

TEXAS STATE VITA

I. Academic/Professional Background

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

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B. Educational Background

<i>Degree</i>	<i>Year</i>	<i>University</i>	<i>Major</i>
Ph.D.	2009	University of Missouri	Curriculum and Instruction – Science Education Dissertation: <i>Investigating the Development and Use of Representations by Undergraduates in a Plant Systematics Course</i> (Co-Chairs: Drs. Sandra Abell & Patricia Friedrichsen)
M.S.	2005	Iowa State University	Ecology, Evolution, and Organismal Biology Thesis: <i>Intraspecific Plant Polyploidy Effects on Goldenrod Insect Herbivores</i> (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)*

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

D. Relevant Professional Experience

<i>Position</i>	<i>Entity</i>	<i>Dates</i>
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

2017-Current	Hays County Master Naturalist
2017-Current	TXST Service-Learning Fellow
2010-Current	CITI Completion Certificate (expires 9/12/2019)
2016	Survival Sign Language
2015	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:**

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 show(s) 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. Courses Taught:

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; 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. Graduate Theses/Dissertations, Honors Theses, or Exit Committees:

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

<i>Student Name, School</i>	<i>Year</i>	<i>Degree</i>
*Ryan Spencer, TXST	In progress	Ph.D. Aquatic Resources and Integrated Biology
*Jenn Idema, TXST <i>*Celebrity Classic Scholar</i>	In progress	Ph.D. Aquatic Resources and Integrated Biology
*Myra McConnell, TXST	In progress	M.S. Biology
*Antonia MacCrossan, TXST	In progress	M.S. Biology
*Bria Marty, TXST	In progress	M.S. Biology
*Miranda Wait, TXST	In progress	M.S. Wildlife Biology
*Victoria Reyes, TXST	In progress	B.S. Biology (Honor's Thesis)
Millicent K. Hardy, USM	In progress	Ph.D. Science and Mathematics Education

- *Zach Nolen, TXST 2019 Aug Ph.D. Aquatic Resources and Integrated Biology
A Consideration into Ways Biology-Based Student Organizations Facilitate Participation in STEM
- 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

Inga Ubben, Humboldt Universität zu Berlin, Germany – visited at TXST 9/2015-12/2015

Masters – Non Thesis

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| *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):

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):

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 4400/5400 (TXST): Plants Important to Wildlife
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 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. and **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 Funded)

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

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:

Ubben, I., Salisbury, S., & **Daniel, K.L.** (Accepted). Assessing and Diagnosing Model Competence with Verbal-Oral and Visual Data. 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.

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.

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.

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.

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.

Halverson, K.L. & Friedrichsen, P.M. (2013). Learning tree thinking: Developing a new framework of representational competence. In D. 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:

Leone, E.A., Salisbury, S., Nolen, Z.L., Idema, J., Parsley, K., Stefanik, K.L., & **Daniel, K.L.** (2019). Identifying the breakdowns in how students and faculty interpret course learning objectives. *Bioscene*, 45, 16-23.

Cuddeback, L.M., Idema, J.L., & **Daniel, K.L.** (In Press) Exploring the influence of teen volunteer opportunities on science perceptions and pathways. *International Zoo Educators Journal*, 55.

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.

- Bucklin, C.J. & **Daniel, K.L.** (2017). Using word associations as a formative assessment for understanding phylogenetics. *American Biology Teacher*, 79, 668-670. DOI: 10.1525/abt.2017.79.8.668
- 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
- Daniel, K.L.** (2016). Impacts of active learning on student outcomes in large lecture biology courses. *American Biology Teacher*, 78(8), 651-655. DOI: 10.1525/abt.2016.78.8.651
- 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
- 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>
- 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
- 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, 681-708. DOI 10.1007/s10972-014-9392-1
- 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) I*, 54, 108-121. http://www.iubs.org/fileadmin/user_upload/Biology-International/BI/BI_Numero_54.pdf
- 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
- 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
- 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, 2483-2507. DOI: 10.1080/09500693.2011.600351
- 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, 794-823. DOI: 10.1002/sce.20436

- 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
- Siegel, M.A., **Halverson, K.L.**, Freyermuth, S.K., & Clark, C. (2011). Beyond grading: A series of rubrics for science learning. *The Science Teacher*, 78(1), 42-47.
http://learningcenter.nsta.org/files/tst1101_28.pdf
- 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
- Halverson, K.L.**, Freyermuth, S., Siegel, M., & Clark, C. (2010). What undergraduates misunderstand about stem cell research. *International Journal of Science Education*, 32, 2253-2272. DOI:10.1080/09500690903367344
- 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
- Halverson, K.L.** (2010). Using pipe cleaners to bring the tree of life to life. *American Biology Teacher*, 72, 223-224. DOI: <http://dx.doi.org/10.1525/abt.2010.72.4.4>
- Halverson, K.L.** & Lankford, D.M. (2009). Science galls me: What is a niche anyway? *American Biology Teacher*, 71, 483-491. DOI: <http://dx.doi.org/10.1662/005.071.0807>
- 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, 1249-1268. DOI:10.1080/09500690802178123
- 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
- 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
- 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. Conference Proceedings

a. Refereed Conference Proceedings:

