Texas State University Vita

Assistant Professor

512-245-3361

carriebucklin@txstate.edu

I. ACADEMIC/PROFESSIONAL BACKGROUND

A. Carrie Jo Bucklin (née Boyce), Ph.D.

214 Supple Science Building 601 University Dr. San Marcos, TX 78666

B. Educational Background

Degree	Year	University	Major
Ph.D.	2015	University of Southern Mississippi	Biological Sciences
		tation: Investigating How Students Communicate Tree-Thinks	ng
	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
Assistant Professor-Biology		TXST	2023-Present
Associate Professor-J	Biology Educator	SUU	2022-2023
Director UT State Sc	ience Olympiad	SUU	2020-2023
Director Southern U	tah Sci. & Engin. Fair	SUU	2018-2023
Assistant Professor-I	Biology Educator	SUU	2016-2022
Outreach and Educa	tion Coordinator	UVI-EPSCoR	2015-2016
Research Investigator	r	USM	2013-2015
Understanding	How Students Communicate Their	Tree-Thinking Ability. Supervisor: K	Kristy L. Daniel (née Halverson)
Graduate Teaching A		USM	2010-2012, & 2014
Graduate Research A		USM	2010-2015
2013-15:	Understanding Students Tree-Th	inking Ability. Supervisor: Kristy L	Daniel
2013-15:	HHMI Phage Hunters. Supervi	sors: Dr. Kristy L. Daniel & Dr. K	ari L. Clase
2013-15:	Tree-thinking Assessment Develo	pment. Supervisors: Dr. Kristy L. E	Daniel & PI Dr. Kristen Jenkins
2011-14:	Over Under and Through, Stude	nts Informally Discover the Environn	nent. Supervisors: Dr. Kristy L.
	Daniel 🗢 Dr. Aimee K. Thoma	IS	
2010-12:	Using Manipulative Models, Stu	dents' Acceptance of Evolution, and .	Assessment Question Order
	Supervisor: Kristy L. Daniel		
MS Region 1 Sci. & Engin. Fair Co-Director		USM	2012-2015
Adjunct Instructor		PRCC	2012-2014
Adjunct Instructor		MU	2009
Undergraduate Teaching Assistant		MU	2008
D. <u>Relevant Profess</u>	sional Experience		
Position		Entity	Dates
Zoo Intern, Aves, Penguin Exhibit		St. Louis Zoo	2008
Research Assistant	5	MO Dept. of Conservation	2006-2007
Undergraduate Peer Advisor		MU	2004-2008
0			

E. Other Professional Credentials

2021-2022 Provost Fellow, SUU
2011 National Science Foundation, Science: Becoming the Messenger
2010-Present CITI Certificate (exp 09/2025)

II. TEACHING

A. Teaching Honors & Awards

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

Distinguished Educator. (2021). University. This award recognizes 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. SUU.

B. Courses Taught

- **TXST** BIO 4350Z/5350Z: Diversity and Cultural Impact of Geoparks; BIO 7102: Seminar Research Ethics; BIO 7301: College Science Teaching; 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

C. Graduate Theses/Dissertations, Professional Projects, Honors Theses, or Exit Committees

*Indicates C.J. Bucklin – major professor		
Name, School	Year	Degree
1. Graduate Theses/Dissertations		
*Daniell Gay, TXST	In Progress	1 0 0,
Career Preparedness and a Wildlife Course-	-based Undergraduate Res	earch Experience (CURE)
*Deedee Carlton, TXST	In Progress	M.S. Biology
Pre-service Elementary Teachers (PSETs) S Experience CURE		cy and a Water Quality Course-based Undergraduate Research
Jill Zipperer, TXST Bridging the Gap: Studies on the Connection	In Progress ns Between Scientists and i	1 0 0.
*Amandeep Kaur, TXST Mapping the Path to Science Teaching: The Elementary Teachers (PSETs)	0	Ph.D. Aquatic Resources & Integrated Biology Undergraduate Research Experiences (CUREs) on Pre-Service
Bess (Reisberg) Price, TXST Development of an integrated service-learning University	2024, Aug g experiences and communi	M.S. Sustainability Studies ity partnership for elementary teacher candidates at Texas State

