Texas State University Vita

I. ACADEMIC/PROFESSIONAL BACKGROUND

A. Carrie Jo Bucklin (née Boyce), Ph.D. **Associate Professor**
214 Supple Science Building carriebucklin@txstate.edu
601 University Dr. 512-245-3361
San Marcos, TX 78666

B. Educational Background

Ph.D. 2015 University of Southern Mississippi Biological Sciences
Dissertation: *Investigating How Students Communicate Tree-Thinking*
Chair: Dr. Kristy Lynn Daniel née Halverson
M.S. 2010 University of Southern Mississippi Science & Mathematics Education
B.A. 2008 University of Missouri Biological Sciences; Minor: Natural Resources

C. University Experience

Institutions Abbreviated: Texas State University (TXST), Southern Utah University (SUU), University of the Virgin Islands Experimental Program to Stimulate Competitive Research (UVI-EPSCoR), University of Southern Mississippi (USM), Pearl River Community College (PRCC), University of Missouri (MU)

Position	***University***	***Dates***
Associate Professor	TXST	2026-Present
Assistant Professor	TXST	2023-2026
Associate Professor-Biology Educator	SUU	2022-2023
Director UT State Science Olympiad	SUU	2020-2023
Director Southern Utah Sci. & Engin. Fair	SUU	2018-2023
Assistant Professor-Biology Educator	SUU	2016-2022
Outreach and Education Coordinator	UVI-EPSCoR	2015-2016
Research Investigator	USM	2013-2015
Understanding How Students Communicate Their Tree-Thinking Ability. Supervisor: Kristy L. Daniel (née Halverson)		
Graduate Teaching Assistant	USM	2010-2012, & 2014
Graduate Research Assistant	USM	2010-2015
2013-15: Understanding Students Tree-Thinking Ability. Supervisor: Kristy L. Daniel		
2013-15: HHMI Phage Hunters. Supervisors: Dr. Kristy L. Daniel & Dr. Kari L. Clase		
2013-15: Tree-thinking Assessment Development. Supervisors: Dr. Kristy L. Daniel working with PI Dr. Kristen Jenkins		
2011-14: Over Under and Through, Students Informally Discover the Environment. Supervisors: Dr. Kristy L. Daniel & Dr. Aimee K. Thomas		
2010-12: Using Manipulative Models, Students' Acceptance of Evolution, and Assessment Question Order Supervisor: Kristy L. Daniel		
Co-Director MS Region 1 Sci. & Engin. Fair	USM	2012-2015
Adjunct Instructor	PRCC	2012-2014
Adjunct Instructor	MU	2009
Undergraduate Teaching Assistant	MU	2008

D. Relevant Professional Experience

Position	***Entity***	***Dates***
Zoo Intern, Aves, Penguin Exhibit	St. Louis Zoo	2008
Research Assistant	MO Dept. of Conservation	2006-2007
Undergraduate Peer Advisor	MU	2004-2008

E. Other Professional Credentials

2024-2026 Texas Stream Team: Standard Core Monitoring; Riparian Evaluation; Advanced Monitoring
2021-2022 Provost Fellow (SUU)
2011 National Science Foundation - Science: Becoming the Messenger

II. TEACHING

A. Teaching Honors & Awards

Outstanding Faculty. (2022). College of Sciences, Biology, SUU. This award is student-nominated and given to one faculty member per department each year.

Distinguished Educator. (2021). University, SUU. This award is to recognize three (3) individual, full-time faculty for distinguished teaching effectiveness, professional commitment, demonstrated interest in students, and service to others and the University overall. A Faculty Senate subcommittee votes on nominations and selects the recipients of this award.

B. Mentored Students

1. Graduate Theses/Dissertations & Honors Theses

**Indicates Bucklin, C.J. Committee Chair*

Student Name, School	***Year***	***Degree***
*Kianna Bannerman, TXST	In Progress	M.S. Biology
Title: Forthcoming		
*Curtis Eckerman, TXST	In Progress	Ph.D. Aquatic Resources & Integrated Biology
Title: Forthcoming		
*Zuley Subvillaga-Benitez, TXST	In Progress	M.S. Biology
Title: Comprehensive Literature Review of the Scientific Attitudes Scale II		
*Danielle Gay, TXST	In Progress	Ph.D. Aquatic Resources & Integrated Biology
Title: Increasing Wildlife Career Preparedness by Investigating Bat Activity in an Urbanized Community Through Acoustics		
Project Funded in part by the TXST Doctoral Research Support Fellowship - Fall 2026 Award ($4,992.00)		
Tiara Thompson, TXST	In Progress	Ph.D. Aquatic Resources & Integrated Biology
Title: Effect of messaging on environmental stewardship		
Jill Zipperer, TXST	In Progress	Ph.D. Aquatic Resources & Integrated Biology
Title: Bridging the Gap Between Science and the Community Through Service-Learning and Third Spaces.		
Carolyn Jess, TXST	In Progress	Ph.D. Aquatic Resources & Integrated Biology
Title: Exploring the use of nature-based science inquiry activities		
Mallika Saha, TXST	In Progress	Ph.D. Aquatic Resources & Integrated Biology
Title: Investigating into undergraduate students' cognitive understanding of scientific diagrams using Eye movement		
*Lauren Slack, TXST	2026, Aug	M.S. Biology
Title: CUREing Doubt: Investigating Self-Efficacy and Imposter Syndrome in First-Year STEM Students after Participation in a Course-based Undergraduate Research Experience		
*Amandeep Kaur, TXST	2025, Dec	M.S. Biology
Title: Exploring The Effectiveness Of Course-Based Undergraduate Research Experiences On Pre-Service Elementary Teachers		
*Deedee Carlton, TXST	2025, Aug	M.S. Biology
Title: Pre-service Elementary Teachers (PSETs) Science Teaching Self-efficacy and a Water Quality Course-based Undergraduate Research Experience CURE		
Kristi Becker, TXST	2025, Aug	M.S. Biology
Title: Texas Master Naturalists Volunteerism Motivations		
Bess (Reisberg) Price, TXST	2024, Aug	M.S. Sustainability Studies
Title: Development of an integrated service-learning experiences and community partnership for elementary teacher candidates at Texas State University		
Hannah Baratang, TXST	2024, May	M.S. Biology
Title: Drawing as a generative learning activity: A case study on a nature journaling seminar course		

Zach Nolen, TXST 2019, Aug Ph.D. Aquatic Resources & Integrated Biology.
Title: 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)

2. Professional Projects & Exit Committees

a. Master's - Non-thesis Committee

Jessi Bocanegra, TXST 2024, Dec M.S. Biology

b. Postdoctoral Scholars

Tyler Harper-Gampp 2025-2026
Ph.D. Learning and Teaching in STEM, North Carolina State University

John Ojeogwu 2024 – 2025
Ph.D. Science Education, University of Virginia

c. Other Students

i. Supervisor, Undergraduate Student Research (Non-Thesis)
Zuleyca Subvillaga Benitez (TXST), Julie Price (TXST), Euan Andrew (SUU), John Albrecht (SUU), Luke Alder (SUU), Sierra Ball (SUU), Samantha Blom (SUU), Jennifer Crowell (SUU), Judy Flamenco (SUU), Johanna Garavito (SUU), Lauren Hardin (SUU), Kaitlyn Howard (SUU), Sheridan Lloyd (SUU), Jalynn Lunceford (SUU), Sierra Marines (SUU), Elizabeth Obray (SUU), Jarvon Stout (UVI), Kaitlin Veylupek (SUU), Diana Villicana (SUU), Zihe Wan (SUU)

ii. Mentor, Graduate Student Research (Non-Thesis)
Euan Andrew (Georgia Southern), Luke Alder (Utah State), Fahad Alam (TXST), E. Austin Leone (TXST)

C. Courses Taught

TXST BIO 4327: Issues in Irish Biodiversity and Conservation; BIO 4332/5332: Biology in Film & Television; BIO 4350Z/5350Z: Diversity and Cultural Impact of Geoparks; BIO 4421/5421: Ornithology; BIO 5114/5214/5314: Collaborative Research; BIO 5399A/B: Thesis; BIO 7102: Seminar (Research Ethics); BIO 5X14/7X14: Research Experience; BIO 7301: College Science Teaching; BIO 7303: Research; BIO 7361H: Professional Research Ethics; RES 3399: Research & Creative Expression

SUU BIOL 1010/15: Introduction to Biology/Lab; BIOL 1020/25: Human Biology/Lab; BIOL 1610/15: General Biology I/Lab I; BIOL 1620/25: General Biology II/Lab II; BIOL 2500: Environmental Biology; BIOL 3050: Biomedical Ethics; BIOL 3390/3395: Mammalogy/Lab; BIOL 3990: Life Finds a Way: Exploring Biology through Cinema (FS 2021); BIOL 4900: Biology Teaching Methods (MS/HS); BIOL 4980: Student Teaching (MS/HS Science); SUU 2250: Western Women in Medicine (Integrated Biology & History); GOSC 6303: Methods & Materials for Teaching Secondary Science (Graduate)

USM BSC 110L: Principles of Biological Sciences I Laboratory; BSC 111L: Principles of Biological Sciences II Laboratory; BSC 251L: Human Anatomy & Physiology II Laboratory

PRCC Bio 1131: General Biology I Laboratory; Bio 1133: General Biology I Lecture; Bio 1521: Principles of Anatomy and Physiology II Laboratory; Bio 1523: Principles of Anatomy and Physiology II Lecture

MU Bio 1010: Introductory Biology Laboratory for Non-Science Majors

D. Courses & Curriculum Developed

TXST BIO 4332/5332: Biology in Film & Television (2023); BIO 4350Z/5350Z: Diversity and Cultural Impact of Geoparks with Dr. Kristy Daniel (2018; SUU-TXST Collaboration); BIO 7102: Seminar – Research Ethics (2024); BIO 7361H – Professional Research Ethics (2025)

SUU BIOL 3990: Life Finds a Way: Exploring Biology through Cinema (2021); SUU 2250: Western Women in Medicine with Dr. Laura June Davis, History (2019; Integrated Biology & History); INDS 4900: The History, Culture, and Legacy of the American Civil War Era with Dr. Laura June Davis, History & Dr. Lisa Arter, English (SUU). (2022).

