Katelyn M. Cooper

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Lab website: https://katelyncooper1.wixsite.com/bioedlab

APPOINTMENTS

Assistant Professor, School of Life Sciences, Arizona State University, Aug. 2020 – present

• Research focus: Undergraduate biology education

Assistant Professor, Department of Biology, University of Central Florida, Aug. 2019 – Aug. 2020

• Research focus: Undergraduate biology education

Postdoctoral Scholar in Biology Education, Arizona State University, May 2018 – Aug. 2019

- Concentration: Undergraduate Biology Education
- Advisor: Dr. Sara Brownell

Program Manager, LEAP Scholars program, Arizona State University, June 2017 – Aug. 2019

- Managed the NSF-funded LEAP Scholars program developed to engage community college transfer students in undergraduate research.
- Recruited prospective students, managed program logistics, conducted program evaluations, and co-developed and co-taught all curricula for the program.

Academic Advisor and Coordinator, School of Life Sciences, Arizona State University, April 2013 – June 2017

- One of six people advising 2500+ life sciences students about degree planning, prospective research opportunities, career planning, academic success strategies, and engagement programs.
- Served on the undergraduate programs committee to develop Bachelor of Science degrees in Medical Microbiology and Biomedical Sciences.
- Co-developed and oversaw the BioBridge program- a two-week program to transition incoming academically underprepared biology majors into college. The program prepared students for intro bio, provided students with academic resources, and built connections between faculty and students. This program was developed in 2014 and is still running each summer.

EDUCATION

Arizona State University, Tempe, AZ (2015 – 2018)

Ph.D. in Biology, May 2018

Concentration: Undergraduate Biology Education

Advisor: Dr. Sara Brownell

Northern Arizona University, Flagstaff, AZ online (2013 – 2014)

Master of Education, With Distinction, May 2014

University of Arizona College of Medicine-Phoenix, Phoenix, AZ (2011 – 2012)

First year of medical school coursework

Arizona State University, Tempe, AZ (2006 – 2010)

B.S. in Biochemistry, Magna Cum Laude, May 2010

GRANTS

NSF IUSE Collaborative Research: Using a Self-Guided Online Intervention to Address Student Fear of Negative Evaluation in Active Learning Undergraduate Biology Courses (2021 – 2025)

• This collaborative grant between ASU and clinical psychologists at Stony Brook University (Dr. Jessica Schleider and Dr. Michael Mullarkey) was awarded to develop a single-session intervention to help undergraduates cope with fear of negative evaluation in the context of active learning science courses. \$300,000 total funding (\$130,214 to ASU) was awarded in December of 2021. Cooper is PI.

Arizona State University College of Liberal Arts and Sciences Online Undergraduate Research Scholars (OURS) Program Group-based Research Experience Seed Grant (2021-2022)

• This grant was awarded to develop a course-based undergraduate research experience in biology education for 25 students in the School of Life Sciences online bachelor's program. \$10,000 total funding was awarded in October of 2021. Cooper is PI.

NSF IUSE: Developing a bioinformatics Course-based Undergraduate Research Experience for online students (2021-2024).

• This grant was awarded to develop and assess a bioinformatics CURE to serve students enrolled in the ASU online B.S. in Biological Sciences program. \$300,000 funded March 2021. Cooper is Co-PI (PI: Melissa Wilson).

NSF IUSE: Exploring the Effect of Shared Identities Between Instructors and Students in the Undergraduate Biology Classroom (2021-2024).

• This grant assesses the impacts on students when biology instructors share their LGBTQ+ identities in the context of college biology classrooms. Specifically, the project examines the impact on students' sense of belonging and science identities for both LGBTQ+ students and those with other concealable stigmatized identities. \$300,000 total funded February 2021. Cooper is PI.

NSF RCN-UBE Incubator: Undergraduate Learning Environments in Biology (2020-2021).

• This grant brings together biology education researchers, psychiatrists, psychologists, and student support specialists to identify sources of anxiety in active-learning biology classrooms, design interventions to help lessen student anxiety, and to spur new research related to student anxiety in this unique context. \$74,319 total funded August 2020. Cooper is PI.

NSF INCLUDES Planning Grant: Developing a Shared Vision for Engaging Persons with Disabilities in Science and Engineering (2020-2021).

• This planning award is to develop a shared vision for classrooms that engage persons with disabilities in science and engineering. \$100,000 total funded. Cooper is Co-PI (PI: Kristen Parrish).

University of Central Florida Interdisciplinary Team Building Award (2019).

• Towards a Center for Discipline-based Education Research at UCF: Flexible, Accessible, Equitable, and Transferable strategies for Post-Secondary STEM Education. \$40,000 total funded December 2019. Cooper is Co-PI (PI: Jacqueline Chini).

National Science Foundation (NSF) S-STEM Making the LEAP from Transfer Student to Researcher (2017).

• Contributed preliminary data and co-wrote the grant proposal as a graduate student, which was successfully awarded. \$999,965. Served as the program manager for the LEAP Scholars program for two years.

ASU Lincoln Center for Applied Ethics Grant (2015).

• Awarded \$7000 to determine the unwritten rules of undergraduate research

Pending awards

NSF CAREER: Addressing the undergraduate and graduate mental health crisis in biology: Identifying aspects of research that exacerbate student depression and developing interventions (*This grant has been reviewed positively and is in strong consideration for funding. NSF is currently reviewing the submitted negotiation letter*).

• This \$985,868 project proposes to use an exploratory sequential mixed-methods design to examine the relationship between scientific research and depressive symptoms among undergraduate and graduate students in the life sciences. Additionally, the project will develop and evaluate single-session interventions to help undergraduate and graduate students cope with aspects of scientific research that can exacerbate depressive symptoms.

PUBLICATIONS

40 total publications: 38 peer reviewed publications, 1 book chapter, and 1 teaching article. 25 first-author or co-first-author publications. 10 senior author publications. 6 papers resulting from bio ed CUREs that I have taught. Corresponding authorships are underlined, co-first authorships are designated with #, students that I have trained are designated with *, and students who conducted research as part of a biology education research course-based research experiences (CUREs or CREs) that I have taught are designated with ^.

Peer Reviewed Journal Articles

38. Gin LE*, Pais, DA*, Parrish K, Brownell SE, <u>Cooper KM</u>. New online accommodations are not enough: The mismatch between student needs and supports given for students with disabilities during the COVID-19 pandemic. Accepted with minor revisions at the Journal of Microbiology and Biology Education.

- 37. Mohammed TF**, Nadile EM**, Busch CA**, Brister D&, Claiborne CT&, Edwards BA&, Gazing Wolf J&, Lunt C&, Tran M&, Vargas C&, Walker KM&, Warkina TD&, Witt ML&, Brownell SE, Zheng Y, Cooper KM. Aspects of large-enrollment online college science courses that exacerbate and alleviate student anxiety. CBE Life Sciences Education. Nov. 2021. *These first authors contributed equally. *These authors contributed equally. https://www.lifescied.org/doi/10.1187/cbe.21-05-0132
- 36. Supriya K, Mead C, Anbar A, Caulkins JL, Collins JP, **Cooper KM**, Lepore PC, Lewis T, Pate A, Scott RA, Brownell SE. Undergraduate biology students received higher grades during COVID-19 but perceived negative effects on learning. Frontiers in Higher Education. Oct. 2021. <a href="https://www.frontiersin.org/articles/10.3389/feduc.2021.759624/full?&utm_source=Email_to_authors_&utm_medium=Email&utm_content=T1_11.5e1_author&utm_campaign=Email_publication&field=&journalName=Frontiers_in_Education&id=759624

35. Yannier N, Hudson SE, Koedinger KR, Hirsh-Pasek K, Michnick Golinkoff R, Munakata Y, Doebel S, Schwartz DL, Deslauriers L, McCarty L, Callaghan K, Theobald EJ, Freeman S, Cooper KM, Brownell SE. Instructor decisions and student anxiety in <u>Active learning: "Hands-on" meets "minds-on"</u>. Science. Sept. 2021. <u>https://www.science.org/doi/abs/10.1126/science.abj9957</u>

Article is in the top 5% of all research outputs ever tracked by Altmetric

- 34. Gin LE*, Clark CE[^], Elliott DB[^], Roderick TB[^], Scott RA[^], Arellano D[^], Ramirez D[^], Vargas C[^], Velarde K[^], Aeschliman A[^], Avalle ST[^], Berkheimer J[^], Campos R[^], Gerbasi M[^], Hughes S[^], Roberts JA[^], White QM[^], Wittekind E[^], Zheng Y, **Cooper KM**[#], Brownell SE[#]. An exploration across institution types of undergraduate life sciences student decisions to stay in or leave an academic-year research experience. CBE Life Sciences Education. Aug. 2021. [#]These senior authors contributed equally. https://www.lifescied.org/doi/10.1187/cbe.21-04-0108.
- 33. Turner AN, Challa AK, <u>Cooper KM</u>. Student perceptions of authoring a publication stemming from a course-based undergraduate research experience (CURE). CBE Life Sciences Education. Aug. 2021. https://www.lifescied.org/doi/pdf/10.1187/cbe.21-02-0051
- 32. Gin LE*#, Wiesenthal NJ*#, Ferreira I*, <u>Cooper KM</u>. Ph.Depression: Examining how graduate research and teaching affect depression in life sciences Ph.D. students. CBE Life Sciences Education. July 2021. **These authors contributed equally. https://www.lifescied.org/doi/10.1187/cbe.21-03-0077

Commentary

Morrison, N. (2021). Put Children In The Driving Seat Of Their Own Learning For Better Results. *Forbes*.

Silezar J. (2021). 'Active learning' helps students learn better by engaging them physically. *The Harvard Gazette*

Article was highlighted in dozens of other news outlets including *U.S. News, Times Higher Education*, and *MSN*

Langin K. (2021). This lab asked depressed Ph.D. students what's hardest- and what parts of grad school help them cope. *Science Magazine*.

- 31. Nadile EM*, Williams KD^&, Wiesenthal NJ^&*, Stahlhut KN^&, Sinda KA^&, Sellas CF^&, Salcedo F^&, Rivera Comacho^&, YI, Perez SG^&, King ML^&, Hutt AE^&, Heiden A^&, Gooding G^&, Gomez-Rosado JO^&, Ford SA^&, Ferreira I^&, Chin MR^&, Bevan-Thomas WD^&, Barreiros BM^&, Alfonso E^&, Zheng Y, Cooper KM. Gender differences in student comfort voluntarily asking and answering questions in large-enrollment college science courses. Journal of Microbiology & Biology Education. These authors contributed equally. June 2021. https://journals.asm.org/doi/epub/10.1128/jmbe.00100-21
- 30. Gin LE*, Guerrero FA*, Brownell SE, <u>Cooper KM</u>. COVID-19 and undergraduates with disabilities: Challenges resulting from the rapid transition to online course delivery for students with disabilities in undergraduate STEM. CBE Life Sciences Education. June 2021. https://www.lifescied.org/doi/10.1187/cbe.21-02-0028
- 29. Gin LE^{#*}, Scott RA^{#*}, Pfeiffer LD^{*}, Zheng Y, **Cooper KM**[&], Brownell SE[&]. It's in the syllabus... or is it? How syllabi can serve as tools for creating inclusive classrooms. Advances in Physiology

Education. April 2020. **these authors contributed equally, **these senior authors contributed equally. April 2021. https://journals.physiology.org/doi/full/10.1152/advan.00119.2020

- 28. Ding Lu, Cooper KM, Stephens MD*, Chi MTH, Brownell SE. Learning from error episodes in dialog-videos: A comparison between higher- and lower-performing undergraduates in an authentic course study. Australasian Journal of Educational Technology. April 2021. https://ajet.org.au/index.php/AJET/article/view/6239
- 27. <u>Cooper KM</u>, Cala JM*, Brownell SE. Cultural capital in undergraduate research: An exploration of how biology students operationalize knowledge to access research experiences at a large, public research-intensive institution. International Journal of STEM Education. February 2021. https://stemeducationjournal.springeropen.com/articles/10.1186/s40594-020-00265-w

Commentary

Young N. (2021). The ten "unwritten" rules of getting involved in undergraduate research. PERbites Accessible Physics Education Research.

