

M. Elizabeth Barnes
Assistant Professor
Department of Biology
Middle Tennessee State University
liz.barnes@mtsu.edu

APPOINTMENTS

Assistant Professor, Department of Biology, Middle Tennessee State University, August 2020 – present

- Research focus: biology education, science communication education

Postdoctoral Scholar, Arizona State University, School of Life Sciences, June 2018 – July 2020

- Research focus: biology education
- Advisor: Sara E. Brownell

EDUCATION

Arizona State University, Tempe, AZ (2010-2018)

Ph.D. in Biology, May 2018

Concentration: Biology Education Research

M.S. in Biological Sciences, June 2014

Concentrations: Biology Education Research, History & Philosophy of Biology

B.S. in Biological Sciences, May 2013

Concentrations: Biology & Society, History & Philosophy of Biology

Glendale Community College, Glendale, AZ (2006 – 2010)

A.S. in General Science, May 2010

GRANTS

NSF CAREER: Investigating and Supporting Undergraduate Biology Students' Abilities to Communicate about Culturally Controversial Science Topics (2023 – present)

- This grant was awarded to establish the field of undergraduate science communication education research to support undergraduate science students' abilities to communicate about culturally controversial science topics like climate change, evolution, and vaccines. This project is creating the methodologies, frameworks, and instructional materials needed to investigate and support students' learning in this area. Total \$1,044,794. Barnes is the sole PI.

NSF RCN UBE Incubator: Facilitating science communication beyond the ivory tower: a DBER network to stabilize and grow undergraduate science communication education research (starts January 2025)

- This project will convene science communication researchers to coordinate research on how to improve undergraduate students' science communication skills. Total \$74,989. Barnes is PI.

Tennessee Board of Regents Student Engagement, Retention and Success grant: Incorporating Learning Assistants into high DFW science courses to decrease DFW rates (2024 – present).

- This grant is meant to support and grow the Learning Assistant program at MTSU to decrease DFW rates in large enrollment gateway STEM courses. Total \$49,997. Barnes is Co-PI (PI is Kathryn Hosbein, Middle Tennessee State University).

NSF STEM Education Organizational Postdoctoral Research Fellowships: Preparation and Refinement of Postdocs in STEM for Disciplinary-Based Education Research (PROPS for DBER) (2023 – present)

- This grant was awarded to recruit and train 4 post-doctoral researchers at MTSU who are transitioning from basic science research to STEM education research. Additionally, the project will inform theory on training Ph.D.'s from basic science disciplines to become effective boundary spanners in STEM education research. Total \$1,249,445. Barnes is Co-PI (PI is Grant Gardner, Middle Tennessee State University)

NSF Core Research: Race, Religion, and STEM: Examining the Intersections for Black Students (2022 – present)

- This grant was awarded to explore Black undergraduate and graduate students' perceptions of the relationship between religion and science. Additionally, the project will explore how the religious identities of students may impact their experiences in STEM and their decisions to pursue STEM degrees. Total \$499,999. Barnes is Co-PI (PI is Julie J. Park, University of Maryland).

NSF Improving Undergraduate STEM Education (IUSE): A Large-scale Systematic Exploration of the Impact of Culturally Competent Biology Education (2018 – 2024)

- This project explored the impact of Religious Cultural Competence in Evolution Education (ReCCE) on students' perceived conflict between religion and evolution in undergraduate biology courses nationwide. Total \$423,003. Barnes was post-doc and then Co-PI (PI is Sara Brownell, Arizona State University).

NSF Research Coordination Network in Undergraduate Biology Education (RCN-UBE): Measuring Evolution Acceptance (2020 – 2022)

- This network grant was awarded to convene researchers in psychology, biology, education, and statistics who study evolution acceptance to discuss how to improve measurement of evolution acceptance in undergraduate biology research studies. Total \$73,269. Barnes was Co-PI (PI is Sara Brownell, Arizona State University).

Middle Tennessee State University Undergraduate Research and Creative Activity (URECA) awards: Undergraduate Science Communication about Culturally Controversial Science Topics (2020 – 2022)

- These grants were awarded to support six undergraduate researchers on projects exploring undergraduate students' science communication about vaccines and climate change to their communities and how to improve their communication. Seven separate proposals were funded totaling \$27,200. Barnes was PI.

Middle Tennessee State University Faculty Research and Creative Activity Committee (FRCAC) Award: Perceived Conflict Between Religion and Evolution among Undergraduate Biology Students (2020)

- This grant was awarded to explore how students' perceived conflict between their religion and evolution affects their decision to reject or accept evolution. Total \$10,000. Barnes was PI.

National Science Foundation Graduate Research Fellowship (NSF GRFP): Reducing Students' Perceived Conflict between Religion and Evolution (2015-2018)

- This fellowship grant was awarded to identify and test instructional practices that could reduce undergraduate biology students' perceived conflict between their religions and evolution. The culmination of this work was a new instructional framework that uses the lens of cultural competence for bridging divides between secular instructors and their religious students called Religious Cultural Competence in Evolution Education (ReCCEE). Total \$150,200.

Arizona State University Center for Evolution and Medicine Research Grant: Conceptions of acceptance of evolution among college biology students. (2016 – 2017)

- This project proposed to study how students define evolution acceptance and how their definitions of evolution acceptance influence their attitudes towards evolution. Total \$1,600.

PUBLICATIONS

35 total peer reviewed publications. 19 first author or co-first author publications. 11 senior author or co-senior author publications. Corresponding authorships are underlined, co-authorships are designated with #, students that I have trained are designated with *. h-index = 19 | i10-index = 21

35. *Aini, R.Q., *Stewart, M., Brownell, S.E., Barnes, M.E. (2024). Exploring patterns of evolution acceptance, evolution understanding, and religiosity among college biology students in the United States. *Evolution: Education and Outreach*, 17(1), 13. <https://doi.org/10.1186/s12052-024-00207-y>

34. #Mohammed, T. F., *Aini, R. Q., #Barnes, M. E., & #Cooper, K. M. (2024). Toward Culturally Responsive Mentoring of Muslim Research Mentees in the Sciences. *CBE—Life Sciences Education*, 23(3), es5. <https://doi.org/10.1187/cbe.23-07-0145>

33. Morra, C. N., Adkins, S. J., **Barnes, M. E.**, Pirlo, O. J., Fleming, R., Convers, B. J., Glass, S. P., Howell, M. L., & Raut, S. A. (2024). Non-STEM majors COVID-19 vaccine impressions improve, and misconceptions resolve, after podcast assignment. *Journal of Microbiology & Biology Education*, 0(0), e00034-23. <https://doi.org/10.1128/jmbe.00034-23>

32. **Barnes, M. E.**, *Aini, R. Q., Collins, J. P., Dunk, R. D. P., Holt, E. A., Jensen, J., Klein, J. R., *Misheva, T., Nadelson, L. S., Reiss, M. J., Romine, W. L., Shtulman, A., Townley, A. L., Wiles, J. R., Zheng, Y., & Brownell, S. E. (2024). Evaluating the current state of evolution acceptance instruments: A research coordination network meeting report. *Evolution: Education and Outreach*, 17(1), 1. <https://doi.org/10.1186/s12052-024-00194-0>

31. *Edwards, B. A., *Bowen, C., #Brownell, S. E., & #Barnes, M. E. (2024). Christian Student Experiences During Peer Interactions in Undergraduate Biology Courses. *CBE—Life Sciences Education*, 23(1), ar7. <https://doi.org/10.1187/cbe.23-01-0020>

30. *Bowen, C., *Summersill, A., Google, A., *Aadnes, M., & **Barnes, M.E.** (2023). Exploring Black Undergraduate Students' Communication and Biology Education Experiences about COVID-19 and COVID-19 Vaccines During the Pandemic. *CBE—Life Sciences Education*, 22(4), ar42. <https://doi.org/10.1187/cbe.22-11-0233>

Highlighted paper in CBE LSE

29. Google, A., *Bowen, C., Brownell, S., & **Barnes, M. E.** (2023). Isolation, resilience, and faith: Experiences of Black Christian students in biology graduate programs. *Journal of Research in Science Teaching*. <https://doi.org/10.1002/tea.21898>

28. *Misheva, T., #Brownell, S. E., & #Barnes, M. E. (2023). “It’s More Of A Me-Thing Than An Evolution Thing”: Exploring The Validity Of Evolution Acceptance Measures Using Student Interviews. *CBE—Life Sciences Education*, 22(4), ar41. <https://doi.org/10.1187/cbe.23-01-0022>

27. Soner, P. A., Brownell, S. E., & **Barnes, M. E.** (2023). Analysis of Religious Bias among Christian Students in Science. *Journal for the Scientific Study of Religion*. <https://doi.org/10.1111/jssr.12825>

26. *Bowen, C. D., *Summersill, A. R., Jensen, J. L., Brownell, S. E., & **Barnes, M. E.** (2022). A Comparison of Online and In-Person Evolution Instruction That Includes Religious Cultural Competence. *Journal of Microbiology & Biology Education*, 0(0), e00067-22. <https://doi.org/10.1128/jmbe.00067-22>

25. **Barnes, M. E.**, *Riley, R., *Bowen, C., Cala, J., & Brownell, S. E. (2022). Community College Student Understanding and Perceptions of Evolution. *CBE—Life Sciences Education*, 21(3), ar46. <https://doi.org/10.1187/cbe.21-09-0229>

Highlighted paper for online with CBE webinar series.

