



Emily Driessen (She/Her/Hers)

Postdoctoral Researcher

Department of Biology Teaching and Learning | 3-154 Molecular and Cellular Biology Building

University of Minnesota | Minneapolis, MN 55455

Dries046@umn.edu | (763) 268-9023

<https://emilydriessen.weebly.com/>

EDUCATION

- 2019 – 2023** **PhD, Biological Sciences, Auburn University**
Dissertation: Characterizing and Changing Course Elements in Undergraduate Biology Education
Advisor: Dr. Cissy Ballen
- 2017 – 2019** **M.S. STEM Education, University of Kentucky**
Thesis: A Quasi-experimental Study of Middle Level Student Engineering Understanding
Advisor: Dr. Jennifer Wilhelm
- 2015** **Nursing Assistant Certification**
- 2010 – 2014** **B.S. Microbiology, North Dakota State University**
Research: Sequencing the dry bean genome for genome-wide analysis
Advisor: Philip McClean

TEACHING EXPERIENCE

- 2025** **Instructor of Record, Foundations of Biology, University of Minnesota**
Course Description: First semester of the introductory biology sequence. The course content emphasizes evolution, organismal diversity, and genetics within the context of problem-solving and application of understanding. I am slated to teach the evolution portion of this course, and my co-instructor will teach the genetics portion.
Level: First- and second-year undergraduate students
Class Size: 130 students
Teaching format: In-person, Flipped-Classroom, Active learning
Class hours: 6 hours/week for 1 semester
- 2024** **Instructor of Record, Nature of Life, University of Minnesota**
Course Description: A summer bridge program at Lake Itasca Field Station where incoming biology majors meet faculty and fellow incoming students and participate in learning through 4-hour modules led by faculty.
Level: Incoming first-year undergraduate students
Class size: 12-20
Teaching format: In-person, Active Learning
Class hours: 10 hours/session for 2 sessions (20 hours total)
- 2024** **Guest Lecturer, Foundations of Biology, University of Minnesota**
Course Description: First semester of the introductory biology sequence. The course content emphasizes evolution, organismal diversity, and genetics within the context of

problem-solving and application of understanding. I guest lectured on Mendelian Genetics for two class periods.

Level: First- and second-year undergraduate students

Class Size: 130 students

Teaching format: In-person, Flipped-Classroom, Active learning

Class hours: 6 hours/week for 1 week

2022

Instructor of Record, Meta-analysis, Auburn University

Course Description: A project-based instruction course that instructs students how to conduct a meta-analysis on a research topic of each student's interest. The final project is a full draft of each student's manuscript, based on their meta-analysis findings.

Level: Graduate students

Class Size: 20 students

Teaching format: Online, Active learning

Class hours: 6 hours/week for 1 semester

2021

Instructor of Record, Organismal Biology, Auburn University

Course Description: The second semester of an introduction to biology focused on the diversity of species from the last universal common ancestor through humans

Level: First- and second-year undergraduate students

Class Size: 240 students

Teaching format: Online, Active learning

Class hours: 6 hours/week for 1 semester

2019

Graduate Teaching Assistant, Vertebrate Development Lab, Auburn University

Course Description: Covers fertilization to post-birth development as taught through the use of sea urchin animal models.

Level: Medical students

Class Size: 12 students

Teaching format: In-person

Class hours: 6 hours/week for 1 semester

2014 – 2017 **Teaching Specialist, Chemistry Labs, University of Minnesota**

Course Description: Students explore general chemistry concepts through problem-based learning, including heat capacity and acid-base neutralizations

Level: First- and second-year undergraduate students

Class Size: 30 students in each of 5 sections

Teaching format: In-person, project-based instruction

Class hours: 20 hours/week for 6 semesters

2013

Undergraduate Teaching Assistant, Immunology and Serology Lab, North Dakota State University

Course Description: Students learn about immunity through using vaccines on mice as animal models.

Level: Third-year undergraduate students

Class Size: 30 students

Teaching format: In-person

Class hours: 5 hours/week for 1 semester

2012

Undergraduate Teaching Assistant, General Microbiology Lab, North Dakota State University

Course Description: Students learn how to use microscopes, perform Gram stains, identify microbes, and isolate colonies.