Hannah Baratang, TXST2024, MayM.S. BiologyDrawing as a generative learning activity: A case study on a nature journaling seminar course

Zach Nolen, TXST2019, AugPh.D. Aquatic Resources & Integrated BiologyA Consideration into Ways Biology-Based Student Organizations Facilitate Participation in STEM

2. Postdoctoral Researchers

John Ojeogwu, UVA	2024 – Present	Ph.D. Science Education
3. Masters – Non-thesis		
Kristi Becker, TXST	2024	Independent Study Project
Jessi Bocanegra, TXST	2024	Committee Member

4. Other Students

a. Undergraduate Student Research (Non-Thesis Research) **TXST:** Zuleyca Benitez, Julie Price.

SUU: Euan Andrew, John Albrecht, Luke Alder, Sierra Ball, Judy Flamenco, Johanna Garavito, Kaitlyn Howard, Sheridan Lloyd, Jalynn Lunceford, Sierra Marines, Elizabeth Obray, Kaitlin Veylupek, Diana Villicana, & Zihe Wan.

b. Graduate Student Research (Non-Thesis Research) E. Austin Leone, TXST

D. Courses Developed

- TXST BIO 4332/5332 (2023): Biology in Film & Television.BIO 4350Z/5350Z (2018): Diversity and Cultural Impact of Geoparks.
- SUU INDS 4900 (2022): The History, Culture, and Legacy of the American Civil War Era with Dr. Laura June Davis (History Dept) & Dr. Lisa Arter (English Department).
 BIOL 3990 (2021): Life Finds a Way: Exploring Biology through Cinema.
 SUU 2250 (2019): Women in Medicine; Integrated Life Sciences-Humanities course with Dr. Laura June Davis (History Dept).

E. Teaching Grants and Contracts

- 1. Funded External Teaching Grants and Contracts $\rm N/A$
- 2. Submitted, Not Funded External Teaching Grants & Contracts $\rm N/A$

3. Funded - Internal Teaching Grants & Contracts (Total \$2000)

- SUU Center for Excellence in Teaching and Learning Curriculum Innovation Grant Team-taught Integrated GE Courses. (2018, May). Development of Western Women in Medicine Course. Co-PIs: Bucklin, C.J. & Davis, L.J. (\$1000).
- 2. SUU Center for Excellence in Teaching and Learning Curriculum Innovation Grant Diversity and Global Learning. (2017, May). *Implementing a CURE to expand student's global learning and increase diversity in science research*. PI: **Bucklin, C.J.** (\$1000).

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

N/A

III. SCHOLARLY/CREATIVE

Note: All works authored by 'Boyce" are credited to USM, and works by 'Bucklin" are credited to other institutions. *Undergraduate student author ⁺Graduate student author

A. Works in Print (n=34)

1. Books

a. Scholarly Monographs N/A

b. Textbooks N/A

c. Edited Books

N/A

d. Chapters in Books

- 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).
- 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. Articles

a. Refereed Journal Articles

- Thomas, A. K., St. Clair, A. M. R., Bucklin, C. J., Zipperer, J., & Daniel, K. L. (2024). Naturalists' Technology Use Supports Nature Education. *Journal of Interpretation Research*, 0(0). <u>https://doi.org/10.1177/10925872241292599</u>
- Bolus, R., Ogburn, M., & Bucklin, C.J. (2024). Ecology in Action: A Niche Modeling CURE. American Biology Teacher, 86(4), 226-232. <u>https://doi.org/10.1525/abt.2024.86.4.226</u>
- 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. <u>https://doi.org/10.1525/abt.2024.86.2.71</u>
- 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. <u>https://doi.org/10.1525/abt.2023.85.3.166</u>.
- 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. <u>https://doi.org/10.1525/abt.2022.84.6.353</u>.
- 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. <u>https://doi.org/10.1111/evo.14458</u>
- 10. 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. <u>https://doi.org/10.1525/abt.2021.83.8.521</u>