E. External Teaching Grants & Contracts

1. **Contract: Bucklin, C.J.** (September 2022-January 2025). *Biology Content & Pedagogy Developer.* 21st Century Partnership for STEM Education (21PSTEM). STEM Teaching and School Strengthening Activity (STESSA). (**$13,668 Total**)

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

N/A

G. Funded - Internal Teaching Grants & Contracts

3. **PIs: Bucklin, C.J.** & Davis, L.J. (2018, May). *Development of Western Women in Medicine Course.* SUU Center for Excellence in Teaching and Learning Curriculum Innovation Grant: Team-taught Integrated GE Courses. (SUU **$1000 Total**).

2. **PI: Bucklin, C.J.** (2016, October). *Conference Travel to Attend NABT*. Faculty Development Support Fund. (SUU **$1200 Total**).

1. **PI: Bucklin, C.J.** (2016, May). *Conference Travel to Attend HAPS*. Faculty Development Support Fund. (SUU **$1200 Total**).

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

N/A

III. SCHOLARLY/CREATIVE

Note: All works authored by "Boyce" are credited to USM, works by "Bucklin" are credited to other institutions.

**Undergraduate Student; [+]Graduate Student*

A. Works in Print

1. Books

a. Scholarly Monographs

N/A

b. Textbooks

N/A

c. Edited Books

N/A

d. Chapters in Books

2. 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).

1. 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).

2. Manuscripts

**Undergraduate Student; [+]Graduate Student*

a. Refereed Journal Articles

22. Subvillaga Benitez, Z., Harper-Gampp, T., Gold, R., Forshee, L., **Bucklin, C. J.** (**Under Review)**. Leeching the CURE: How a Course-based Undergraduate Research Experience Influences Students' Attitudes Toward Scientists, Science Research, and Leeches. *Journal of College Science Teaching*.

21. Thomas, A. K., Mraz-Craig, J. A., **Bucklin, C. J.**, Jess, C.,[+] Zipperer, J.,[+] & Daniel, K. L. (**Under Review**). From interest to expertise: Exploring motivation, identity, and career connection in naturalist development programs. *Journal of Interpretation Research.*

20. Mauger, L., Carleton, D., & **Bucklin, C. J.** (**Accepted**). Changes in Student Perceptions of Science and the Environment after an Ant Course Based Undergraduate Research Experience. *American Biology Teacher.*

19. **Bucklin, C.J.**, Harper-Gampp, T., Mraz-Craig, J.A., Gay, D.,+ Ojeogwu, J., & Marines, S.* (**Accepted**). Student Perceptions of Simulated Versus Physical Biology Labs. *Bioscene: Jour. Coll. Bio. Teach.*

18. Alder, L. A.,[+] Andrew, E. J.,[+] Proctor, G.,***** Corchado-Sonera, M., Heyborne, W., **Bucklin, C. J.**, & Govedich, F. (2026). *Lithobates Catesbeianus*: A Natural History In Washington County, UT. *The Southwestern Naturalist, 70*(2), 1-11.

17. Thomas, A., St. Clair, A., **Bucklin, C.J.**, Zipperer, J.,[+] & Daniel, K. (2024). Naturalists' technology use supports nature education. *Journal of Interpretation Research*, *29*(2), 69-86. https://doi.org/10.1177/10925872241292599

16. Bolus, R., Ogburn, M., & **Bucklin, C.J.** (2024). Ecology in Action: A Niche Modeling CURE. *American Biology Teacher, 86*(4), 226-232. https://doi.org/10.1525/abt.2024.86.4.226

15. Daniel, K.L., Ferguson, D.G., Leone, E.A., & **Bucklin, C.J.** (2024). A comparison of Measured Outcomes Across Tree-Thinking Interventions. *American Biology Teacher, 86*(2),71-77. https://doi.org/10.1525/abt.2024.86.2.71

14. Gold, R., **Bucklin, C.J.,** Forshee, L., Weeks, C., & Hardin, L.* (2023). Exploring the Leech Gut Microbiome as a Course-based Undergraduate Research Experience. *Journal of College Science Teaching, 52*(5), 70-79.

13. Johnson, S.L., & **Bucklin, C.J.** (2023). Using Pipe Cleaners to Bring Proteins to Life. *American Biology Teacher, 85*(3), 168-170. https://doi.org/10.1525/abt.2023.85.3.166.

12. **Bucklin, C.J.** & Mauger, L. (2022). CUREs: How to create & incorporate a collaborative ant-based project to teach science practices. *American Biology Teacher, 84*(6), 353-357. https://doi.org/10.1525/abt.2022.84.6.353.

11. Jenkins, K., Mead, L., Baum, D., Daniel, K.L., **Bucklin, C.J.**, Leone, E.A.,[+] Gibson, J.P. & Naegle, E. (2022). Developing the BETTSI: A Tree-Thinking Diagnostic Tool to Assess Individual Elements of Representational Competence. *Evolution, 76*(4), 708-721. https://doi.org/10.1111/evo.14458

10. 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

9. **Bucklin, C.J.,** Roper, L., & Belk, J. (2021). The Goggle Lab: Using Impairment Goggles to Teach Science Practices. *American Biology Teacher, 83(8)*, 521-525. https://doi.org/10.1525/abt.2021.83.8.521

8. Garavito, J.,* **Bucklin, C.J.,** & Mauger, L. (2020). Urbanization Effects on Genetic and Species Diversity in Southern Utah Ant Populations. *Utah Academy of Science, Arts, and Letters, 97,* 97-116. http://www.utahacademy.org/wp-content/uploads/2021/02/JUASAL-full-text-final-color.pdf

7. Nolen, Z.L.,[+] Daniel, K.L., & **Bucklin, C.J.** (2020). Perceived benefits from participating in content-based student organizations. *Journal of Student Affairs Research and Practice, 58(4),* 1-13. https://doi.org/10.1080/19496591.2020.1796689

6. Mraz-Craig, 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(1),* 68-75. https://www.jstor.org/stable/26491348

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

4. **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

3. 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) l, 54,* 108-121. http://www.iubs.org/fileadmin/user_upload/Biology-International/BI/BI_Numero_54.pdf

2. 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. https://doi.org/10.1186/1936-6434-6-26

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

b. Non-refereed Articles

1. **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. Published Proceedings

**Undergraduate Student; [+]Graduate Student*

a. Refereed Conference Proceedings

14. Gay, D., & Bucklin, C.J. (2027, March, **Under Review**). Wildlife Self Efficacy Research Measure (W-SERM): Development, Validity, and Reliability of a New Survey Instrument. *National Association for Research in Science Teaching (NARST) Annual Meeting, Boston, MA*.

13. Ruppert, J., **Bucklin, C.J.**, & Mauger, L. (2026, July). Rethinking Argumentation in Science Education: From Defense to Problematization. *International History, Philosophy, and Science Teaching (IHPST) Group Biennial Meeting, Lisbon, Portugal.*

12. Kaur, A.,[+] Taylor, S.J., Daniel, K.L., & **Bucklin, C.J**. (2026, April). Motivation and Science Identity Changes in Pre-Service Elementary Teachers Following a Science CURE. *National Association for Research in Science Teaching (NARST) Annual Meeting, Seattle, WA*.

11. Gay, D.,[+] Daniel, K.L., & **Bucklin, C.J**. (2026, April). Increasing Wildlife Career Preparedness: Comparing an Inquiry-based and a Course-based Undergraduate Research Experience Wildlife Course. *National Association for Research in Science Teaching (NARST) Annual Meeting, Seattle, WA.*

10. Zipperer, J.,[+] Jess, C.,[+] **Bucklin, C.J.,** & Daniel, K.L. (2025, March). Science in Third Spaces: Exploring Community Motivations at Informal Brewery Events. *National Association for Research in Science Teaching (NARST) Annual Meeting, National Harbor, MD.* https://virtual.oxfordabstracts.com/event/44289/submission/256

9. **Bucklin, C.J.**, Daniel, K.L., & Nolen, Z.L.[+] (2019, April). Introductory biology majors understanding of phylogenies after variable intervention types. *Proceedings of the American Educational Research Association*, 1-9. https://doi.org/10.3102/1440820

8. Daniel, K.L., Leone, E.A.,[+] & **Bucklin, C.J.** (2019, April). Developing a tree-thinking diagnostic test to assess individual elements of representational competence. *Proceedings of the American Educational Research Association*, 1-11. https://doi.org/10.3102/1440655

7. **Bucklin, C.J.** & Daniel, K.L. (2017, March). Changes in students' phylogenetic tree-reading: A quasi-experimental design study. *National Association for Research in Science Teaching (NARST) Annual Meeting,* San Antonio, TX. https://narst.org/sites/default/files/2019-07/2017_Abstracts.pdf

6. St. Clair, A.,[+] Halverson, K.L., Thomas, A.K., & **Boyce, C.J.**[+] (2015, March). Dividing attention participation to support informal learning. *National Association for Research in Science Teaching (NARST) Annual Meeting,* Chicago, IL. https://narst.org/sites/default/files/2019-07/2015_Abstracts.pdf

5. **Boyce, C.J.,**[+] Mishra, C.,[+] Halverson, K.L., & Thomas, A.K. (2014, March). Getting students OUTSIDE: Using technology as a way to stimulate engagement. *National Association for Research in Science Teaching (NARST) Annual Meeting*, Pittsburgh, PA. https://narst.org/sites/default/files/2019-07/2014_Abstracts.pdf

4. McLaurin, D.C.,***** Halverson, K.L., **Boyce, C.J.**[+] (2013, March). Using manipulative models to develop tree-thinking. *National Association for Research in Science Teaching (NARST) Annual Meeting,* Rio Grande, Puerto Rico. https://narst.org/sites/default/files/2019-07/2013_Abstracts.pdf

3. Halverson, K.L., Walter, E.,[+] & **Boyce, C.J.**[+] (2012, March). Investigating the relationship between college students' acceptance of evolution and tree thinking understanding. *National Association for Research in Science Teaching (NARST) Annual Meeting,* Indianapolis, IN. https://narst.org/sites/default/files/2019-07/2012_Abstracts.pdf