McGlynn T. (2021). Recommended reads #189. Small Pond Science.

- 26. **Cooper KM**, Schinske JN, Tanner KD. Reconsidering the Share of a Think-Pair-Share: Emerging Limitations, Alternatives and Opportunities for Research. CBE Life Sciences Education. January 2021. https://www.lifescied.org/doi/pdf/10.1187/cbe.20-08-0200
- 25. Nadile EM*, Alfonso E^&, Barreiros BM^&, Bevan-Thomas WD^&, Brownell SE, Chin MR^&, Ferreira I^&, Ford SA^&, Gin LE*, Gomez-Rosado JO^&, Gooding G^&, Heiden A^&, Hutt AE^&, King ML^&, Perez SG^&, Rivera Camacho YI^&, Salcedo F^&, Sellas CF^&, Sinda KA^&, Stahlhut KN^&, Stephens MD*, Wiesenthal NJ^&*, Williams KD^&, Zheng Y, Cooper, KM. Call on me! Undergraduates' perceptions of voluntarily asking and answering questions in front of large-enrollment science classes. PLoS One. &These authors contributed equally. January 2021. https://journals.plos.org/plosone/article/comments?id=10.1371/journal.pone.0243731
- 24. <u>Cooper KM</u>*, Knope ML*, Munstermann M, Brownell SE. Students who analyze their own data in a course-based undergraduate research experience (CURE) show gains in scientific identity and emotional ownership of research. Journal of Microbiology and Biology Education. Nov. 2020. *These authors contributed equally. https://www.asmscience.org/docserver/fulltext/jmbe/21/3/jmbe-21-69.pdf?expires=1605909972&id=id&accname=guest&checksum=ABCD6EB2A0D9A1D54606A8AFABC48E58
- 23. Gin LE*, Guerrero FA*, Cooper KM*, Brownell SE*. Accessible active learning: To what extent is active learning inclusive for science undergraduates with disabilities? CBE Life Sciences Education. *These senior authors contributed equally. October 2020. https://www.lifescied.org/doi/pdf/10.1187/cbe.20-03-0049

Commentary

Guerrero FA. (2020). Helping to support science undergraduates with disabilities in an active learning setting. ASU SOLS Teach Tech Blog.

22. **Cooper KM***, Auerbach AJ, Bader JD, Beadles-Bohling AS, Brashears JA, Cline E, Eddy SE, Elliott DB[^], Farley E, Fuselier L, Heinz HM, Josek T, Lane AK, Lo SM, Maloy J, Nugent M, Offerdahl E, Palacios-Moreno J, Ramos J, Reid JW, Sparks RA, Stephens M*, Waring AL, Gormally

C*, Brownell SE*. Fourteen recommendations to create a more inclusive environment for LGBTQ+ individuals in academic biology. CBE Life Sciences Education. July 2020. *These authors contributed equally https://www.lifescied.org/doi/10.1187/cbe.20-04-0062

Article is in the top 1% of all research outputs ever tracked by Altmetric and is #4 of 669 outputs from the CBE Life Sciences Education.

Commentary

Brownell. S. (2020). Tips to Make your Classroom More Inclusive for LGBTQ+ Students. *ASU Teach Tech Blog*.

21. <u>Cooper KM</u>, Gin LE*, Brownell SE. Depression as a concealable stigmatized identity: What influences whether students conceal or reveal their depression in undergraduate research experiences? International Journal of STEM Education. June 2020. https://stemeducationjournal.springeropen.com/articles/10.1186/s40594-020-00216-5

Cooper K. (2020). How can we, as mentors, help undergraduate researchers with depression? *BMC On Society*. Part of Springer Nature.

- 20. Downing VR**, <u>Cooper KM</u>*, Cala JM*, Gin LE*, Brownell SE. Fear of negative evaluation and student anxiety in community college active learning science courses. CBE Life Sciences Education. May 2020. *These authors contributed equally. https://www.lifescied.org/doi/10.1187/cbe.19-09-0186
- 19. <u>Cooper KM</u>*, Gin LE**, Barnes ME, Brownell SE. An exploratory study of students with depression in undergraduate research experiences. CBE Life Sciences Education. *In press.* *These authors contributed equally. May 2020. https://www.lifescied.org/doi/full/10.1187/cbe.19-11-0217?af=R

Article is in the top 3% of all research outputs ever tracked by Altmetric and is #16 of 648 outputs from the CBE Life Sciences Education.

Commentary

Seckel. S. (2020). Depression can hit science undergrads hard: What to do about it. ASU Now.

McGlynn T. (2020). Recommended reads #174. Small Pond Science.

Cooper K. (2020). How can we, as mentors, help undergraduate researchers with depression? *BMC On Society*. Part of Springer Nature.

18. <u>Cooper KM</u>, Nadile EM*, Brownell SE. Don't joke about me: Student identities and perceptions of instructor humor in college science courses. Journal of Microbiology and Biology Education for the Inclusive Science special issue. April 2020.

https://www.asmscience.org/content/journal/jmbe/10.1128/jmbe.v21i1.2085

Commentary

Nidel EM. (2020). Instructors, be careful about joking around: Science students find topics about own identity offensive. ASU SOLS Teach Tech Blog.

- 17. **Cooper KM**, Blattman JN, Hendrix T*, Brownell SE. The impact of broadly relevant novel discoveries on student project ownership in a traditional lab course turned CURE. CBE- Life Sciences Education. November 2019. https://www.lifescied.org/doi/10.1187/cbe.19-06-0113
- 16. **Cooper KM**, Brownell SE, Gormally C. Coming out to the class: Identifying factors that influence college biology instructor decisions about whether to reveal their LGBQ identity in class. Journal of Women and Minorities in Science and Engineering. October 2019. http://www.dl.begellhouse.com/journals/00551c876cc2f027,4a7f1b59629473cd,3610e1d3176d3d99.ht ml
- 15. <u>Cooper KM</u>*, Gin LE**, Akeeh B^, Clark CE^, Hunter JS^, Roderick TB^, Elliott DB^, Gutierrez LA^, Mello RM^, Pfeiffer LD^, Scott RA*^, Arellano D^, Ramirez D^, Valdez EM^, Vargas C^, Velarde K^, Zheng Y, Brownell SE. Factors that predict biological sciences student persistence in undergraduate research experiences. PLoS One. August 2019. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0220186

Commentary:

Leander, S. (2019) ASU study shows positive lab environment critical for undergraduate success in research. *ASU Now*.

Highlighted by Phys.Org, Science Daily, and Eureka Alert.

Flaherty, C. (2018) Lab climate and persistence in undergraduate research? *Inside Higher Ed.*

Scott, R. (2019). Not all undergraduate research experiences are good. ASU SOLS Teach Tech Blog.

Seckel. S. (2020). Depression can hit science undergrads hard: What to do about it. ASU Now.

Johnson. K. (2020). Strategies and tips for inclusive advising. *PECOP Blog*.

Vargis C., Cooper K., (2020). How can we create more inclusive undergraduate research experiences for people excluded because of their ethnicity or race (PEERs)? *ASU SOLS Teach Tech Blog*.

Featured on SEISMIC Office Hours, a podcast hosted by Solina Solanki (June 2021).

14. **Cooper KM**[#], Gin LE^{#*}, Brownell SE. Diagnosing differences in what undergraduates in a fully online and in-person program know and do regarding medical school admission. (*these authors contributed equally). Advances in Physiology Education. May 2019. https://www.physiology.org/doi/10.1152/advan.00028.2019

Commentary:

Balli E. The College launches new Online Undergraduate Research Scholars Program. ASU News. September 2021. https://news.asu.edu/20210921-college-launches-new-online-undergraduate-research-scholars-program

13. **Cooper KM**, Brownell SE. Developing Discipline-based Education Research Course-based Research Experiences: Lessons learned and recommendations. Journal of Microbiology and Biology Education. September 2018.

http://www.asmscience.org/content/journal/jmbe/10.1128/jmbe.v19i2.1567

12. <u>Cooper KM</u>, Hendrix T^{*}*, Stephens M^{*}*, Cala JM^{*}*, Mahrer K^{*}, Krieg A^{*}*, Agloro A^{*}, Badini G^{*}, Barnes ME, Eledge B^{*}, Jones R^{*}, Lemon E^{*}, Mossimo N^{*}, Martin A^{*}, Ruberto T^{*}, Simonson K^{*}, Weaver J^{*}, Webb E^{*}, Zheng Y, Brownell SE. To be funny or not to be funny: Gender differences in student perceptions of instructor humor in college science courses. PLoS One. August 2018. http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0201258

Commentary:

Leander, S. (2018) Student-led study finds men and women differ in what topics they find funny and offensive. *ASU Now*.

Was the #1 most viewed ASU Now news story of 2018. Posted on Reddit and received over 35K views and 1300 comments. Highlighted by *ScienceCodex*, *Phys.Org*, *Brinkwire*, *Science Daily*, *Infosurhoy*, *EurekAlert*, *Wallstreet:online* and *Nature Partner Journals Science of Learning*.

Featured on WREK, a radio station at Georgia Tech (April, 2019). A full episode of Inside the Black Box, hosted by Pete Ludovice, Jennifer Leavy, and Ed Greco, was devoted to this work.

Flaherty, C. (2018) Why can't you trust an atom? *Inside Higher Ed.* Highlighted by *STEM Prof Newsletter*

Ross, J. (2018). No laughing matter? Classroom humour treads a fine line. *The Times Higher Education*.

Renner B (2019). Class Clowns: Most students appreciate teachers with a sense of humor, study finds. *Study Finds*.

Micu, A. (2018). Humor done right helps in the classroom, 99% of students report. Bad humor hurts. *ZME Science*.

Ferdowsian, R (2018). 'To be funny or not to be funny': ASU study finds disparities in responses to humor. *The State Press*.

Brownell, S. (2018). Should science instructors try to be funny? Yes, depending on what they joke about. *ASU SOLS Teach Tech Blog*

Webb E, Cooper KM. (2018). Should science teachers try to be funny? ASU- Ask A Biologist.

11. Wright CD, Huang AL*, **Cooper KM**, Brownell, SE. Exploring differences in decisions about exams among instructors of the same introductory biology course. Journal for the Scholarship of Teaching and Learning. July 2018.

https://digitalcommons.georgiasouthern.edu/cgi/viewcontent.cgi?article=1810&context=ij-sotl

10. Cooper KM*, Downing VR**, Brownell SE. The influence of active learning practices on student anxiety in large-enrollment college science classrooms. International Journal of STEM Education. June 2018. (*these authors contributed equally).

https://stemeducationjournal.springeropen.com/articles/10.1186/s40594-018-0123-6

Article is in the top 3% of all research outputs ever tracked by Altmetric and is #2 of 194 outputs from the International Journal of STEM Education.

Listed as the third most frequently cited International Journal of STEM Education article in the past two years

Highlighted by Science Magazine as an Editor's Choice for Education.

Commentary:

Jarvis C.L. (2020). The flip side of flipped classrooms. Chemical and Engineering News.

Highlighted by STEM Prof Newsletter (2018). Examining the link between active learning practices and anxious students.

Downing V. (2018). Considering Clickers & Anxiety: Implementing clicker technology so that it decreases student anxiety in the classroom. *ASU SOLS Teach Tech Blog*.

Brownell S. (2018). Is active learning making students anxious? It depends on how it's done. *Center for Biology and Society*, Arizona State University.