- 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
- 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.
- 7. Nolen, Z.L.⁺, Daniel, K.L., & Bucklin, C.J. (2020). Perceived benefits from participating in contentbased student organizations. *Journal of Student Affairs Research and Practice*, 58(4), 1-13. <u>https://doi.org/10.1080/19496591.2020.1796689</u>
- 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(1), 68-75. <u>https://www.jstor.org/stable/26491348</u>
- Bucklin, C.J. & Daniel, K.L. (2017). Using word associations as a formative assessment for understanding phylogenetics. *American Biology Teacher*, 79(8), 668-670. <u>https://doi.org/10.1525/abt.2017.79.8.668</u>
- 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
- 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) 1, 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. <u>https://doi.org/10.1186/1936-6434-6-26</u>
- Halverson, K.L., Boyce, C.J., & Maroo, J.D. (2013). Order matters: Pre-assessments and student generated representations. *Evolution: Education and Outreach, 6*, 24. <u>https://doi.org/10.1186/1936-6434-6-24</u>

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. Conference Proceedings

a. Refereed

- Zipperer, J., Jess, C., Bucklin, C.J., & Daniel, K.L. (2025, March; Under Review). Science in Third Spaces: Exploring Community Motivations at Informal Brewery Events [Conference Presentation]. Annual meeting of the National Association for Research in Science Teaching (NARST), National Harbor, MD, United States.
- 10. Kaur, A., Ojeogwu, J., Daniel, K., & Bucklin, C. (2025, March; Under Review). *Developing an instrument to measure Science Affinity in Pre-Service Elementary Teachers* [Conference Presentation]. Annual meeting of the National Association for Research in Science Teaching (NARST), National Harbor, MD, United States.
- 9. Bucklin, C.J., Daniel, K.L., & Nolen, Z.L.⁺ (2019, April). *Introductory biology majors understanding of phylogenies after variable intervention types.* Conference presentation at the annual meeting of the American Educational Research Association, Toronto, Canada.

- 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.* Conference presentation at the annual meeting of the American Educational Research Association, Toronto, Canada.
- 7. Bucklin, C.J. & Daniel, K.L. (2017, April). *Changes in students' phylogenetic tree-reading: A quasi-experimental design study*. Conference presentation at the NARST Annual International Conference, San Antonio, TX.
- 6. St. Clair, A., Halverson, K.L., Thomas, A.K., & **Boyce, C.J.** (2015, April). *Dividing attention participation to support informal learning*. Conference presentation at the NARST Annual International Conference, Chicago, IL.
- 5. Boyce, C.J., Mishra, C., Halverson, K.L., & Thomas, A.K. (2014, April). *Getting students OUTSIDE: Using technology as a way to stimulate engagement.* Conference presentation at the NARST Annual International Conference, Pittsburg, PA.
- 4. McLaurin, D.C.*, Halverson, K.L., **Boyce, C.J.** (2013, April). *Using manipulative models to develop tree-thinking*. Conference presentation at the NARST Annual International Conference, Rio Grande, Puerto Rico.
- 3. Halverson, K.L., Walter, E., & **Boyce, C.J.** (2012, March). *Investigating the relationship between college students'* acceptance of evolution and tree thinking understanding. Conference presentation at the Annual Meeting of the National Association for Research in Science Teaching, Indianapolis, IN.
- 2. Boyce, C.J., Maroo, J., & Halverson, K.L. (2011, April). *The influence of task order on student responses on a tree thinking pretest.* Conference presentation at the annual meeting of the American Educational Research Association, New Orleans, LA.
- 1. Boyce, C.J., & Halverson, K.L. (2011, April). Understanding evolution and evidentiary support. Conference presentation at the Annual Meeting of the National Association for Research in Science Teaching, Orlando, FL.

b. Non-refereed

N/A

4. Abstracts

N/A

5. Reports (Non-refereed)

NSF-INCLUDES 2017-2019

- 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
- 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
- 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. Works not in Print (n=79)

