffer, M., Co-PI: **Daniel, K.L.** and Schuchardt, A. ($62,499 University of Northern Colorado + $12,500 TXST = $74,999 Total).

National Science Foundation, Improving Undergraduate STEM Education. (2017). *Accelerating Science Undergraduate Identity Transitions through Immersion Experiences (A SUIT & TIE).* PI: Del Carlo, D, Co-PI: Maroo, J. Evaluator: **Daniel, K.L.** (University of Northern Iowa $299,992 Total).

National Science Foundation, Division of Research and Learning - Core R&D Programs (2017). *CAREER: Building Visual Competence in STEM with Trees.* PI: **Daniel, K.L.** (TXST $601,804 Total).

Texas Parks and Wildlife Department Wildlife Diversity Program Conservation License Plate Grant. (2017). *Drivers of spotted bat (Euderma maculatum) occupancy in the Big Bend region of Texas.* PI: Fritts, S., Co-PI: **Daniel, K.L.** (TXST $29,817 Total).

National Science Foundation, Research Coordination Networks. (2017). *RCN-UBE Incubator: Interdisciplinary Network for Biology Education Research Group (I-BERG).* PI: Peffer, M., Co-PI: **Daniel, K.L.** and Reinsvold, L. ($46,325 University of Northern Colorado + $3,500 TXST = $49,825 Total).

National Science Foundation, Advancing Informal Science Learning. (2016). *Collaborative Research: Gauging Enhancements from Training and Technology use in Over, Under and Through: Students Informally Discover the Environment (GET^2 OUTSIDE).* PIs: **Daniel, K.L.** & Thomas, A.K. ($2,533,818 TXST + $407,269 Loyola = $2,941,087 Total).

National Science Foundation, Division of Research and Learning - Core R&D Programs (2016). *CAREER: Building Visual Competence in STEM with Trees.* PI: **Daniel, K.L**. (TXST $599,635 Total).

Spencer Foundation (2016). *Explicit Syllabi as Tools for Comparing Professor and Student Perceptions of Course Objectives.* PI: **Daniel, K.L.** (TXST $39,266 Total).

Alfred P. Sloan, Higher Education Science of Learning STEM (2016). *Exploring College Student Biology Learning with Manipulative Representations.* PI: **Daniel, K.L.** (TXST $69,225 Total).

National Science Foundation, Advancing Informal Science Learning (2016). *Science Learning+: GeoCapabilities: An Approach to Informal STEM Learning in the Field.* PI: Boehm, R.G., Co-PI: **Daniel, K.L.**, Solem, M. (TXST $1,192,507 Total).

National Science Foundation, Advancing Informal Science Learning (2015). *Collaborative Research: Gauging Enhancements from Training and Technology use in OUTSIDE (GET^2 OUTSIDE).* PI: **Daniel, K.L.** (TXST), Co-PI: Thomas, A.K. (Loyola, New Orleans) ($2,583,986 TXST, $390,696 Loyola = $2,974,682 Total).

National Science Foundation, Advancing Informal Science Learning (2014). *Collaborative Research: Gauging Enhancements from Training and Technology use in OUTSIDE (GET^2 OUTSIDE)*. PI: **Halverson, K.L.** (USM), Co-PI: Thomas, A.K. (Loyola, New Orleans), Co-PI: To, Y. ($1,997,468 USM, $989,364 Loyola = $2,986,832 Total).

National Science Foundation, Advancing Informal Science Learning (2014). *Collaborative Research: Generating Engagement with Technology through OUTSIDE (GET OUTSIDE)*. PI: **Halverson, K.L.** (USM) PI: Thomas, A.K. (Loyola, New Orleans) Co-PI: Gearity, B. ($1,998,663 USM, $1,001,185 Loyola = $2,999,848 Total).

National Science Foundation. Improving Undergraduate STEM Education (2014). *Exploring the Development of Student Identity through Biology Course Experiences.* PI: Clase, K.L. (Purdue) Consultant: **Halverson, K.L.** (USM) (Purdue $696,577 Total).