Level: Third-year undergraduate students

Class Size: 30 students

Teaching format: In-person

Class hours: 5 hours/week for 1 semester

RESEARCH AND PROFESSIONAL APPOINTMENTS

2023 – 2025 Postdoc, Biology Education Research, University of Minnesota

Research: Deconstructing Binary Sex and Gender Narratives; Genetics of Race

Advisor: A. Kelly Lane

2016 – 2017 Nursing Assistant, Walker Methodist Westwood, Saint Paul, MN

2015 – 2017 Medical Scribe, North Memorial Emergency Room, Robbinsdale, MN

2014 – 2017 Teaching Specialist, Chemistry Labs, University of Minnesota

PUBLICATIONS

#Co-first authorship; *Master student mentee; **Undergraduate student mentee

20 PEER REVIEWED ACCEPTED OR PUBLISHED ARTICLES:

The standards of the biology education research field are that the first author is the person who conducted the majority of the research and writing. Of the 20 peer reviewed articles I have published, I am first author on 9 of them. I included my contributions to each of publications as well as the number of citations they have received. Collectively, my work has 250+ citations.

1. **Driessen, E.P.**, Wilson, A.E., Odom, S., Hall, I.**, Brewer, P.**, Ramsay, S.B.**, Wood, S.**, & Ballen, C.J. (2024). Group work enhances student performance in biology: A meta-analysis. *BioScience*.
Featured reading by the University of Minnesota's Center for Educational Innovation Pedagogical Innovations Journal Club.
Contribution: 70%, conceptualized project, collected and analyzed data, created figures, wrote manuscript.
Citations: 2
2. **Driessen, E.P.#**, Walker, K.**#, Hallman, T., Casper, A., Eddy, S., Schneider, J., & Lane, A.K. (2024). "It's been a process": A multiple case study of biology instructor efforts to reform their sex and gender curriculum to be more inclusive of trans-spectrum and intersex students. *CBE—Life Sciences Education*.
Invited submission for special issue "Equity, inclusion, access and justice in biology education. Chosen by CBE—Life Sciences Education as one of seven Highlighted articles in the Special Issue on Equity, Inclusion, Access, and Justice.

Contribution: 40%, co-analyzed data and wrote and edited manuscript.

3. **Driessen, E.P.**, Steele, A., Costello, R., Brewer, P.** , Ballen, C.J. (2024). It let me merge my love of teaching with research”: A qualitative investigation of the career pathways of biology education researchers. *PLOS One*.
Contribution: 70%, conceptualized project, co-created interview protocols, co-collected and co-analyzed data, created figures, wrote manuscript.
Citations: 0
4. Lamb, T.* , **Driessen, E.P.**, Beatty, A., Youngblood, R.** , Esco, A., Cotner, S., Creech, C., Drake, A., Fagbodun, S., Hobbs, K., Lane A.K., Larson, E., McCoy, S., Thompson, S., & Ballen C.J. (2024). Equitable instructor assessment changes amid COVID-19 pandemic. *Journal of College Science Teaching*.
Contribution: 20%, analyzed qualitative data, co-created figures, edited manuscript, and mentored Master’s student and first-author, Todd Lamb.
Citations: 0
5. Costello, R.A., **Driessen, E.P.**, Kjellvik, M.K., Schultheis, E.H., Youngblood, R.M.** , Zemenick, A.T., Weber, M.G., & Ballen, C.J. (Accepted). More than a token photo: humanize scientist role models to enhance student engagement. *Proceedings of the Royal Society B*.
Contribution: 20%, co-created survey tools, co-collected data, co-wrote manuscript.
Citations: 6 – from pre-print on bioRxiv
6. Schultheis, E.H., Zemenick, A.T., Youngblood, R.** , Costello, R.A., **Driessen, E.P.**, Kjellvik, M.K., Weber, M.G., & Ballen, C.J. (2024). “Scientists are people too”: Biology students relate more to scientists when they are humanized in course materials. *CBE—Life Sciences Education. Invited submission for special issue “Equity, inclusion, access and justice in biology education.”*
Contribution: 10%, co-conceptualized project, co-collected and co-analyzed data, wrote and edited manuscript.
Citations: 0
7. Ewell, S. N., **Driessen, E. P.**, Grogan, W., Johnston, Q., Ferdous, S., Mehari, Y., ... & Ballen, C. J. (2023). A Comparison of Study Behaviors and Metacognitive Evaluation Used by Biology Students. *CBE—Life Sciences Education*, 22(4), ar36.
Contribution: 30%, created and conducted quantitative data analysis plan, created figures, wrote quantitative methods and results, and edited manuscript.
Citations: 6
8. Adams, P.E., **Driessen, E.P.**, Granados, E., Ragland, P., Henning, J.A., Beatty, A. E., & Ballen, C.J. (2023). Embracing the inclusion of societal concepts in science leads to better understandings of their impacts. *CBE—Life Sciences Education. Invited submission for special issue “Centering Humanism in STEM Education.”*
Contribution: 40%, co-created quantitative data analysis plan, co-conducted quantitative data analysis, co-created figures, co-wrote manuscript.
Citations: 9