1. Presentations at Professional Meetings (n=74)

a. National

- 33. Gay, D., & **Bucklin, C.** (2025, June, Under Review). *Exploring career preparedness through a wildlife CURE* [Presentation]. International Urban Wildlife Conference, Atlanta, GA, United States. <u>https://www.urban-wildlife.org/</u>
- 32. Bucklin, C.J., Idema, J., & Gold, R. (2024, November 14-17). *Developing Course-Based Research Experiences in Your Courses* [Conference Session]. Annual Meeting of the National Association of Biology Teachers, Anaheim, CA, United States.
- 31. Kaur, A., Daniel, K., & Bucklin, C. (2024, November 14-17). The development & importance of valid and reliable measures to assess student learning [Poster]. Annual Meeting of the National Association of Biology Teachers, Anaheim, CA, United States.
- 30. Gay, D., **Bucklin, C.**, & Daniel, K. (2024, October 19-24). *Increasing Wildlife Career Preparedness by Investigating Bat Activity Through Acoustics* [Poster]. Annual Meeting of The Wildlife Society Annual Conference, Baltimore, MD, United States.
- 29. Benitez, 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]. Annual Meeting of the Society for the Advancement of Biology Education Research, Minneapolis, MN, United States.
- 28. 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]. Annual meeting of the Society for the Advancement of Biology Education Research, Minneapolis, MN, United States.
- 27. Daniel, K.L. & **Bucklin, C.J.** (2023, November). *Dealing with a zombie epidemic: Applying knowledge of microbiology, immunology, and potential treatments.* Presentation at the annual meeting of the National Association of Biology Teachers, Baltimore, MD.
- 26. 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.
- 25. 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.
- 24. 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.
- 23. 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.
- 22. 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.
- 21. Forbes, Jr., H., Stout, J.*, Wilson 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.

- **20. 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.
- 19. Forbes, Jr., H., Stout, J.*, Wilson 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.
- 18. 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.
- 17. 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.
- **16. 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.
- 15. 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.
- 14. 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.
- 13. 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.
- 12. Bucklin, C.J. & Wilson-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.
- 11. 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.
- **10.** 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.
- 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.
- 7. 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.

- 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.
- 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). Citizen 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

- 19. Carlton, D., Ojeogwu, J., Taylor, S., & Bucklin, C.J. (2024, October 5). A CURE for Science Teaching Selfefficacy in Pre-service Elementary Teachers [Conference Presentation]. Annual Meeting of the Southwest Association for Science Teacher Education, Denton, TX, United States.
- 18. Alam, F.*, **Bucklin, C.J.**, & Daniel, K.L. (2024, February). *Modeling Minds: Fostering Scientific Inquiry through Diverse Models in Science Education*. Poster Presentation at the Informal Science Education Association of Texas (ISEA), Corpus Christi, TX, United States.
- 17. 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.
- 16. 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.
- 15. Bucklin, C.J. & Johnson, S.L. (2023, October). *Pipe Cleaner Protein Folding*. Presentation at the SW Region Association for Science Teacher Education, Houston, TX.
- 14. Andrew, E.*, Alder, L.*, **Bucklin, C.J.** (2023, Feb). <u>Lithobates catesbeianus</u>: A Study of Diet, Disease, and Water Chemistry in Washington County, Utah. Presentation at the Utah Conference on Undergraduate Research, Salt Lake City, UT.
- 13. 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.
- 12. 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.

- 11. 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.
- 10. Tuttle, L.*, Mauger, L., Bucklin, C.J., & Wells, S. (2018, April). <u>Wolbachia</u> Infection Rates in Southern Utah Ants. Poster Presented at the Utah Academy of Sciences, Arts, & Letters, Cedar City, UT.
- 9. 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.
- 8. 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.
- **7. 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.
- 6. 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.
- 5. 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.
- 4. 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.
- **3. 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.
- 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.

c. Local

- 22. 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
- 21. 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
- 20. Benitez, Z.S.*, **Bucklin, C.J.**, Forshee, L., & Gold, R. (2024, February). *Student's 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