National Science Foundation, Discovery Research K-12 (2013). *Collaborative Research: Integrating Quantitative Literacy into Biology through Teacher Professional Development*. PI: Clase, K.L. (Purdue) PI: **Halverson, K.L.** (USM) Co-PI: Kirkham, L. & Parker, L.C. ($39,999 USM, $407,800 Purdue = $447,799 Total).

NASA Solicitation and Proposal Integrated Review and Evaluation System (NSPIRES). (2013). *Let's Learn While Having Fun at INFINITY*. PI: Herron, S. Co-PIs: Brown, S., Buchanan, R., **Halverson, K.L.**, Kar, B., Sirola, C., Stephen, J., Graben, J. (USM $868,258.00 Total).

National Science Foundation, Experimental Program to Stimulate Competitive Research (EPSCoR) Research Infrastructure Improvement (RII-Track1) Program. (2012). *Advancing Basic and Applied Research through Genomics*. PI: Peterson, D.G., Co-PI: Elasri, M.O., Isokephi, R., Marquart, M.E., Williams, L., Lawrence, M.L., Hoeksema, J., Nannapaneni, R., Noonan, B., Counterman, B., **Halverson, K.L.,** Perkins, A. (~20Mil) *Preproposal*.

NASA Space Grant: STEM Education (2012). *Improving Retention and Success of Unprepared Introductory Biology Students.* PI: **Halverson, K.L.** (USM $500,000 pre-proposal).

National Science Foundation, Ethics Education in Science & Engineering. (2012). *Sophrosync: An Ethics Education Project for the Sciences.* Principle Investigator: Herron, S.S.; Co-PI: Bruton, S.V., and **Halverson, K.L.** (USM $299,993 Total).

National Science Foundation, Transforming Undergraduate Education in Science, Mathematics, and Technology Education (2012). *Using Tree Thinking to Reform Education in Evolutionary Science (Using TREES)*. PI: **Halverson, K.L.** (USM $192,972 Total).

NCAA Research Committee: Graduate Student Research Grant Program. (2012). *Exploring Effective Student-Athlete Time Management Strategies to Maximize Academic Success.*

Graduate Student Investigator: Boyce, C.; Faculty Research Advisors: **Halverson, K.L.**, & Gearity, B. (USM $7,500 Total).

Spencer Foundation. (2011). Nursing Students Obstacles with Science (Nursing SOS). PI: **Halverson, K.L.** (USM $39,723 Total).

National Science Foundation, Informal Science Education (2010). *Over, Under and Through, Students Informally Discover the Environment (OUTSIDE)*. PI: Thomas, A.; Co-PI: **Halverson, K.L.** (USM $2,925,608 Total).

National Science Foundation, Transforming Undergraduate Education in Science, Technology, Engineering, and Mathematics (TUES) (2010). *Investigating the Role of Representations in Introductory Biology to Optimize Science Education*. PI: **Halverson, K.L.** (USM $199,340 Total).

National Science Foundation, Transforming Undergraduate Education in Science, Technology, Engineering, and Mathematics (TUES) (2010). *Collaborative Research: TUES Phase I: An experimental model for integrating virtual learning into interdisciplinary biology education* (#1044050). PI: Clase, K.L.; Co-PI: **Halverson, K.L.** ($23,989 USM, $176,000 Purdue = $199,989 Total).

Howard Hughes Medical Institute Undergraduate Science Education – Educational Experiment. (2009). *Using visual representations to enhance undergraduate learning in the life sciences.* Program Director: Moore, F.; Key Faculty: **Halverson, K.L**., Freyermuth, S., & Lee, A. (USM $491,600 Total).

Howard Hughes Medical Institute Undergraduate Science Education – Core Project (2009). *Integrated engagement in the life sciences.* Program Director: Moore, F.; Key Faculty: Herron, S., Shearer, G., Biesiot, P., Lee, A., & **Halverson, K.L.** (USM $1,692,952 Total).

National Science Foundation, Gordon Research Conference Visionary Grant. (2009). *Developing and evaluating interactive visualization tools for supporting undergraduate understanding of phylogenetic trees.* PI: **Halverson, K.L.** (MU $6000 Total).