9. **Cooper KM**, Ding L, Stephens MS*, Chi MTH, Brownell SE. A course-embedded comparison of instructor-generated videos of either an instructor alone or an instructor and a student. CBE- Life Sciences Education. June 2018. https://www.lifescied.org/doi/abs/10.1187/cbe.17-12-0288

Commentary:

Hurlbert, D. (2018). Tutee or not tutee: Who should be on camera in your instructional video? *Carleton College Academic Technology Blog*.

8. **Cooper KM**, Krieg A*, Brownell, SE. Who perceives they're smarter? Exploring the influence of student characteristics on student academic self-concept. Advances in Physiology Education. April 2018. https://www.physiology.org/doi/full/10.1152/advan.00085.2017

Article downloaded over 25,000 times, is in the top 1% of all research outputs ever tracked by Altmetric, and is #2 of 874 outputs from Advances in Physiology Education.

Commentary:

This article generated local, national, and international press including:

Chokshi, N. (2018). Do men think they're better at science than women do? Well, actually... *New York Times*.

Fox, M. (2018). Not smart enough? Men overestimate intelligence in science class. NBC News.

Gillett, G. (2018). College men think they're smarter than they are; women are a little more realistic, study finds. *ABC News*.

Additionally, USA: CNN, CNBC, ABC, Yahoo! News, Fortune, Inside Higher Ed, Science Daily, Science Newsline, Mother Jones, Jezebel, Slate The Gist, and AZ Central. UK: The Times, Daily Mail, The Daily Telegraph, London Evening Standard, Times Higher Education, Irish Independent, Australia: The Australian, The Northern Star, India: DNA (Delhi), The Free Press Journal, The Times of India, in addition to being featured in dozens of other blogs and news organizations.

7. **Cooper KM***, Ashley M**, Brownell, SE. Breaking down barriers: A bridge program helps first year biology students become comfortable and make connections with faculty. Journal of College Science Teaching. March 2018. http://www.nsta.org/college/

Featured article in JCST March 2018 issue

6. Ashley M**, Cooper KM*, Cala JM*, Brownell SE. Building better bridges into STEM: A synthesis of 25 years of literature on STEM summer bridge programs. CBE Life Sciences Education. December 2017. (*these authors contributed equally) https://www.lifescied.org/doi/10.1187/cbe.17-05-0085

Featured article in CBE LSE December 2017 issue

5. **Cooper KM**, Ashley ME*, Brownell SE. Using expectancy value theory as a framework to reduce student resistance to active learning: a proof of concept. Journal of Microbiology and Biology Education. August 2017. http://www.asmscience.org/content/journal/jmbe/10.1128/jmbe.v18i2.1289

Featured as one of JMBE's most popular articles of 2017

- 4. **Cooper KM**, Soneral PA, Brownell SE. Define your goals before you design a CURE: A call to use backward design in planning course-based undergraduate research experiences. Journal of Microbiology and Biology Education. August 2017. http://www.asmscience.org/content/journal/jmbe/10.1128/jmbe.v18i2.1287
- 3. **Cooper KM**, Ashley M*, Brownell SE. A bridge to active learning: A summer bridge program helps students to maximize active learning experiences and the active learning experiences of others. CBE Life Sciences Education. March 2017. https://www.lifescied.org/doi/full/10.1187/cbe.16-05-0161

7th most read article in CBE Life Sciences Education in the second month it was published

2. **Cooper KM***, Haney B*, Krieg A*, Brownell SE. What's in a name? The importance of students perceiving an instructor knows their name in a high enrollment biology classroom. CBE Life Sciences Education. March 2017. (*these authors contributed equally) https://www.lifescied.org/doi/10.1187/cbe.16-08-0265

8th most read article in CBE Life Sciences Education in the first month it was published

Commentary:

Cooper KM. (2020). <u>Using Name Tents to Improve Engagement</u>. *UCF Center for Teaching and Learning Faculty Focus*.

Weimer, M. (2017). The Importance of Learning Students' Names. Faculty Focus Blog.

Krieg, A. (2017) What's the Point of Using Student Names in Large Courses? *ASU SOLS Teachtech blog*.

Highlighted in *STEM PROF newsletter* (2017). I Got a Name: Why It Matters that Instructors Know Student Names.

1. **Cooper KM**, Brownell SE. Coming out in class: The challenges and opportunities of active learning for LGBTQIA students in an undergraduate biology class. CBE Life Sciences Education as part of the Broadening Participation Special Issue. September 2016. https://www.lifescied.org/doi/10.1187/cbe.16-01-0074

2nd most read article in CBE Life Sciences Education in the first month it was published.

Article is in the top 2% of all research outputs ever tracked by Altmetric and is #15 of 598 outputs from CBE Life Sciences Education.

Commentary:

Lieberman, G. (2018) New data collection by NSF could change the perception of LGBT+ in STEM. ASU State Press.

Leander, S. (2016.) 'Coming out' in the classroom, but not by choice. ASU Now.

Pedersen, T. (2016). Interactive Classrooms May Push LGBT Students to "Come Out" Before They Are Ready. *PsychCentral*.

Cooper, K. (2016). How Instructors Can Make Their Active Learning Classrooms More Inclusive to Members of the LGBTQIA Community. *ASU SOLS Teachtech blog*

Featured on Teach Learn Pima a podcast hosted by Mays Iman (Sept. 2019).

Manuscripts under re-review after revision

Busch CA*. Supriya K. Brownell SE*. Cooper KM*. Unveiling concealable stigmatized identities in class: The impact of an instructor revealing her LGBTQ+ identity to students in a large-enrollment biology course. Under re-review at CBE Life Sciences Education. *These senior authors contributed equally.

Mohammed TM*. Gin LE*. Wiesenthal NJ*. Cooper KM. The experiences of undergraduates with depression in online science learning environments. Under re-review at CBE Life Sciences Education.

Manuscripts invited for revision after peer review

Gin LE, Pais D, Brownell SE[#], <u>Cooper KM</u>. * Students with disabilities in undergraduate research: Challenges and opportunities. Under review at CBE Life Sciences Education. *These senior authors contributed equally.

Abraham A*. Busch CA*. Brownell SE[#]. <u>Cooper KM</u>[#]. Instructor perceptions of student incivility in the online undergraduate science classroom. Under review at the Journal of Microbiology and Biology Education.

Manuscripts under review

Busch CA*, Mohammed TF*, Nadile EM, <u>Cooper KM.</u> Depression in online learning: aspects of courses that help and hinder. Under review at PLoS One.

Book Chapter

Cooper KM, Brownell SE. Student anxiety and fear of negative evaluation in active learning science classrooms. Chapter in book: Active learning in college science, the case for evidence-based practice.

Springer Nature. February 2020. https://link.springer.com/chapter/10.1007/978-3-030-33600-4_56

Teaching manuscript

Cala JM*, Cooper KM, Brownell SE. Using a Sequential Interpretation of Data in Envelopes (SIDE) approach to identify a mystery TRP channel. CourseSource. September 2018. https://doi.org/10.24918/cs.2018.7

Guest blogs

Vargas C, Cooper KM. (2020) How can we create more inclusive undergraduate research experiences for people excluded because of their ethnicity or race (PEERs)? ASU Teach Tech Blog. http://asutechwebs.blogspot.com/2020/11/how-can-we-create-more-inclusive.html

Cooper KM. (2020). How can we, as mentors, help undergraduate researchers with depression? *BMC On Society*. Part of Springer Nature. http://blogs.biomedcentral.com/on-society/2020/06/29/how-can-we-as-mentors-help-undergraduate-researchers-with-depression/

Cooper KM (2020, June) Why I Come Out to my Biology Classrooms. American Society of Cell Biology Pride Month Blog. https://www.ascb.org/careers/why-i-come-out-to-my-biology-classrooms/

Cooper KM. (2020, March) Using Name Tents to Improve Engagement. UCF Faculty Center for Teaching and Learning Faculty Focus Blog. https://fctl.ucf.edu/wp-content/uploads/sites/5/2020/03/FF_2020_March.pdf

Webb E, **Cooper KM.** (2018, September) Should science teachers try to be funny? ASU- Ask A Biologist. https://askabiologist.asu.edu/plosable/science-teacher-humor

Cooper, K. (2016, September 1) How instructors can make their active learning classrooms more inclusive to members of the LGBTQIA community. SOLS Teachtech Blog. http://asutechwebs.blogspot.com/2016/09/

Cooper, K. (2015, September 30) The hidden economic costs of active learning. SOLS Teachtech Blog. http://asutechwebs.blogspot.com/2015/09/

Scientific Conference Proceedings

Iyer, N., **Cooper, K.,** Yang, J., and Zenhausern, F. (2009). Measuring Elastic Properties of Highly Metastatic Cells using Nano-Capillary Wrinkling. *MRS Proceedings* (Vol. 1185, pp. 1185-II06). Cambridge University Press.

Iyer, N., Cooper, K., Yang, J., and Zenhausern, F. (2009). Measuring elastic properties of thin biological films using capillary wrinkling. In A. D'Amore, D. Acierno, & L. Grassia (Eds.), *AIP Conference Proceedings* (Vol. 1042, No. 1, pp. 41-43). AIP.

PRESENTATIONS

43 invited presentations: 34 invited talks or seminars and 9 invited workshops. 19 peer reviewed talks.

Invited talks and seminars, upcoming

- 34. Cooper KM. Plenary Talk. Toward more inclusive biology learning environments: identifying inequities and possible underlying mechanisms. American Physiological Society Institute on Teaching and Learning. Madison, WI. June 2022.
- 33. **Cooper KM.** Session: Innovative techniques for developing an inclusive teaching environment. Presentation: Examining the experiences of LGBTQ+ students and students with disabilities to make biology education more inclusive. American Physiological Society's (APS) Annual Meeting at Experimental Biology 2022 (EB2022).
- 32. **Cooper KM**. Creating more inclusive science learning environments for LGBTQ+ individuals. Department of Biodiversity, Earth & Environmental Sciences Seminar, Drexel University. Online. Philadelphia, PA. February 2022.
- 31. **Cooper KM.** TBD. Discipline-based Science Education Research Center. University of Pittsburgh. Pittsburg, PA. January 2022.
- 30. **Cooper KM.** TBD. Department of Microbiology. University of California Davis. Davis, CA. January 2022.
- 29. **Cooper KM.** The opportunities and challenges of active learning for student anxiety, LGBTQ+ students, and students with disabilities. Department of Neurobiology, Physiology, and Behavior. University of California Davis. Davis, CA. January 2022.