- Andrew, E.*, Alder, L.*, Bucklin, C.J. (2023, March). <u>Lithobates catesbeianus</u>: A Study of Diet, Disease, and Water Chemistry in Washington County, Utah. Presentation at the SUU Festival of Excellence, Cedar City, UT.
- 18. 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.
- 17. Wan, Z*. & Bucklin, C.J. (2019, April). *Investigation of Preferences in Ants.* Presentation at the SUU Festival of Excellence, Cedar City, UT.
- 16. Ball, S.* & Bucklin, C.J. (2019, April). *A Biodiversity Survey of Southern Utah Reptiles*. Presentation at the SUU Festival of Excellence, Cedar City, UT.
- 15. Blom, S.*, Crowell, J.*, & Bucklin, C.J. (2019, April). *The Art of Specimen Preservation*. Presentation at the SUU Festival of Excellence, Cedar City, UT.
- 14. 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.
- 13. 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.
- 12. Bucklin, C.J. & Wilson-Grimes, K. (2018, April). *Teaching Teachers How to Modify Curricula*. Presentation at the SUU Festival of Excellence, Cedar City, UT.
- 11. 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.
- 10. Nickell, L*., Rhein, N.*, **Bucklin, C.J.**, Govedich, F. (2017, November). *Brian Head Fire: Affects of Fire on Aquatic Ecosystems*. Poster presented at the WMG COSE Annual Symposium, Cedar City, UT.
- 9. 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.
- 8. 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
- 7. 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.
- 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.
- 5. Boyce, C.J. & Halverson, K.L. (2013, March). Word association and mental recall: An evolution formative assessment. Presentation at the Graduate Student 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 13th Annual McNair Scholars Research Symposium, 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.

- 2. 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.
- 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

- 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., M. Brandt, C., Jones, M. Medina, H., & 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
- Grimes, K., M. Brandt, C., Jones, M. Medina, H., & 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.
- 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. Other Works not in Print *a. Works "submitted" or "under review"*

b. Works "in progress"

- 5. Price, J.*, Gold, R., & **Bucklin, C.J.** (In Preparation). A comparison of student performance and outcomes between Traditional Academic Semester and Summer Academic Semester in a Microbiology Course.
- 4. Mraz-Craig, J.A., Marines, S.*, Gay, D., & **Bucklin, C.J.** (In Preparation). Student Perceptions of Virtual vs. In-Person Introductory Laboratory Activities.
- 3. Ojeogwu, J., 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.
- 2. Mauger, L., Carlton, D., & **Bucklin, C.J.** (In Preparation). Investigating Changes in Students' Attitudes toward Science and Nature after an Ant CURE.
- 1. Subvillaga, Z.*, Gold, R., Forshee, L., & **Bucklin, C.J.**, (In Preparation). Leeching the CURE: Coursebased Undergraduate Research Experiences and Student's Perceptions of Science, Scientists, and Model Organisms.

c. White Papers

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].

d. Current Projects

- 6. High Enrollment Capacity Laboratory CUREs. Slack, L., Idema, J., Bucklin, C.J.
- 5. Changes in Student Perceptions of Wildfires. Bucklin, C.J., Ojeogwu, J., Gay, D., & Carleton, D.
- 4. Seasons of Science. Zipperer, J., Jess, C., Gay, D., Bucklin, C.J., & Daniel, K.L.
- 3. Wildlife Techniques & CUREs. Gay, D., Ojeogwu, J., & Bucklin, C.J.
- 2. Pre-Service Elementary Teachers Self-Efficacy & CUREs. Carleton, D., Ojeogwu, J., Taylor, S., & Bucklin, C.J.
- 1. Pre-Service Elementary Teachers Science Affinity & CUREs. Kaur, A., Ojeogwu, J., Taylor, S., Daniel, K., & Bucklin, C.J.

C. Grants & Contracts

1. Funded - External Grants & Fellowships (Total \$ 2,849,765; 2020-2025 Total \$21,923; TXST \$16,000)

- 7. CURE TAPESTRy Fellowship Program. (2024-2025). Course-based Undergraduate Research Experiences TA Professional Development Resource Development. Fellow: Bucklin, C.J. (Total \$2500).
- National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (S-STEM). (2019-2025). *Creating STEM Opportunities for High-Achieving Rural Alabama Students*. (Award No. 1929409). **UNA PI:** Johnson, S.L. **UNA Co-PIs**: Cochran, K. & Paulk, A.; Sub-Award PI: Bucklin, C.J. (Total \$647,613; TXST \$13,500)
- Environmental Protection Agency Environmental Education Program (EPA- EE-18-02). (2019-2021). Supporting Emerging Aquatic Scientists (Seas) Your Tomorrow Program. UVI PI: Wilson Grimes, K.R.; Contract: Bucklin, C.J. (Total \$100,000; Contract \$5,923)
- National Science Foundation INCLUDES. (2016-2019). 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]). UVI PI: Wilson-Grimes, K.R.; Co-PIs UVI: Brandt, M., Jones, N.; Co-PIs Penn State: Medina, M.; Co-PI SUU: Bucklin, C.J. (Total \$ 1,999,441; SUU \$19,122).
- National Oceanic and Atmospheric Administration: Marine Debris Prevention Through Education. (2016-2018). 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. UVI PI: Wilson Grimes, K.R.; UVI Co-PIs: Habtes, S., Taylor, M., Forbes, H.; Sub-Award PI: Bucklin, C.J., (Total \$99,411; SUU \$13,334).
- 2. Wal-Mart Community Grant. (2011). Haunted Science Trail Supply Grant. (Total \$300). PI: Maroo, J.D.; Co-PI: Boyce, C.J.
- Wal-Mart Community Grant. (2011). Local Waterway and Coastal Clean-up Grant. (Total \$500). PI: Boyce, C.J.; Co-PI: Maroo, J.D.