3. Funded Internal Grants and Contracts ($66,254.80):

Texas State University, Faculty Developmental Leave Supplemental Award (September 2021 – May 2022). PI. Daniel, K.L. (TXST $20,000 + $26,370 Salary supplement from Provost = **$46,370** Total).

Texas State University Speed Networking for Researchers Multidisciplinary Team Incentive (July 2017 – August 2019). *Visual Education and Communication across Science Domains.* PI: Savelyev, A. Co-PI: **Daniel, K.L.**, Roundtree, A., & Luxford, C. (TXST **$2,500**).

Texas State University, Research Enhancement Program (January 2016-May 2017). *Impacts of Visualization Interactions on Student Tree-Thinking Outcomes.* PI: **Daniel, K.L. (**TXST **$8000).**

Texas State University. (September 2015). *Alkek University Library Faculty Startup Funds to Support New Faculty Research by Enhancing the Library's Collections in the New Faculty Areas of Specialization.* Requestor: **Daniel, K.L. (**TXST **$1405 for Eight Book Series).**

University of Southern Mississippi Grants Proposal Develop Program. (February 2013-February 2014). *Assessing the impact of a VWE educational intervention on college student learning and engagement.* PI: **Halverson, K.L. (**USM **$2000).**

Richard Wallace Research Incentive Grant, MU. (August 2008-July 2009). *Improving Phylogenetic Thinking in Biology Undergraduates.* PI: Pires, J. C. Investigator: **Halverson, K.L.** (MU **$4000).**

Learning Teaching and Curriculum Travel Grant, MU, 2006 (**$250**), 2007 (**$250**), 2008 (**$300**). The Department of Learning Teaching and Curriculum annually supports professional development to present research.

Organization Research Group (ORG) Travel Budget Funding 2007 (**$603.86**). ORG supports student associations at MU send members to professional conferences to present research.

Graduate Student Association Travel Grant, 2007 (**$50**), 2008 (**$110**). This association at the MU selectively supports graduate students' pursuits toward professional development and dissemination of research.

Graduate Professional Council Travel Grant, 2007 (**$366.44**), 2008 (**$50**). This association at the MU selectively supports graduate students' dissemination of research.

4. Submitted, but not Funded, Internal Grants and Contracts:

Texas State University, CoSE Collaborative Postdoctoral Fellowship. (2022, January). *Shifting Phenology and Perspectives: Harnessing community science to quantify shifts in public perceptions of sustainability and biodiversity conservation research.* PI: O'Connell, M., Faculty Mentors: **Daniel, K.L**. & Ikehata, K. (TXST Salary [$94,944 plus 28% fringe] +$2,400 materials = $123,992 Total). *Withdrawn*

Texas State University, Research Enhancement Program. (2020). *Pollinator Partners: Scaffolding Outdoor Elementary Science Investigations.* PI: Forsythe, S., Co-PI: **Daniel, K.L.** (TXST $16,000).

Texas State University, Research Enhancement Program (2018). *Student Hormonal Stress Responses in Two Learning Environments.* PI: **Daniel, K.L.**, Co-PI: Huertas, M. (TXST $16,000).

Texas State University, Research Enhancement Program (2017). *Connecting Interest in and Awareness of the Environment with an Informal Experience*. PI: **Daniel, K.L.**, Co-PI: Williamson, P. (TXST $15,989).

Texas State University Multi-Disciplinary Internal Research Grant (2016). *Overcoming Language Issues through Visual Education in STEM.* PI: **Daniel, K.L.** Co-PI: Komogortsev, O.V. (TXST $25,000 Pre-proposal).

USM Summer Grant of Improvement of Instruction (2012). *Helping Unprepared Students Succeed in Introductory Biology.* PI: **Halverson, K.L.** (USM $2000).

Student eResearch Fellowship Program, MU (2008). *Developing phylogenetic thinking in biology undergraduates by using online supports*. Investigator: **Halverson, K.L.** (USM $2000).

D. Fellowships, Awards, Honors:
LBJ Institute Faculty Research Fellow. TXST. 2021-2022.

Finalist for *Outstanding Doctoral Dissertation Award.* National Association of Research in Science Teaching. 2010.

Nominated for *Distinguished Doctoral Dissertation Award.* MU. 2010.