24. *Couch, B., *Wybren, E., *de Araujo Bryan, M., *Niravong, T., Jin, Y., *Bowen, C., & **Barnes, M. E.** (2022). Exploring Undergraduate Biology Students' Science Communication About COVID-19. *Frontiers in Education*, 7. <https://www.frontiersin.org/article/10.3389/educ.2022.859945>
23. Morra, C. N., Adkins-Jablonsky, S. J., **Barnes, M.E.**, Boling, T. W., Almeahmi, S. E., Convers, B. J., ... & **Raut, S.** Expert-Led Module Improves Non-STEM Undergraduate Perception of and Willingness to Receive COVID-19 Vaccines. *Frontiers in Public Health*, 1213. <https://doi.org/10.3389/fpubh.2022.816692>
22. *Edwards, B. A., *Roberts, J. A., *Bowen, C., Brownell, S. E., & **Barnes, M. E.** (2022). An exploration of how gender, political affiliation, or religious identity is associated with comfort and perceptions of controversial topics in bioethics. *Advances in Physiology Education*, 46(2), 268–278. <https://doi.org/10.1152/advan.00008.2022>

Commentary:

Mohammed, T. (2022). How Can We Maximize Student Comfort When Teaching Controversial Topics in Bioethics? *ASU SOLS Teach Tech Blog*

21. #**Barnes, M.E.**, *Misheva, T. Supriya, K., Rutledge, M., Brownell, S.E. (2022). A Revised Measure of Acceptance of the Theory of Evolution: Introducing the MATE 2.0. *CBE—Life Sciences Education*, 21(1), ar10. <https://doi.org/10.1187/cbe.21-05-0127>
20. **Barnes, M. E.**, *Roberts, J. A., *Maas, S. A., & Brownell, S. E. (2021). Muslim undergraduate biology students' evolution acceptance in the United States. *PLOS ONE*, 16(8), e0255588. <https://doi.org/10.1371/journal.pone.0255588>
19. **Barnes, M. E.**, Supriya, K., Zheng, Y., *Roberts, J. A., & Brownell, S. E. (2021). A New Measure of Students' Perceived Conflict between Evolution and Religion (PCoRE) Is a Stronger Predictor of Evolution Acceptance than Understanding or Religiosity. *CBE—Life Sciences Education*, 20(3), ar42. <https://doi.org/10.1187/cbe.21-02-0024>
18. Grunspan, D. Z., Dunk, R. D. P., **Barnes, M. E.**, Wiles, J. R., & **Brownell, S. E.** (2021). A comparison study of human examples vs. non-human examples in an evolution lesson leads to differential impacts on student learning experiences in an introductory biology course. *Evolution: Education and Outreach*, 14(1), 9. <https://doi.org/10.1186/s12052-021-00148-w>
17. **Barnes, M.E.**, *Maas, S.A., *Roberts, J.A. **Brownell, S.E.** (2021). Christianity as a Concealable Stigmatized Identity (CSI) among Biology Graduate Students. *CBE—Life Sciences Education*, 20(1), ar9. <https://doi.org/10.1187/cbe.20-09-0213>

Commentary:

Jingyi, H. (2021) How Christians May Feel Stigmatized in the Biology Community. *ASU SOLS Teach Tech Blog*.

16. **Barnes, M.E.**, Supriya, K., *Dunlop, H. M., *Hendrix, T. M., Sinatra, G. M., **Brownell, S.E.** (2020) Relationships between the Religious Backgrounds and Evolution Acceptance of Black and Hispanic Biology Students. *CBE—Life Sciences Education*, 19(4), ar59. <https://doi.org/10.1187/cbe.19-10-0197>

Commentary:

Edwards, B. (2020) Religious Cultural Competence in Evolution Education Could Address the Underrepresentation of People of Color in Evolutionary Biology. *ASU Teach Tech Blog*

15. **Barnes, M. E.**, *Dunlop, H. M., Sinatra, G. M., *Hendrix, T. M., Zheng, Y., & **Brownell, S. E.** (2020). "Accepting Evolution Means You Can't Believe in God": Atheistic Perceptions of Evolution among College Biology Students. *CBE—Life Sciences Education*, 19(2), ar21. <https://doi.org/10.1187/cbe.19-05-0106>

Most downloaded article in CBE—Life Sciences Education history from 2021 – 2023.

Commentary:

Roberts, J. (2020) Can Someone Believe in God and Accept Evolution? Atheistic Perceptions of Evolution, Decrease Acceptance of Evolution. *ASU Teach Tech Blog*.

14. Cooper, K. M., Gin, L. E., **Barnes, M. E.**, & **Brownell, S. E.** (2020). An Exploratory Study of Students with Depression in Undergraduate Research Experiences. *CBE—Life Sciences Education*, 19(2), ar19. <https://doi.org/10.1187/cbe.19-11-0217>

13. **Barnes, M.E.**, *Truong, JM., Grunspan, D.Z., **Brownell, S.E.** (2020). Are scientists biased against Christians? Exploring real and perceived bias against Christians in academic biology. *PLOS ONE*, 15(1), e0226826. <https://doi.org/10.1371/journal.pone.0226826>

Chosen by PLOS ONE to be highlighted in their private press release to media outlets.

Commentary:

Baskin, P. (2020). US biologists ‘biased’ against evangelical students, says study. *Times Higher Education*.

12. **Barnes, M. E.**, Werner, R., **Brownell, S.E.** (2020). Differential Impacts of Religious Cultural Competence on Students' Perceived Conflict with Evolution at an Evangelical University. *The American Biology Teacher*, 82(2), 93-101. <https://doi.org/10.1525/abt.2020.82.2.93>

11. Dunk, R. D., **Barnes, M. E.**, Reiss, M. J., Alters, B., Asghar, A., Carter, B. E., ... & Mead, L. S. (2019). Evolution education is a complex landscape. *Nature ecology & evolution*, 3(3), 327. <https://doi.org/10.1038/s41559-019-0802-9>.

10. **Barnes, M.E.**, *Dunlop, HM., Holt, E., **Brownell, S.E.** (2019). Different Instruments used to Measure Acceptance of Evolution Leads to Different Research Findings. *Evolution: Education and Outreach*, 12(1), 4. <https://doi.org/10.1186/s12052-019-0096-z>.

9. Cooper, K.M., *Hendrix, T., Stephens, M.D., Cala, JM., Mahrer, K., Krieg, A., Agloro, A.C.M., Badini, G.V., **Barnes, M.E.**, Eledge, B., Jones, R., Lemon, E.C., Massimo, N.C., Martin, A., Ruberto, T., Simonson, K., Webb, E.A., Weaver, J., Zheng, Y., **Brownell, S.E.** (2018). To be funny or not to be funny: Gender differences in student perceptions of instructor humor in college science courses. *PLoS ONE* 13(8): e0201258. <https://doi.org/10.1371/journal.pone.0201258>.

8. **Barnes, M.E.**, & **Brownell, S.E.** (2018). A Call to Use Cultural Competence When Teaching Evolution to Religious College Students: Introducing Religious Cultural Competence in Evolution Education (ReCCEE). *CBE-Life Sciences Education*, 16 (4). <https://doi.org/10.1187/cbe.17-04-0062>.

7. #**Barnes, M.E.**, *#Truong, JM., **Brownell, S.E.** (2018). Can Six Minutes of Culturally Competent Evolution Education Reduce Students’ Level of Perceived Conflict between Evolution and Religion? *The American Biology Teacher*, 80(2), 106-115. <https://doi.org/10.1525/abt.2018.80.2.106>.

6. Grunspan, D. Z., Nesse, R. M., **Barnes, M. E.**, & **Brownell, S.E.** (2017). Core principles of evolutionary medicine: a Delphi study. *Evolution, Medicine, and Public Health*, 2018 (1), 13-23. <https://doi.org/10.1093/emph/cox025>.

5. **Barnes, M. E., & Brownell, S. E.** (2017). Experiences and Practices of Evolution Instructors at Christian Universities that can Inform Culturally Competent Evolution Education. *Science Education*, 101(6), 1-24. <https://doi.org/10.1002/sce.21317>.
4. **Barnes, M. E., Evans, E. M., Hazel, A., Brownell, S. E., & Nesse, R. M.** (2017). Teleological Reasoning, not Acceptance of Evolution, Impacts Students' Ability to Learn Natural Selection. *Evolution: Education and Outreach*, 10(7). <https://doi.org/10.1186/s12052-017-0070-6>.
3. **Barnes, M. E., Elser, J., & Brownell, S. E.** (2017). Impact of a Short Evolution Module on Students' Perceived Conflict between Religion and Evolution. *The American Biology Teacher*, 79(2), 104-111. <https://doi.org/10.1525/abt.2017.79.2.104>.

American Biology Teacher most read article of 2021

Commentary:

Lloyd, R. (2017). Dissent with Modification: Soothing Evolution–Religion Tensions in the Classroom. *Scientific American*.

2. **Barnes, M. E., *Truong, J. M., & Brownell, S.E.** (2017). Experiences of Judeo-Christian Students in Undergraduate Biology. *CBE-Life Sciences Education*, 16(1), 15. <https://doi.org/10.1187/cbe.16-04-0153>.

1. **Barnes, M. E., & Brownell, S.E.** (2016). Practices and Perspectives of College Instructors on Addressing Religious Beliefs When Teaching Evolution. *CBE-Life Sciences Education*, 15(2), 18. <https://doi.org/10.1187/cbe.15-11-0243>.

Commentary:

Pior, A. (2018). Teachers Help Bring Evolution Back to the Classroom. *Scientific American*.

Refereed publications under review:

6. **Barnes, M.E., *Edwards, B.A., Google, A., Graves, J., Brownell, S.B.** (under review) “A Road to Exclusion: Why anti-religious sentiments harm Black scholars.” *Nature ecology and evolution*.

5. **Barnes, M.E.** and Brownell, S.B. (under review) “A call to use conflict reducing practices in evolution education with non-religious students”. *BioScience*.

4. ***Aini, R. Q., *Edwards, B. A., *Summersill, A. R., *Epting, C., Zheng, Y., #Brownell, S.E., #Barnes, M.E.** (under revision, after review). Evidence for the efficacy of conflict reducing practices in evolution education in a randomized controlled study. *CBE Life Sciences Education*.

3. ***Coscia, K. A., *Aini, R. Q., *Edwards, B. A., *Bowen, C. D., #Brownell, S. E., & #Barnes, M. E.** (under review). Do non-religious biology students perceive more conflict and less compatibility between religion and evolution than religious students? *CBE Life Sciences Education*.

2. ***Coscia, K.A., Bowen, C., Aadnes, M., Summersill, A. R., & Barnes, M. E.** (under re-revision, after re-revision). Undergraduate Biology Students' Experiences Communicating about Climate Change within their Communities and their Experiences Learning to Communicate in Biology Classes. *CBE Life Sciences Education*.

1. **Aini, R. Q., Supriya, K., Dunlop, H. M., Edwards, B. A., Maas, S. A., Roberts, J. A., Summersill, A. R., Zheng, Y., #Brownell, S. E., & #Barnes, M. E.** (under review). Instructor use of religious cultural competence in evolution education is associated with increases in student evolution acceptance. *Plos One*

PRESENTATIONS

201 total presentations. I have been invited to give 34 presentations as seminars or workshops. I have given 55 peer-reviewed oral and poster presentations at meetings, and my trainees have presented 112 oral and poster presentations on our collaborative work.

Invited talks, seminars, and workshops:

34. **Barnes, ME.** Conflict Reducing Practices to Alleviate Tension between Religion and Evolution. Vanderbilt Evolutionary Studies Institute Scopes "Monkey" Trial Centennial Symposium. Vanderbilt University. Nashville, Tennessee. Forthcoming July 2025.