2. Funded – External Contracts

 21st Century Partnership for STEM Education. STEM Teaching and School Strengthening Activity (STESSA), 2018 - Present. Funded by the US Agency for International Development (USAID).
 21PSTEM Project Director: Merlino, J.F.; Contract Consultant – Biology Content & Pedagogy (2023-Present): Bucklin, C.J.

3. Pending - External Grants & Contracts

- 4. National Science Foundation. Improving Undergraduate STEM Education: Directorate for STEM Education (IUSE: EDU). (2024). Collaborative Research: ELEVATED STATS: Enhancing Learning and Values Through Educational Design for Statistics. UMN PI: Schuchardt, A.; UNH PI: Aikens, M.; TXST PI: Bucklin, C.J. (Total \$748,982; TXST \$198,574).
- National Science Foundation. Improving Undergraduate STEM Education: Directorate for STEM Education (IUSE: EDU). (2024). AID DCL: The Case for Authenticity in Science Education: Using Case Studies to Enhance Socioscientific Reasoning (CASE-SSR). 21PSTEM PI: Mauger, L.; Sub-Award PI FCLC: Ruppert, J.; Sub-Award PI TXST: Bucklin, C.J. (Total \$1,999,990; TXST \$496,649).
- 2. National Science Foundation. CAREER. (2024). Characterizing the mechanisms linking bleaching recovery to pathogen susceptibility in a model cnidarian system. **PI:** Fuess, L. (**Total \$1,150,000**).
- National Science Foundation. Data Science Core (DSC). (2024). Empowering Next-generation Data Scientists for Sustainable Transportation and Supply Chains. TXST PIs: Dong, W., Jin, T., Konur, D., Londa, M. ACCC PIs: Hooper, R. Senior Personnel/Evaluator: Bucklin C.J. (Total \$1,199,519; TXST \$1,059,250).

4. Submitted, Not Funded - External Grants & Contracts

- National Science Foundation. Advancing Informal STEM Learning (AISL). (2024). Collaborative Research: Increasing Latino Student Interest in STEM Utilizing Culturally Responsive Themed STEM Kits. TXST PI: Bucklin, C.J.; 21PSTEM PI: Mauger, L. (Total \$1,986,126).
- National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). (2024). S-STEM: Transforming Access to Life Sciences is Key to Doctoral Student Success (TALK Doc). PI: Bucklin, C.J. Co-PIs: Giuffre, P., Daniel, K., & Martina, J. (Total \$1,999,441).
- Spencer Foundation Research-Practice Partnership Grant. (2023). Emerging STEM Program (ESP): Enriching STEM Identity in Young Hispanic Students Through Informal Learning. PI: Bucklin, C.J., Mauger, L., Payne, K. (Total \$399,994.92)
- 9. American Association of University Women Community Action Grant. (2023). Seasons of Science: Changing the Narrative of Science Spaces for Women. PI: Bucklin, C.J. & Daniel, K.L. (TXST \$8,252 + \$8,730 Matched Costs = \$16,982 Total)
- Biochemical Society Scientific Outreach Grant. (2023). Seasons of Science. PI: Bucklin, C.J., Daniel, K.L., & Johnson, S.L. (Total GBP 5000 [\$6274]).
- National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). (2023). Reinforced Pathways within STEM Programs by Increasing Interdependence of Technical and Community Colleges and 4-Year Institutions. PI: Askar, M. Co-PIs: Roberts, M., Caldwell, C., Sorensen, K., Baker, S., SP: Malekzadeh, M., Bucklin, C.J. (Total \$100,000).
- National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). (2022). Becoming a Scientist: Utilizing Scholarships and the Cohort Experience to Decrease Attainment and Equity Gaps in the Sciences. PI: Bucklin, C.J. Co-PIs: Roper, L., Pierce, E., & Rocabato, G. (<u>Total \$1,500,000</u>).
- National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). (2021). Becoming a Scientist: Utilizing Scholarships and the Cohort Experience to Decrease Attainment and Equity Gaps in the Sciences. PI: Bucklin, C.J. Co-PIs: Roper, L. & Pierce, E., (<u>Total</u> <u>\$1,500,000</u>).