9. Beatty A.E., **Driessen, E.P.**, Clark, A.D., Costello, R.A., Ewell, S., Fagbodun, S., Klabacka, R.L., Lamb, T., Mulligan, K., Henning, J.A., & Ballen, C.J. (2023). Biology instructors see value in discussing controversial topics but fear personal and professional consequences. *CBE—Life Sciences Education*.
Contribution: 15%, analyzed qualitative data, co-wrote and edited manuscript.
Citations: 18
10. Pokorny, A., Ballen, C.J., Drake, A., **Driessen, E.P.**, Fagbodun, S., Gibbens, B., Henning, J., McCoy, S., Thompson, S., Willis, C. (2023). Not remotely okay: Science undergraduates report mental health concerns and inconsistent conditions when using remote proctoring software. *The International Journal for Educational Integrity*
Contribution: 5%, contributed data, edited manuscript, and provided feedback to undergraduate and first-author, Annika Pokorny.
Citations: 0
11. Youngblood, R. M.** , Costello, R. A., **Driessen, E. P.**, Radocha, A. R.** , Kjellvik, M., Schultheis, E., Zemenick, A., Weber, M., and Ballen, C. J. 2023. Exposure to counterstereotypical scientist role models impacts how students relate to scientists. *Auburn University Journal of Undergraduate Scholarship*.
Contribution: 10%, collected data, edited manuscript, co-mentored undergraduate and first author, Rachel Youngblood.
Citations: 0
12. **Driessen, E.P.**, Beatty, A.E., & Ballen, C. J. (2022). Evaluating open-note examinations: student perceptions and preparation methods in an undergraduate biology course. *PLOS ONE*.
Contribution: 70%, conceptualized project, re-designed exams, implemented exams, created survey protocol, collected data, co-analyzed data, co-created figures, wrote manuscript.
Citations: 8
13. **Driessen, E.P.**#, Tracy, C.#, Beatty, A.E., Lamb, T.*, Pruett, J., Botello, J., Brittain, C., Claudio Ford, I., Josefson, C., Klabacka, R., Smith, T., Steele, A., Zhong, M., Bowling, S., Dixon, C., & Ballen, C.J. (2022). Why students struggle in biology education: sources and solutions. *CBE—Life Sciences Education*.
Contribution: 40%, co-conceptualized project, analyzed qualitative data, created figures, co-wrote manuscript. Emily Driessen and Claire Tracy are co-first authors.
Citations: 15
14. **Driessen, E.P.**, Wilhelm, J., Cole, M., Dunn, A.** , & Sallah, K.** (2022). The impacts of two curricula on middle-level students' engineering understanding. *The Journal of Educational Research*.
Contribution: 70%, conceptualized project, collected and analyzed data, wrote manuscript.
Citations: 2
15. Wilhelm, J.A., Cole, M., **Driessen, E.P.**, & Ringl S.J. (2022). Grade-level influences in middle school students' spatial-scientific understandings of lunar phases. *School Science and Mathematics*.
Contribution: 30%, collected and analyzed data, co-wrote manuscript.
Citations: 6