- Idema, J. & **Daniel, K.L.** (2019, Accepted). Exploring the presentation of climate change in aquarium exhibits. *Proceedings of the biennial meeting of the European Science Education Research Association*, Bologna, Italy.
- Leone, E.A. & **Daniel, K.L.** (2019, Accepted). Teaching the tree of life to undergraduate students. *Proceedings of the biennial meeting of the European Science Education Research Association*, Bologna, Italy.
- Daniel, K.L.**, Mac Crossan, A., & Huertas Pau, M. (2019, Accepted). Student hormonal stress responses in two learning environments. *Proceedings of the biennial meeting of the European Science Education Research Association*, Bologna, Italy.
- Salisbury, S. & **Daniel, K.L.** (2019, March). Preservice Teacher Engagement during a Nature-Based Fieldtrip. *Proceedings of the Annual Meeting of NARST: A Worldwide Organization for Improving Science Teaching and Learning through Research*, Baltimore, MD.
- 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 2017 Research Symposium for the National Association of Biology Teachers Annual Meeting*, St. Louis, MO.
- Bucklin, C.J. & **Daniel, K.L.** (2017, April). Changes in students' phylogenetic tree-reading: A quasi-experimental design study. *Proceedings of the Annual Meeting of NARST: A Worldwide Organization for Improving Science Teaching and Learning through Research*, San Antonio, TX.
- Daniel, K.L.** & Mishra, C. (2016, April). Investigating the role of reflexive practices in a science laboratory course. *Proceedings of the Annual Meeting of NARST: A Worldwide Organization for Improving Science Teaching and Learning through Research*, Baltimore, MD.
- Daniel, K.L.** (2015, September). Impacts of collaborative active learning in a large lecture setting. *Paper presented at the European Science Education Research Association*, Helsinki, Finland.
- Daniel, K.L.** & Clase, K.L. (2015, September). Teaching systems biology through a course based undergraduate research experience. *Paper presented at the European Science Education Research Association*, Helsinki, Finland.
- St. Clair, A., **Halverson, K.L.**, Thomas, A.K., & Boyce, C.J. (2015, April). Dividing attention participation to support informal learning. *Proceedings of the Annual Meeting of NARST: A Worldwide Organization for Improving Science Teaching and Learning through Research*, Chicago, IL.
- 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.

- Boyce, C.J., Mishra, C., **Halverson, K.L.**, & Thomas, A.K. (2014, April). Getting students OUTSIDE: Using technology as a way to stimulate engagement. *Proceedings of the Annual Meeting of NARST: A Worldwide Organization for Improving Science Teaching and Learning through Research*, Pittsburg, PA.
- Maroo, J. & **Halverson, K.L.** (2014, April). Nursing students' attitudes toward science: A modification of the Scientific Attitude Inventory II (SAI II). *Proceedings of the Annual Meeting of NARST: A Worldwide Organization for Improving Science Teaching and Learning through Research*, Pittsburg, PA.
- Clase, K., & **Halverson, K.L.** (2013, September). Using technology to facilitate science learning and community development. *Paper presented at the European Science Education Research Association*, Nicosia, Cyprus.
- McLaurin, D.C., **Halverson, K.L.**, Boyce, C.J. (2013, April). Using manipulative models to develop tree-thinking. *Proceedings of the Annual Meeting of NARST: A Worldwide Organization for Improving Science Teaching and Learning through Research*, Rio Grande, Puerto Rico.
- Saleh, M.R., **Halverson, K.L.**, Gearity, B. (2013, April). Moving students to a better understanding of enzyme specificity. *Proceedings of the Annual Meeting of NARST: A Worldwide Organization for Improving Science Teaching and Learning through Research*, Rio Grande, Puerto Rico.
- Samuel, J. & **Halverson, K.L.** (2013, April). Factors influencing middle school teachers' planning and facilitation of visualization-based instruction. *Proceedings of the Annual Meeting of NARST: A Worldwide Organization for Improving Science Teaching and Learning through Research*, Rio Grande, Puerto Rico.
- 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.
- 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.
- Boyce, C.J., Maroo, J., & **Halverson, K.L.** (2011, April). The influence of task order on student responses on a tree thinking pretest. *Paper presented at the annual meeting of the American Educational Research Association*, New Orleans, LA.
- 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.
- 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.