33. **Barnes, ME.** Using Conflict Reducing Practices in Biology Education to Develop Undergraduate Students' Science Communication Skills. Department of Biology Teaching and Learning. University of Minnesota. Minneapolis, Minnesota. Forthcoming November, 2024.

32. **Barnes, ME.** Using Conflict Reducing Practices in Biology Education to Develop Undergraduate Students' Science Communication Skills. Department of Biology Teaching and Learning. University of Minnesota. Minneapolis, Minnesota. November, 2024.

31. **Barnes, ME.** Using Conflict Reducing Practices in Biology Education to Develop Undergraduate Students' Science Communication Skills. Raider Research Series. Middle Tennessee State University. Murfreesboro, TN. Forthcoming October 2024.

30. **Barnes, ME.** Building Religious Cultural Competence in Biology Education. Biology Department Seminar Series. Northern Illinois University. DeKalb, IL. September 2023.

29. **Barnes, ME.** Building Religious Cultural Competence for Effective and Inclusive Evolution Education. Center for Evolutionary Studies Seminar Series. Vanderbilt University. Nashville, Tennessee. September 2023.

28. **Barnes, ME.** Keynote. Building Religious Cultural Competence for Inclusive and Effective Science Communication. International Research Network for the Study of Science and Belief in Society. Exeter, England. July 2023.

27. **Barnes, ME.** Using Cultural Competence to Improve Undergraduate Biology Education about Culturally Controversial Science Topics. Math and Science Education Doctoral Program. Middle Tennessee State University. Murfreesboro, TN. March 2023.

26. **Barnes, ME.** Intersections of Religious Identity, Inclusive Teaching, and Evolution Education: Context, Research and Instructional Resources: Religious Cultural Competence in Evolution Education. Howard Hughes Medical Institute (HHMI) Teacher Ambassadors Program. Virtual. February 2023.

24. **Barnes, ME.** Teaching Culturally Controversial Science Topics in the 21st Century. Tennessee STEM Education Center STEAM Festival. Middle Tennessee State University. Murfreesboro, TN. October 2022.

23. **Barnes, ME.** A Call to Build Religious Cultural Competence in Biology Education to Advance Inclusive Biology Education. Arizona State University Research in Science Education Center Seminar Series. Virtual. October 2022.

22. **Barnes, ME.** A Call to Build Religious Cultural Competence in Biology Education. Brigham Young University. Provo, Utah. September 2022.

21. **Barnes, ME.** A Call to Build Religious Cultural Competence in Biology Education to Advance Inclusive

Biology Education. Biology Department Seminar Series. University of Alabama. August 2022.

20. **Barnes, ME.** Panelist. DBER-sit Early Career Transitions in Biology Education. Virtual. June 2022

19. **Barnes, ME.** Building Religious Cultural Competence in Biology Education. University of California San Diego Biological Sciences Seminar Series. Virtual. May 2022.

18. **Barnes, ME.** How to talk about your research and give a good presentation. MTSU Science Wisdom Imparted to Graduate Students (SWIGS) group meeting. Middle Tennessee State University. April 2022.

17. **Barnes, ME.** Career Trajectory in Biology Education Research. Biology and Society group meeting. Arizona State University. February 2022.

16. **Barnes, ME.** A Call to Build Religious Cultural Competence in Biology Education. Biology Department Seminar Series. Purdue University. November 2021.

15. **Barnes, ME.** A Call to Build Religious Cultural Competence in Biology Education. Department of Biology Seminar Series. University of Memphis. September 2021.

14. **Barnes, ME.** Religious Cultural Competence in Evolution Education and Beyond. Department of Ecology and Evolutionary Biology Seminar Series. University of Tennessee, Knoxville. Virtual. September 2021.

13. **Barnes, ME.** Plenary panelist. Religious cultural competence in science education to promote diversity, inclusion, and positive attitudes towards science. International Society for the Study of Science and Belief in Society (INSBS) conference. Virtual. July 2021.

12. **Barnes, ME.** Religious Identity and Cultural Competence in Evolution Education. American Association of Physical Anthropologists (AAPA) Educator Workshop. Virtual. April 2021.

11. **Barnes, ME.** Religious Cultural Competence in Evolution Education and Beyond. Math and Science Education Doctoral Program. Middle Tennessee State University. Murfreesboro, TN. April 2021.

10. **Barnes, ME.** Religious Cultural Competence in Evolution Education (ReCCEE). Thomas H. Gosnell School of Life Sciences seminar series. Rochester Institute of Technology (RIT). Virtual. February 2021.

9. **Barnes, ME.** Religious Cultural Competence in Evolution Education (ReCCEE). Science, Ethics, and Religion Conference. Arizona State University. Virtual. February 2021.

8. **Barnes, ME.** Religious Cultural Competence in Evolution Education. Research on STEM Education (ROSE) seminar series. University of Alabama, Birmingham. Virtual. January 2021.

7. **Barnes, ME.** Religious Cultural Competence in Evolution Education. SEISMIC Seminar Series. University of Michigan. Virtual. October 2020.

6. **Barnes, ME.** Religious Cultural Competence in Evolution Education and Beyond. Biology Department Seminar Series. Middle Tennessee State University. February 2020.

5. **Barnes, ME.** Religious Cultural Competence in Evolution Education. Biology Department Seminar Series. University of Central Florida. Orlando, FL. March 2019.

4. **Barnes, ME.** Religious Cultural Competence in Evolution Education. Biology Department Seminar Series. California State University, Sacramento. March 2019.

3. **Barnes, ME.** Religious Cultural Competence in Evolution Education. Biology Department Seminar Series. University of California, Merced. Merced, California. February 2019.
2. **Barnes, ME.** Studying the Science of Science Communication. Biology Department seminar series. Missouri Western State University. St Joseph, MO. January 2019.
1. **Barnes, ME.** Religious Cultural Competence in Evolution Education. Biology Department Colloquium Series, California State University, Fresno. Fresno, CA. October 2018.

Peer reviewed oral presentations:

26. **Barnes, ME.** (July 2024) “Exploring the impact of conflict reducing practices and instructor non-religious identity on students’ perceived conflict between religion and evolution in a randomized controlled study”. Society for the Advancement of Biology Education Research (SABER). Minneapolis, Minnesota.
25. **Barnes, ME.** (March 2024) “Are experiences and trajectories of Black students impacted by the relationship between religion and science?” National Association of Research in Science Teaching (NARST). Denver, Colorado.
24. **Barnes, ME.,** (January 2022) “Undergraduate science communication about culturally controversial science topics”. Southeastern STEM Education Research Conference (SERC). Tennessee Tech University.
23. **Barnes, ME.** (August 2022) “Exploring Undergraduate Biology Students’ Science Communication During the Pandemic”. Science Communication Conference. University of Nebraska, Lincoln.
22. **Barnes, ME.** (March 2022) “Religious Cultural Competence in Evolution Education and its Association with Changes in Student Acceptance of Evolution across the United States”. National Association of Research on Science Teaching (NARST). Vancouver, British Columbia.
21. **Barnes, ME.** (Feb 2022) “A national study of using religious cultural competence in evolution education”. American Association for the Advancement of Science (AAAS).
20. **Barnes, ME.** Long Talk. (July 2021) “Why we need to build religious cultural competence in biology education”. Society for the Advancement of Biology Education Research (SABER).
19. **Barnes, ME.** (July 2021). “Are scientists biased against Christians? Exploring real and perceived bias against Christians in academic biology” International Society for the Study of Science and Belief in Society (INSBS).
18. **Barnes, ME.** (February 2021) “Relationships between the Religious Backgrounds and Evolution Acceptance of Black and Hispanic Biology Students.” Science Educators for Equity Diversity and Social Justice (SEEDS).
17. **Barnes, ME.** (January 2021) “Relationships between the Religious Backgrounds and Evolution Acceptance of Black and Hispanic Biology Students.” Society for the Advancement of Biology Education Research (SABER) West.
16. **Barnes, ME.** (January 2021) “Relationships between the Religious Backgrounds and Evolution Acceptance of Black and Hispanic Biology Students.” Tennessee STEM Education Research Conference.
15. **Barnes, ME.** (November 2020) “Relationships between the Religious Backgrounds and Evolution Acceptance of Black and Hispanic Biology Students.” National Association for Biology Teachers (NABT) Biology Education Research Symposium.

14. **Barnes, ME.** (July 2020) “Christianity as a Concealable Stigmatized Identity (CSI) in graduate biology programs” Society for the Advancement of Biology Education Research (SABER).
13. **Barnes, ME.** (June 2019) “Religious Students' Definitions of Evolution Predict their Acceptance.” International Research Network for the Study of Science and Belief in Society. Birmingham, United Kingdom.
12. **Barnes, ME.** (January 2019) “Religious Students' Definitions of Evolution Predict their Acceptance.” Society for the Advancement of Biology Education Research West (SABER West). Irvine, California.
11. **Barnes, ME.** (July 2018) “Explaining the Dearth of African Americans in Evolutionary Biology as a Function of Religiosity” Society for the Advancement of Biology Education Research (SABER). Minneapolis, Minnesota.
10. **Barnes, ME.** (April 2018) “Atheistic Definitions of Evolution Exacerbate Rejection of Evolution among Religious Students” American Educational Research Association (AERA). New York, New York.
9. **Barnes, ME.** (April 2018) “Religiosity and Acceptance of Evolution Predict Career Choices among College Biology Students” American Educational Research Association (AERA). New York, New York.
8. **Barnes, ME.** & Brownell, S.E. (February 2018) “Religious Cultural Competence in Evolution Education (ReCCEE)” Diversity and Inclusion Science Initiative (DISI). Tempe, AZ.
7. **Barnes, ME.** (July 2017) “Towards More Inclusive Evolution Education: A Call to Use Cultural Competence when Teaching Evolution. Society for the Advancement of Biology Education Research (SABER). Minneapolis, MN.
6. **Barnes, ME.** (April 2017) “A need for culturally sensitive evolution education: perspectives from college biology instructors and students” American Educational Research Association (AERA) meeting. San Antonio, TX.
5. Brownell, SE, **Barnes, ME.** (April 2017) “Instructional Practices of Evolution Instructors at Christian Universities,” National Association for Research in Science Teaching (NARST) San Antonio TX.
4. **Barnes, ME.** (February 2017) “How to teach evolution to religious students who may be resistant.” The American Association for the Advancement of Science (AAAS). Boston, MA.
3. **Barnes, ME.** (January 2017) “Reducing students' perceived conflict between religion and evolution.” Society for the Advancement of Biology Education Research West (SABER West) meeting. UC Irvine, CA.
2. **Barnes, ME.** (November 2016) “Reducing students' perceived conflict between religion and evolution.” National Association of Biology Teachers (NABT) meeting. Denver, CO.
1. **Barnes, ME.** (June 2016) “Reducing students' perceived conflict between religion and evolution.” Evolution Meeting. Austin, TX.