16. Beatty, A.E., **Driessen, E.P.**, Gusler, T.,** Ewell, S., Grilliot, A., & Ballen, C. J. (2021). Teaching the Tough Topics: Fostering ideological awareness through the inclusion of societally impactful topics in introductory biology. *CBE—Life Sciences Education*.
Contribution: 10%, co-analyzed data, edited manuscript.
Citations: 22
17. Beatty, A. E., Ballen, C. J., **Driessen, E. P.**, Schwartz, T. S., & Graze, R. M. (2021). Addressing the unique qualities of upper-level biology course-based undergraduate research experiences through the integration of skill-building. *Integrative and comparative biology*, 61(3), 981-991.
Contribution: 10%, edited manuscript.
Citations: 8
18. **Driessen, E. P.**, Knight, J. K., Smith, M. K., & Ballen, C. J. (2020). Demystifying the Meaning of Active Learning in Postsecondary Biology Education. *CBE—Life Sciences Education*, 19(4), ar52.
Contribution: 60%, created and conducted data analysis plan, created figures, wrote manuscript.
Citations: 101
19. **Driessen, E.P.**, Beatty, A., Stokes, A.**, Wood, S.**, & Ballen, C.J. (2020). Learning principles of evolution during a crisis: An exploratory analysis of student barriers one week and one month into the COVID-19 pandemic. *Ecology and Evolution*.
Contribution: 60%, co-conceptualized project, collected and analyzed data, created figures, wrote manuscript.
Citations: 45
20. **Driessen, E.P.**, Dunn, A.**, Sallah, K.**, Wilhelm, J. & Cole, M. (2018). A Qualitative Study of Baseline Urban and Rural Middle Level Science Teacher and Student Views on Engineers and Engineering. *International Journal of Environmental and Science Education*, 13(7), 559-578.
Contribution: 70%, conceptualized project, collected and analyzed data, created figures, wrote manuscript.
Citations: 3

1 MANUSCRIPT UNDER REVISION AFTER FAVORABLE REVIEW:

1. Costello, R.A., Amin, R., **Driessen, E.P.**, Kjelvik, M.K., Schultheis, E.H., Youngblood, R.M.,** Zemenick, A.T., Weber, M.G., & Ballen, C.J. (In revision). Students express minimal resistance to inclusive biology activities highlighting the diversity of scientists. *CBE—Life Sciences Education*. *Invited submission for special issue "Equity, inclusion, access and justice in biology education."*
Contribution: 20%, co-conceptualized project, co-collected and co-analyzed data, edited manuscript.

3 MANUSCRIPTS IN PREPARATION:

1. **Driessen, E.P.**, Schneider, J., Walker, K.**, Seeley, B.**, Hallman, T., Casper, A., Eddy, S., & Lane, A.K. What's in a Definition Anyway? A Survey of College Biology Instructor Definitions of Sex/Gender. *JMBE*.
Contribution: 40%, co-analyzed data, wrote manuscript.

2. **Driessen, E.P.**, Kivett, A., Hammerstrom, E., Schneider, J., Casper, A., Eddy, S., & Lane, A.K. Context and Beliefs Influence Instructor Use of Trans-Spectrum Inclusive Teaching Strategies in Undergraduate Biology Courses. *CBE—Life Sciences Education*.
Contribution: 60%, designed interview protocol, conducted interviews, co-analyzed data, wrote manuscript.
3. Schneider, J.R., Magstadt, J., Olson, A.N. Pokorny, A. Blaskowski, A., **Driessen, E.P.**, Furniss, K.L., Prescott, K.K., Lane, A.K. Working Toward Unifying a Fragmented Theory of Genetic Essentialism in Biology Education by Bridging Literature and Student Beliefs about Race. *Journal of Research and Science Teaching*.
Contribution: 5%, contributed to data analysis, edited manuscript.

1 BOOK CHAPTER

1. Maiorca, C., Stohlmann, M., & **Driessen, E.P.** (2019). Getting to the bottom of the truth: STEM shortage or STEM surplus?. In Sahin, A., & Mohr-Schroeder, M. J. (Eds.), *STEM Education 2.0: Myths and Truths—What Has K-12 STEM Education Research Taught Us?* (22-35). Leiden: Brill.
Contribution: 25%, co-wrote chapter.
Citations: 5

RESEARCH GRANTS

1 Grant Funded

2021 Elucidating culturally and linguistically diverse student experiences with group work in undergraduate biology courses. Equity and Diversity in Undergraduate STEM (EDU-STEM) Scholars program. PI (**\$3,000 awarded**).