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

4. Abstracts

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.

5. Reports: (Non-refereed)

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:

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. Works not in Print

1. Papers Presented at Professional Meetings:

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. (November, 2013). *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). *Citizen 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.** (2018, April). *All About Plant: Botany 101.* Oral presentations for the Hays County Master Naturalists Training Course, San Marcos, TX.
- Daniel, K.L.** (2017, April). *All About Plant: Botany 101.* Oral presentations 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, <i>Quantitative Assessment: Diagnostics Instrument Development for Tree-Thinking</i> . Duke University & National Evolutionary Synthesis Center.	2013
Assessment Consultant, Linn State Technical College	2011
New England Aquarium Evolution of Fishes Panel, Consultant	2011

4. Workshops:

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.

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. Other Works not in Print:

a. Works "submitted" or "under review"

Nolen, Z.L. & **Daniel, K.L.** (Under Review – June 2019). How participating in biology-based student organizations influences undergraduate sense of belonging in STEM. *Submitted to The Journal of Higher Education*.

Nolen, Z.L. & **Daniel, K.L.** (Under Review – June 2019). The benefits of participating in content-based student organizations. *Submitted to Journal of Student Affairs Research and Practice.*

Nolen, Z.L., Close, E.W., & **Daniel, K.L.** (Under Review – May 2019). Academic affinity: Assessing the characteristics of biology-based student organizations. Submitted to *Journal of College Student Development.*

Ashford-Hanserd, S., Gutierrez Mannix, M.P., **Daniel, K.L.**, & Garcia, D.M., (Under Revision - February 2019). Factors that influence persistence of STEM majors at a Hispanic Serving Institution. Submitted to *Journal of Research in Technical Careers.*

Nolen, Z.L. & **Daniel, K.L.** (Under Review – June 2018). Developing and testing an instrument to assess student perceptions of social media use in the science classroom. Submitted to *The Internet and Higher Education.*

b. Works “in progress”

Daniel, K.L., Leone, E.A., & Bucklin, C.J. (In preparation). Comparing measured outcomes from three independent tree-thinking questionnaires. *To be submitted to Evolution Education and Outreach.*

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.*

Leone, E.A. & **Daniel, K.L.** (In preparation). An investigation of tree-thinking outcomes from different instructional methods. *To be submitted to the American Biology Teacher.*

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.*

Mishra, C., **Daniel, K.L.**, & Clase, K.L. (In preparation). Impacts of reflexive practices in authentic undergraduate research experiences. *To be Journal of Research in Science Teaching.*

Thomas, A.K. & **Daniel, K.L.** (In preparation). Using mobile technology as a hook to engage students in the process of science in a nature setting. *To be Journal of Natural History Education.*

C. Grants and Contracts

1. Funded External Grants and Contracts:

National Science Foundation, INCLUDES (2019). NSF INCLUDES DDLP - ACCEYSS: Association of Collaborative Communities Equipping Youth for STEM Success (award # 1764404). PI: Ashford, S., Co-PIs: **Daniel, K.L.**, Garcia, D.M., & Masino, A. (TXST **\$14,999** Supplemental Funding).

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).

National Science Foundation, Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science. (December 2017-November 2019). *ACCEYSS (Association of Collaborative Communities Equipping Youth for STEM Success)*. PI: Ashford, S., Co-PI: **Daniel, K.L.** and Garcia, D. (TXST **\$299,536** Total).

Travis Audubon Society & Commons Ford Prairie Committee Vegetation Surveys and Recording Data at the Commons Ford Prairie. (September 2017-ongoing). *Texas State Gallling 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)*. 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*. PI: Smith, K., Co-PI: Jenkins, K., Consultant: **Halverson, K.L.** (\$150,000 Duke + \$2500 USM Consultant + \$3072 USM Graduate Student = **\$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. (\$3700 USM, \$2300 Purdue = **\$6000** Total).

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

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). **PENDING.**

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. (\$2,051,592). **PENDING.**

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.** (\$74,989). **PENDING.**

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., (\$649,437).

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).

Spencer Foundation. (2019, January). *Student Hormonal Stress Responses in Two Learning Environments*. PI: **Daniel, K.L.**, Co-PI: Huertas, M. (TXST \$49,809.00).