2. **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 American Educational Research Association*, 1-25. https://www.aera.net/Publications/Online-Paper-Repository/AERA-Online-Paper-Repository

1. **Boyce, C.J.**[+] & Halverson, K.L. (2011, March). Understanding evolution and evidentiary support. *National Association for Research in Science Teaching (NARST) Annual Meeting,* Orlando, FL. https://narst.org/sites/default/files/2019-07/2011_Abstracts.pdf

4. Abstracts

N/A

5. Reports *(Non-refereed)*

NSF S-STEM 2022-2025

4. **Bucklin, C.J.** (2025). Creating STEM Opportunities for High-Achieving Rural Alabama Students. – NSF Outcomes and Project Report – *NSF Annual Project Evaluation.* San Marcos, TX: Department of Biology, TXST

3. **Bucklin, C.J.** (2024). Creating STEM Opportunities for High-Achieving Rural Alabama Students. – NSF Outcomes and Project Report – *NSF Annual Project Evaluation.* San Marcos, TX: Department of Biology, TXST

2. **Bucklin, C.J.** (2023). Creating STEM Opportunities for High-Achieving Rural Alabama Students. – NSF Outcomes and Project Report – *NSF Annual Project Evaluation.* San Marcos, TX: Department of Biology, TXST

1. **Bucklin, C.J.** (2022). Creating STEM Opportunities for High-Achieving Rural Alabama Students. – NSF Outcomes and Project Report – *NSF Annual Project Evaluation.* Cedar City, UT: Department of Biology, SUU

NSF INCLUDES 2017-2019

3. **Bucklin, C.J.** (2019). Supporting Emerging Aquatic Scientists (SEAS) Your Tomorrow: Bridge to Ph.D. Program and Marine Science Opportunities – *NSF Outcomes and Final Project Report.* Cedar City, UT: Department of Biology, SUU

2. **Bucklin, C.J.** (2018). Supporting Emerging Aquatic Scientists (SEAS) Your Tomorrow: Bridge to Ph.D. Program and Marine Science Opportunities – *NSF Second Annual Project Report.* Cedar City, UT: Department of Biology, SUU

1. **Bucklin, C.J.** (2017). Supporting Emerging Aquatic Scientists (SEAS) Your Tomorrow: Bridge to Ph.D. Program and Marine Science Opportunities – *NSF First Annual Project Report.* Cedar City, UT: Department of Biology, SUU

6. Book Reviews

N/A

7. Other Works in Print

N/A

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

1. Presentations at Professional Meetings

a. National & International

**Undergraduate Student; [+]Graduate Student*

41. Zipperer, J., **Bucklin, C.J.**, & Daniel, K.L. (2026, October, **Under Review**). *Teaching field biology through international service-learning* [Poster presentation]. National Association of Biology Teachers 2026 Annual Conference, Dallas, TX, United States.

40. Zipperer, J.,[+] Bolanos, B.,* **Bucklin, C. J.**, & Daniel, K. L. (2026, April). *Preliminary development of a new instrument to measure adults' perceptions of science and scientists* [Poster presentation]. National Association for Research in Science Teaching 2026 Annual Conference, Seattle, WA, United States.

39. Carleton, D.,[+] **Bucklin, C.J.**, Taylor, S.J., Ojeogwu, J. (2026, January). *A CURE for Science Teaching Self-efficacy in Pre-service Teachers.* Poster presentation at the annual meeting of the Association for Science Teacher Education, Chicago, IL, United States.

38. **Bucklin, C.J.**, Ruppert, J., & Mauger, L. (2025, November). *Modifying & Creating Socio-Scientific Case Studies.* Workshop at the annual meeting of the NABT Professional Development Conference, St. Louis, MO, United States.

37. Slack, L.,[+] Idema, J., Pigg, R., & **Bucklin, C.J.** (2025, November). *CUREing Doubt: Self-Efficacy and Imposter Syndrome in First-Year STEM Students.* Poster presented at the annual meeting of the NABT Professional Development Conference, St. Louis, MO, United States.

36. Kaur, A.,[+] Taylor, S.J., Daniel, K.L., & **Bucklin, C.J.** (2025, November). *Assessing Motivational Shifts in Pre-Service Elementary Teachers Engaged in a Science CURE.* Poster presented at the annual meeting of the NABT Professional Development Conference, St. Louis, MO, United States.

35. **Bucklin, C.J.,** Ojeogwu, J., Carleton, D.,[+] Gay, D.,[+] Lloyd, S.,* Bolus, R., Ogburn, M. (2025, August). *Changes in Undergraduate Students' Knowledge of Wildland Fires and Wildland Fire Management.* Presentation at the 16th biennial meeting of the Conference of the European Science Education Research Association (ESERA), Copenhagen, Denmark.

34. Olimpo, J.T., Adler, J.J., Aikens, M., **Bucklin, C.J.**, El-Zawily, A., McGrane, R.S., Schuchardt, A., & Shay, J. (2025, July). *Getting Started with CURE Teaching Assistant Professional Development.* Roundtable at the annual meeting of the Society for the Advancement of Biology Education Research, Minneapolis, MN.

33. Gay, D. & **Bucklin, C.** (2025 June). *Investigating research design in a wildlife management course.* Poster at the annual meeting of the American Society of Mammalogists, West Lafayette, IN, United States.

32. Gay, D.[+] & **Bucklin, C.** (2025, June). *Investigating research design in a wildlife management course.* Presentation at the annual meeting of the International Urban Wildlife Conference, Atlanta, GA, United States.

31. **Bucklin, C.J.,** Idema, J.L., & Gold, R. (2024, November). *Developing Course-Based Research Experiences in Your Courses.* Workshop at the annual meeting of the NABT Professional Development Conference, Anaheim, CA, United States.

30. Kaur, A.,[+] Daniel, K., & **Bucklin, C.** (2024, November). *The development & importance of valid and reliable measures to assess student learning.* Poster presented at the annual meeting of the NABT Professional Development Conference, Anaheim, CA, United States.

29. Gay, D.,[+] **Bucklin, C.**, Fritts, S., & Daniel, K. (2024, October). *Increasing Wildlife Career Preparedness by Investigating Bat Activity Through Acoustics*. Poster presented at The Wildlife Society Annual Conference, Baltimore, MD, United States.

28. Subvillaga, Z.,* **Bucklin, C.J.**, Forshee, L., & Gold, R. (2024, July). *Leeching the CURE: How a Course-based Undergraduate Research Experience Influences Student's Attitudes Toward Science Research.* Poster presented at the annual meeting of the Society for the Advancement of Biology Education Research, Minneapolis, MN.

27. Kaur, A.,[+] **Bucklin, C.J.,** Daniel, K.L., & Taylor, S. (2024, July). *Exploring the Impact of CUREs on Pre-Service Elementary Teachers: Science Affinity, Motivated Learning Strategies, and Perceptions of Instructional Support.* Roundtable at the annual meeting of the Society for the Advancement of Biology Education Research, Minneapolis, MN.

26. Daniel, K.L. & **Bucklin, C.J.** (2023, November). *Dealing with a zombie epidemic: Applying knowledge of microbiology, immunology, and potential treatments.* Workshop at the annual meeting of the National Association of Biology Teachers, Baltimore, MD.

25. **Bucklin, C.J.**, Mraz-Craig, J.A., & Marines, S.* (2022, November). *Student Attitudes & Perceptions of Biology Labs Across Modalities.* Poster presented at the annual meeting of the National Association of Biology Teachers, Indianapolis, IN.

24. Angle, J. & **Bucklin, C.J.** (2022, November). *Teaching the Next Generation: Finding Success, Sustainability, and Sanity in Teaching.* Presentation at the National Association of Biology Teachers, Indianapolis, IN.

23. **Bucklin, C.J.** & Roper, L. K. (2021, November). *Laughing in Lab Equals Learning: Utilizing Impairment Goggles to Teach Science Practices and Science Literacy.* Workshop presentation at the annual meeting of the National Association of Biology Teachers, Atlanta, GA.

22. Schlender, K.,[+] Grimes, K., Brandt, M., Medina, **Bucklin, C.J.**, & Jones, N. (2019, November). *Supporting Emerging Aquatic Scientists (SEAS) Your Tomorrow: Bridge to Ph.D. Program and Marine Science Opportunities.* Poster presentation, 25th Biennial Conference of the Coastal & Estuarine Research Federation, Mobile, AL.

21. Grimes, K., Brandt, M., Medina, **Bucklin, C.J.**, Jones, N., Forbes, Jr., H., & Guannel, M. (2019, November). *A Pathway and Partnership Program to Engage U.S. Virgin Islanders in the Marine Sciences.* Oral presentation, 25th Biennial Conference of the Coastal & Estuarine Research Federation, Mobile, AL.

20. Forbes, Jr., H., Stout, J.,* Grimes, K., Brandt, M., Jones, N., **Bucklin, C.J.** & Medina, M. (2019, November). *Youth Ocean Explorers: A pathway to diversifying the field of marine science.* Oral presentation, 25th Biennial Conference of the Coastal & Estuarine Research Federation, Mobile, AL.

19. **Bucklin, C.J.** & Mauger, L. (2019, November). *CUREs: How to create & incorporate a collaborative ant-based project to teach science practices.* Workshop presented at the annual meeting of the National Association of Biology Teachers, Chicago, IL.

18. Forbes, Jr., H., Stout, J.,* Grimes, K., Guannel, M., Jones, N., Brandt, M., **Bucklin, C.J.**, & Medina, M. (2019, March). *Youth Ocean Explorers: A Pathway to Diversifying the Field of Aquatic Science in the U.S. Virgin Islands.* Oral presentation, Aquatic Sciences Meeting of the Association for the Sciences of Limnology & Oceanography, San Juan, PR.

17. Grimes, K., Brandt, M., **Bucklin, C.J.**, Jones, N., Medina, M, Forbes, Jr., H., & Guannel, M. (2019, March). *Supporting Emerging Aquatic Scientists (SEAS) Your Tomorrow: Increasing Diversity & Inclusion in the Marine Sciences in the U.S. Virgin Islands.* Oral presentation, Aquatic Sciences Meeting of the Association for the Sciences of Limnology & Oceanography, San Juan, PR.