- 4. National Science Foundation. Vision and Change in Undergraduate Biology Education. (2021). Collaborative Research: Vision and Change Professional Development across the Faculty Spectrum (V&C ProSpect). PI: Bucklin, C.J. (\$67K). Collaborative PIs: Daniel, K.L (TXST - \$680K), Hiatt, A.C. (Univ. Nebraska - \$103K), & Witzig, S. (UMass-Dartmouth - \$500K). (Total \$1,377,000).
- National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). (2019). UR²: Undergraduate Research Experiences to Increase Underrepresented Students' Science Identity. PI: Lunt, J. Co-PIs: Bucklin, C.J., MacLean, J., Weeg, M.S., & Werner, N.S., (<u>Total</u> <u>\$1,000,000</u>).
- National Science Foundation. Scholarships in Science, Technology, Engineering, and Mathematics Program (SSTEM). (2018). UR²: Undergraduate Research Experiences to Increase Underrepresented Students' Science Identity. PI: Lunt, J. Co-PIs: Bucklin, C.J., Weeg, M.S., & Werner, N.S., (<u>Total \$1,000,000</u>).
- National Collegiate Athletic Association. Graduate Student Grant. (2012). Exploring effective student-athlete time management strategies to maximize academic success. PI: Boyce, C.J. Co-PIs: Halverson, K.L. and Gearity, B.T. (<u>Total \$7500</u>).

4. Funded - Internal Grants & Contracts

* Indicates Undergraduate Student Researchers

a. Research Grants (Total \$ 10,020)

- 4. Gibson Scholarship Funding. (2022, November). *Student Attitudes and Perceptions of Biology Labs Across Modalities*. SUU PIs: Andrew, E., & Alder, L.*, SUU Co-PI: **Bucklin, C.J.** (Total \$3000).
- 3. Gibson Scholarship Funding. (2021, November). *Student Attitudes and Perceptions of Biology Labs Across Modalities*. SUU PI: Marines, S.*, SUU Co-PIs: **Bucklin, C.J.** & Mraz-Craig, J. (**Total \$3000**).
- Gibson Scholarship Funding. (2020, November). Burn Scar: An Assessment of a Course-Based Undergraduate Research Experience on the Effects of the Brian Head Wildfire. SUU PI: Lloyd, S.*, SUU Co-PI: Bucklin, C.J. (Total \$3000).
- Gibson Scholarship Funding. (2018, November). Investigating how a Bridge to PhD Program influences the Science Identity of Graduate Students: A Case Study. SUU PI: Obray, E.*, SUU Co-PI: Bucklin, C.J. (Total \$1020).

b. Professional Development Grants – Scholarship

1. Quanta Services Research Development Fund [TXST]. (2024). *Interdisciplinary Collaborative Research Team Development*. Fellow: **Bucklin, C.J.** (**Total \$2500**).

c. Professional Development Grants – Travel (Total \$ 11,361)