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: Pepper, 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 SUI & 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: Pepper, 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 (GET² 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 (GET² 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 (GET² 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.**, & Garity, 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:

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, 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:

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 Technology-Enhanced Classrooms Committee, Member
2017 – Present University Lecturers Committee, Member

USM

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

MU

2007 – 2008 Representative, Graduate Student Association

ISU

2004 – 2005 Honors and Awards Committee Member

2. College:

TXST – College of Science and Engineering

2017 – Present 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 College Science Teaching Conversations Seminar Series, Organizer

MU – College of Education

2007 – 2008 Conversations about College Science Teaching Organizing Committee

3. Department/School:

TXST – Department of Biology

2019 – Present Graduate Admissions Committee Member
 2018 – Present Instructor Evaluation Committee Member
 2016 – Present Space Committee Member
 2017 – 2018 Human Dimensions Search Committee Member
 2016 – 2018 Departmental Co-Liaison to Instructional Technologies Support
 2015 – 2018 Faculty Co-Advisor Beta Beta Beta
 2016 Wildlife Biologist Search Committee Member
 2016 Judge, 21st Annual Biology Student Colloquium

USM – Department of Biological Sciences

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

USM – Center for Science and Mathematics Education

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

MU – Department of Learning, Teaching, and Curriculum

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

B. Professional

Review Work

2010 – Present Grant Reviewer, Panelist DUE and DRL National Science Foundation
 2009 – Present Manuscript Reviewer, *The American Biology Teacher*
 2012 – Present Manuscript Reviewer, *Evolution, Education, and Outreach*
 2011 – Present Presentation Proposal Reviewer, *National Association of Biology Teachers*
 2010 – Present Manuscript Reviewer, *International Journal of Science Education*
 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*
 2014 Manuscript Reviewer, *CBE – Life Sciences 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

2016 – Present Advisory Board Member, *The American Biology Teacher*
 2016 – Present Commission on Education and Communication, International Union for Conservation of Nature, Member
 2016 – Present Executive Board, Four Year College and University Section, National Association of Biology Teachers (2016 Secretary, 2017 Vice Chair, 2018 Chair, 2019 Past Chair, 2019 Nominations Chair)
 2016 – Present State of Texas Assessments of Academic Readiness (STAAR) exam, Chief Scoring Leader
 2016 – Present Jane Goodall Institute, Member
 2012 – Present AP Biology, Reader
 2009 – Present Research Committee, National Association of Biology Teachers (co-Chair, 2011 – 2015)
 2012 Galway Atlantaquaria, National Aquarium of Ireland, Costal Clean-up
 2012 Wildlife Film School of Ireland, Lissard Estate habitat building project
 2011 Sigma Xi, Designated (Voting) Delegate for the USM Chapter
 2010 Non-Majors Biology Summit, Wiley, Phoenix, AZ
 2008 – 2010 Presider, Annual meeting of the National Association for Research in Science Teaching
 2007 – 2009 National Evolutionary Synthesis Center (NESCent) – Tree Reasoning in Evolutionary Education (TREE) Working Group
 2007 – 2009 College and University Student Committee, National Association of Biology Teachers

Regional and Local

2017 – Present San Marcos River Foundation, Lifetime Member
 2017 – Present Mermaid Society, River Guardianship Symposium Committee, Member
 2017 – Present Master Naturalist Project Volunteer
 2010 – 2015 Mississippi Science Olympiad, Event Supervisor (Advisory Board Member 2012-2015)
 2010 – 2015 Mississippi Science Fair, Regional Judge (Scientific Review Committee 2012-2015)
 2010 Summer Academy, Pentathlon
 2006 – 2008 Missouri State Science Olympiad, Event Supervisor

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
International Society of the Learning Sciences (ISLS)	Since 2010
National Association of Biology Teachers (NABT)	Since 2006
National Association for Research in Science Teaching (NARST)	Since 2005
National Science Teachers Association (NSTA)	Since 2004
Society for the Advancement of Biology Education Research (SABER)	Since 2013
Society for the Study of Evolution (SSE)	Since 2007
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	2011-12
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. Community

2017-Present	Hays County Master Naturalist Training Committee
2017-Present	Biennial Night Sky Festival, Dripping Spring, TX
2017	Kids Day at Common Fords Prairie, Austin, TX
2016 – 2017	Families in Nature, Adult Volunteer
2017	32 nd Annual Great Texas River Clean-up, San Marcos River
2016	31 st Annual Great Texas River Clean-up, Willow Creek
2015 – 2016	Education Advisor, Kappa Alpha Theta: Alpha Theta Chapter
2010 – 2013	Audubon Coastal Bird Survey (Gulfport, MS), Volunteer
2010 – 2013	Southern Pines Animal Shelter
2006 – 2008	Education and Scholarship Advisor, Kappa Alpha Theta: Epsilon Iota

D. Service Honors and Awards

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:*

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:*

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