16. **Bucklin, C.J.**, Grimes, K., Brandt, M., Medina, M., Jones, N., Albrecht, J.M.* (2018, November). *A Case Study Investigating the Impact of a Summer MS to PhD Bridge Program on the Science Identities of Underrepresented Minority Students.* Poster presented at the annual meeting of the National Association of Biology Teachers, San Diego, CA.

15. **Bucklin, C.J.** & Mauger, L. (2018, November). *Implementing a CURE to Investigate the Impacts on Science Attitudes Towards Nature and Science.* Poster presented at the annual meeting of the National Association of Biology Teachers, San Diego, CA.

14. Villicana, D.,* Veylupek, K.,* & **Bucklin, C.J.** (2018, November). *Brian Head Fire Aftermath: Investigating Plant Re-Growth and Area Use by Wildfire.* Poster presented at the annual meeting of the National Association of Biology Teachers, San Diego, CA.

13. Obray, E.,* **Bucklin, C.J.**, Grimes, K., Habtes, S., Forbes, H., Taylor, M., & Gunnel, M. (2018, November). *Investigating the Impact of Community Engagement Projects on Project Leaders.* Poster presented at the annual meeting of the National Association of Biology Teachers, San Diego, CA.

12. Ball, S.,* Mauger, L., & **Bucklin, C.J.** (2018, November). *A Biodiversity Survey of Southern Utah Reptiles.* Poster presented at the annual meeting of the National Association of Biology Teachers, San Diego, CA.

11. **Bucklin, C.J.** & Grimes, K. (2017, November). *Modifying Existing Curriculum to Mirror Local Environments to Benefit Students.* Workshop presented at the annual meeting of the National Association of Biology Teachers, St. Louis, MO.

10. **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.

9. 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.

8. 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.

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

6. **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.

5. 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.

4. 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.

3. 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.

2. 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.

1. **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.

b. Regional/State

**Undergraduate Student; [+]Graduate Student*

24. Zipperer, J.,[+] **Bucklin, C. J.**, & Daniel, K. L. (2026, February). Not just event planning: Developing outreach events with the help of community partners. [Conference presentation]. Informal Science Education Association of Texas 2026 Annual Conference, Houston, TX, United States.

23. Kaur, A.,+ Taylor, S.J., Daniel, K.L., & **Bucklin, C.J.** (2025, October). *Assessing Motivational Shifts in Pre-Service Elementary Teachers Engaged in a Science CURE.* Presentation at the annual meeting of the Southwest Association for Science Teacher Education, Pottsboro, TX, United States.

22. Kaur, A.,[+] Daniel, K., & **Bucklin, C.** (2025, February). *The Importance & Developmental Process of Creating Valid and Reliable Measures to Assess Student Learning*. Presentation at the annual meeting of the Informal Science Education Association of Texas (ISEA), San Antonio, TX.

21. Carleton, D.L.,[+] & Ojeogwu, J. Taylor, S., & **Bucklin, C.J.** (2025, February). *A CURE for science teaching self-efficacy in preservice science teachers*. Presentation at the annual meeting of the Informal Science Education Association of Texas (ISEA), San Antonio, TX.

20. Zipperer, J.,[+] Gay, D.,[+] Jess, C.,[+] **Bucklin, C.J.**, & Daniel, K.L. (2025, February). *Brewing knowledge: Engaging communities through informal science events at breweries.* Presentation at the annual meeting of the Informal Science Education Association of Texas (ISEA), San Antonio, TX.

19. Carleton, D.,[+] Ojeogwu, J., Taylor, S., & **Bucklin, C.J.** (2024, October). *A CURE for Science Teaching Self-efficacy in Pre-service Elementary Teachers*. Presentation at the annual meeting of the Southwest Association for Science Teacher Education, Denton, TX, United States.

18. Kaur, A.,[+] **Bucklin, C.,** & Daniel, K. (2024, February). *Student Engagement, Perceived Costs of Belonging in Biology, and Instructor Fidelity to Instruction*. Poster presented at the annual meeting of the Informal Science Education Association, Corpus Christi, TX, United States.

17. **Bucklin, C.J.** & Daniel, K.L. (2023, November). *ISEA Presents: Draw to Learn.* Presentation at the Conference for the Advancement of Science Teaching, Houston, TX.

16. **Bucklin, C.J.** & Johnson, S.L. (2023, October). *Pipe Cleaner Protein Folding.* Presentation at the Southwest Association for Science Teacher Education, Houston, TX.

15. Andrew, E.,* Alder, L.,* **Bucklin, C.J.** (2023, February). *Lithobates catesbeianus: A Study of Diet, Disease, and Water Chemistry in Washington County, Utah.* Presentation at the Utah Conference on Undergraduate Research, Salt Lake City, UT.

14. Andrew, E.,* Alder, L.,* **Bucklin, C.J.** (2022, December). *Lithobates catesbeianus: A Study of Diets in Washington County*, *Utah*. Poster Presentation at the Utah Health Scholars Conference, St. George, UT.

13. Lloyd, S.,* **Bucklin, C.J.,** Bolus, R., & Ogburn, M. (2021, March). *Burn Scar: An Assessment of a Course-Based Undergraduate Research Experience on the Effects of the Brian Head Wildfire*. Presentation at the Utah Academy of Sciences, Virtual.

12. Berryhill, S.,* Glauser, K.,* Kennerley, K.,* Mickelson, J.,* Navin, S.,* Reed, A.,* Skidmore, D.,* **Bucklin, C.J.**, & Mauger, L. (2018, April). *Ant Genera Distribution at Three Peaks between Sunny and Shady Locations with Ant Foraging Terrain Preferences.* Poster Presented at the Utah Academy of Sciences, Arts, & Letters, Cedar City, UT.

11. Tuttle, L.,* Mauger, L., **Bucklin, C.J.**, & Wells, S. (2018, April). *Wolbachia Infection Rates in Southern Utah Ants*. Poster Presented at the Utah Academy of Sciences, Arts, & Letters, Cedar City, UT.

10. Thacker, B.,* Tyler, M.,* Oborn, M.,* Olsen, E.,* Allen, R.,* **Bucklin, C.J.,** & Wells, S. (2018, April). *A Preliminary Study of Genetic Diversity in Ant Populations at the Southern Utah University Mountain Center.* Poster Presented at the Utah Academy of Sciences, Arts, & Letters, Cedar City, UT.

9. Rhein, N.,* Govedich, F., **Bucklin, C.J.**, & Bain, B. (2018, April). *Brain Head Fire: Effects of Fire on Aquatic Ecosystems.* Poster Presented at the Utah Academy of Sciences, Arts, & Letters, Cedar City, UT.

8. **Bucklin, C.J.**, & Mauger, L. (2018, March). *Using CUREs to Increase Engagement and Learning.* Roundtable presentation at the Teaching for Learning Conference, Las Vegas, NV.

7. Obray, L.,* **Bucklin, C.J.**, Habtes, S., & Wilson-Grimes, K. (2018, February). *Investigating the Impact of Community Engagement Projects on Project Leaders*. Poster presented at the Utah Conference on Undergraduate Research, Cedar City, UT.

6. Villicana, D.,* Veylupek, K.,* & **Bucklin, C.J.** (2018, February). *Measuring Regrowth & Animal Movement After a Fire Disturbance*. Poster presented at the Utah Conference on Undergraduate Research, Cedar City, UT.

5. Albrecht, J.M.,* **Bucklin, C.J.**, & Wilson-Grimes, K. (2018, February). *A Case Study Investigating the Impact of a Summer MS to PhD Bridge Program on the Science Identities of Underrepresented Minority Students*. Poster presented at the Utah Conference on Undergraduate Research, Cedar City, UT.

4. **Bucklin, C.J.** & Wilson-Grimes, K. (2017, June). *Pride in Our Seas, Pride in Ourselves: Increasing Outdoor Experiences to Change Content Knowledge and Attitudes Toward Land-Based Sources of Marine Debris.* Workshop presented at the annual meeting of the Experiential Learning Leadership Institute, Park City, UT.

3. 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.**

2. 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.

1. **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.

c. Local

**Undergraduate Student; $^{+}$Graduate Student*

26. Zipperer, J.,$^{+}$ Bolanos, B.,* **Bucklin, C. J.,** & Daniel, K. L. (2026, April). *Preliminary development of a new instrument to measure adults' perceptions of science and scientists* [Poster presentation]. Texas State University 17th Annual Graduate Student Research Conference, San Marcos, TX.

25. Gay, D.,$^{+}$ **Bucklin, C.**, & Dainel, K. L. (2026, February). Comparing an Inquiry-based and a Course-based Undergraduate Research Experience Wildlife Course. Oral presentation at the Texas State University Biology Department Colloquium, San Marcos, TX, United States.

24. Carleton, D. L.,$^{+}$ & Ojeogwu, J., Taylor, S., & **Bucklin, C.J.** (2025, March). *Exploring Pre-service Teacher Science Teaching Self-efficacy Before and After a Course-based Undergraduate Research Experience* [Poster Presentation]. Texas State STEM Conference, San Marcos, TX, USA.

23. Kaur, A.,$^{+}$ Daniel, K., & **Bucklin, C.** (2025, February). *The Importance & Developmental Process of Creating Valid and Reliable Measures to Assess Student Learning* [Poster session]. Texas State University Biology Colloquium, San Marcos, TX, United States.

22. Carleton, D. L.,$^{+}$ & Ojeogwu, J. Taylor, S., & **Bucklin, C.J.** (2025, February). *Exploring Pre-service Teacher Science Teaching Self-efficacy Before and After a Course-based Undergraduate Research Experience* [Poster Presentation]. Texas State Biology Colloquium, San Marcos, TX, USA.