Peer reviewed poster presentations:

29. **Barnes, ME.** (November 2024) “Perceptions of Conflict between Religion and Evolution Are Higher among Atheist Undergraduate Biology Students than Christian Biology Students” National Association of Biology Teachers (NABT) meeting. Anaheim, California.
28. **Barnes, ME.** (July 2022) “Undergraduate Biology Students’ Climate Change Communication and Training Experiences” Society for the Advancement of Biology Education Research (SABER). Minneapolis, Minnesota.

27. **Barnes, ME.** (January 2022) “Exploring Undergraduate Biology Students’ Attitudes and Science Communication about COVID19 and COVID19 Vaccines” Southeastern STEM Education Research Conference (SERC). Middle Tennessee State University.
26. **Barnes, ME.** (November 2020) “Christianity as a Concealable Stigmatized Identity (CSI) in graduate biology programs.” American Society for Cell Biology (ASCB). Virtual.
25. **Barnes, ME.** (July 2020) “Undergraduate Perceptions of Bioethics Topics: A Pilot Study.” Society for the Advancement of Biology Education Research (SABER). Virtual.
24. **Barnes, ME.** (July 2020) “Testing Religious Cultural Competence in Evolution Education Nationwide.” Society for the Advancement of Biology Education Research (SABER). Virtual.
23. **Barnes, ME.** (February 2020) “Are Scientists Based Against Christians?” Society for Personality and Social Psychology (SPSP). New Orleans, Louisiana.
22. **Barnes, ME.** (February 2020) “Christianity as a Concealable Stigmatized Identity among Biology Graduate Students.” Society for Personality and Social Psychology (SPSP). New Orleans, Louisiana.
21. **Barnes, ME.** (August 2019) “Testing Religious Cultural Competence in Evolution Education Nationwide: A Pilot Study.” Southwestern Association of Biological Anthropologists. Tempe, Arizona.
20. **Barnes, ME.,** (July 2019) “Testing Religious Cultural Competence in Evolution Education Nationwide: A Pilot Study.” Society for the Advancement of Biology Education Research (SABER). Minneapolis, Minnesota.
19. **Barnes, ME.,** (July 2019) “Exploring the impact of student religiosity on faculty perceptions of potential PhD students in biology.” Society for the Advancement of Biology Education Research (SABER). Minneapolis, Minnesota.
18. **Barnes, ME.,** (January 2019) “Exploring the Impact of Student Religiosity on Faculty Perceptions of Competence, Hireability, and Likeability of Potential PhD Students in Biology.” Society for Personality and Social Psychology (SPSP). Portland, Oregon.
17. **Barnes, ME.,** (January 2019) “Exploring the Impact of Student Religiosity on Faculty Perceptions of Competence, Hireability, and Likeability of Potential PhD Students in Biology” Society for the Advancement of Biology Education Research West (SABER West). Irvine, California.
16. **Barnes, ME.** (August 2017) “A call to use cultural competence when teaching evolution to religious undergraduate students: Introducing Religious Cultural Competence in Evolution Education (ReCCEE)”. International Society for Evolution, Medicine, and Public Health (ISEMPH) meeting. Groningen, Netherlands.
15. **Barnes, ME.** (April 2017) “Explaining the dearth of African Americans in evolutionary biology as a function of religiosity”. American Educational Research Association (AERA) meeting. San Antonio, TX.
14. **Barnes, ME.** (February 2017) “The Impact of a Short Evolution Module on Students' Perceived Conflict with Evolution” The American Association for the Advancement of Science (AAAS). Boston, MA.
- 2nd place poster competition winner in education category.*
13. **Barnes, ME.** (January 2017) “The Survey Matters: Instructors Using Different Surveys to Measure Acceptance of Evolution May Come to Different Conclusions about their Students” Society for the Advancement of Biology Education Research West (SABER West) meeting. UC Irvine, CA.

12. **Barnes, ME.** (January 2017) “The Impact of a Short Evolution Module on Students' Perceived Conflict with Evolution” Institute for the Science of Teaching and Learning (ISTL). Tempe, AZ.

11. **Barnes, ME.** (November 2016) “Instructors Using Different Surveys to Measure Acceptance of Evolution May Come to Different Conclusions about their Students”. National Association of Biology Teachers (NABT) meeting. Denver, CO.

2nd place poster competition winner in the scholarship of teaching and learning category.

10. **Barnes, ME.** (July 2016) “Addressing potential conflict between students’ religious beliefs and evolution: instructor attitudes, practices, and barriers” Evolution Meeting. Austin, TX.

9. **Barnes, ME.** (July 2016) “How identity, biology content, and instructional practices impact religious students’ sense of belonging in the biology classroom” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN.

8. **Barnes, ME.** (June 2016) “Reducing students' perceived conflict between religion and evolution.” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN.

7. **Barnes, ME.** (June 2016) “Addressing potential conflict between students’ religious beliefs and evolution: instructor attitudes, practices, and barriers” Evolution Meeting. Austin, TX.

6. **Barnes, ME.** (June 2016) “Reducing students' perceived conflict between religion and evolution.” Human Behavior and Evolution Society (HBES) meeting. Vancouver, Canada.

5. **Barnes, ME.** (February 2015). Pedagogies of Professors Teaching Evolution at Secular versus Christian Colleges. The American Association for the Advancement of Science (AAAS). San Jose, CA.

4. **Barnes, ME.** (July 2015) Pedagogies of Professors Teaching Evolution at Secular versus Christian Colleges. Society for the Advancement of Biology Education Research Conference (SABER). Minneapolis, MN.

3. **Barnes, ME.** (June 2015). Pedagogies of Professors Teaching Evolution at Secular versus Christian Colleges. International Society for Evolutionary Medicine Conference. Tempe, AZ.

2. **Barnes, ME.** (February 2015). Politics, Morality, and Science: An extended Analysis. Society for Personality and Social Psychology Conference (SPSP). Long Beach, CA.

1. **Barnes, ME.** (November 2013). Politics, Morality, and Science: An Analysis of the Social Factors Influencing Acceptance of Biological Evolution. Poster Presentation. Southwest Consortium for Innovative Psychology in Education Conference (SCIPIE). Tucson, AZ.

Mentee oral presentations:

20. **Aini, RQ.** (July 2024) “Exploring the effect of students' and professors' religious identity on increasing students' perceived compatibility between evolution and religion?” Joint Conference of East-Asian Association for Science Education and International Conferences on Mathematics and Science Education. Bandung, Indonesia.

19. **Coscia, KA.** (March 2024) “Perceptions of conflict between religion and evolution are higher among atheist undergraduate biology students than Christian biology students.” Association of Southeastern Biologists (ASB). Chattanooga, Tennessee.

18. **Aini, RQ.** (March 2024) “Does Instructor or Student Religious Identity Matter for the Efficacy of Evolution Instruction with Religious Cultural Competence?” National Association of Research in Science Teaching (NARST). Denver, Colorado.
17. **Epting, C.** (March 2024) “Exploring the impact of a science communication lesson on undergraduate biology students’ ability to communicate about culturally controversial science topics.” MTSU Scholars’ Week Research and Creativity Exposition, Murfreesboro, Tennessee.
16. **Coscia, KA.** (January 2024) “Perceptions of conflict between religion and evolution are higher among atheist undergraduate biology students than Christian biology students.” Southeastern STEM Education Research Conference (SSERC). Murfreesboro, Tennessee.
15. **Aini, RQ.** (January 2024) “Does Instructor or Student Religious Identity Matter for the Efficacy of Evolution Instruction with Religious Cultural Competence?” Southeastern STEM Education Research Conference (SSERC). Murfreesboro, Tennessee.
14. **Aini, RQ.** (July 2023) “Muslim Undergraduate Biology Students’ Perceptions of Evolution.” Society for the Advancement of Biology Education Research (SABER). Minneapolis, Minnesota.
13. **Aini, RQ.** (April 2023) “Patterns for managing potential conflict between religion and evolution among Muslim undergraduate biology students.” National Association of Research in Science Teaching (NARST). Chicago, Illinois.
12. **Aini, RQ.** (January 2023) “Patterns for managing potential conflict between religion and evolution among Muslim undergraduate biology students.” Southeastern STEM Education Research Conference (SERC). Tennessee Tech University.
11. **Aini, RQ.** (November 2022) “Patterns for managing potential conflict between religion and evolution among Muslim undergraduate biology students.” National Association of Biology Teachers (NABT) meeting. Indianapolis, Indiana.
10. **Bowen, C.** (August 2022) “Exploring Black Undergraduate Biology Students’ Experiences Learning about COVID19 and Communicating about COVID19 to their Communities.” Science Communication Conference. University of Nebraska Lincoln.
9. **Misheva, T.** (July 2022) “Exploring the Validity of Evolution Acceptance Measures Using Cognitive Interviews” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, Minnesota.
8. **Bowen, C.** (July 2022) “Exploring Black Undergraduate Biology Students’ Experiences Learning about COVID19 and Communicating about COVID19 to their Communities.” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, Minnesota.
7. **Aini, RQ.** (March 2022) “Religious Cultural Competence in Evolution Education and its Association with Changes in Student Acceptance of Evolution across the United States.”. National Association of Research on Science Teaching (NARST). Vancouver, British Columbia.
6. **Google, AN.** (April 2022) “Isolation, Resilience, and Faith: Experiences of Black Christian Graduate Students in Biology Programs” American Education Research Association (AERA) meeting. San Diego, California
5. **Google, AN.** (July 2021) “Isolation, Resilience, and Faith: Experiences of Black Christian Graduate Students in Biology Programs” Society for the Advancement of Biology Education Research (SABER) meeting.

4. **Misheva, T.** (July 2021) “Introducing the Measure of Acceptance of the Theory of Evolution 2.0 (MATE 2.0)” Society for the Advancement of Biology Education Research (SABER) meeting. Virtual.
3. **Misheva, T.** (October 2020) “Uncovering Validity Issues with the Measure of Acceptance of the Theory of Evolution (MATE)” Southwestern Association of Biological Anthropologists. Virtual.
2. **Dunlop HM.** (January 2019) “Religious Students' Definitions of Evolution Predict their Acceptance.” Society for the Advancement of Biology Education Research West (SABER West). Irvine, California.
1. **Truong, JM.** (January 2018) “Using Cultural Competence to Improve the Experiences of Religious Students in Biology Classes” Society for the Advancement of Biology Education Research West (SABER West) meeting. Irvine, CA.