Invited talks and seminars

- 28. Cooper KM. The impact of research and teaching on graduate student anxiety and depression. National Directors of Graduate Studies Changing Culture of Graduate Education Seminar Series. Online, December 2021.
- 27. Cooper KM. Gin LE. Wiesenthal NJ. How teaching and research affect graduate anxiety and depression. Bio and Society Spotlight Series. Arizona State University. Tempe, AZ. November 2021.
- 26. Cooper KM. How undergraduates' identities affect their experiences collaborating with peers in active learning courses. Department of History. Cooperation in Education Seminar Series. University of Texas San Antonio. San Antonio, TX. November 2021.
- 25. Cooper KM. How biology learning environments affect students with anxiety and depression: identifying and lessening challenges. Biology Department Seminar. Georgia Tech. Atlanta, GA. November 2021.
- 24. **Cooper KM**. Munstermann M. Students who analyze their own data in a course-based undergraduate research experience (CURE) show gains in scientific identity and emotional ownership of research. Tropical Conservation Biology and Environmental Sciences (TCBES) Seminar Series. University of Hawaii, Hilo. October 2021.
- 23. Cooper KM. Creating inclusive undergraduate STEM classrooms. University of Rhode Island, STEM Teach Week Seminar. June 2021.
- 22. Cooper KM. Munstermann M. Students who analyze their own data in a course-based undergraduate research experience (CURE) show gains in scientific identity and emotional ownership

- of research. JMBE LIVE! Invited webinar. American Society of Microbiology Education Department. April 2021
- 21. **Cooper KM.** Hot off the press data on undergraduate anxiety and depression online biology courses. HHMI Inclusive Excellence School of Life Sciences Retreat. Arizona State University, Tempe, AZ, USA. April 2021.
- 20. Cooper KM. Creating more inclusive biology learning environments for LGBTQ+ individuals. Invited Biology Education Area Seminar. Department of Biological Sciences at Purdue University. Online. West LaFayette, IN, USA. April 2021.
- 19. **Cooper KM**. Creating more inclusive STEM learning environments for LGBTQ+ individuals. UCLA Queer and Trans in STEM invited seminar. University of California, Los Angeles, Los Angeles, CA, USA. March 2021.
- 18. Cooper KM. Factors that predict student persistence in research: From lab environment to mental health. Sloan Equity and Inclusion in STEM Introductory Classes (SEISMIC) invited seminar. University of Michigan, Ann Arbor, MI, USA. February 2021.
- 17. **Cooper KM**. Vargas C. Why underrepresented minority students are leaving undergraduate research experiences. Arizona State University Research for Inclusive STEM Education (RISE) Center. Virtual presentation due to COVID19. Tempe, AZ, USA. October 2020.
- 16. **Cooper KM**. Factors that predict student persistence in research: From lab environment to mental health. University of Alaska Fairbanks invited seminar. Virtual presentation due to COVID19. Fairbanks, AK, USA. October 2020.
- 15. Cooper KM. How biology learning environments affect students with anxiety and depression. University of Pittsburg. National Physics Education Research Consortium of Graduate Students (PERCoGS). Virtual presentation due to COVID19. Pittsburg, PA, USA. October 2020.
- 14. **Cooper KM**. Nadile EM. How instructor decisions impact how students feel and behave in college biology classrooms. University of Massachusetts Lowell. Virtual presentation due to COVID19. Lowell, MA, USA. October 2020.
- 13 **Cooper KM**. Creating more inclusive classrooms for students with anxiety and depression. Arizona State University Resilient Teaching Series. Virtual presentation due to COVID19. Tempe AZ, USA. September 2020.
- 12. Cooper KM. Identifying and lessening challenges for undergraduates with anxiety in biology learning environments. Arizona State University School of Life Sciences New Faculty Showcase. Virtual presentation due to COVID19. Tempe, AZ, USA. September 2020.
- 11. Cooper KM. Factors that predict student persistence in research: From lab environment to mental health. Cary Institute of Ecosystem Studies. Virtual presentation due to COVID19. Millbrook, NY, USA. May 2020.
- 10. **Cooper KM**. Identifying and lessening the challenges for undergraduates with anxiety and depression in biology learning environments. Virtual presentation due to COVID19. Tempe, AZ, USA. April 2020.

- 9. Cooper KM. Factors that predict student persistence in research: From lab environment to mental health. Florida International University STEM Transformation Institute invited seminar. Miami, FL, USA. April 2020. *Canceled due to COVID19*.
- 8. Cooper KM. Factors that predict student persistence in research: From lab environment to mental health. University of Alabama Birmingham Research on STEM Education (ROSE) invited seminar. Virtual presentation due to COVID19. Birmingham, AL, USA. March 2020.
- 7. Cooper KM. Toward more inclusive active learning classrooms: How groups of students are differentially impacted by active learning. University of California San Diego Division of Biological Sciences Seminar Program. San Diego, CA, USA. February 2020.
- 6. **Cooper KM**. Toward more inclusive active learning classrooms: Identifying inequities and possible underlying mechanisms. Auburn University. Department of Biological Sciences Seminar, Auburn AL, USA. November 2019.
- 5. Cooper KM. Factors that predict student persistence in research: From lab environment to mental health. University of Central Florida, Department of Chemistry invited seminar. Orlando, FL, USA. October 2019.
- 4. Cooper KM. Toward more inclusive active learning classrooms: Identifying inequities and possible underlying mechanisms. University of Central Florida. Orlando, FL, USA. March 2019.
- 3. Cooper KM. Toward more inclusive active learning classrooms: Identifying inequities and possible underlying mechanisms. Western Michigan University. Kalamazoo, MI, USA. January 2019.
- 2. Cooper KM, Brownell SE. A Sense of Mission: Assessment of courses that integrate teaching and research. Invited by the Howard Hughes Medical Association (HHMI) at the Council of Undergraduate Research (CUR) Dialogues Meeting. Washington DC, USA. February 2018.
- 1. **Cooper KM**. Coming out in class: The challenges and opportunities of active learning for LGBTQIA students in an undergraduate biology class. Arizona State University LGBT Showcase. Tempe, AZ, USA. April 2016.

Invited workshops, upcoming

- 9. Cooper KM. Building inclusive and fair classrooms: Spotting sources of bias in biology classrooms. American Physiological Society Institute on Teaching and Learning. June 2022.
- 8. Cooper KM. Creating more inclusive academic science environments for students with different identities. University of Massachusetts Amherst. February 2022.

Invited workshopss

- 7. **Cooper KM**, Building inclusive and fair classrooms: Spotting sources of bias in biology classrooms. University of Alabama. March 2019. Virtual presentation due to COVID19.
- 6. **Cooper KM**, Donnelly J. Understanding students' responses to active learning. Faculty Center for Teaching and Learning 2019 Winter Conference. University of Central Florida. December 2019.

- 5. Cooper KM, Brownell SE. Building inclusive and fair classrooms: Spotting sources of bias in biology classrooms. University of Heidelberg Center for Organismal Studies seminar. Heidelberg, Germany. July 2017.
- 4. **Cooper KM**, Brownell SE. Building inclusive and fair classrooms: Spotting sources of bias in biology classrooms. ASU Human Evolution and Social Change seminar. Tempe, AZ, USA. March 2017.
- 3. **Cooper KM**, Brownell SE. Building inclusive and fair classrooms: Spotting sources of bias in biology classrooms. Society for the Advancement of Biology Education Research (SABER) West meeting. Irvine, CA, USA. January 2017.
- 2. **Cooper KM**, Brownell SE. Building inclusive and fair classrooms: Spotting sources of bias in biology classrooms. ASU Committee for Campus Inclusion (CCI) Diversity and Inclusion Educational Conference. Tempe, AZ, USA. November 2016.
- 1. **Cooper KM**, Brownell SE. Building inclusive and fair classrooms: Spotting sources of bias in biology classrooms. ASU Evidence-based Teaching Seminar Series. Tempe, AZ, USA. September 2016.

Peer-reviewed talks

Trainees who co-presented with me are designated with a *

- 20. **Cooper KM**. Examining how graduate research and teaching affect depression in life sciences Ph.D. students. Education Minisymposium: Silver Linings: Responsive Teaching through Major Transitions and Beyond at the ASCB Virtual 2021 Meeting. Dec. 2021
- 19. **Cooper KM**. Ph.Depression: Examining how graduate research and teaching affect depression in life sciences Ph.D. students. Society for the Advancement of Biology Education Research (SABER). Held electronically due to COVID19. July 2021.
- 18. **Cooper KM.** Creating more inclusive online biology learning environments for students with anxiety and depression. American Society for Microbiology Conference of Undergraduate Educators (ASMCUE). Held electronically due to COVID19. June 2021.
- 17. **Cooper KM**. Call on me! Undergraduates' perceptions of voluntarily asking and answering questions in front of large-enrollment science classes. Society for the Advancement of Biology Education Research (SABER) West. Held electronically due to COVID19. January 2021.
- 16. **Cooper KM**. Exploring student depression in undergraduate research experiences. Society for the Advancement of Biology Education Research (SABER). Held electronically due to COVID19. July 2020
- 15. **Cooper KM**. The impact of research anxiety on biology undergraduates' intentions to pursue a science research career. Society for the Advancement of Biology Education Research (SABER). Minneapolis, MN, USA. July 2019.
- 14. **Cooper KM**. The impact of research anxiety on biology undergraduates' intentions to pursue a science research career. Undergraduate Biology Education Gordon Research Seminar. Lewiston, ME, USA. June 2019.

- 13. **Cooper KM**, Cala J*. Identifying the unwritten rules of obtaining undergraduate research experiences. Society for the Advancement of Biology Education Research (SABER) West coast regional meeting. Irvine, CA, USA. January 2019.
- 12. **Cooper KM**. Comparison of an immunology cookbook lab course and a course-based undergraduate research experience. The Future of Education International Conference. Pixel-International Education and Training Institution. Florence, Italy. June 2018.
- 11. **Cooper KM**, Brownell SE. A course-embedded comparison of instructor-generated videos of either an instructor alone or an instructor and a student. Experimental Biology. International Conference of Learning Sciences. London, United Kingdom. June 2018.
- 10. **Cooper KM**. Who perceives they're smarter? The influence of student identities on student academic self-concept in physiology. ASU Diversity and Inclusion Science Initiative. Tempe, AZ, USA. February 2018.
- 9. Cooper KM, Downing VD*. How to make large-enrollment active learning science classes less anxiety inducing. ASU Diversity and Inclusion Science Initiative. Tempe, AZ, USA. February 2018.
- 8. **Cooper KM**. To be funny or not to be funny: Student perceptions of instructor use of humor in college science classrooms. ASU Diversity and Inclusion Science Initiative. Tempe, AZ, USA. February 2018.
- 7. **Cooper KM**, Hendrix T*. To be funny or not to be funny: Student perceptions of instructor use of humor in college science classrooms. Society for the Advancement of Biology Education Research (SABER) West coast regional meeting. Irvine, CA, USA. January 2018.
- 6. **Cooper KM**, Brownell SE. Coming out in class: The influence of covert identities on student experiences in active learning classrooms. European Molecular Biology Laboratory (EMBL) Equality and Diversity Committee's Inspirational Seminar. Heidelberg, Germany. July 2017.
- 5. **Cooper KM,** Brownell SE. Coming out in class: The influence of covert identities on student experiences in active learning classrooms. International Higher Education of Teaching and Learning (HETL) Annual Meeting. Paisley, Scotland. June 2017.
- 4. **Cooper KM**. Coming out in class: The influence of covert identities on student experiences in active learning classrooms. Society for the Advancement of Biology Education Research (SABER) West meeting. Irvine, CA, USA. January 2017.
- 3. **Cooper KM**. A summer bridge program helps students to maximize active learning experiences and the active learning experiences of others. American Society for Cell Biology (ASCB) meeting. San Francisco, CA, USA. December 2016.
- 2. **Cooper KM**. A bridge to active learning: A summer bridge program helps students to maximize active learning experiences and the active learning experiences of others. Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN, USA. July 2016.
- 1. **Cooper KM**. What's in a name? The importance of student perceptions of an instructor knowing their names in a high enrollment biology course. Society for the Advancement of Biology Education Research (SABER) meeting. Minneapolis, MN, USA. July 2016.