Graduate Research Assistant of the Year Award, Southwestern Bell Science Education Center, MU, 2009. Each year, the Science Education Center faculty at MU select one graduate research assistant who has demonstrated outstanding research productivity for this award.

Ruth E. Norris Scholarship, MU, AY 2006-2007. Each year the college of education awards one graduate student with an exemplary academic and research record an annual scholarship to support future research endeavors.

IV. SERVICE

A. Institutional

1. University:

TXST

2018 – Present	Member, Technology-Enhanced Active Learning Spaces (TEALS) Committee
2017 – Present	Member (Interim Chair, 2020AY; Chair, 2021-Present), University Lecturers Committee

USM

2014 – 2015	Member, International Exchange Program Committee
2013 – 2015	Member, Service-Learning Advisory Board
2011 – 2013	Advisor (Donaven McLaurin), McNair Scholar
2010 – 2012	Faculty Co-Advisor, Roots and Shoots

MU

2007 – 2008	Representative, Graduate Student Association

ISU

2004 – 2005	Member, Honors and Awards Committee

2. College:

TXST – College of Science and Engineering

2017 – 2019	Poster Judge (WISE, SURE)
2016 – 2018	Biology Representative, ESB General Purpose Classroom Task Force
2015	Faculty Chair, Seventh International Research Conference for Graduate Students

USM – College of Science and Technology

2009 Organizer, College Science Teaching Conversations Seminar Series

MU – College of Education

2007 – 2008 Member, Conversations About College Science Teaching Organizing Committee

3. Department/School:

TXST – Department of Biology

2021 – Present Member, Fuess Tracking Advisory Committee
2020 – Present Member, Martina Tracking Advisory Committee
2019 – Present Peer Reviewer of Teaching (Wilson, 2019 [Functional Biology]; Fritts, 2019 [Natural History of Vertebrates]; Martina, 2020 [Wetlands Plant Ecology and Management]; Huertas, 2021 [Scientific Writing])
2019 – Present Member, Graduate Admissions Committee
2018 – Present Chair, Serenari Tracking Advisory Committee
2017 – Present Member, Francis Rose Undergraduate Research Award Committee
2017 – Present Member, William E. (Henry) Norris Jr. Scholarship Committee
2017 – Present Member (Chair 2017-2019), Audrey L. Evers Scholarship Committee
2016 – Present Member, Biology Space Committee
2018 – 2022 Member, Instructor Evaluation Committee
2017 – 2018 Member and Candidate Schedule Organizer, Human Dimensions Search Committee
2016 – 2018 Departmental Co-Liaison to Instructional Technologies Support
2015 – 2018 Faculty Co-Advisor, Beta Beta Beta
2016 Member, Wildlife Biologist Search Committee
2016 Judge, 21st Annual Biology Student Colloquium

USM – Department of Biological Sciences

2011 – 2015 Member, Assessment Committee
2010 – 2015 Member, Textbook Committee
2014 Member, Marine Biologist Search Committee
2010 – 2014 Member, Graduate Admissions Committee
2010 – 2011 Haunted Halloween Trail Volunteer, Biological Sciences Learning Center
2010 Judge, Department of Biological Sciences Graduate Student Forum

USM – Center for Science and Mathematics Education

2014 – 2015 CSME Representative, Faculty Council
2013 – 2015 Member, CSME Graduate Admissions Committee

MU – Department of Learning, Teaching, and Curriculum

2006 – 2009 Member (President 2007 – 2008), Learning, Teaching, and Curriculum-Graduate Student Association
2008 Member, Learning Teaching and Curriculum Departmental Awards Committee
2006 – 2008 Member, Science Outreach Coordinator Search Committee

B. <u>Professional</u>

Review Work

2022 T&P reviewer, Georgia Southern University
2022 Program Reviewer, Texas A&M Commerce
2021 T&P Reviewer, University of Alabama
2010 – Present Grant Reviewer, Panelist DUE, DRL, and DBI, National Science Foundation (IUSE, S-STEM, RaMP, DRK-12, iTEST, REESE, TUES)