Mentee poster presentations:

92. **Asberry, D.** (November 2024) “The Impact of Identity on Undergraduate Students’ Science Communication about Culturally Controversial Science Topics” National Association of Biology Teachers (NABT) meeting. Anaheim, California.

2nd place winner in Undergraduate Student Biology Education Research competition.

91. **Coscia, KA** (November 2024) “The Impacts of Science Communication Instruction on Introductory Undergraduate Biology Students’ Ability to Communicate about Culturally Controversial Science Topics” National Association of Biology Teachers (NABT) meeting. Anaheim, California.

1st place winner in Graduate Student Biology Education Research competition.

90. **Alnassari, K.** (November 2024) “Perceptions of Evolution and Evolution Education among Undergraduate Muslim Biology Students in the United States” National Association of Biology Teachers (NABT) meeting. Anaheim, California.

89. **Hayes, J.** (November 2024) “Christian Undergraduate Biology Students’ Climate Change Beliefs and Communication” National Association of Biology Teachers (NABT) meeting. Anaheim, California.

88. **Aini, RQ** (November 2024) “Can Non-Religious Instructors Reduce Perceived Conflict Between Religion and Evolution? A Randomized Controlled Study” National Association of Biology Teachers (NABT) meeting. Anaheim, California.

87. **Rowland-Schaefer, EG** (November 2024) “Developing Instruments to Evaluate and Improve Interpersonal Science Communication Skills for Students in College Biology” National Association of Biology Teachers (NABT) meeting. Anaheim, California.

86. **Coscia, KA** (July 2024) "The Impacts of Science Communication Instruction on Introductory Undergraduate Biology Students’ Ability to Communicate about Culturally Controversial Science Topics" Society for the Advancement of Biology Education Research (SABER) conference. Minneapolis, Minnesota.

85. **Rowland-Schaefer, EG** (July 2024) "Developing Instruments to Evaluate and Improve Interpersonal Science Communication Skills for Students in College Biology" Society for the Advancement of Biology Education Research (SABER) conference. Minneapolis, Minnesota.

84. **Aini, RQ.** (March 2024). Going Beyond Correct Answers: Evaluating Metacognitive Monitoring in Evolution Understanding. MTSU College of Education Scholars’ Day. Murfreesboro, TN.

Poster winner for College of Education Graduate Student Innovation or Creative Project

83. **Aini, RQ.** (March 2024). Going Beyond Correct Answers: Evaluating Metacognitive Monitoring in Evolution Understanding. MTSU College of Basic and Applied Sciences Scholars' Day, Murfreesboro, Tennessee.

1st place Winner for the Graduate level at Scholar Week 2024 University-Wide from College of Basic and Applied Sciences MTSU.

82. **Coscia, KA.** (March 2024) "Exploring the impact of a science communication lesson on undergraduate biology students' ability to communicate about culturally controversial science topics." MTSU College of Education Scholars' Day, Murfreesboro, Tennessee.

81. **Coscia, KA.** (March 2024) "Exploring the impact of a science communication lesson on undergraduate biology students' ability to communicate about culturally controversial science topics." MTSU College of Basic and Applied Sciences Scholars' Day, Murfreesboro, Tennessee.

80. **Coscia, KA.** (March 2024) "Perceptions of conflict between religion and evolution are higher among atheist undergraduate biology students than Christian biology students." MTSU Scholars' Week Research and Creativity Exposition, Murfreesboro, Tennessee.

79. **Epting, C.** (March 2024) "Exploring the impact of a science communication lesson on undergraduate biology students' ability to communicate about culturally controversial science topics" Association of Southeastern Biologists (ASB) meeting. Chattanooga, Tennessee.

78. **Aini, RQ.** (March 2024) "Assessing Metacognitive Monitoring in Evolution Understanding" National Association of Research in Science Teaching (NARST) meeting. Denver, Colorado.

77. **Coscia K.** (February 2024) "Perceived Conflict Between Religion and Evolution in Undergraduate Biology Students" American Association for the Advancement of Science (AAAS) meeting. Denver, Colorado.

2nd place graduate student poster competition winner in the social science category.

76. **Aini, RQ.** (February 2024) "Navigating the Intersection of Evolution and Religion among Muslim Biology Students" American Association for the Advancement of Science (AAAS) meeting. Denver, Colorado.

75. **Aini, RQ.** (January 2024) "Assessing Metacognitive Monitoring in Evolution Understanding" Southeastern STEM Education Research Conference (SSERC) meeting. Murfreesboro, Tennessee.

74. **Epting, C.** (January 2024) "Exploring the impact of a science communication lesson on undergraduate biology students' ability to communicate about culturally controversial science topics" Southeastern STEM Education Research Conference (SSERC) meeting. Murfreesboro, Tennessee.

73. **Stewart, M.** (July 2023) "Exploring Patterns of Identity Protective Cognition about Evolution among Undergraduate Biology Students" Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, Minnesota.

72. **Summersill, A.** (July 2023) "Does an instructor revealing their religious or non-religious identity impact the effectiveness of religious cultural competence in evolution education?" Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, Minnesota.

71. **Coscia, KA.** (July 2023) "Perceptions of conflict between religion and evolution are higher among atheist biology students than Christian biology students". Society for the Advancement of Biology Education Research

(SABER) meeting. Minneapolis, Minnesota.

70. **Coscia, KA.** (March 2023) “Perceptions of conflict between religion and evolution are higher among atheist biology students than Christian biology students”. Association of Southeastern Biologists (ASB) meeting. Winston-Salem, NC.

69. **Epting, C., Summersill, A.** (March 2023) “Does an instructor revealing their religious or non-religious identity impact the effectiveness of religious cultural competence in evolution education?” MSTU Scholars Week Presentations. Middle Tennessee State University, Murfreesboro, TN.

68. **Aini, RQ.** (March 2023) “Does an instructor revealing their religious or non-religious identity impact the effectiveness of religious cultural competence in evolution education?” College of Basic and Applied Sciences Scholars Week Presentations. Middle Tennessee State University, Murfreesboro, TN.

67. **Stewart, M.** (March 2023) “Exploring Patterns of Identity Protective Cognition about Evolution among Undergraduate Biology Students” College of Basic and Applied Sciences Scholars Week Presentations. Middle Tennessee State University, Murfreesboro, TN.

66. **Coscia, KA.** (March 2023) “Perceptions of conflict between religion and evolution are higher among atheist biology students than Christian biology students”. College of Basic and Applied Sciences Scholars Week Presentations. Middle Tennessee State University, Murfreesboro, TN.

65. **Stewart, M.** (January 2023) “Undergraduate biology students show patterns of identity protective cognition and motivated reasoning about evolution”. Southeastern STEM Education Research Conference (SSERC). Tennessee Tech University.

64. **Coscia, KA.** (January 2023) “A new survey of perceived conflict between evolution and religion reveals differences in atheist and Christian biology students’ perceived conflict between religion and evolution”. Southeastern STEM Education Research Conference (SSERC). Tennessee Tech University.

63. **Epting, C., Summersill, A.** (January 2023) “An experimental study testing the effect of biology instructor identity on reducing students’ perceived conflict between evolution and religion” Southeastern STEM Education Research Conference (SSERC). Tennessee Tech University.

62. **Aini, RQ.** (November 2022) “Student Reports of Religious Cultural Competence in Evolution Education (ReCCEE) is associated with gains in students’ evolution acceptance.” National Association of Biology Teachers (NABT) meeting. Indianapolis, IN.

3rd place winner of graduate student research poster competition.

61. **Aadnes, M.** (July 2022) “Exploring Undergraduate biology Students’ Science Communication about Climate Change” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN.

60. **Edwards, BE.** (July 2022) “When stigma is anticipated but not experienced: experiences of Christian students during peer discussions in undergraduate biology classes” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN.

59. **Misheva, T.** (July 2022) “Defining evolution acceptance: A Delphi study” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN.

58. **Summersill, A.** (July 2022) “Is education with religious cultural competence delivered online as effective as when it is delivered in-person?” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN.

57. **Aini, RQ.** (July 2022) “Patterns for managing conflict between religion and evolution among Muslim undergraduate biology students” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN.

1st place winner of graduate student research poster competition.

56. **Aadnes, M.** (April 2022) “Understanding Undergraduate Biology Students Current Communication Habits About Climate Change.” National Conference of Undergraduate Research (NCUR)

55. **Summersill, A.** (April 2022) “The effect of Religious Cultural Competence in Evolution Education Online versus In-Person on Student Acceptance of Evolution and Comfort learning Evolution.” National Conference of Undergraduate Research (NCUR)

54. **Aini, RQ.** (March 2022) “Patterns for Managing Conflict between Religion and Evolution among Muslim Undergraduate Biology Students” Middle Tennessee State University Scholars Week. Murfreesboro, TN.

1st place in graduate student poster competition in University Wide poster competition.

53. **Aini, RQ.** (March 2022) “Patterns for Managing Conflict between Religion and Evolution among Muslim Undergraduate Biology Students” College of Basic and Applied Sciences Scholars Week Presentations. Middle Tennessee State University, Murfreesboro, TN.

3rd place in graduate student poster competition for CBAS Scholar’s Week.

52. **Bowen, C.** (March 2022) “Exploring Black Undergraduate Biology Students’ Experiences Learning about COVID19 and Communicating about COVID19 to their Communities.” College of Basic and Applied Sciences Scholars Week Presentations. Middle Tennessee State University, Murfreesboro, TN.

3rd place in undergraduate poster competition.

51. **Aadnes, M.** (March 2022) “Understanding Undergraduate Biology Students Current Communication Habits About Climate Change.” Middle Tennessee State University Scholars Week Presentations. Middle Tennessee State University, Murfreesboro, TN.

2nd place in undergraduate poster competition.

50. **Edwards, BE.** (February 2022) “An exploration of how gender, political affiliation, or religious identity is associated with comfort and perceptions of controversial topics in bioethics” American Association for the Advancement of Science (AAAS) meeting.

Finalist in the Graduate Social Sciences poster competition.

49. **de Araujo Bryan, M.** (February 2022) “Exploring Undergraduate Biology Students’ Attitudes and Science Communication about COVID19 and COVID19 Vaccines” American Association for the Advancement of Science (AAAS) meeting.

2nd place in Undergraduate Science and Society poster competition.

48. **Bowen, C.** (Feb 2022) “Isolation, Resilience, and Faith: Experiences of Black Christian Graduate Students in Biology Programs” American Association for the Advancement of Science (AAAS) meeting.