21. Price, J.,* Gold, R., & **Bucklin, C.J.** (2024, April). *Differences in Student Attitudes Toward Science & Learning Outcomes Between Short & Long Semesters.* Poster presented at the Texas State University IDEA Center Poster Session, San Marcos, TX

20. Price, J.,* Gold, R., & **Bucklin, C.J.** (2024, April). *Differences in Student Attitudes Toward Science & Learning Outcomes Between Short & Long Semesters.* Presentation at the Texas State University Undergraduate Research Conference, San Marcos, TX

19. Subvillaga Benitez, Z.* & **Bucklin, C.J.**, Forshee, L., & Gold, R. (2024, February). *Students' Perceptions of Leeches after Participation in a Microbiology Course-based Undergraduate Research Experience (Micro-CURE)*. Poster Presented at the Texas State University Biology Colloquium, San Marcos, TX

18. Andrew, E.,* Alder, L.,* & **Bucklin, C.J.** (2023, March). *Lithobates catesbeianus: A Study of Diet, Disease, and Water Chemistry in Washington County, Utah*. Presentation at the SUU Festival of Excellence, Cedar City, UT.

17. **Bucklin, C.J.**, Daniel, K.L., Nolen, Z.,[+] Mead, L., Jenkins, K., & Baum, D. (2019, November). *Developing a Tree-Thinking Diagnostic Test to Assess Individual Elements of Representational Competence.* Presentation at the WMG COSE Annual Symposium, Cedar City, UT.

16. Wan, Z.* & **Bucklin, C.J.** (2019, April). *Investigation of Preferences in Ants*. Presentation at the SUU Festival of Excellence, Cedar City, UT.

15. Ball, S.* & **Bucklin, C.J.** (2019, April). *A Biodiversity Survey of Southern Utah Reptiles.* Presentation at the SUU Festival of Excellence, Cedar City, UT.

14. Blom, S.,* Crowell, J.,* & **Bucklin, C.J.** (2019, April). *The Art of Specimen Preservation*. Presentation at the SUU Festival of Excellence, Cedar City, UT.

13. **Bucklin, C.J.**, Forshee, L., Gold, R., Jarvis, K., Mraz-Craig, J., & Roper, L. (2019, April). *How Biology Department Faculty Utilized Campus Funding Opportunities to Promote Personal and Professional Growth.* Presentation at the SUU Festival of Excellence, Cedar City, UT.

12. **Bucklin, C.J.** & Mauger, L. (2018, April). *Implementing a CURE to Investigate the Impacts on Student Attitudes Towards Nature and Science.* Presentation at the SUU Festival of Excellence, Cedar City, UT.
11. **Bucklin, C.J.** & Wilson-Grimes, K. (2018, April). *Teaching Teachers How to Modify Curricula.* Presentation at the SUU Festival of Excellence, Cedar City, UT.

10. Ogburn, M., Bolus, R., & **Bucklin, C.J.** (2018, April). *Classroom-based experiential education at the site of the 2017 Brian Head Fire.* Presentation at the SUU Festival of Excellence, Cedar City, UT.

9. Nickell, L,*, Rhein, N.,* **Bucklin, C.J.**, & Govedich, F. (2017, November). *Brian Head Fire: Effects of Fire on Aquatic Ecosystems*. Poster presented at the WMG COSE Annual Symposium, Cedar City, UT.

8. Tuttle, L.,* Mauger, L., **Bucklin, C.J.**, & Wells, S. (2017, November). *Wolbachia Infection Rates in Southern Utah Ants*. Poster presented at the WMG COSE Annual Symposium, Cedar City, UT.

7. Villicana, D.,* Veylupek, K.,* & **Bucklin, C.J.** (2017, November). *Measuring Regrowth & Animal Movement After a Fire Disturbance*. Poster presented at the WMG COSE Annual Symposium, Cedar City, UT

6. **Bucklin, C.J.** & Daniel, K.L. (2016, November). *To use or not to use a virtual lab.* Poster presented at the Walter WMG COSE Annual Undergraduate Research Symposium. Cedar City, UT.

5. **Boyce, C.J.,**[+] Halverson, K.L., & Thomas, A.K. (2015, May). *VI-.* Oral presentation at VI-EPSCoR Conference, St. Thomas, VI.

4. **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.**

3. 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.

2. 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.**

1. **Boyce, C.J.,**[+] Burnham, E.,[+] Wright, J.,[+] & Conguista, S.[+] (2010, April). *Directorial attitudes on assistive technology*. Poster presented at the Student Research Colloquium, University of Southern Mississippi, Hattiesburg, MS.

2. Invited Talks, Lectures, and Presentations

**Undergraduate Student; [+]Graduate Student*

5. **Bucklin, C.J.** (2017, November). *Pride in Our Seas, Pride in Our Selves: Lessons Learned from A Sub-Awardee.* Presented at the SUU SPARC Project Recognition Luncheon, Cedar City, UT.

4. Grimes, K., Brandt, M., Jones, N., Medina, M., & **Bucklin, C.J.** (2017, March). NSF INCLUDES Video Showcase: Envisioning Impact. "Changing the Face of STEM in the U.S. Virgin Islands." Retrieved from: http://includes2017.videohall.com/presentations/826

3. Grimes, K., Brandt, M., Jones, N., Medina, M., & **Bucklin, C.J.** (2017, March). NSF 2017 STEM for ALL Video Showcase "Changing the Face of STEM in the U.S. Virgin Islands." Retrieved from: http://stemforall2017.videohall.com/presentations/1047

2. **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.

1. 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.

3. Workshops

N/A

4. <u>Other Works</u>

**Undergraduate Student; [+]Graduate Student*

a. Other Publications

6. Zipperer, J.,[+] **Bucklin, C.J.,** & Daniel, K.L. (2026). *Drawing Nature*. Research Rangers Nature Exploration. https://researchrangers.wp.txstate.edu/?page_id=151

5. Daniel, K. L., Zipperer, J.,[+] Godfrey, A., & **Bucklin, C.J.** (2025). *Natural Journey.* [Research Rangers Activity]. https://bpb-us-e1.wpmucdn.com/wp.txstate.edu/dist/a/4338/files/2025/10/Research-Rangers-Plant-Protectors.pdf

4. Zipperer, J.,[+] Godfrey, A., **Bucklin, C.J.**, & Daniel, K. L. (2025). *Plant Protectors* [Research Rangers Jr. ed. Activity]. https://bpb-us-e1.wpmucdn.com/wp.txstate.edu/dist/a/4338/files/2025/10/Research-Rangers-Plant-Protectors.pdf

3. **Bucklin, C.J.,** Zipperer, J.,[+] & Daniel, K. L. (2025). *Winged Wanderers* [Research Rangers Activity]. https://researchrangers.wp.txstate.edu/?page_id=446

2. **Bucklin, C.J.,** Daniel, K.L. & Zipperer, J.[+] (2025). *Bird Buddies* [Research Rangers Activity]. https://researchrangers.wp.txstate.edu/?page_id=299

1. Bhalla, N., **Bucklin, C.J.**, Devlin, M., Lopez, O., & Stephan, K. (2024). *Engineering Fit: Developing a Tool to Identify Skills-Job Mismatch Among Engineering Students* [White paper; TXST].

b. Works "in progress"

3. Ferguson, D., Leone, E.A., **Bucklin, C.J.**, & Daniel, K.L. (In Revision). Religiosity, young Earth views, and tree-thinking predict evolution acceptance. Evolution Education and Outreach.

2. Ojeogwu, J., Carleton, D.,[+] Gay, D.,[+] Ogburn, M., Bolus, R., Lloyd, S.,* & **Bucklin, C.J.**, (In Preparation). Investigating Changes in Student's Understanding of Wildfires After Working in a Burn Scar.

6. <u>Media Recognition</u>

2025 Staff. (2025, October 1). Two area breweries to host science event this weekend. *Dripping Springs Century News.* https://www.drippingspringsnews.com/article/3012,two-area-breweries-to-host-science-event-this-weekend

2025 Staff. (2025, April 30). Seasons of Science brings more science to local breweries. *San Marcos Daily Record*, online. https://www.sanmarcosrecord.com/article/30042,seasons-of-science-brings-more-science-to-local-breweries

2025 Zipperer, J. (2025, April). Research Rangers. Beautiful Hays County - Hays Hum, online. https://www.beautifulhayscounty.org/hays-humm/research-rangers

2025 Staff. (2025, March 23). Celebrating Central Texas pollinators: Seasons of Science brings science fun to local breweries. *San Marcos Daily Record*, online. https://www.sanmarcosrecord.com/article/29676,celebrating-central-texas-pollinators-seasons-of-science-brings-science-fun-to-local-breweries

2025 Staff. (2025, March 19). Seasons of Science brings science fun to local breweries. *Hays Free Press News-Dispatch,* online. https://www.haysfreepress.com/2025/03/19/seasons-science-brings-science-fun-local-breweries/

2025 Kendrick, T. (2025, March 18). Bringing science out of the classroom. *The Wimberley View,* online. https://www.wimberleyview.com/article/3263,bringing-science-out-of-the-classroom

2024 Sweat, D. (2024, July 07). Seasons of Science helps teach about recycling. *San Marcos Daily Record*, online. https://sanmarcosdailyrecord.com/news/seasons-science-helps-teach-about-recycling

2016 Pollock, J.F. SEAS: Supporting Emerging Aquatic Scientists. http://www.seasyourtomorrow.org

C. Consultancies

2022-2023 University of North Alabama. COMPASS.

D. Grants & Contracts

a. External Grants & Contracts

**Undergraduate Student; [+]Graduate Student*

12. **PI: Bucklin, C.J.** (2025, December). *BLOOME Shaker Garden.* Native American Seed – Texas Seed Grant Program. (**$100 Total**)

11. PI: Aleinikava, D.; Co-PIs: Ronkainen, N., Ziliak, E.; **Ext. Eval.: Bucklin, C.J.** (October 2025-December 2030). *S-STEM: Benedictine University STEM Scholars (BenSTEMS).* (Award No. 2527550). National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). (**$1,595,353 Total**).

10. PI: Fuess, L., **Senior Personnel: Bucklin, C.J.** (August 2025-December 2029). *CAREER: Characterizing the mechanisms linking bleaching recovery to pathogen susceptibility in a model cnidarian system.* National Science Foundation. Faculty Early Career Development Program (CAREER). (**$676,766 Total**).

9. **PI: Bucklin, C.J.**; Co-PI: Gay, D.[+] (August 2025-July 2026). *Increasing Wildlife Career Preparedness by Investigating Bat Activity Through Acoustics.* Wildlife Acoustics. (**$1,596 Total**).