Conference Poster Presentations

Trainees who co-presented with me are designated with a *

- 36. **Cooper KM.** Examining how graduate research and teaching affect depression in life sciences Ph.D. students. American Society of Cell Biology (ASCB) annual meeting. Washington DC, USA. December 2021
- 35. **Cooper KM.** The impact of student research anxiety on undergraduate intention to pursue a scientific research career. American Society of Cell Biology (ASCB) annual meeting. Washington DC, USA. December 2019
- 34. **Cooper KM.** Factors that predict life sciences student persistence in undergraduate research experiences. American Society of Cell Biology (ASCB) annual meeting. Washington DC, USA. December 2019.
- 33. **Cooper KM.** Fear of negative evaluation: A novel construct underlying student anxiety in active learning college science courses. Society for the Advancement of Biology Education Research (SABER) annual meeting. Minneapolis, MN, USA. July 2019.
- 32. **Cooper KM**. Fear of negative evaluation: A novel factor underlying student anxiety in active learning. Undergraduate Biology Education Gordon Research Conference. Lewiston, ME. June 2019.
- 31. **Cooper KM**. Leaving research: Factors that impact a student leaving an academic year research experience. Focus URE conference. Stuttgart, Germany. June 2019.
- 30. **Cooper KM**. Leaving research: Factors that impact a student leaving an academic year research experience. Society for the Advancement of Biology Education (SABER) West meeting. Irvine, CA, USA. January 2019.
- 29. **Cooper KM**. Gender differences of student perceptions of instructor humor in college science courses. American Society for Cell Biology (ASCB) annual meeting. San Diego, CA, USA. December 2018.
- 28. **Cooper KM**. The influence of active learning practices on student anxiety in large-enrollment college science classrooms. American Society for Cell Biology (ASCB) annual meeting. San Diego, CA, USA. December 2018.
- 27. **Cooper KM**. Coming out to the class: Identify factors that influence college biology instructor decisions about whether to reveal their LGBQ identity in class. Society for the Advancement of Biology Education Research (SABER) annual meeting. Minneapolis, MN, USA. July 2018.
- 26. **Cooper KM**. A course-embedded comparison of instructor-generated videos of either an instructor alone or an instructor and a student. Society for the Advancement of Biology Education Research (SABER) annual meeting. Minneapolis, MN, USA. July 2018.
- 25. Cooper KM. To be funny or not to be funny: Students' perception of humor used by instructors in college science courses. Society for the Advancement of Biology Education Research (SABER) annual meeting. Minneapolis, MN, USA. July 2018.

- 24. **Cooper KM**. Who perceives they're smarter? Exploring the experience of gender, transfer student status, and native English speaking on student academic self-concept in physiology. Experimental Biology annual meeting. San Diego, CA, USA. April 2018.
- 23. **Cooper KM**. A course-embedded comparison of instructor-generated videos of either an instructor alone or an instructor and a student. Experimental Biology annual meeting. San Diego, CA, USA. April 2018.
- 22. **Cooper KM**. Arizona State University's LEAP Scholars Program. Experimental Biology annual meeting- Outreach and Education. San Diego, CA, USA. April 2018.
- 21. **Cooper KM**. Identifying the unwritten rules for participating in undergraduate research. Diversity and Inclusion Science Initiative. Tempe, AZ, USA. February 2018.
- 20. **Cooper KM**. Same curriculum, different mice, different outcomes: A reductionist approach to probing the impact of working on broadly relevant novel research. Society for the Advancement of Biology Education Research (SABER) West coast regional meeting. Irvine, CA, USA. January 2018.
- 19. **Cooper KM**. Identifying the unwritten rules of obtaining undergraduate research experiences. Society for the Advancement of Biology Education Research (SABER) West coast regional meeting. Irvine, CA, USA. January 2018.
- 18. Cooper KM. Learning anxiously: Alleviating and exacerbating student anxiety in active learning classrooms. Society for the Advancement of Biology Education Research (SABER) West coast regional meeting. Irvine, CA, USA. January 2018.
- 17. **Cooper KM**. To be funny or not to be funny: Students' perception of humor used by instructors in college science courses. Society for the Advancement of Biology Education Research (SABER) annual meeting. Minneapolis, MN, USA. July 2017.
- 16. **Cooper KM**. Who perceives they're smarter? Males have a higher academic self-concept in a large-enrollment physiology course. Society for the Advancement of Biology Education Research (SABER) annual meeting. Minneapolis, MN, USA. July 2017.
- 15. **Cooper KM**. Learning Anxiously: The challenges and benefits of active learning for students with anxiety. Gordon Research Conference, Undergraduate Biology Education Research. Stonehill College, Easton, MA, USA. July 2017.
- 14. **Cooper KM.** Who perceives they're smarter? Males have a higher academic self-concept in a large-enrollment physiology course. Gordon Research Conference, Undergraduate Biology Education Research. Stonehill College, Easton, MA, USA. July 2017.
- 13. **Cooper KM**. Capital Gains: The influence of a summer bridge program on first year students' social capital. National Association for Research in Science Teaching (NARST) annual meeting. San Antonio, TX, USA. April 2017.
- 12. **Cooper KM**. A summer bridge program helps students to maximize active learning experiences and the active learning experiences of others. Biology Leadership Conference. Tucson, AZ, USA. February 2017.

- 11. **Cooper KM**. Who perceives they're smarter? Males have a higher academic self-concept in a large-enrollment physiology course. Society for the Advancement of Biology Education Research (SABER) West meeting. Irvine, CA, USA. January 2017.
- 10. **Cooper KM**. What's in a name? The importance of student perceptions of an instructor knowing their names in a high enrollment biology course. American Society for Cell Biology (ASCB) meeting. San Francisco, CA, USA. December 2016.
- 9. **Cooper KM.** Coming out in class: The challenges and opportunities of active learning for LGBTQIA students in an undergraduate biology class. American Society for Cell Biology (ASCB) meeting. San Francisco, CA, USA. December 2016
- 8. Cooper KM. An exploratory interview study of what factors impact student participation in undergraduate research. The Council on Undergraduate Research (CUR) meeting. Tampa, FL, USA. June 2016.
- 7. **Cooper KM**. A high enrollment course-based undergraduate research experience improves student conceptions of scientific thinking. The Council on Undergraduate Research (CUR) meeting. Tampa, FL, USA. June 2016.
- 6. **Cooper KM**. Design elements of a high-enrollment course based undergraduate research experience may lead to inaccurate student conceptions about scientific research. Experimental Biology meeting. San Diego, CA, USA. April 2016.
- 5. Cooper KM. Design elements of a high enrollment course based undergraduate research experience may lead to inaccurate student conceptions about scientific research. Freshman Research Initiative (FRI) Biennial Conference. Austin, TX, USA. March 2016.
- 4. **Cooper KM**. BioBridge: A two-week intensely active learning biology program has a positive impact on incoming first year students. ASU Institute for the Science of Teaching and Learning (ISTL) Learning and Innovation Showcase. Tempe, AZ, USA. January 2016.
- 3. **Cooper KM**. A high enrollment course-based undergraduate research experience improves student conceptions of scientific thinking. ASU Association for Women in Science (AWIS) JumpStarting STEM Careers Conference. Tempe, AZ, USA. January 2016.
- 2. **Cooper KM**. A high enrollment course-based undergraduate research experience improves student conceptions of scientific thinking. American Society for Cell Biology (ASCB) annual meeting. San Diego, CA, USA. December 2015.
- 1. **Cooper KM**. A high enrollment course-based undergraduate research experience improves student conceptions of scientific thinking and ability to interpret data. Society for the Advancement in Biology Education Research (SABER) meeting. Minneapolis, MN, USA. July 2015.

Trainee invited talks

6. Cooper KM. **Gin LE. Wiesenthal NJ.** How teaching and research affect graduate anxiety and depression. Bio and Society Spotlight Series. Arizona State University. Tempe, AZ. November 2021.

- 5. **Gin LE.** Challenges and opportunities for students with disabilities in evolving learning environments: active learning, online instruction, and undergraduate research. University of California San Diego's Science of Teaching Seminar Series. November 2021.
- 4. **Busch CA.** Coming Out to the Class: Students Benefit from an Instructor Revealing her LGBTQ+ Identity in a Large-enrollment Biology Course. Scientific Queeries. University of Alberta, Edmonton, Canada. June 2021. Presented virtually due to COVID-19.
- 3. **Gin LE.** Challenges for students with disabilities in active learning, undergraduate research, and the transition to online. Duke University Biology Department's Inclusion, Diversity, Equity, and Anti-Racism (IDEA) Graduate Committee. April 2020. Presented virtually due to COVID-19.
- 2. **Gin LE**. Challenges for students with disabilities in active learning and the transition to online. University of Washington Biology Learning and Teaching meeting. Seattle, WA. February 2020. Presented virtually due to COVID-19.
- 1. **Gin LE.** Challenges for students with disabilities in active learning, undergraduate research, and the transition to online. Washington State University Seminar for the School of Molecular Biosciences. Pullman, WA. January 2020. Presented virtually due to COVID-19.

Trainee peer-reviewed talks and poster presentations, upcoming

- 79. **Wiesenthal, NJ.** Examining how research and teaching affect depression in life sciences Ph.D. students. (poster) American Association for the Advancement of Science (AAAS) annual meeting. Virtual conference due to COVID-19. February 2022.
- 78. **Abraham AE,** Busch CA, Brownell SE, Cooper KM. Instructor perceptions of undergraduate incivility in online science courses. (poster). American Association for the Advancement of Science (AAAS) Annual Meeting. February 2022.
- 77. **Busch, CA.** Coming out to the class: Students benefit from an instructor revealing her LGBTQ+ identity in a large-enrollment biology course. (talk). The Society for Integrative and Comparative Biology (SICB). Phoenix, AZ. January 2022.
- 76. **Mohammed, T.** The impact of large-enrollment online college science courses on student anxiety. (poster). The Society for Integrative and Comparative Biology (SICB). Phoenix, AZ. January 2022.
- 75. **Gin, LE**. Challenges and opportunities for students with disabilities in life science undergraduate research experiences. (talk). The Society for Integrative and Comparative Biology (SICB). Phoenix, AZ. January 2022.
- 74. **Wiesenthal, NJ**. PhDepression: Examining how graduate research and teaching affect depression in life sciences PhD students. (talk). The Society for Integrative and Comparative Biology (SICB). Phoenix, AZ. January 2022.

Trainee peer-reviewed talks and poster presentations

73. **Wiesenthal, NJ.** The impacts of concealing and revealing depression among life sciences Ph.D. students. The American Society for Cell Biology (ASCB) meeting. Virtual conference due to COVID-19. (poster). December 2021.

- 72. **Gin LE**. Challenges and opportunities for students with disabilities in life science undergraduate research experiences. American Society for Cell Biology EMBO Virtual Meeting. (talk). Held remotely due to COVID-19. December 2021.
- 71. **Busch CA.** Coming Out to the Class: Students Benefit from an Instructor Revealing her LGBTQ+ Identity in a Large-enrollment Biology Course. (poster). American Society for Cell Biology (ASCB) Cell Bio Virtual 2021. December 2021.
- 70. **Mohammed, TF**. The impact of large-enrollment online college science courses on student anxiety. (talk). 3rd Annual BioSci Southwest Symposium. October 2021.
- 69. **Abraham AE**, Busch CA, Brownell SE, Cooper KM. Instructor perceptions of student incivility in the online undergraduate science classroom (poster). BioSci Southwest Symposium. Tempe, AZ. October 2021.
- 68. **Busch CA.** Coming Out to the Class: Students Benefit from an Instructor Revealing her LGBTQ+ Identity in a Large-enrollment Biology Course (talk). Out in Science, Technology, Engineering, and Mathematics (oSTEM). Held remotely due to COVID-19. October 2021.
- 67. **Wiesenthal, NJ.** Navigating academic biology as an LGBTQ+ Ph.D. student: learning, teaching, and doing research (talk). Out in Science, Technology, Engineering, and Mathematics (oSTEM) Conference 2021. Held remotely due to COVID-19. October 2021.
- 66. **Gin LE.** Students with disabilities in undergraduate research: Challenges and opportunities (talk). Inclusion in Science Learning a New Direction: A Conference on Disability in STEM (ISLANDS) 2021 Annual Meeting. (talk). Virtual conference due to COVID19. September 2021.
- 65. **Busch CA.** Coming out to the class: Students benefit from instructor revealing LGBTQ+ identity in a large-enrollment biology course (talk). American Chemical Society (ACS). Virtual conference due to COVID19.
- 64. **Gin LE**. Challenges and opportunities for students with disabilities resulting from the rapid transition to online course delivery during COVID-19 (talk). American Association of Physics Teachers (AAPT) Summer Meeting. Virtual conference due to COVID19.
- 63. **Mohammed T.** The impact of online college science courses on student anxiety (poster). 2021 American Association of Physics Teachers (AAPT) Summer Meeting. Virtual conference due to COVID19.
- 62. **Gin LE.** An exploration across institution types of undergraduate life sciences student decisions to stay in or leave an academic-year research experience (poster). Society for the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2021.
- 61. **Mohammed T.** The Effects of Online Science Learning Environments on Undergraduates with Depression (poster). Society for the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2021.
- 60. **Wiesenthal N.** Exploring depression as a concealable stigmatized identity: factors that influence Ph.D. students to conceal or reveal their depression in graduate school programs (poster). Society for

the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2021.