2nd place in Undergraduate Social Sciences poster competition.

47. **Misheva, T.** (January 2022) “Uncovering Validity Issues with the I-SEA and GAENE using student voices” Society for the Advancement of Biology Education Research (SABER) west meeting. Irvine, CA.
46. **Riley, R.** (January 2022) “A comparison between community college and university student perceptions about evolution” Southeastern STEM Education Research Conference (SSERC). Middle Tennessee State University.
45. **Matthews, L., Niravong, T., de Araujo Bryan, M.** (January 2022) “Exploring Undergraduate Biology Students’ Attitudes and Science Communication about COVID19 and COVID19 Vaccines” Southeastern STEM Education Research Conference (SSERC). Middle Tennessee State University.
44. **Bowen, C.** (January 2022) “Isolation, Resilience, and Faith: Experiences of Black Christian Graduate Students in Biology Programs” Southeastern STEM Education Research Conference (SSERC). Middle Tennessee State University.
43. **Summersill, A.** (January 2022) “The effect of Religious Cultural Competence in Evolution Education Online versus In-Person on Student Acceptance of Evolution and Comfort learning Evolution.” Southeastern STEM Education Research Conference (SSERC). Middle Tennessee State University.
42. **Matthews, L., Niravong, T., de Araujo Bryan, M.** (Nov 2021) “Exploring Undergraduate Biology Students’ Attitudes and Science Communication about COVID19 and COVID19 Vaccines: Does Religious Identity Matter?” National Association of Biology Teachers (NABT) meeting. Atlanta, GA.
- 2nd place winner of mentored student research poster competition*
41. **Bowen, C.** (Nov 2021) “Isolation, Resilience, and Faith: Experiences of Black Christian Graduate Students in Biology Programs” Society for the Advancement of Biology Education Research (SABER) meeting. National Association of Biology Teachers (NABT) meeting. Atlanta, GA.
40. **Summersill, A.** (Nov 2021) “The effect of Religious Cultural Competence in Evolution Education Online versus In-Person on Student Acceptance of Evolution and Comfort learning Evolution.” National Association of Biology Teachers (NABT) meeting. Atlanta, GA.
- 1st place winner of biology education research poster competition*
39. **Edwards, B.** (July 2021) “Undergraduate Perceptions of Bioethics” Society for the Advancement of Biology Education Research (SABER) meeting.
38. **Maas, S.** (July 2021) “Christianity as a Concealable Stigmatized Identity among Biology Graduate Students” Society for the Advancement of Biology Education Research (SABER) meeting.
37. **Matthews, L., Niravong, T., de Araujo Bryan, M.** (July 2021) “Exploring Undergraduate Biology Students’ Attitudes and Science Communication about COVID19 and COVID19 Vaccines: Does Religious Identity Matter?” Society for the Advancement of Biology Education Research (SABER) meeting.
36. **Aadnes, M.** (July 2021) “Are undergraduate biology students communicating climate change effectively?” Society for the Advancement of Biology Education Research (SABER) meeting.
35. **Riley, R.** (July 2021) “A comparison between community college and university student perceptions about evolution” Society for the Advancement of Biology Education Research (SABER) meeting.
34. **Bowen, C.** (July 2021) “The effect of Religious Cultural Competence in Evolution Education Online versus In-Person on Student Acceptance of Evolution and Comfort learning Evolution.” Society for the Advancement of

Biology Education Research (SABER) meeting.

33. **Matthews, L., Niravong, T., de Araujo Bryan,** (April 2021) “Exploring Undergraduate Biology Students’ Attitudes and Science Communication about COVID19 and COVID19 Vaccines” College of Basic and Applied Sciences Scholars Week Presentations. Middle Tennessee State University, Murfreesboro, TN.

1st place winner in biology undergraduate research poster competition.

32. **Aadnes, M.** (April 2021) “Does teaching the scientific consensus about climate change really lead to higher acceptance of and concern about climate change” College of Basic and Applied Sciences Scholars Week Presentations. Middle Tennessee State University, Murfreesboro, TN.

31. **Riley, R.** (April 2021) “A comparison between community college and university student perceptions about evolution” College of Basic and Applied Sciences Scholars Week Presentations. Middle Tennessee State University, Murfreesboro, TN.

30. **Bowen, C.** (July 2021) “A Comparison of Religious Cultural Competence in Evolution Education Online versus In-Person and its Effects on Student Outcomes” Society for the Advancement of Biology Education Research (SABER) meeting.

29. **Roberts, J.** (January 2021). “Perceptions of Evolution among Muslim Undergraduate Biology Students in the United States.” American Association for the Advancement of Science (AAAS).

1st place winner in poster presentation competition in science and society.

28. **Misheva, T.** (February 2021) “Uncovering Validity Issues with the Measure of Acceptance of the Theory of Evolution (MATE)” American Association for the Advancement of Science (AAAS).

27. **Roberts, J.** (December 2020). “Perceptions of Evolution among Muslim Undergraduate Biology Students in the United States.” American Society for Cell Biology (ASCB). due to COVID19.

26. **Edwards, B.** (November 2020) “Undergraduate Perceptions of Bioethics Topics: A Pilot Study.” National Association of Biology Teachers (NABT).

2nd place winner in poster competition for mentored undergraduate research

25. **Edwards, B.** (July 2020) “Undergraduate Perceptions of Bioethics Topics: A Pilot Study. Society for the Advancement of Biology Education Research (SABER). Minneapolis, Minnesota.

24. **Roberts, J.** (July 2020). “Perceptions of Evolution among Muslim Undergraduate Biology Students in the United States.” Society for the Advancement of Biology Education Research (SABER). Minneapolis, Minnesota.

23. **Misheva, T.** (July 2020) “Uncovering Validity Issues with the Measure of Acceptance of the Theory of Evolution (MATE)” Society for the Advancement of Biology Education Research (SABER).

22. **Maas, SM** (July 2020). “Exploring the Christian “Leaky Pipeline” in Academic Biology.” Society for the Advancement of Biology Education Research (SABER). Minneapolis, Minnesota.

21. **Maas, SM.** (February 2020). “Christianity as a Concealable Stigmatized Identity among Biology Graduate Students.” American Association for the Advancement of Science (AAAS) meeting. Seattle Washington.

20. **Maas, SM.** (January 2020). “Exploring Christianity as a Concealable Stigmatized Identity (CSI) among Biology Graduate Students.” Society for the Advancement of Biology Education Research (SABER) West

meeting. Irvine, California.

19. **Maas, SM.** (November 2019). “Exploring Christianity as a Concealable Stigmatized Identity (CSI) among Science Graduate Students.” Southwestern Association of Biological Anthropologists 7th Annual Conference. Tempe, AZ.

18. **Dunlop, HM.** (July 2019). “Different Instruments used to Measure Acceptance of Evolution Leads to Different Research Findings.” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN.

17. **Dunlop, HM.** (March 2019). “Different Instruments used to Measure Acceptance of Evolution Leads to Different Research Findings.” Arizona State University School of Life Sciences Undergraduate Research (SOLUR) Symposium. Tempe, Arizona.

16. **Dunlop, HM.** (February 2019). “Different Instruments used to Measure Acceptance of Evolution Leads to Different Research Findings.” American Association for the Advancement of Science (AAAS) meeting. Washington D.C.

15. **Dunlop, HM.** (January 2019). “Different Instruments used to Measure Acceptance of Evolution Leads to Different Research Findings.” Society for the Advancement of Biology Education Research (SABER) West meeting. Irvine, California.

14. **Dunlop, HM.** (July 2018) “Atheistic definitions of acceptance of evolution exacerbate rejection of evolution among religious students.” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, Minnesota.

13. **Dunlop, HM.** (January 2018) “Atheistic definitions of acceptance of evolution exacerbate rejection of evolution among religious students.” Society for the Advancement of Biology Education Research (SABER) West meeting. Irvine, California.

12. **Dunlop, HM.** (July 2017) “The survey matters: instructors using different surveys to measure acceptance of evolution may reach different conclusions about their students.” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, Minnesota.

11. **Truong, JM.** (July 2017) “Can a five-minute introduction to an evolution module reduce students’ level of perceived conflict between evolution and religion?” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN.

10. **Dunlop, HM.** (April 2017) “The survey matters: instructors using different surveys to measure acceptance of evolution may reach different conclusions about their students.” Arizona State University School of Life Sciences Undergraduate Research (SOLUR) Symposium. Tempe, Arizona.

9. **Truong, JM.** (April 2017) “How identity, biology content, and instructional practices impact religious students’ sense of belonging in the biology classroom” School of Life Sciences Faculty Septennial Review. Tempe, AZ.

8. **Truong, JM.** (March 2017) “How identity, biology content, and instructional practices impact religious students’ sense of belonging in the biology classroom” School of Life Sciences Undergraduate Research (SOLUR) Symposium. Tempe, AZ.

7. **Truong, JM.** (February 2017) “How identity, biology content, and instructional practices impact religious students’ sense of belonging in the biology classroom” The Association for the Advancement of Science (AAAS). Boston, MA.

6. **Truong, JM.** (January 2017) “How identity, biology content, and instructional practices impact religious students’ sense of belonging in the biology classroom” Society for the Advancement of Biology Education Research West (SABER West) meeting. Irvine, CA.
5. **Truong, JM.** (January 2017) “How identity, biology content, and instructional practices impact religious students’ sense of belonging in the biology classroom” Institute for the Science of Teaching and Learning (ISTL). Tempe, AZ.
4. **Dunlop, HM.** (January 2017) “The survey matters: instructors using different surveys to measure acceptance of evolution may reach different conclusions about their students.” Society for the Advancement of Biology Education Research (SABER) West meeting. Irvine, California.
3. **Hendrix, T.** (January 2017) “Do Christian Biology Students Experience Stereotype Threat?” Society for the Advancement of Biology Education Research (SABER) West meeting. Irvine, California.
2. **Truong, JM.** (July 2016) “How identity, biology content, and instructional practices impact religious students’ sense of belonging in the biology classroom” Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN.
1. **Truong, JM.** (March 2016) “How identity, biology content, and instructional practices impact religious students’ sense of belonging in the biology classroom” School of Life Sciences Undergraduate Research (SOLUR) Symposium. Tempe, AZ.