8. PI: Daniel, K.L., **Co-PI: Bucklin, C.J.,** Godfrey, A., Senior Personnel; Zipperer, J.,[+] & Jess, C.[+] (September 2025-August 2026). *Plant Protectors: Enriching Elementary Plant Biology Education by Integrating Outdoor Science Inquiry.* American Society of Plant Biologists. Plant Biology Learning Objectives, Outreach Materials & Education Award Program (BLOOME). (**$8,500 Total**).

7. **PI: Bucklin, C.J.,** Co-PI: Daniel, K.L. (May 2025-March 2027). *Third Spaces Community Partnership - Seasons of Science*. Jester King, Roughhouse Brewery, & Shady Llama Community Science Outreach. (Research Participant Support: **$7,200 Total**).

6. **PI: Bucklin, C.J.,** Co-PI: Daniel, K.L. (June 2024-April 2025). *Seasons of Science*. Roughhouse Brewery & Shady Llama Community Science Outreach. (Research Participant Support: **$1,000 Total**).

5. **PI: Bucklin, C.J.** (May 2024-May 2025). *Course-based Undergraduate Research Experiences TA Professional Development Resource Development.* CURE TAPESTRy Fellowship Program. (**$2,500 Total**).

4. PI: Johnson, S.L. **Co-PIs:** Cochran, K., & Paulk, A., **Ext. Eval.: Bucklin, C.J.** (August 2019-December 2025). *Creating STEM Opportunities for High-Achieving Rural Alabama Students.* (Award No. 1929409). National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (S-STEM). (**$647,613 Total**)

3. PI: Wilson Grimes, K.R.; **SUU Contract: Bucklin, C.J.** (August 2019-December 2021). *Supporting Emerging Aquatic Scientists (Seas) Your Tomorrow Program.* Environmental Protection Agency - Environmental Education Program (EPA- EE-18-02). (**$100,000 Total**)

2. PI: Wilson-Grimes, K.R.; **Co-PIs: Bucklin, C.J.,** Brandt, M., Jones, N., & Medina, M. (August 2016-December 2019). *Collaborative Research: Changing the Face of STEM in the U.S. Virgin Islands through Targeted Interventions to Expand Opportunities and Broaden Participation.* (Award No. 1649300 [UVI]; 1649184 [Penn State]; 1649183 [SUU]). National Science Foundation. INCLUDES. (**$1,999,441 Total**).

1. PI: Wilson Grimes, K.R.; **Co-PIs: Bucklin, C.J.,** Habtes, S., Taylor, M., & Forbes, H. (August 2016-December 2018). *Pride in Our Seas, Pride in Ourselves: Preventing Land-Based Sources of Marine Debris in the US Virgin Islands through Educational Transformation and Community Engagement.* National Oceanic and Atmospheric Administration: Marine Debris Prevention Through Education. (**$99,411 Total**).

b. Other External Funding Received

**Undergraduate Student; +Graduate Student*

6. **PI: Bucklin, C.J.**, Co-PI: Daniel, K.L. (2026). *Spring Season Sponsor for Research Rangers and Seasons of Science*. Public Donations – Bobcat Blend [gift]. (**$300 Total**)

5. **PI: Bucklin, C.J.,** Co-PI: Daniel, K.L. (2025). *Winter Season Sponsor for Research Rangers and Seasons of Science*. Public Donations – Comal Conservation [gift]. (**$300 Total**)

4. PI: Daniel, K.L., **Co-PI: Bucklin, C.J.** (2025). *Winter Season Sponsor for Research Rangers and Seasons of Science*. Public Donations – Texas Wildlife Association [gift]. (**$300 Total**)

3. PI: Daniel, K.L., **Co-PI: Bucklin, C.J.** (2025). *Seasons of Science and Research Rangers Outreach.* Public Donations [gift]. (**$6,206 Total**)

2. PI: Daniel, K.L., **Co-PI: Bucklin, C.J.** (2025). *Fall Seasons of Science Sponsor for Research Rangers and Seasons of Science.* Public Donation – Wimberly United Methodist Church [gift]. (**$300 Total**)

1. PI: Daniel, K.L., **Co-PI: Bucklin, C.J.** (2024). *Seasons of Science and Research Rangers Outreach.* Public Donations [gift]. (**$792 Total**)

c. Pending - External Grants & Contracts

**Undergraduate Student; +Graduate Student*

3. PI: Dong, W., Senior Personnel: Cokyasar, T., Benzerga, A., Creel, J., **Ext. Eval.: Bucklin, C.J.** (2026, August). *EDGE-ISAM: Evidence-Driven Guidance and Evaluation for Domestic Supplier Sufficiency and Qualification Readiness of ISAM Interfaces*. NASA MUREP. (**$1,000,000 Total**).

2. PI: Schuchardt, A.; **Co-PIs: Bucklin, C.J.,** & Aikens, M. (2026, July). *Collaborative Research: ELEVATED STATS: Enhancing Learning and Values Through Educational Design for Statistics.* National Science Foundation. Improving Undergraduate STEM Education: Directorate for STEM Education (IUSE: EDU). (**$749,410 Total; TXST $205,227**).

1. PI: Bucklin, C.J., Co-PIs: Harper-Gampp, T., Paulson, E., & Hewitt, B. (2026, July). *CADAVERS: Comparing Anatomy Dissection and Virtual Education: Results from Student Learning.* National

Science Foundation. Improving Undergraduate STEM Education: Directorate for STEM Education (IUSE: EDU). (**$736,483 Total**).

d. Submitted, Not Funded - External Grants & Contracts

**Undergraduate Student; [+]Graduate Student*

33. PI: Daniel, K.L., Co-PIs: **Bucklin, C.J.** & Mauger, L. (2026, January). *Research Rangers.* National Science Foundation. Improving Undergraduate STEM Education: Directorate for STEM Education (IUSE: EDU). ($400,000 Total).

32. PI: Merlino, J., Co-PIs: Mauger, L., Ruppert, J., Macalalag, A., & **Bucklin, C.J.** (2025, October). VOICE: Virtual/Open AI for Civic Engagement and Education. OpenAI: People-First AI Fund. ($200,000 Total)

31. **PI: Bucklin, C.J.** (2025, May). *Seasons of Science – Volunteer Support*. San Marcos Lions Club. ($2,500 Total).

30. PI: Leontyev, A.; Co-PI: Rocabado, G., & Atkinson, M.; **Ext. Eval.: Bucklin, C.J.** (2025, July). *Collaborative Research: Supporting the Measurement and Evaluation of Evidence-Based Instructional Practice Impacts on Chemistry Students through Communities of Transformation (CHIRAL)*. National Science Foundation. Improving Undergraduate STEM Education: Directorate for STEM Education (IUSE: EDU). ($2,000,000 Total).

29. **PI: Bucklin, C.J.;** Co-PIs: Ruppert, J., Mauger, L., & Macalalag, A. (2025, July). *Collaborative Research*: G*eneral Biology Reform through Authentic Socioscientific Practice and Professionalism (GRASPP)*. National Science Foundation. Improving Undergraduate STEM Education: Directorate for STEM Education (IUSE: EDU). ($1,998,541 Total).

28. **PI: Bucklin, C.J.** (2025, July). *CAREER: Understanding the Importance of Place in Authentic Undergraduate Research Experiences to Increase Persistence in Life Sciences (Importance of Place)*. National Science Foundation. Faculty Early Career Development Program (CAREER). ($1,279,466 Total).

27. PI: Schuchardt, A.; **Co-PIs: Bucklin, C.J.,** & Aikens, M. (2025, July). *Collaborative Research: ELEVATED STATS: Enhancing Learning and Values Through Educational Design for Statistics.* National Science Foundation. Improving Undergraduate STEM Education: Directorate for STEM Education (IUSE: EDU). ($749,410 Total; TXST Total $199,400).

26. **PI: Bucklin, C.J.**, Co-PI: Idema, J. (2025, May). *Augmented Reality and Education in Action: Transforming Instructional Assistant Training and Disability Accessibility in High-Enrollment Biology Education? (AREd).* SimBio Foundation Funding ($10,000 Total).

25. PI: Dong, W.; Co-PIs: Devine, J. & Edawards, M.; **Senior Personnel: Bucklin, C.J.** (2025). *Battery Swap Station-Enabled Air-based Middle- and Last-Mile Transportation Systems (BATS).* National Aeronautics and Space Administration. Minority University Research and Education Project Aeronautics Community Engagement Impact Research 2.0 (MUREP ACEIR 2.0). ($749,155 Total).

24. PI: Daniel, K.L.; **Co-PI: Bucklin, C.J.** & Forsythe, M. (2025). *Research Rangers.* National Science Foundation. Advancing Informal Science Learning (AISL). ($1,999,564 Total)

23. **PI: Bucklin, C.J.** (2025). *Seasons of Science – Event Support.* HEB Community Investment Program. ($2,500 Total).

22. **PI: Bucklin, C.J.;** Co-PI: Daniel, K.L., Mauger, L., & Baker, J. (2025). *Collaborative Research: Empowering Multicultural Bridges for Responsive and Adaptive Informal Science Education (EMBRAISE).* National Science Foundation. Advancing Informal Science Learning (AISL). ($1,090,068 Total).

21. **PI: Bucklin, C.J.;** Co-PIs: Giuffre, P., Daniel, K., & Martina, J.; Senior Personnel: Hastings, C. (2025). *S-STEM: Institutional Change to Enhance Life Sciences Doctoral Programs (ICE Doc).* National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). ($2,000,000 Total).

20. **PI: Bucklin, C.J.;** Co-PIs: Gay, D.,[+] Thompson, T.;[+] Senior Personnel: Zipperer, J.,[+] Jess, C.[+] (2025). *Celebrating Salamanders of Barton Springs: Education, Service, and Science to Preserve Salamander Habitats through Community Engagement.* City of Austin. Barton Springs Salamander Conservation Fund. ($50,556 Total)

19. PI: Mauger, L.; **Co-PIs: Bucklin, C.J.,** Ruppert, J. (2025). *Who Contributes to Sustainability? Advancing Epistemic Justice in Undergraduate STEM Education by Empowering Student and Community Agency.* Spencer Foundation. Visions Grant. ($74,676 Total)

18. **PI: Bucklin, C.J.** (2024). *Investigating the Importance of Place in Research-based Learning Experiences.* American Association of University Women. Short-Term Research Publication Grants. (**$7,000 Total**).