2014 – Present	Manuscript Reviewer, *CBE – Life Sciences Education*
2012 – Present	Manuscript Reviewer, *Evolution, Education, and Outreach*
2010 – Present	Manuscript Reviewer, *International Journal of Science Education*
2009 – Present	Manuscript Reviewer, *The American Biology Teacher*
2011 – 2020	Presentation Proposal Reviewer, *National Association of Biology Teachers*
2016	Manuscript Reviewer, *Science and Education*
2013 – 2015	Manuscript Reviewer, *Science Education*
2006 – 2015	Presentation Proposals Reviewer, *National Association for Research in Science Teaching*
2014	Manuscript Reviewer, *Journal of Geoscience Education*
2013 – 2014	Manuscript Reviewer, *International Journal of Science & Mathematics Education*
2011 – 2014	Chapter Reviewer, *Biology for a Changing World*, W.H. Freeman
2010 – 2014	Textbook reviewer, Wiley Publisher
2011 – 2013	Manuscript Reviewer, *BioScience*
2011 – 2013	Textbook reviewer, Oxford University Press
2011 – 2012	Chapter Reviewer, *Visual Data in Science Education*
2007	Manuscript Reviewer, *Ecology*
2007	Presentation Proposal Reviewer, *American Educational Research Association*

International and National

2022	Panel Member, AP Biology Standard Setting
2022	Member, National Association for Interpretation (NAI) College and University Academics Section Committee
2016 – Present	Advisory Committee Member, *The American Biology Teacher*
2016 – Present	Commission on Education and Communication, International Union for Conservation of Nature, Member
2016 – Present	Executive Board (2016 Secretary, 2017 Vice Chair, 2018 Chair, 2019 Past Chair, 2019-Present Nominations Chair), Four Year College and University Section, National Association of Biology Teachers
2009 – 2021	Research Committee (co-Chair, 2011 – 2015), National Association of Biology Teachers
2021	Volunteer Host, National Association of Interpretation Annual Meeting
2021	Member, NABT Introductory Biology Task Force
2021 – 2022	Mentor, Biology Education Intersegmental Collaborative (BEIC), UC San Diego and San Diego City College
2020 – 2022	Region VII Coordinator, National Association of Biology Teachers
2012 – 2021	Reader (Table Leader 2021-Present), AP Biology
2016 – 2020	Chief Scoring Leader, State of Texas Assessments of Academic Readiness (STAAR) exam
2012	Costal Clean-up Crew, Galway Atlantaquaria, National Aquarium of Ireland
2012	Lissard Estate habitat building project, Wildlife Film School of Ireland
2011	Designated (Voting) Delegate for the USM Chapter, Sigma Xi
2010	Non-Majors Biology Summit Contributor, Wiley, Phoenix, AZ
2008 – 2010	Presider, Annual meeting of the National Association for Research in Science Teaching
2007 – 2009	Tree Reasoning in Evolutionary Education (TREE) Working Group Member, National Evolutionary Synthesis Center (NESCent)

2007 – 2009	College and University Student Committee, National Association of Biology Teachers

Regional and Local

2021 – Present	Board Member (*Elected*), Texas Informal Science Education Association (ISEA) (Fundraising Committee, Chair 2021-2022)
2019 – Present	#1903 Project Director, Hays County Master Naturalist
2017 – 2019	River Guardianship Symposium Committee Organizer, Mermaid Society
2010 – 2015	Event Supervisor (Advisory Board Member 2012-2015), Mississippi Science Olympiad
2010 – 2015	Regional Judge (Scientific Review Committee 2012-2015), Mississippi Science Fair
2010	Pentathlon Coordinator, Summer Academy
2006 – 2008	Event Supervisor, Missouri State Science Olympiad