AWARDS

- Middle Tennessee State University (MTSU) Distinguished Early Career Research Award, 2024
- MTSU Outstanding Teaching in General Education Award, 2024
- National Association of Biology Teachers (NABT) Evolution Education Award, 2021
- Arizona State University (ASU) Faculty Women’s Association Distinguished Graduate Student Award, 2018
- ASU Graduate & Professional Student Association Outstanding Mentor Award, 2017
- Graduate Excellence Award, Arizona State University, 2015

MENTORSHIP EXPERIENCE

Post-doctoral scholars:

3. Mary Foley, fall 2024 - present
2. Erin Rowland-Schaefer, summer 2024 - present
Mentor for NSF STEM Education Individual Postdoctoral Research Fellowship (STEMEdIPRF)
1. Angela Google, summer 2021 – fall 2022
Mentored research has led to two publications.

Ph.D. students:

6. Theresa Ayangbola, MTSU doctoral student – committee member, 2023 – present
Next position: Instructor, Middle Tennessee State University Chemistry Department
5. Baylee Edwards, ASU doctoral student – committee member, 2022 – present
Mentored research has led to two publications under review.
4. Kate Coscia, MTSU doctoral student – committee chair, 2022 – present
Mentored research has led to one publication under review.
3. Rahmi Aini, MTSU doctoral student – committee chair, 2021 – present
Mentored research has led to three publications and three under review.
4. Brock Couch, MTSU doctoral student, – committee member, 2021 – spring 2022
Mentored research has led to one publication.
Next position: Assistant Teaching Professor, Loyola University Biology Department

3. Jacob Jia, MTSU doctoral student – committee member, 2021 – 2022
Next position: post-doctoral researcher, industry
2. Jacqueline Cala, Grand Canyon University doctoral student – committee member, 2020 – present
Mentored research led to one publication.
Next position – Life Sciences department chair at Gilbert-Chandler community college.
1. Taya Misheva, ASU doctoral student– committee member, 2019 – present
Mentored research has led to three publications and a NSF STEMEd Post Doctoral Fellowship
Next position: post-doctoral scholar at Syracuse University

Master’s students:

3. Madison Stewart, MTSU master’s student – committee chair, 2022 – 2024
Mentored research led to one publication.
Next program: Optometry School, Southern College of Optometry
2. Baylee Edwards, ASU master’s student – committee member, 2021 – 2022
Mentored research led to one publication.
Next program: Biology education research Ph.D. at Arizona State University.
1. Rebekah Riley, MTSU master’s student – committee chair, 2021 – 2022
Mentored research led to one publication.
Next position: High school environmental science instructor

Undergraduate students:

20. Khadijah Alnassari, 2024
19. J Hayes, MTSU undergraduate, 2024
18. Donye Asbury, MTSU undergraduate, 2024
17. Casey Epting, MTSU undergraduate, 2022 – present
Mentored research has led to one publication under review.
16. Alexa Summersill, MTSU undergraduate, 2021 – 2023
Mentored research has led to two publications and three under review.
Next program: master’s program in clinical psychology, Middle Tennessee State University
15. Chloe Bowen, MTSU undergraduate, 2020 – present
Mentored research has led to seven publications and two under review.
Next program: medical school at the University of Tennessee
14. Madeline Aadnes, MTSU honors student – committee chair, 2021 – 2022
Mentored research led to one publication.
Next program: master’s in environmental education at Florida State University.
13. Mariana de Araujo Bryan, MTSU undergraduate, 2021 – 2022
Mentored research led to one publication.
Next position: Foster coordinator at Rutherford County Animal Shelter
12. Laine Elizabeth Matthews, MTSU undergraduate, 2020 – 2022
Mentored research led to one publication.
Next program: master’s in Global Security at the University of Glasgow
11. Thippaphone Niravong, MTSU undergraduate, 2020 – 2022
Mentored research led to one publication.
10. Baylee Edwards, ASU Barrett Honor’s student – committee member, 2020 – 2021
Mentored research led to one publication.
Next program: Baylee went on to complete a master’s degree in biology education research at ASU and is now a doctoral student at ASU in biology education research.
9. Aaron Gatewood, MTSU undergraduate, 2021
8. Julie Roberts, ASU undergraduate, 2019 – 2020
Mentored research led to three publications.
Next program: Clinical Psychology Masters at Northwestern University.
Next position: child trauma counselor
7. Samantha Maas, ASU Barrett honors student – committee member, 2019 – 2020

Mentored research led to two publications.

Next position: manager of the Research for Inclusive STEM Education Center at Arizona State University.

6. Hayley Dunlop, ASU Barrett honors student – committee member, 2016 - 2019

Mentored research led to three publications.

Next program: Hayley was accepted to six medical schools and chose to complete a master's in public health at Edinburgh before starting medical school at Ohio State University. She went on to receive a Fulbright grant as a medical student.

5. Tajia Hendrix, ASU undergraduate, 2016-2018

Mentored research led to three publications.

Next position: Tajia went on to become a middle school science teacher.

4. Jasmine Truong, ASU Barrett honors student – committee member, 2015-2018

Mentored research led to three publications, including one co-first author publication.

Next program: Jasmine received a master's in public health from Johns Hopkins.

Next position: Program manager, ASU COVID19 investigation program

3. Aditya Ponnappalli, ASU undergraduate, 2016

2. Samantha Belcher, ASU undergraduate, 2015

1. Monro Obenauer, ASU undergraduate, 2015

Trainee awards

2024

- Rahmi Aini – 1st place poster award winner among graduate students, MTSU University Scholar's Week
- Rahmi Aini – Winner of Graduate Student Innovative Project Poster Award, MTSU College of Education Scholar's Week
- Kate Coscia – 2nd place poster graduate student competition winner at the American Association for the Advancement of Science (AAAS) conference in social sciences.

2023

- Madison Stewart – placed second in the three-minute thesis competition in the College of Basic and Applied Science at MTSU.

2022

- Kate Coscia – placed third in the three-minute thesis presentation competition in the College of Basic and Applied Science at MTSU.
- Rahmi Aini – placed third in graduate student research poster competition at the National Association of Biology Teachers (NABT) meeting.
- Rahmi Aini – Winner of Society for the Advancement of Biology Education Research (SABER) graduate student poster competition.
- Rahmi Aini - 1st place in graduate student poster competition for College of Basic and Applied Sciences Scholars Week Presentations
- Chloe Bowen - 3rd place in undergraduate poster competition for College of Basic and Applied Sciences Scholars Week Presentations
- Madeline Aadnes - 2nd place in undergraduate poster competition for Middle Tennessee State University Scholars Week Presentations
- Mariana Brien - 2nd place in Undergraduate Science and Society poster competition at American Association for the Advancement of Science (AAAS) meeting.
- Chloe Bowen - 2nd place in Undergraduate Social Sciences poster competition at American Association for the Advancement of Science (AAAS) meeting.

2021

- Angela Google - Winner of the Society Bill Wood Graduate Student Talk Award.
- Alexa Summersill - 1st place winner of biology education research poster competition at the National Association of Biology Teachers (NABT) meeting.

- Laine Matthews - 1st place winner in biology undergraduate research poster competition at the MTSU College of Basic and Applied Sciences Scholars Week Presentations.
- Julie Roberts - 1st place winner in poster presentation competition in science and society at the American Association for the Advancement of Science (AAAS) meeting.
- Aaron Gatewood - MTSU Outstanding Freshman award.
- Thippaphone Niravong - *MTSU* George P. Freeman Scholarship award.

2020

- Baylee Edwards - 2nd place winner in poster competition for mentored undergraduate research at the National Association of Biology Teachers (NABT) meeting.

2018

- Jasmine Truong – ASU Dean’s Medalist – highest award to an undergraduate in the college.
- Taija Hendrix – ASU True Grit Award – for achievement in the face of unique circumstance
- Hayley Dunlop – ASU Linda Birge Scholarship Award – for research in biology education.

LEADERSHIP

- Head of the Social Perceptions of Science Lab in which I direct undergraduate students, graduate students, and post-doctoral researchers to conduct studies to understand effective teaching and learning of topics that are important in biology but controversial in society like evolution, climate change, and vaccines, 2020 – present.
- Co-director of the Learning Assistant program in the College of Basic and Applied Sciences (CBAS) at MTSU in which I collaborate with a chemistry faculty member to develop and direct the use of learning assistants in large introductory science courses to promote student success and community.
- Chair of the Society of Advancement of Biology Education Research (SABER) Award Committee 2023 – present
- Chair of the Patrick Doyle Research Fund for undergraduate and graduate students committee 2023 – present.

TEACHING EXPERIENCE

Middle Tennessee State University, Department of Biology (2020 – present)

- **BIOL 1110: General Biology I (2020 – present)**
 - Developed and taught an online and in person active learning courses in the general biology for majors. This is a semi-flipped class in which we use learning assistants to facilitate a community of learning and emphasize scientific practices and collaboration. In 2024, I was awarded the MTSU Outstanding Teaching in General Education Award after being nominated by three of my students in this class the first year I was eligible to receive the award.
- **BIOL 6500: Special Problems - Papers in Teaching Controversial Topics in Biology (2021 – present)**
 - Developed and taught a journal club course in which graduate students critically analyze research literature on the teaching and learning of topics in biology that are controversial in society like evolution, climate change, and vaccines.

Arizona State University, School of Life Science

- **BIO 194: Biology Early Start Program (2015 – 2019)**
 - Developed and taught an introductory biology curriculum, for five consecutive years, in a bridge program for incoming freshmen biology majors. These lessons focused on the nature of science, evolution, genetics, and cellular biology and were meant to immerse students in biology content before they started their introductory biology courses.
- **BIO 591: Papers in Inclusive Teaching in College science (2019 – 2020)**

- Guided students in a weekly seminar class on current readings in science education related to how to become more inclusive science teachers.
- **BIO 498/598: Biology Education Research (2017)**
 - I was a graduate teaching assistant and helped design and teach a Biology Education Research course for undergraduate and graduate students. This course was designed and implemented as a Course-Based Undergraduate Research Experience (CURE) and led to a co-authored publication with 16 undergraduate and graduate students.
- **BIO 189 Life Sciences Career paths (2015 – 2016)**
 - Developed and taught lessons on evolutionary science.
- **Graduate Partners in Science Education (GPSE) (2013 – 2017)**
 - In collaboration with middle school teachers, I designed and taught an afterschool STEM program for 6th-8th graders as well as mentored students who are working on individual research projects. In 2015, my students won 2nd place and in 2016 my students won 1st place at the annual ASU GPSE research science fair competitions for their research.
- **BIO 151 Principles of Biology (2014)**
 - I was a graduate teaching assistant and helped teach a course for aspiring biology majors who scored low on their math placement exams. This was a survey course with ~100 students that covered all major introductory topics in biology including molecular biology, genetics, ecology, evolution, and nature of science. I ran a fraction of lectures and facilitated active learning sessions as well as graded exams and assignments.