- 59. **Gin, LE.** Challenges and opportunities for students with disabilities in life science undergraduate research experiences (talk). SABER 2021. Virtual conference due to COVID19. July 2021.
- 58. **Busch C.** Coming Out to the Class: Students Benefit from Instructor Revealing LGBTQ+ Identity in a Large-enrollment Biology Course. (talk). Society for the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2021.
- 57. **Abraham A.** Instructor perceptions of student incivility in the online undergraduate science classroom during the COVID-19 pandemic (poster). Society for the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2021.
- 56. **Busch C.** To what extent do science and engineering instructors reveal or conceal potentially invisible identities to students? PhD student (poster). Society for the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2021.
- 55. **Nadile E.** Student perceptions of personalized emails with their names in an upper-level online biology course (poster). American Society of Microbiology Conference for Undergraduate Educators (ASMCUE). Virtual conference due to COVID19. June 2021.
- 54. **Mohammed T.** The experiences of students with depression in online science learning environments (poster). American Society of Microbiology Conference for Undergraduate Educators (ASMCUE). Virtual conference due to COVID19. June 2021.
- 53. **Busch C.** Creating more inclusive biology learning environments for LGBTQ+ individuals (talk). American Society of Microbiology Conference for Undergraduate Educators (ASMCUE). Virtual conference due to COVID19. June 2021.
- 52. **Wiesenthal N.** The effect of research and teaching on depression in life sciences PH.D. students (poster). American Society of Microbiology Conference for Undergraduate Educators (ASMCUE). Virtual conference due to COVID19. June 2021.
- 51. **Wiesenthal N.** The effect of research and teaching on depression in life sciences PH.D. students (poster). Experimental Biology. Virtual conference due to COVID19. April 2021.
- 50. **Busch C.** Student benefit from instructor revealing LGBTQ+ identity in an upper-level physiology course (poster). Experimental Biology. Virtual conference due to COVID19. April 2021.
- 49. **Wiesenthal N.** The effect of research and teaching on depression in life sciences PH.D. students (talk). Experimental Biology. Virtual conference due to COVID19. April 2021.
- 48. **Busch C.** Student benefit from instructor revealing LGBTQ+ identity in an upper-level physiology course (talk). Experimental Biology 2021. Virtual conference due to COVID19. April 2021.

Awarded 2021 Teaching Section Research Recognition Award. Awarded Graduate College Q4 Online/Remote Travel Award for the Experimental Biology 2021 Conference

- 47. **Mohammed T.** The effects of online science learning environments on undergraduates with depression (poster). Experimental Biology. Virtual conference due to COVID19. April 2021.
- 46. **Abraham A.** Instructor perceptions of student incivility in the online undergraduate science classroom during the COVID-19 pandemic (talk). ASU SOLUR Symposium. Virtual symposium due to COVID19. April 2021.
- 45. **Mohammed T.** The effects of online science learning environments on undergraduates with depression (talk). ASU SOLUR Symposium. Virtual symposium due to COVID19. April 2021.
- 44. **Nadile EM.** Call on me! Science undergraduates' perceptions of voluntarily asking questions (poster). American Association for the Advancement of Science (AAAS). Virtual conference due to COVID19. February 2021.

Awarded 1st prize in the AAAS Student E-Poster Competition-Social Science Division

- 43. **Gin LE**. Challenges and opportunities for students with disabilities resulting from the rapid transition to online course delivery during COVID-19 (talk). SABER West Virtual Meeting. Virtual conference due to COVID19. January 2021.
- 42. **Nadile EM.** Call on me! Science undergraduates' perceptions of voluntarily asking questions (talk). National Association for Biology Teachers (NABT). Virtual conference due to COVID19. November 2020.

Awarded first prize at NABT Poster Competition

- 41. **Gin LE.** Accessible active learning: To what extent is active learning inclusive for science undergraduates with disabilities? (talk). 2nd Annual BioSci Southwest Symposium. Virtual conference due to COVID19. October 2020.
- 40. **Nadile EM.** Call on me! Science undergraduates' perceptions of voluntarily asking questions (talk). 2nd Annual BioSci Southwest Symposium. Virtual conference due to COVID19. October 2020.
- 40. **Gin LE**. Factors that predict life sciences student persistence in undergraduate research experiences across institution types (poster). ASU Institute of Social Science Research (ISSR) Poster Competition. Virtual conference due to COVID19. October 2020.
- 39. **Gin LE.** Accessible active learning: To what extent is active learning inclusive for science undergraduates with disabilities? (talk). Geological Society of America (GSA) annual meeting. Virtual conference due to COVID19. October 2020.
- 38. **Turner A**. Publications CURE all: Student-perceived benefits of co-authoring a peer-reviewed scientific publication stemming from a molecular genetics course-based undergraduate research experience (poster). Society for the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2020.
- 37. **Gin LE.** Factors that predict life sciences student persistence in undergraduate research experiences across institution types (poster). Society for the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2020.

- 36. **Downing VR**. Fear of negative evaluation and student anxiety in community college active learning science courses (poster). Society for the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2020.
- 34. **Scott RA**. It's in the syllabus... or is it? How syllabi can serve as tools for creating inclusive classrooms (poster). Society for the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2020.
- 36. **Gin LE**. Call on me! Accessible active learning: To what extent is active learning inclusive for science undergraduates with disabilities? (talk). Society for the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2020.
- 35. **Nadile EM**. Call on me! Undergraduates' perceptions of voluntarily asking questions in front of large-enrollment science classes (poster). Society for the Advancement of Biology Education Research (SABER). Virtual conference due to COVID19. July 2020.
- 34. **Nadile EM**. Call on me! Undergraduates' perceptions of voluntarily asking questions in front of large-enrollment science classes (poster). Australasian Science Education Research Association (ASERA). Virtual conference due to COVID19. June 2020.
- 33. **Downing VR.** Fear of negative evaluation and student anxiety in community college active learning science courses (talk). American Educational Research Association (AERA). San Francisco, CA, April 2020.
- 32. **Gin L.** Factors that predict life sciences student persistence in undergraduate research experiences (talk). Society for the Advancement of Biology Education Research West coast meeting. Irvine, CA, USA. January 2020.
- 31. **Gin L.** Fear of negative evaluation and student anxiety in community college active learning science courses (poster). Society for the Advancement of Biology Education Research West coast meeting. Irvine, CA, USA. January 2020.
- 30. **Nadile E.** Don't joke about me: The impact of student identity on perception of instructor humor in college science courses (poster). Society for the Advancement of Biology Education Research West. Irvine, CA, USA. January 2020.
- 29. **Cala J.** Fear of negative evaluation and student anxiety in community college active learning science courses (talk). National Association for Biology Teachers national meeting. Chicago, IL, USA. November 2019.
- 28. **Cala J**. The unwritten rules of undergraduate research (poster). National Association for Biology Teachers national meeting. Chicago, IL, USA. November 2019.
- 27. **Gin L.** Diagnosing differences in preparing for med school between students in online and inperson biology degree programs (poster). American Association for Medical Colleges Annual Meeting. Phoenix AZ, USA. November 2019.
- 26. **Scott R, Ramiriez D.** Factors that predict biological sciences student persistence in undergraduate research experiences (poster). BioSci Southwest Symposium. Tempe, AZ, USA. November 2019.

- 25. **Nadile E.** Don't joke about me: The impact of student identity on perception of instructor humor in college science courses (poster). BioSci Southwest Symposium. Tempe, AZ, USA. November 2019.
- 24. **Gin L.** Diagnosing differences in what undergraduates in ASU's fully online and an in-person biology degree program know and do regarding medical school admission (talk). ASU BioSci Southwest Symposium. Tempe, AZ, USA. November 2019.
- 23. **Clark C.** Arizona State University's LEAP Scholars program (poster). National Science Foundation S-STEM meeting. Washington DC, USA. September 2019.
- 22. **Gin L**. Leaving research: Factors that influence science student persistence in undergraduate research (talk). Geological Society of America national meeting, Phoenix AZ, September 2019.
- 21. **Gin L.** Diagnosing differences in what undergraduates in a fully online and in an in-person biology degree program know and do regarding medical school admission (talk). Society for the Advancement of Biology Education Research. Minneapolis, MN, USA. July 2019.
- 20. **Gin L.** Leaving Research: Factors that impact a student leaving an academic year research experience (poster). Society for the Advancement of Biology Education Research. Minneapolis, MN, USA. July 2019.
- 19. **Gin L**. Leaving Research: Factors that impact a student leaving an academic year research experience (poster). Undergraduate Biology Education Research Gordon Research Conference. Lewiston, ME, USA. June 2019.
- 18. **Gin L.** Diagnosing differences in what undergraduates in a fully online and in an in-person biology degree program know and do regarding medical school admission (poster). Undergraduate Biology Education Research Gordon Research Seminar. Lewiston, ME, USA. June 2019.
- 17. **Gin L.** Leaving Research: Factors that impact a student leaving an academic year research experience (poster). Sloan Equity and Inclusion in STEM Introductory Courses (SEISMIC) summer conference. Ann Arbor, MI, June 2019.
- 16. **Gin L.** Fear of negative evaluation: A novel construct underlying student anxiety in active learning college science courses (poster). Sloan Equity and Inclusion in STEM Introductory Courses (SEISMIC) summer conference. Ann Arbor, MI, USA. June 2019.
- 15. **Gin L**. Online with Career Goals? Exploring student decisions to enroll in online biology degree programs and lab courses (poster). ASU Teacher's College Education Research Conference. Tempe, AZ, USA. February 2019.
- 14. **Gin L.** Maximizing inclusion and questioning excellence: Are online biology degree programs a way to promote inclusive excellence in undergraduate education? (talk). ASU Diversity and Inclusion Science Initiative (DISI) Tempe, AZ, USA. February 2019.
- 13. **Hendrix T.** How do astrophysicists organize a party? Their wives planet: Gender differences in student perceptions of instructor humor in college science classrooms (poster). Experimental Biology. San Diego, CA, USA. April 2018.