Memberships

American Association for the Advancement of Science (AAAS)	Since 2007
American Educational Research Association (AERA)	Since 2007
Association of College and University Biology Educators (ACUBE)	Since 2006
European Science Education Research Association (ESERA)	Since 2012
Hays County Master Naturalists (HCMN)	Since 2017
International Society of the Learning Sciences (ISLS)	Since 2010
Jane Goodall Institute	Since 2016
National Association of Biology Teachers (NABT) – *Lifetime Member*	Since 2006
National Association for Interpretation	Since 2020
National Association for Research in Science Teaching (NARST)	Since 2005
National Science Teachers Association (NSTA)	Since 2004
San Marcos River Foundation (SMRF) – *Lifetime Member*	Since 2017
Society for the Advancement of Biology Education Research (SABER)	Since 2013
Society for the Study of Evolution (SSE)	Since 2007
Southwestern Association of Naturalists (SWAN) – *Lifetime Member*	Since 2018
Texas Association of Biology Teachers (TABT)	Since 2015
Mississippi Academy of Sciences (MAS)	2010-15
Mississippi Science Teachers Association (MSTA)	2011-15
Pinebelt Young Professionals (PBYP)	2011-12
Sigma Xi	2011-14
Botanical Society of America (BSA)	2007-12
American Society of Plant Taxonomists (ASPT)	2008-10
Society of Systematic Biologists (SSB)	2008-09
Ecological Society of America (ESA)	2007-09

C. <u>Community</u>

2017 – Present	Training Committee (Speaker Chair 2017-2021, Technology Chair, 2022), Hays County Master Naturalist
2017 – 2019	Silent Auction Volunteer, Biennual Night Sky Festival, Dripping Spring, TX
2017	Program Leader Kids Day at Common Fords Prairie, Austin, TX
2016 – 2017	Adult Volunteer, Families in Nature
2017	32nd Annual Great Texas River Clean-up, San Marcos River
2016	31st Annual Great Texas River Clean-up, Willow Creek

2015 – 2016	Education Advisor, Kappa Alpha Theta: Alpha Theta Chapter
2010 – 2013	Field Data Volunteer, Audubon Coastal Bird Survey (Gulfport, MS)
2010 – 2013	Cat Room Volunteer, Southern Pines Animal Shelter, Hattiesburg, MS
2006 – 2008	Education and Scholarship Advisor, Kappa Alpha Theta: Epsilon Iota

D. Service Honors and Awards

Significant Contributions to the Chapter. The Hays County Master Naturalist Chapter recognizes one member for this award each year that has excelled in dedicating service benefitting the Hays County chapter through their efforts. 2020

Outstanding New Class Volunteer. The Hays County Master Naturalist recognizes one member for this award each year that has excelled in service to the chapter through their role on the Training Committee. 2020.

Outstanding Faculty Service Award. The College of Science and Technology at USM recognizes one faculty member for this award each year that has excelled in (non-administration) professional service. 2012.

E. Service Grants and Contracts

1. Funded External Service Grants and Contract ($10,409 Funded):

Learn and Serve America: Mississippi Service Learning Program, Service Learning Higher Education STEM. (August 2011-July 2012). *Service Learning Irish Biology Field Experience.* PI: **Halverson, K.L.** (USM **$5,000 Funds + $5,406 Cost Share = $10,409 Total**).

2. Submitted, but not Funded, External Service Grants and Contracts:

Kresge Foundation - San Marcos Texas Community Health Impact Grant. (2017). *Using Critical Service Learning to have long-term impact on the whole life health needs of our community members, across their lifespan.* P.I. Minifie, J., Co-PIs: Armstrong, G.L., Biggan, E.A., Ellis, J.H., Czyzewska, M, **Daniel, K.L.**, Guerrero, D., Lu, Y., Meaney, K.S., Norton, C., Rayburn, S.W., Renick, C.O., Trad, M.L., and Wagner, N. (TXST $350,000).

Student Leadership: Mississippi Service Learning Program, Service Learning Higher Education STEM Project. (2011). *Cleaning up Southern Mississippi.* Student Leaders: Boyce, C., Maroo, J., McElyea, K., Bohn, S., Wheat, J. Faculty Liaisons: Herron, S, **Halverson, K.L.**, & Hendry, S. (USM $2250).

3. Funded Internal Service Grants and Contracts ($4,500.00 Funded):

Leadership Grant, Westminster College, 1998-99 (**$1500**), 1999-2000 (**$1500**), 2000-01 (**$1500**). The college annually recognizes students in the top 10% of their class who have also demonstrated active involvement in leadership events and community service.

4. Submitted, but not Funded, Internal Service Grants and Contract:

N/A