17. **PI: Bucklin, C.J.**; Co-PI: Gay, D.[+] (2025, Quarter 1). *Increasing Wildlife Career Preparedness by Investigating Bat Activity Through Acoustics*. Wildlife Acoustics. ($3889 Total).

16. PI: Dong, W.; Co-PIs: Jin, T., Konur, D., Londa, M., & Hooper, R.; Senior Personnel: **Bucklin, C.J.** (2024, July). *Empowering Next-generation Data Scientists for Sustainable Transportation and Supply Chains*. National Science Foundation. Data Science Core (DSC). ($1,199,519 Total).

15. **PI: Bucklin, C.J.**; Co-PI: Gay, D.[+] (2024, Quarter 4). *Increasing Wildlife Career Preparedness by Investigating Bat Activity Through Acoustics*. Wildlife Acoustics. ($3889 Total).

14. PI: Schuchardt, A.; Co-PIs: Aikens, M. & **Bucklin, C.J.** (2024, July). *Collaborative Research: ELEVATED STATS: Enhancing Learning and Values Through Educational Design for Statistics.* National Science Foundation. Improving Undergraduate STEM Education: Directorate for STEM Education (IUSE: EDU). ($748,982 Total).

13. PI: Mauger, L.; Co-PIs: Ruppert, J. & **Bucklin, C.J.** (2024, July). AID DCL: *The Case for Authenticity in Science Education: Using Case Studies to Enhance Socioscientific Reasoning (CASE-SSR)*. National Science Foundation. Improving Undergraduate STEM Education: Directorate for STEM Education (IUSE: EDU). ($1,999,990 Total).

12. **PI: Bucklin, C.J.;** Co-PI: Mauger, L. (2024, January). *Collaborative Research: Increasing Latino Student Interest in STEM Utilizing Culturally Responsive Themed STEM Kits.* National Science Foundation. Advancing Informal STEM Learning (AISL). ($1,986,126 Total).

11. **PI: Bucklin, C.J.;** Co-PIs: Giuffre, P., Daniel, K.L., & Martina, J. (2024, March). SSTEM: Transforming Access to Life Sciences is Key to Doctoral Student Success (TALK Doc). National Science Foundation, Scholarships in STEM Program (S-STEM). ($1,999,441).

10. **PIs: Bucklin, C.J.**, Mauger, L., & Payne, K. (2023, November). *Emerging STEM Program (ESP): Enriching STEM Identity in Young Hispanic Students Through Informal Learning*. Spencer Foundation - Research-Practice Partnership Grant. ($399,994.92 Total)

9. **PI: Bucklin, C.J.**, Co-PI: Daniel, K.L. (2023, November). *Seasons of Science: Changing the Narrative of Science Spaces for Women.* American Association of University Women, Community Action Grant. ($16,982 Total).

8. **PI: Bucklin, C.J.**, Co-PIs: Daniel, K.L., & Johnson, S. (2023, October). *Seasons of Science.* Biochemical Society. ($6,170.50).

7. PI: Askar, M. Co-PIs: Roberts, M., Caldwell, C., Sorensen, K., & Baker, S., Senior Personnel: Malekzadeh, M. & **Bucklin, C.J.** (2023, March). *Reinforced Pathways within STEM Programs by Increasing Interdependence of Technical and Community Colleges and 4-Year Institutions.* National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). ($100,000 Total).

6. **PI: Bucklin, C.J.;** Co-PIs: Roper, L., Pierce, E., & Rocabato, G. (2022, March). *Becoming a Scientist: Utilizing Scholarships and the Cohort Experience to Decrease Attainment and Equity Gaps in the Sciences.* National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). ($1,500,000 Total).

5. **PI: Bucklin, C.J.;** Co-PIs: Roper, L. & Pierce, E. (2021, March). *Becoming a Scientist: Utilizing Scholarships and the Cohort Experience to Decrease Attainment and Equity Gaps in the Sciences.* National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). ($1,500,000 Total).

4. PI: Daniel, K.L. Co-PIs: Witzig, S., & **Bucklin, C.J.** (2021, March). *Collaborative Research: Vision and Change Professional Development across the Faculty Spectrum (V&C ProSpect).* National Science Foundation, Vision and Change in Undergraduate Biology Education (V&C). ($1,346,044 Total).

3. PI: Lunt, J. Co-PIs: **Bucklin, C.J.,** MacLean, J., Weeg, M.S., & Werner, N.S. (2019, March). *UR^2: Undergraduate Research Experiences to Increase Underrepresented Students' Science Identity.* National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM, March). ($1,000,000 Total).

2. PI: Lunt, J. Co-PIs: **Bucklin, C.J.,** Weeg, M.S., & Werner, N.S. (2018, March). *UR^2: Undergraduate Research Experiences to Increase Underrepresented Students' Science Identity.* National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). ($1,000,000 Total).

1. **PI: Boyce, C.J.**[+]**,** Co-PIs: Halverson, K.L. & Gearity, B.T. (2012). *Exploring effective student-athlete time management strategies to maximize academic success.* National Collegiate Athletic Association. Graduate Student Grant. ($7500 Total).

Funded - Internal Grants & Contracts

a. Research Grants

**Undergraduate Student; [+]Graduate Student*

6. **PI: Bucklin, C.J.** (February 2024-May 2024). *Interdisciplinary Collaborative Research Team Development.* Quanta Services Research Development Fund. (**$2500 Total**).

5. PI: Andrew, E.,* Co-PI: Alder, L.,* **Bucklin, C.J.** (November 2022-August 2023). *Lithobates catesbeianus: A Study of Diet, Disease, and Water Chemistry in Washington County, Utah*. Gibson Scholarship Funding. (**$3000 Total**).

4. PI: Marines, S.,* Co-PIs: **Bucklin, C.J.** & Mraz-Craig, J. (November 2021-August 2022). *Student Attitudes and Perceptions of Biology Labs Across Modalities.* Gibson Scholarship Funding. (**$3000 Total**).

3. PI: Lloyd, S.,* Co-PI: **Bucklin, C.J.** (November 2020-August 2021). *Burn Scar: An Assessment of a Course-Based Undergraduate Research Experience on the Effects of the Brian Head Wildfire.* Gibson Scholarship Funding. (**$3000 Total**).

2. PI: Obray, E.,* Co-PI: **Bucklin, C.J.** (November 2018-August 2019). *Investigating how a Bridge to PhD Program influences the Science Identity of Graduate Students: A Case Study.* Gibson Scholarship Funding. (**$1020 Total**).

1. **PI: Bucklin, C.J.** (2017, May). *Implementing a CURE to expand students' global learning and increase diversity in science research.* SUU Center for Excellence in Teaching and Learning Curriculum Innovation Grant: Diversity and Global Learning. (SUU **$1000 Total**).

b. ***Professional Development Grants – Travel***

**Undergraduate Student; [+]Graduate Student*

7. **PI: Bucklin, C.J.** (2022). *Presentation Travel to NABT*. Faculty Scholarship Support Fund (FSSF). (**$1948 Total**).

6. **PI: Bucklin, C.J.** (2021). *Presentation Travel to NABT*. FSSF. (**$1768 Total**).

5. **PI: Bucklin, C.J.** (2019). *Presentation Travel to NABT*. FSSF. (**$935 Total**).

4. **PI: Bucklin, C.J.** (2019). *Presentation Travel to AERA*. FSSF. (**$1400 Total**).

3. **PI: Bucklin, C.J.** (2017). *Presentation Travel to NABT*. FSSF. (**$1570 Total**).

2. **PI: Boyce, C.J.**[+] (2015). *Biology Graduate Student Travel.* Biological Sciences Travel Award. (**$600 Total**).

1. **PI: Boyce, C.J.**[+] (2010). *Presentation Travel to NABT*. Vernier Student Travel Award. (**$500 Total**).

c. Pending - Internal Grants & Contracts

N/A

d. Submitted, Not Funded - Internal Grants & Contracts
****Undergraduate Student; +Graduate Student***

4. **PI: Bucklin, C.J.** (2025). *Opening the Lab Door: Advancing Accessibility with Extended Reality.* TXST Research Enhancement Program. ($12,000 Total).

3. **PI: Bucklin, C.J.** (2024). *Creating A Wildland Fire Culture Instrument to Promote Conservation.* TXST Research Enhancement Program. ($8000 Total).

2. PI: Daniel, K.L. **Co-PI: Bucklin, C.J.** (2024). *Seasons of Science.* Texas State University, Internal competition for Texas Parks and Wildlife Community Outdoor Outreach Program (TPWD CO-OP). ($62,949.53).

1. **PI: Bucklin, C.J.** (2023). *Importance of Place in Research-based Learning Experiences.* TXST Research Enhancement Program. ($8000 Total).

E. Fellowships, Awards, & Honors

2. *Research Paper and Presentation Departmental Award.* (2011 & 2013). USM. This award is given as part of the Graduate Student Research Symposium for outstanding research papers and associated presentations; each department selects an award winner.

1. Outstanding Master's Student. (2011). USM. This award is to recognize the master's student at the university who shows outstanding accomplishment and potential during their master's program. Individuals are nominated by their department and considered by an independent committee.