- 12. **Hendrix T.** How do astrophysicists organize a party? Their wives planet: Gender differences in student perceptions of instructor humor in college science classrooms (poster). ASU Undergraduate Research Symposium. Tempe, AZ, USA. April 2018.
- 11. **Cala JM.** Identifying the unwritten rules of obtaining undergraduate research experiences (poster). Society for the Advancement of Biology Education Research. Minneapolis, MN, USA. July 2017.
- 10. **Krieg A.** What's in a name? The importance of student perceptions of an instructor knowing their names in a high enrollment biology course (poster). ASU Undergraduate Research Symposium. Tempe, AZ, USA. March 2017.
- 9. **Krieg A.** What's in a name? The importance of student perceptions of an instructor knowing their names in a high enrollment biology course (poster). American Association for the Advancement in Science (AAAS) national meeting. Boston, MA, USA. February 2017.
- 8. **Downing VR.** Learning Anxiously: The challenges and benefits of active learning for students with anxiety (poster). Society for the Advancement of Biology Education Research West coast regional meeting. Irvine, CA, USA. January 2017.
- 7. **Ashley ME.** Capital Gains: The influence of a summer bridge program on first year students' social capital (poster). Society for the Advancement of Biology Education Research West coast regional meeting. Irvine, CA, USA. January 2017.
- 6. **Krieg A.** What's in a name? The importance of student perceptions of an instructor knowing their names in a high enrollment biology course (poster). Society for the Advancement of Biology Education Research West coast regional meeting. Irvine, CA, USA. January 2017.
- 5. **Ashley ME.** Capital Gains: The influence of a summer bridge program on first year students' social capital (poster). ASU ISTL Learning Innovation Showcase. Tempe AZ, USA. January 2017.
- 4. **Kreig A.** What's in a name? The importance of student perceptions of an instructor knowing their names in a high enrollment biology course (poster). ASU ISTL Learning Innovation Showcase. Tempe AZ, USA. January 2017.
- 3. **Krieg A**. What's in a name? The importance of student perceptions of an instructor knowing their names in a high enrollment biology course (poster). ASU School of Life Sciences Honors Event. Tempe AZ, USA. December 2016.
- 2. **Ashley ME.** Using a lens of Expectancy Value Theory to explore student resistance to active learning (poster). Society for the Advancement of Biology Education Research national meeting. Minneapolis MN, USA. July 2016.
- 1. **Ashley ME.** A bridge to active learning: A summer bridge program helps students to maximize their active learning experiences and think about equity in groupwork (poster). ASU SOLS Undergraduate Research Symposium, Tempe, AZ, USA. April 2016.

RESEARCH-RELATED MEDIA APPEARANCES AND NEWS INTERVIEWS Television

- Live interview with Ben Bland. BBC World News. BBC. May 2021. United Kingdom.
 - o Featured as an expert on gender performance differences in education.

- Interview with Lauren Reimer. CBS Channel 5 Arizona's Family: Phoenix News. April 2018. USA.
 - Segment discussing 2018 article: Who perceives they are smarter? Exploring the influence of student characteristics on student academic self-concept in physiology?

Podcasts

- Interview with Sabrina Solanki. SEISMIC Office Hours Podcast. June 2021.
 - o Featured as an expert on undergraduate research experiences. Episode highlighted results for my 2019 paper: Factors that predict biological sciences student persistence in undergraduate research experiences.
- Interview with Mary Spiro. American Society for Cell Biology (ASCB's) Pathways Podcast. June 2021.
 - Featured as an expert on the experiences of LGBTQ+ individuals in Biology. Full episode devoted to the use of humor in the classroom discussing my 2020 paper: Fourteen recommendations to create a more inclusive environment for LGBTQ+ individuals in academic biology.

Radio

- Interview with Peter Ludovice, Jennifer Leavy, and Ed Greco. Inside the Black Box. WREK Georgia Tech Radio. April 2019. USA.
 - Full episode devoted to the use of humor in the classroom discussing my 2018 research paper: To be funny or not to be funny: Gender differences in student perceptions of instructor humor in college science courses
- Interview with Wendy Harmer and Robbie Buck. Australian Broadcast Centre (ABC) Breakfast Show. ABC Radio. April 2018. Sydney, Australia
 - o Segment discussing the overconfidence of men and my 2018 research paper: Who perceives they are smarter? Exploring the influence of student characteristics on student academic self-concept in physiology?
- Interview with Simi Sara. Mornings with Simi | Global News. CKNW. April 2018. Vancouver B.C., Canada
 - Segment discussing my 2018 research paper: Who perceives they are smarter?
 Exploring the influence of student characteristics on student academic self-concept in physiology?

Interviews for news articles

- Interview with Science Magazine journalist Katie Langin for article *This lab asked depressed Ph.D. students what's hardest- and what parts of grad school help them cope.* Science Magazine. 2021.
 - O Article highlights my 2021 research paper: *PhDepression: Examining how graduate research and teaching affect depression in life sciences PhD students*
- Interview with NYT journalist Niraj Chokshi for article *Do men think they're better at science than women do? Well, actually...* New York Times. 2018.
 - Article highlights my 2018 research paper: Who perceives they are smarter? Exploring the influence of student characteristics on student academic self-concept in physiology?
- Interview with NBC journalist Maggie Fox for article Not smart enough? Men overestimate intelligence in science class. NBC News. 2018.
 - Article highlights my 2018 research paper: Who perceives they are smarter? Exploring the influence of student characteristics on student academic self-concept in physiology?

TEACHING EXPERIENCE

Arizona State University, School of Life Sciences (2021 – present)

- BIO 494: Biology Education Research, Spring 2022, as an ocourse for ASU online students
 - O Developed and a 3-credit course-based research experience (CURE) for undergraduates in ASU's fully online program. In this course, students learn about the process of science by engaging in an authentic biology education research project with the intent to publish their findings. The development of the oCURE was partially funded by the ASU Online Undergraduate Research Scholars (OURS) Program Group-based Research Experience Seed Grant for \$10,000. The course was also feature by ASU Now: https://news.asu.edu/20211105-school-life-sciences-awarded-seed-grants-develop-immersive-online-undergraduate-research
- BIO 494/598: Biology Education Research, Spring 2021, online
 - O Developed and taught a 3-credit course-based research experience (CRE) for undergraduates and graduate students interested in conducting biology education research. In this course, students learn about the process of science by engaging in an authentic biology education research project with the intent to publish their findings. This is the first bio ed CURE to be taught entirely online. Thus far, the CURE has resulted in one student co-authored manuscript with me as senior author: https://www.lifescied.org/doi/10.1187/cbe.21-05-0132.

University of Central Florida, Department of Biology (2020)

- BSC 4910 Biology Education Research, *Research-Intensive course, Spring 2020, first half of semester in-person, second half online due to the COVID-19 pandemic
 - O Developed and taught a 3-credit course-based undergraduate research experience (CURE) for 19 biology, chemistry and physics majors. In this course, students learn about the process of science by engaging in an authentic biology education research project with the intent to publish their findings. The CURE resulted in two student co-authored manuscripts with me as the senior author; one at PLoS One (https://pubmed.ncbi.nlm.nih.gov/33434226/) and the other at the Journal of Microbiology and Biology Education (https://journals.asm.org/doi/epub/10.1128/jmbe.00100-21). *The University of Central Florida awards Research-Intensive (RI) course designations to courses that provide curriculum-based engagement in high impact practices such as research.

Arizona State University, School of Life Sciences (2013 – 2019)

- BIO/BCH/SES 494 Producing Research, Instructor of Record, Spring 2019
 - Co-developed and co-taught a 1-credit course-based undergraduate research experience (CURE) for 7 students in biology and biochemistry. This is the fourth course in a four-semester sequence of courses aimed to support undergraduate transfer students as they engage in scientific research. This course guides students as they finish their final semester of undergraduate research and focus on developing research products including posters, presentations, and manuscripts. The 4-course sequence (Learning about research, Entering research, Advising research, and Producing research) resulted in a publication in the journal PLoS One with all 16 students as co-authors and myself as first author.
- BIO/BCH/SES 494 Entering Research, Instructor of Record, Spring 2018, Spring 2019
 - o Co-developed and co-taught a 1-credit course-based undergraduate research experience (CURE) for 7 students in biology and biochemistry. This is the second course in a four-

semester sequence of courses aimed to support undergraduate transfer students as they engage in scientific research. This course guides students as they enter their first basic science research experience. Additionally, students continue to conduct education research by exploring a novel research question with the aim to publish their findings.

- BIO/SES 494 Advising Research, Instructor of Record, Fall 2018
 - Co-developed and co-taught a 1-credit course-based undergraduate research experience (CURE) for 8 students in biology and geosciences. This is the third course in a foursemester sequence aimed to support undergraduate transfer students as they engage in scientific research. As a class, students continue an education research project, investigating a novel research question with the aim to publish their findings.
- BIO/BCH/PHY 494 Learning about Research, Instructor of Record, Fall 2017, Fall 2018
 - Oco-developed and co-taught a 3-credit course-based undergraduate research experience (CURE) for ~10 students in biology, biochemistry, geosciences, and physics. This is the first course in a four-semester sequence of courses aimed to support undergraduate transfer students as they engage in scientific research. This course prepares students to conduct scientific research through engaging in a science education research project. As a class, students explore a novel research question with the aim to publish their findings.
- BIO 360 Animal Physiology, Instructor of Record, Fall 2017
 - Co-taught a 300-person, 3-credit, upper-level course on animal physiology with an emphasis on human physiology. This course was taught to biology majors in an active learning way. I taught a unit on muscle physiology and a unit on metabolism and diabetes.
- BIO 494/594 Biology Education Research, Instructor of Record, Spring 2017
 - Oco-developed and co-taught a 3-credit course-based research experience (CRE) in biology education research to 16 undergraduate and graduate students. As a class, students explored a novel research question with the aim to publish their findings. We successfully completed the project and our manuscript was published in PLoS One with all 16 students as co-authors and myself as first author.
- BIO 189 Life Sciences Career Paths, Instructor of Record, Fall 2015 and Fall 2016
 - Co-developed and co-taught a 1-credit course to ~35 academically underprepared first-semester biology majors that was an extension of the Bio Bridge early start program. The focus of course was on specialized topics in biology and I taught a five-week module on infectious diseases.
- BIO 194 Bio Bridge Early Start Program, Instructor of Record, Summer 2014, Summer 2015, Summer 2016
 - Co-developed and co-taught a 3-credit biology course to ~35 students as part of an early start program for academically underprepared incoming biology majors. The purpose of this course was to prepare students for introductory biology. I taught modules on thinking like a scientist, career options in biology, and academic success strategies.
- BIO 360 Animal Physiology, Teaching Assistant, Fall 2015

- Teaching assistant for a 200 person, 3-credit, upper-level course focused on animal physiology with an emphasis on human physiology. Co-developed and taught one lesson to three sections of ~65 students each, which was later published as a CourseSource article. Facilitated active learning in weekly classes and discussion sessions and wrote exam questions.
- BIO 294 Advanced Career Preparation in Health and Medicine, Instructor of Record, Spring 2014, Spring 2015, Spring 2016
 - Developed and taught a 1-credit course to ~30 upper-level students that focused on enhancing students' scientific thinking and preparing students for careers in health and medicine.
- BIO 189 Career Preparation in Heath and Medicine, Instructor of Record, Fall 2013, Fall 2014
 - Developed and taught a 1-credit course to ~36 introductory biology students that focused on enhancing their scientific thinking and familiarizing students with careers in health and medicine.

Guest lectures

- Syracuse University. Discussion about course-based undergraduate research experiences.
- University of Tennessee, Knoxville. Training session for introductory biology teaching assistants.
 - Taught a guest lecture on the importance of using student names in high enrollment biology courses

MENTORSHIP EXPERIENCE

Primary mentorship as a faculty member, Arizona State University

- Tala Alaghi, Barrett Honors student- committee chair, 2021 present
- Jennifer Norton, Barrett Honors student- committee chair, 2021 present
- Anna Abraham, Barrett Honors student- committee member, 2020 present
- Linzi Kennedy- undergraduate researcher- 2020-2021
 - o Mentored research has led to 1 publication under review.
- Tasneem Mohammed, undergraduate researcher (2020 2021) & Master's student- committee chair, 2021 present
 - o Mentored research has led to 1 publication and 2 under review.
- Carly Busch, NSF GRFP, Ph.D. graduate student- committee chair, 2020 present
 - o Mentored research has led to 1 publication and 4 under review.
- Nicholas Wiesenthal, undergraduate researcher (2019 2021) & Ph.D. student- committee chair 2021 present
 - o Mentored research has led to 3 publications and 1 under review.
- Rachel Scott, undergraduate student, 2018 present
 - o Mentored research led to 3 publications.
- Erika Nadile, Ph.D. graduate student- committee member, 2018 2021
 - o Mentored research has led to 4 publications and 1 under review.
- Logan Gin, NSF GRFP, Ph.D. graduate student- committee co-chair, 2017 present
 - o Mentored research has led to 12 publications.