- 10. Faculty Scholarship Support Fund [SUU]. (2022). Presentation Travel to NABT. (Total \$1948).
- 9. Faculty Scholarship Support Fund [SUU]. (2021). Presentation Travel to NABT. (Total \$1768).
- 8. Faculty Scholarship Support Fund [SUU]. (2019). Presentation Travel to NABT. (Total \$935).
- 7. Faculty Development Support Fund [SUU]. (2019). Conference Travel to NABT. (Total \$1200).
- 6. Faculty Scholarship Support Fund [SUU]. (2019). Presentation Travel to AERA. (Total \$1400).
- 5. Faculty Scholarship Support Fund [SUU]. (2017). Presentation Travel to NABT. (Total \$1570).
- 4. Faculty Development Support Fund [SUU]. (2016). Conference Travel to HAPS. (Total \$1200).
- 3. Faculty Scholarship Support Fund [SUU]. (2016). Presentation Travel to NABT. (Total \$740).
- 2. Biological Sciences Travel Award [USM]. (2015). Biology Graduate Student Travel. (Total \$600).
- 1. Vernier Student Travel Award. (2010). National Association of Biology Teachers Conference. (Total \$500).

5. Pending - Internal Grants & Contracts

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

6. Submitted, Not Funded - Internal Grants & Contracts

- 2. Texas State University, Internal competition for Texas Parks and Wildlife Community Outdoor Outreach Program (TPWD CO-OP). (2024, June). *Seasons of Science*. PI: Daniel, K.L. Co-PI: **Bucklin, C.J.** (Total \$62,949.53).
- 1. TXST Research Enhancement Program. (2023, October). *Importance of Place in Research-based Learning Experiences*. PI: Bucklin, C.J. (Total \$8000).

D. Fellowships, Awards, & Honors

- 2. Research Paper and Presentation Departmental Award. (2011 & 2013). 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. USM.
- 1. Outstanding Master's Student. (2011). 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. USM

IV. SERVICE

A. Institutional

1. University

SUU	
2020 - 2023	Director, UT State Science Olympiad
2020 - 2023	Member, Academic Affairs Committee
2021 - 2023	Member, Pre-Service Teacher Working Group
2021 - 2023	Member, Faculty Representative, Cedar Mountain Resource Advisory Council
2018 - 2023	Director, Southern Utah Science and Engineering Fair
2019	Facilitator, Center for Excellence in Teaching and Learning Curriculum Innovation Grant
2017 - 2021	Member, Faculty Development Support Fund Review Committee
2016 - 2019	Member, Faculty Development/Evaluation Committee

2. College

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 a	nd Technology
2015	Volunteer, Haunted Science Trail
2010 - 2015	Mississippi State Science Olympiad (Advisory Board Member, 2013 – 2015; Event
	Supervisor, 2011-2012; Volunteer, 2010)
2010 - 2015	Volunteer, Lake Thoreau Environmental Education Outreach
2010 - 2012	President, Roots & Shoots, Southern Miss Chapter

3. Department

TXST –	Department	of Biology
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2024 – Present The Audrey and Tony Evers Scholarship Committee

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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 General

B. Professional

2024 – Present	Article Reviewer, CBE–Life Sciences Education
2022 – Present	Grant Reviewer, National Geographic Society
2020 - 2022	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

2023	Four-Year Section Chair, National Association of Biology Teachers
2022	Four-Year Section Vice-Chair, National Association of Biology Teachers
2021	Four-Year Section Secretary, National Association of Biology Teachers
2022 - 2023	Region VIII Coordinator, 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
2010 - 2018	Member, Archival Committee (Co-Chair: 2014-2018), National Association of Biology Teachers
2012 - 2017	Presider, Annual Meeting: National Association for Research in Science Teaching.
2010 - 2015	Member, Graduate Student Group (Chair 2012-2013; Vice Chair 2011-2012), National
	Association of Biology Teachers

3. Regional & Local

N/A

4. Memberships

2023 – Present	Southwest Association of Science Teacher Education (SW-ASTE)
2023 – Present	Science Teacher Association of Texas (STAT)
2018 - 2022	Ecological Society of America (ESA)
2017 - 2022	American Association for the Advancement of Science (AAAS)
2011 – 2012, 2019	American Education Research Association (AERA)
2010 – Present	National Association for Research in Science Teaching (NARST)
2010 – Present	National Association of Biology Teachers (NABT)

C. Community

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

D. Service Honors & Awards

N/A

E. Service Grants & Contracts

1. Funded - External Grants & Contracts N/A

2. Submitted, Not Funded – External Grants & Contracts

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

3. Funded – Internal Grants & Contracts N/A

4. Submitted, Not Funded - Internal Grants & Contracts $\rm N/A$