PROFESSIONAL SERVICE

- National Science Foundation (NSF) grant proposal panel reviewer, 2022 - present.
- Ad-hoc reviewer for: *Journal of Microbiology and Biology Education* (3), 2022, 2024; *Journal for the Scientific Study of Religion* (1), 2024; *Statistics Education Research Journal* (1), 2023 *Cultural Studies of Science Education* (1), 2022; *International Journal of Science Education* (2), 2021 – 2022; *CBE Life Sciences Education* (3), 2018 – 2019, 2021; *Evolutionary Medicine and Public Health* (1), 2021; *Evolution: Education and Outreach* (11), 2018 – 2023; *BioScience* (2), 2020 – 2021; *Journal of Research in Science Teaching* (1), 2020, *School Science and Mathematics* (1), 2019; *The Journal of Education Research* (1), 2017; *The American Biology Teacher* (6), 2016 – 2020, 2023.
- National Association of Research in Science Teaching (NARST) graduate student mentor (2024)
- Reviewer for the Society for Advancement of Biology Education Research (SABER) conference abstracts (2018 – 2024)
- Member of the Middle Tennessee State University True Blue General Education committee (2024)
- Member of the Middle Tennessee State University Non-Instructional Assignment Committee (2024)
- Member of Middle Tennessee State University Math and Sciences Education PhD program Faculty Coordination Committee (2022 - present)
- Member of the Society of Advancement of Biology Education Research (SABER) Award Committee (2021 – present)
- Member of Middle Tennessee State University College of Basic and Applied Sciences Diversity Equity and Inclusion Committee (2021 – 2022)
- Member of Middle Tennessee State University Biology Department Graduate Student Award committee (2021 – present)
- Member of Middle Tennessee State University Biology Department General Education Redesign Committee (2020 – 2023)
- Member of Middle Tennessee State University Math and Sciences Education PhD program Qualifying Exam committee (2020 – 2022)
- Mentor in an NSF-GRFP semester long workshop for graduate students applying to the NSF GRFP, 2015.

TRAVEL AWARDS

Society for the Advancement of Biology Education Research Travel Award

- Awarded \$400 to travel to 2022 SABER conference with my students presenting research. Awarded July 2022.

Society for Science and Belief in Society

- Awarded \$1,200 and hotel accommodations to travel and give a talk at an international conference in South Africa for researchers studying perceptions of science and religion. Awarded July 2020. *cancelled due to COVID 19

Society for Science and Belief in Society

- Awarded \$1,200 and hotel accommodations to travel and give a talk at an international conference in London for researchers studying perceptions of science and religion. Awarded July 2019.

American Anthropological Association Travel Award

- Awarded \$600 to cover airfare, hotel, and registration to present an invited talk at the American Anthropological Association (AAPA) meeting. Awarded April 2018.

ASU School of Life Sciences Travel Grant

- Awarded \$400 to cover registration, travel, and hotel costs to present at the American Educational Research Association (AERA) meeting. Awarded April 2018.

ASU Graduate College Travel Grant

- Awarded \$450 to cover Airfare and Registration costs to present at the Society for the Advancement of Biology Education Research (SABER) meeting. Awarded July 2017.

ASU Graduate and Professional Student Association (GPSA) Travel Grant

- Awarded \$950 to cover lodging and transportation to present at the Society for Advancement of Biology Education Research (SABER) meeting. Awarded July 2017.

ASU School of Life Sciences Travel Grant

- Awarded \$400 to cover registration, travel, and hotel costs to present at the National Association of Biology Teachers (NABT) meeting. Awarded September 2016.

ASU School of Life Sciences Travel Grant

- Awarded \$400 to cover registration, travel, and hotel costs to present at the Society for the Advancement of Biology Education Research. Awarded June 2016.

ASU Graduate Education Travel Grant

- Awarded \$500 to cover registration, travel, and hotel costs to present at the Human Behavior and Evolution Society (HBES) conference. Awarded March 2016.

ASU Biology and Society Travel Grant

- Awarded \$1600 to cover registration, travel, and hotel costs to present at the American Association for Advancement of Science (AAAS) 2015 conference. Awarded October 2014.

ASU School of Life Sciences Travel Grant

- Awarded \$400 to cover registration, travel, and hotel costs to present at the Southwest Consortium for Innovative Psychology in Education (SCIPIE) 2013 conference. Awarded November 2013.

PRESS

International Research Network for the Study of Science and Belief in Society (INSBS) interview. Research on Conflict Reduction in Biology Education (Forthcoming).

Middle Tennessee State University News [article](#) “Two MTSU biology faculty land \$1M NSF grants to support research projects” (November 2023)

Middle Tennessee State University News [article](#) “Road to success: two MTSU faculty journey from first-generation students to award-winning scientists” (November 2023)

Middle Tennessee State University News [article](#) “MTSU STEM faculty land \$1.25M NSF grant to mentor post-doctoral education researchers” (October 2023)

Chinese Humanistic Education Foundation [article](#) “Really walking on the road to meet Darwin: Deciphering the myth of the inconsistency between evolution theory and Christianity” (October 2022)

- I was interviewed about my career path and research in Religious Cultural Competence in Evolution Education (ReCCEE) and it was published as an online article.

Maryland Today [article](#) “Where Race, Religion and Science Meet” (October 2022).

- An article commissioned by the University of Maryland communications department about a collaborative NSF grant between University of Maryland, Howard University, and Middle Tennessee State University.

National Center for Science Education (NCSE) [article](#) “Teaching Evolution to Students of Faith” (April 2022).

- I was interviewed about my research on evolution education and my award in evolution education, sponsored by NSCE. This story was on the cover of their magazine issue.

Middle Tennessee State University “Out of the Blue” [interview](#). “Teaching Evolution” (January 2022)

- I was interviewed on "Out of The Blue" MTSU's media program about my evolution education award and research as well as my experiences as a first-generation student in science.

Arizona State University News [article](#) “ASU alumna, professor receive 2021 Evolution Education Award” (November 2021).

- My alma mater ASU featured a news article about the NABT evolution education award I received.

Middle Tennessee State University News [article](#) “MTSU professor, students honored by National Association of Biology Teachers” (November 2021).

- MTSU Featured a news article about the NABT evolution education award I received.

American Association for the Advancement of Science [interview](#) highlighted “Profiles in science engagement with faith communities” (February 2021)

- Featured as an expert in cultivating productive dialogue on the intersection of science and faith

Nashville News5 segment “Issues of Faith” [interview](#) on reducing tension between religion and Evolution (2021).

- Invited as a guest to discuss my work on the intersection of evolution, religion, and racial/ethnic diversity in science.

MTSU News [article](#) (2020) “MTSU researcher-led study: Instructors need to address compatibility of religion, science while teaching evolution. Teaching gap could hurt interest among minority biology students”

- Study on acceptance of evolution and implications for inclusion of Black students in science featured on MTSU news. Also picked up by: [News wise](#), [Sciencenews.net](#), and [WGNS radio](#).

WGNS radio [interview](#) on research on reducing tension between religion and evolution (2020)

- A guest on the radio program invited to discuss my work on ameliorating conflict between religion and evolution.

Times Higher Education [article](#) (2020) “US biologists ‘biased’ against evangelical students, says study”

- Article on my study looking at bias against evangelical Christians in science.

Scientific American [article](#) (2018) “Teachers Help One Another Bring Evolution Back to the Classroom”

- Interviewed as an expert on how to teach evolution effectively.

Smithsonian [article](#) (2018) “How to talk with Evangelicals about Evolution”

- Interviewed as an expert for how to talk to people of faith about evolution.

Skeptic Magazine (2018) “How to Teach Evolution to Religious Students”

- Article written up on my research on how to teach evolution to students of faith.

Undark [article](#) (2018) “Speaking of Evolution, in Non-Threatening Tones”

Scientific American [article](#) (2017) “Dissent with modification: soothing evolution-religion tensions in the classroom”

- Highlighted my research on how to reduce conflict between religion and evolution with six minutes.

BBC “Science in Action” podcast [interview](#) on evolution education research (2017)

- Interviewed about research presented as a speaker at the American Association for the Advancement of Science annual conference.

NPR Phoenix [interview](#) on evolution education research (2017)

- Interviewed about my research on how secular instructors can consider religious students while teaching evolution.

Tonic, Vice magazine’s science vertical, [interview](#) on persuading climate change skeptics (2017) “There’s a Strategy to Persuade Climate Change Deniers”

Science 2.0 [article](#) (2017) “Evolution And Religion: New Insight Into Instructor Attitudes In Arizona”: **Also in:**

- **Phys.org [article](#) (2017)**
- **News United [article](#) (2017)**
- **Atheism on Trendolizer [article](#) (2017)**

Featured on SOLS ASU News site [article](#) (2017) “Evolution and religion: Finding middle ground in the biology classroom”

- Research program highlighted by ASU and featured on their news website.

Undark [article](#) (2017) “Scientists Work on Public Trust”

- Research I presented at the American Association for the Advancement of Science was highlighted in this article.

Science Daily [article](#) (2016) “Evolution and religion: New insight into instructor attitudes in Arizona”

- Also in **ASU Now [article](#) (2016)**

CEH [article](#) (2016) “Teachers Squeamish About Evolution”

- Article on my research with biology faculty members and their teaching of evolution.

Lutheran Alliance for Faith Science and Technology [article](#) (2016) “Arizona State researchers study how instructors handle perceived conflicts between evolution and religion”

- Article on my research with biology faculty members and their teaching of evolution.

E-learning feeds [article](#) (2016) “Beyond “Teaching the Facts”: How to Teach Evolution to Religious Students Who Don’t ‘Believe’”

- [My blog was highlighted by elearning feeds.](#)

BLOGS

1. **Small Pond Science** (2020) [“Using Religious Cultural Competence to Talk to Students and the Public about Evolution”](#)
2. **Science and Belief in Society** (2020) [“Half of college biology students in the United States think evolution is atheistic”](#)
3. **Biologos** (2020) [“Evolution Education on the Rise”](#)
4. **ASU TeachTech blog** (2016) [“Beyond ‘Teaching the Facts’: How to Teach Evolution to Religious Students Who Don’t ‘Believe’”](#)

PROFESSIONAL ASSOCIATIONS

- *American Association for the Advancement of Science (AAAS)*
- *Society for the Study of Evolution (SSE)*
- *Society for the Advancement of Biology Education Research (SABER)*
- *National Association of Biology Teachers (NABT)*
- *National Association for Research in Science Teaching (NARST)*
- *American Educational Research Association (AERA)*