Committee-level mentorship, Arizona State University

• Cindy Vargas, Environmental Life Science Ph.D. student- committee member, 2021- present

- o Mentored research led to 3 publications.
- Nina Kolath, Barrett Honors student- second reader, Barrett thesis
- Taya Misheva, Ph.D. Biology and Society graduate student- committee member, 2020 present
- Baylee Edwards, Biology master's student- committee member, 2020 2021
 - o Mentored research led to 1 publication.

CURE students who continued conducting research in the lab, Arizona State University

- Erika Nadile, Biology and Society PhD student, 2020- present
- Cindy Vargas, Environmental Life Sciences PhD student, 2020- present
- Madison Witt, undergraduate SOLS student, 2020- present
- Missy Tran, undergraduate SOLS student, 2020- present
- Joseph Gazing Wolf, Environmental Life Sciences PhD student, 2020- present
- Danielle Brister, undergraduate SOLS student, 2020- present

Trainees mentored as a faculty member, University of Central Florida

- Isabella Ferierra, undergraduate student, 2019 2020
 - o Mentored research led to 3 publications.
- Lorena Parilla, undergraduate student, 2019 2020
- Jordan Dowell, ecology graduate student, 2019

Trainees mentored as a graduate student or post-doc in biology education research, Arizona State University

- Jacquie Cala, graduate student, 2016 2019
 - Mentored research led to 5 publications.
- Virginia Downing, graduate student, 2016 2019
 - o Mentored research led to 2 publications.
- Michelle Stephens, undergraduate student, 2017 2018
 - o Mentored research led to 4 publications.
- Taija Hendrix, undergraduate student, 2017 2018
 - Mentored research led to 2 publications.
- Austin Huang, undergraduate student, 2016-2017
 - Mentored research led to 1 publication.
- Kayla Campbell, undergraduate student, 2016 2017
- Brian Haney, graduate student, 2015-2016
 - o Mentored research led to 1 publication.
- Anna Krieg, undergraduate student, Honors thesis student, 2015 2017
 - Mentored research led to 3 publications.
- Michael Ashley, undergraduate student, 2015 2017
 - o Mentored research led to 4 publications.
- Cyril Wassef, undergraduate student, Honors thesis student 2015 2016
- Kate Bergovy, undergraduate student, 2015

Mentor for UCF LGBTQ+ Alliance Mentoring Program (2019 – 2020)

 Served as an LGBTQ+ academic mentor for two LGBTQ+ undergraduates during the academic year

Director of Activities and Engagement, UCLA School of Theater Film and Television and US Performing Arts (2012)

• Coordinated weekly activities for groups of 300+ incoming college students and mentored 15 students each week over a three-month period

Trainee awards

2021

- Logan Gin- The College Outstanding Graduate- Selected out of all PhD students in the largest college at Arizona State University
- Anna Abraham- Selected as 2021 The College Student Leader by ASU's College of Liberal Arts and Sciences
- Carly Busch- Graduate College Q1 Online/Remote Travel Award for the American Chemical Society Resilience of Chemistry Fall 2020
- Carly Busch- Graduate College Q1 Online/Remote Travel Award for the Society for the Advancement of Biology Education Research
- Tasneem Mohammed- Fall 2021/Spring 2022 Graduate College Fellowship (GCF)
- Carly Busch- Awarded 2021 Teaching Section Research Recognition Award, Experimental Biology 2021 Conference
- Carly Busch- Awarded Graduate College Online/Remote Travel Award for the Experimental Biology 2021 Conference
- Erika Nadile- Awarded 1st prize in the AAAS Student E-Poster Competition- Social Science Division
- Erika Nadile- Awarded first prize at NABT Poster Competition

LEADERSHIP

- Research for Inclusive STEM Education Center Director of Evaluation (2021 present)
- Biology and Society Graduate Director of Biology Education Research Program (2021 present)
- Society for the Advancement of Biology Education Research (SABER) Awards Committee Co-Chair (2019- present)
- Consultant for Stetson University CURE assessment stemming from an NSF IUSE grant (2021 present)
- SABER LGBTQ+ affinity group leader for SABER Action Group for Racial Justice during the 2020 annual meeting (2020)
- CUREs in the Time of COVID19. American Society of Cell Biology, Cell Biology Education, Life Sciences Education, CUREnet (2020)

One of four panelists for CUREs in the time of COVID19- a webinar to discuss challenges, opportunities, and strategies for teaching CUREs during COVID19 (June 2020).

- Undergraduate Biology Education Research, Gordon Research Conference discussion leader for "Changing Identities and Demographics in Undergraduate Biology Education" session (June 2019)
- NSF Community College Biology Instructor Network to support Inquiry into Teaching and Education Scholarship (CC Bio INSITES) mentor (June 2019 present).

Invited to serve as a mentor for this NSF project connecting biology education researchers at 4-year institutions to community college instructors who are interested in learning how to conduct biology education research. Attended one in person meeting at HHMI (July 2019) and one virtual meeting (June 2020).

PROFESSIONAL SERVICE

- Ad hoc reviewer for *BioScience* (2021 present), *Journal of American College Health* (2021 present), *PNAS* (2020 present), *PLoS One* (2019 present), *Studies in Higher Education* (2019 present), *Journal for STEM Education Research* (2019 present), *International Journal of STEM Education* (2017 present), *Wildlife Society Bulletin* (2017 present), *CBE: Life Sciences Education* (2016 present)
- Panel service for NSF (2020, 2021)
- Member of School of Life Sciences Director search committee (2021 present)
- Member of target search committee (2021 present)
- Member of School of Life Sciences Physiology Lecturer search committee (2021)
- Keynote panelist for the ASU School of Life Sciences SOLUR Symposium (2021)
- Led a virtual Coffee Chat for the 2nd Annual BioSci Southwest Symposium on how anxiety and depression affect graduate students (2020)
- Member of UCF Department of Biology's Undergraduate Programs Committee (2020)
- Faculty partner for University of Central Florida Out in STEM (oSTEM) (2019 2020)
- Member of the American Society of Cell Biology (ASCB) LGBTQ+ Committee (2019 – present)
- Member of the Society for Advancement of Biology Education Research (SABER) Diversity and Inclusion committee (2018-2020)
- Panelist for ASU Graduate College panel about teaching (2018, 2019)
 One of three ASU graduate students selected by the Graduate College to serve on the Graduate and Professional Student Association (GPSA) panel about teaching for incoming graduate students
- Panelist for the Students Affiliates of the American Chemical Society (SAACS) pre-med and pre-graduate student panel (2018)
- One of three panelists with expertise in medical and graduate school admission standards
- Graduate participant in ASU's School of Life Sciences Camp Ignite, (2014 2016)
 Attended 2-day summer program for all incoming biology majors developed to build community among students, staff, and faculty
- Graduate participant, ASU's Out in STEM (OSTEM) graduate panel (2016)
 Served on panel highlighting LGBTQIA identifying graduate student experiences in STEM
- ASU School of Life Sciences SOLUR Summer Research Program selection committee (2015)
 Served on committee as a graduate representative to select ASU School of Life
 Sciences summer undergraduate research scholars
- Pre-health advising, ASU's pre-health club (2015 2016)
 Gave guest lectures about how to maximize students' chances of being accepted to medical school
- ASU School of Life Sciences Undergraduate Programs Committee (2013 2014) Served as an advising representative on the committee for one year
- ASU Undergraduate Programs Subcommittee for Biomedical Sciences and Medical Microbiology concentrations (2013 – 2014)
 - Served as the pre-health advisor on the committee to develop new degrees
- ASU School of Life Sciences Scholarships and Awards Committee (2013 2014)
 Served on committee as an advising representative
- ASU College of Liberal Arts and Sciences Development Success Network (2014)
 Served on committee to determine best practices for retaining students in the College of Liberal Arts and Sciences

SCHOLARSHIPS, AWARDS, and RECOGNITIONS

- Featured in UCF's Faculty Center for Teaching and Learning Faculty SOTL Activity: Scholarship of Teaching and Learning Activity (2019)
- Featured in UCF College of Sciences News: "New Biology Hire Brings Focus to Accessibility" (2019)
- Work with the NSF S-STEM grant featured by Course Hero in "How to Enrich the Research Experience of Transfer Students" (2019)
- Featured in the University of Leicester Department of Physics and Astronomy's showcase of LGBT+ identifying scientists (2019)
- AAAS/Science Program for Excellence in Science (2018)
- ASU Faculty Women's Association (FWA) Distinguished Graduate Student Award (2018)
- ASU College of Liberal Arts and Sciences (CLAS) Graduate Excellence Award (2018)
- ASU School of Life Sciences Innovative Teaching Award (2018)
- ASU Sun Devil Award for Service (2018)
- Featured on ASU Now as one of ASU's outstanding graduates: *Biology PhD Grad Gains International Recognition for Her Research in Final Week of School* (2018)
- ASU Graduate and Professional Student Association (GPSA) Teaching Excellence Award (2017)
- iEMBER Best Lightening Talk Award (2017)
- ASU College of Liberal Arts and Sciences (CLAS) Graduate Excellence Award (2016)
- University of Arizona College of Medicine-Phoenix Academic Accomplishments Tuition Scholarship (2011 2012)

TRAVEL AWARDS

Awarded 16 travel awards to attend meetings or to visit other institutions

- Florida International University Advance Women, Equity and Diversity travel award, \$700, October 2019
- LGBTQ+ Scientist Travel Award to the 2018 American Society of Cell Biology (ASCB) Annual Meeting, \$600, September 2018
- ASU School of Life Sciences (SOLS) Graduate Student Travel Award, \$400, April 2018
- Undergraduate Biology Education Gordon Research Conferences Travel Stipend, \$500, July 2017
- ASU School of Life Sciences Undergraduate Programs Travel Stipend, \$500, July 2017
- ASU Graduate & Professional Student Association (GPSA) Travel Grant, \$950, June 2017
- ASU School of Life Sciences (SOLS) Graduate Student Travel Award, \$400, June 2017
- ASU Graduate College Travel Award, \$500, June 2017
- ASU Center for Evolutionary Medicine Trainee Travel Grant, \$500, June 2017
- Environment and Metrics in Biology Education and Research (EMBER) Conference Travel Award, \$600, June 2017
- ASU Graduate & Professional Student Association (GPSA) Travel Grant, \$450, July 2016
- ASU School of Life Sciences (SOLS) Graduate Student Travel Award, \$400, July 2016
- American Society for Biochemistry and Molecular Biology (ASBMB) Graduate Travel Award, \$1000, April 2016
- ASU Graduate & Professional Student Association (GPSA) Travel Grant, \$632, December 2015
- ASU School of Life Sciences (SOLS) Graduate Student Travel Award, \$400, July 2015

• National Association of Advisors for the Health Professions (NAAHP) Travel Grant, \$610, June 2014

PROFESSIONAL SOCIETY MEMBERSHIPS

- American Physiological Society (APS) (2021- present)
- American Society of Microbiology (ASM) (2021 present)
- American Association for the Advancement of Science (2018 present)
- Out in STEM (OSTEM) (2016 present)
- American Society of Cell Biology (ASCB) (2016 present)
- Society for the Advancement of Biology Education Research (SABER) (2014 present)
- Inclusive Environments and Metrics for Biology Education Research (iEMBER) (2017 2019)
- American Society of Biochemistry and Molecular Biology (ASBMB) (2016 2017)
- National Academic Advising Association (NACADA) (2013 –2017)
- ASU Council of Academic Advisors (CAA) (2013 2017)
- National Association of Advisors for the Health Professions (NAAHP) (2013 2015)