F. Community Science Outreach Events

a. Organized and Lead Events [impact data]
**Undergraduate Student; +Graduate Student*

15. Seasons of Science. (May 3, 2026). Green Guardians. Roughhouse Brewery, San Marcos, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L. Student Lead: Zipperer, J.+ [97 attendees; 12 volunteers]

14. Seasons of Science. (May 2, 2026). Green Guardians. Shady Llama, Wimberley, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L. Student Lead: Zipperer, J.+ [131 attendees; 16 volunteers]

13. Seasons of Science. (December 7, 2025). Seasonal Senses. Roughhouse Brewery, San Marcos, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L. Student Lead: Zipperer, J.+ [94 attendees; 18 volunteers]

12. Seasons of Science. (December 6, 2025). Seasonal Senses. Shady Llama, Wimberley, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L. Student Lead: Zipperer, J.+ [164 attendees; 16 volunteers]

11. Seasons of Science. (October 5, 2025). Natural Neighbors. Roughhouse Brewery, San Marcos, TX. Event Leads: Daniel, K.L. & **Bucklin, C.J;** Student Lead: Zipperer, J.+ [85 attendees; 10 volunteers]

10. Seasons of Science. (October 4, 2025). Natural Neighbors. Shady Llama, Wimberley, TX. Event Leads: Daniel, K.L. & **Bucklin, C.J.;** Student Lead: Zipperer, J.+ [124 attendees; 13 volunteers]

9. Seasons of Science. (May 4, 2025). Nature's Wardrobe. Roughhouse Brewery, San Marcos, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L., Student Lead: Zipperer, J.+ [118 attendees]

8. Seasons of Science. (May 3, 2025). Nature's Wardrobe. Shady Llama, Wimberley, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L., Student Lead: Zipperer, J.+ [151 attendees]

7. Seasons of Science. (April 6, 2025). Science Blooms. Roughhouse Brewery, San Marcos, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L., Student Lead: Zipperer, J.$^{+}$ [57 attendees]

6. Seasons of Science. (April 5, 2025). Science Blooms. Shady Llama, Wimberley, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L., Student Lead: Zipperer, J.$^{+}$ [139 attendees]

5. Seasons of Science. (April 4, 2025). Science Blooms. Jester King, Dripping Spring, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L., Student Lead: Zipperer, J.$^{+}$ [59 attendees]

4. Seasons of Science. (January 12, 2025). Wintery Wings. Roughhouse Brewery, San Marcos, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L., Student Lead: Zipperer, J.$^{+}$ [104 attendees]

3. Seasons of Science. (January 11, 2025). Wintery Wings. Shady Llama, Wimberley, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L., Student Lead: Zipperer, J.$^{+}$ [124 attendees]

2. Seasons of Science. (October 20, 2024). Feed Me. Roughhouse Brewery, San Marcos, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L., Student Lead: Zipperer, J.$^{+}$ [105 attendees]

1. Seasons of Science. (October 19, 2024). Feed Me. Shady Llama, Wimberley, TX. Event Leads: **Bucklin, C.J.** & Daniel, K.L., Student Lead: Zipperer, J.$^{+}$ [124 attendees]

b. Invited Participation at Community Events [impact data]

5. American Society of Plant Biologists. (October 28-November 2, 2025). Research Rangers: Plant Protectors and Natural Journey. National Association of Biology Teachers, St. Louis, MO. [65 attendees]

4. Migratory Bird Day. (May 10, 2025). Research Rangers: Winged Wanderers and Bird Buddies. Discovery Center, San Marcos, TX. [200 attendees]

3. Earth Day. (April 26, 2025). Research Rangers: Living Waters. Wimberley United Methodist Church, Wimberley, TX. [48 attendees]

2. Earth Day Festival. (April 19, 2025). Research Rangers. The Meadows Center for Water and the Environment, San Marcos, TX. [198 attendees]

1. Library Literacy Day. (November 9, 2024). Research Rangers. Jester King Brewery, Dripping Springs, TX. [224 attendees]

IV. SERVICE

A. <u>Institutional</u>

1. University

TXST

2026 – Present	Member, Student Evaluations of Teaching (SET) Working Group
2026	Breakout Session Discussant, New Tenure Track Faculty Orientation, "Becoming a Productive Scholar and Researcher"

SUU

2021 – 2023	Member, Pre-Service Teacher Working Group
2021 – 2023	Member, Faculty Representative, Cedar Mountain Resource Advisory Council
2020 – 2023	Director, UT State Science Olympiad
2020 – 2023	Member, Academic Affairs Committee

2019 Facilitator, Center for Excellence in Teaching & Learning Curriculum Innovation Grant
2018 – 2023 Director, Southern Utah Science and Engineering Fair
2017 – 2021 Member, Faculty Development Support Fund Review Committee
2016 – 2019 Member, Faculty Development/Evaluation Committee

USM
2013 – 2015 Co-Director, MS Region 1 Science & Engineering Fair

2. College

TXST – College of Science and Engineering
2025 Poster Judge, TXST STEM Conference

SUU – College of Sciences
2018 Member, Search Committee – TT Hydrogeologist
2017 – 2022 Walter Maxwell Gibson Grant Review Committee
2016 – 2020 Faculty Advisor – Teach STEM! SUU Student Chapter of NSTA
2016 – 2018 Regional Science Fair Judge
2016 – 2018 Utah Science Olympiad Event Supervisor

USM – College of Science and Technology
2012 – 2015 Volunteer, Haunted Science Trail
2012 – 2015 Advisory Board Member, Mississippi State Science Olympiad
2011 – 2012 Event Supervisor, Mississippi State Science Olympiad
2010 – 2015 Volunteer, Mississippi State Science Olympiad
2010 – 2015 Volunteer, Lake Thoreau Environmental Education Outreach
2010 – 2012 President, Roots & Shoots, Southern Miss Chapter

3. Department

TXST – Department of Biology
2026 – Present Coffee with Colleagues, Supple Science, Organizer
2026 – Present Darwin Day Committee (w/Drs Michele Fissel & Leila Sicliano-Martina)
2026 Co-Chair (w/Dr. Michele Fissel), Biology Colloquium
2025 – Present Member, Doctoral Program Degree Concentration Naming Committee, Social and Educational Dimensions of Biology (SED)
2025 – 2026 Member, Department Picnic Planning Committee
2025 – Present Attendee, Biology Open House, Faculty Meet-and-Greet
2025 Session Judge, TXST Biology Colloquium
2024 – Present Chair (’26-Present), Member (’24-‘25), The Audrey and Tony Evers Endowed Scholarship Committee

SUU – Department of Biological Sciences
2021 – 2023 Chair, Search Committee – NTT Biology, General (3 Positions)
2021 – 2022 Member, Search Committee – TT Microbiology
2021 – 2023 Co-Coordinator (w/Dr. Jennifer Mraz-Craig), BIOL 1615 Laboratory Course
2020 – 2021 Chair, Search Committee – TT Genetics
2018 Member, Search Committee – Bio Dept Admin
2018 – 2023 Concurrent Enrollment Liaison
2017 Member, Search Committee – NTT Biology General

B. Professional

1. Review Work

2025 – Present	Presentation Proposal Reviewer, European Education Research Association
2024 – Present	Article Reviewer, CBE–Life Sciences Education
2022 – 2024	Grant Reviewer, National Geographic Society
2020 – Present	Article Reviewer, Journal of Microbiology & Biology Education
2017	Article Reviewer, Journal of Geoscience Education
2015 – Present	Article Reviewer, American Biology Teacher
2015 – 2022	Presentation Proposal Reviewer, National Association of Biology Teachers
2015 – 2016	Grant Reviewer, Water Resources Research Institute, UVI
2012 – 2019	Presentation Proposal Reviewer, National Association for Research in Science Teaching
2014	Article Reviewer, Science Education

2. International & National

2025 – 2028	Social Media Lead, *National Association of Biology Teachers*
2023	Four-Year Section Chair, *National Association of Biology Teachers*
2022	Four-Year Section Vice-Chair, *National Association of Biology Teachers*
2022 – 2023	Region VIII Coordinator, *National Association of Biology Teachers*
2021	Four-Year Section Secretary, *National Association of Biology Teachers*
2019 – Present	Poster Session Judge, *National Association of Biology Teachers*
2018 – Present	AP Biology Reader, *College Board*
2018 – 2020	Four-Year Section Faculty Development Committee (Co-Chair), *National Association of Biology Teachers*
2014 – 2018	Co-Chair, Archival Committee, *National Association of Biology Teachers*
2012 – 2017	Presider, Annual Meeting: *National Association for Research in Science Teaching.*
2012 – 2013	Chair, Graduate Student Group, *National Association of Biology Teachers*
2011 – 2012	Vice-Chair, Graduate Student Group, *National Association of Biology Teachers*
2010 – 2018	Member, Archival Committee, *National Association of Biology Teachers*
2010 – 2015	Member, Graduate Student Group (Chair 2012-2013; Vice Chair 2011-2012), *National Association of Biology Teachers*

3. Regional & Local

2025 – 2027	Secretary, *Southwest Association of Science Teacher Education (SW-ASTE)*

4. Memberships

2025	European Education Research Association (ESERA)
2023	Southwest Association of Science Teacher Education (SW-ASTE)
2023	Science Teacher Association of Texas (STAT)
2018	Ecological Society of America (ESA)
2017	American Association for the Advancement of Science (AAAS)
2011	American Education Research Association (AERA)
2010	National Association for Research in Science Teaching (NARST)
2010	National Association of Biology Teachers (NABT)

C. Community

2024 – 2025	Daughters of the American Revolution, Captain Thomas Moore Chapter
2021 – 2023	Daughters of the American Revolution, Bald Eagle Chapter
2017	Fiber Arts Guild – "How to Make Plarn"
2016 – 2021	Science Booth/Talent Coordinator, Orchestra of Southern Utah Children's Jubilee
2005 – 2008	Tau Beta Sigma (Service Chair, 2007 – 2008)
2005 – 2008	Tau Beta Sigma – Kappa Kappa Psi (Joint Service Chair, 2007 – 2008)
2003 – 2006	Circle K International (Secretary, 2005 – 2006)

D. Service Honors & Awards

N/A

E. Service Grants & Contracts

a. External Grants & Contracts (Total $800; 2020-2025 Total $0)

**Undergraduate Student; [+]Graduate Student*

2. PI: Maroo, J.D.;[+] **Co-PI: Boyce, C.J.**[+] (2011, October). *Haunted Science Trail Supply Grant.* Wal-Mart Community Grant. (**USM $300 Total**).

1. **PI: Boyce, C.J.;**[+] Co-PI: Maroo, J.D.[+] (2011, October). *Local Waterway and Coastal Clean-up Grant*. Wal-Mart Community Grant. (USM $500 Total).

b. Submitted, Not Funded – External Grants & Contracts

**Undergraduate Student; [+]Graduate Student*

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

c. Funded – Internal Grants & Contracts

N/A

d. Submitted, Not Funded - Internal Grants & Contracts

N/A