4 Grants Declined

2024 The Affordances and Constraints of Group Work for Multilingual Students in Undergraduate Biology Courses. National Science Foundation EHR Core Research: Building Capacities in STEM Education Research. PI (**\$348,305**).

2022 Inclusive Instructional Practices in Undergraduate STEM Introductory Courses. National Science Foundation Improving Undergraduate STEM Education Level 3 (NSF IUSE). Senior Personnel. (**\$1,667,000**).

2021 Collaborative Research: STEM Graduate Student Teaching Professional Development: A Synthesis Project to Inform Fundamental Research and Practice Priorities. National Science Foundation (NSF). Consultant (**\$2,000**).

2020 Demystifying Active Learning in Undergraduate STEM Education. National Science Foundation Improving Undergraduate STEM Education (NSF IUSE) Level 1. Co-PI (**\$300,000**).

AWARDS

2024	NSF ECR PI Meeting Early-Career Project Collaborator Travel Award	\$1,000.00
2024	PEER Institute Travel Award	\$500.00

2023	Auburn University Graduate School Distinguished Dissertation Award	\$500.00
2023	Auburn University COSAM Dean's Research Award for PhD students	\$250.00
2023	Gordon Research Conference Travel Award	\$955.00
2023	Gordon Research Symposium Travel Award	\$245.00
2022	iEMBER Conference Travel Award	\$700.00
2019	Carlock Award Recipient for Excellence in graduate student research	\$150.00

PRESENTATIONS

*Master student mentee; **Undergraduate mentee

3 Invited Seminars

1. **Driessen, E.P.** (2024). *The struggle is real: Understanding student barriers to learning in undergraduate biology courses*. The State University of New York at Buffalo, Buffalo, NY.
2. **Driessen, E.P.** (2023). *Characterizing and Changing Course Elements in Undergraduate Biology Education*. University of South Alabama, Mobile, AL.
3. **Driessen, E.P.** (2022). *Why students struggle in undergraduate biology: Sources and potential solutions*. ROSE seminar series, University of Alabama-Birmingham, Birmingham, AL.

1 Plenary Talk

1. **Driessen, E.P.** Wilson, A.E., Hall, I.,** Brewer, P.,** Odom, S.,* Ramsey, S.B.,** Wood, S.,** Ballen, C.J. (2024). *Group work enhances student performance in biology: A meta-analysis*. Presented at the International Forum on Active Learning in Classrooms at the University of Minnesota Rochester in Rochester, MN on August 1st, 2024. Plenary Talk.

13 Short Talk Presentations

1. **Driessen, E.P.**, Walker, K.,** Hallman, T., Casper, A.M., Eddy, S., Schneider, J., & Lane, A.K. (2024). *Biology instructor efforts to teach sex and gender topics inclusively and accurately*. Accepted to be presented at the Annual Conference for the Society of Integrative and Comparative Biology (SICB) in Atlanta, GA on January 4th, 2025. Short talk.
2. **Driessen, E.P.**, Kivett, A.,** Casper, A.M., Eddy, S., Schneider, J., & Lane, A.K. (2024). *Context and Beliefs Influence Instructor Use of Trans-Spectrum Inclusive Teaching Strategies in Undergraduate Biology Courses*. Presented at the Annual Conference for the Association for the Study of Higher Education (ASHE) in Minneapolis, MN on November 24th, 2024. Short talk.
3. **Driessen, E.P.**, Walker, K.,** Hallman, T., Casper, A.M., Eddy, S., Schneider, J., & Lane, A.K., (2024). *It's been a process": Biology instructor efforts to reform their undergraduate sex/gender curriculum to be more accurate and inclusive of trans-spectrum and intersex students*. Presented at the Annual Society for the Advancement of Biology Education Research (SABER) conference in Minneapolis, MN, on July 11th, 2024. Short talk.

4. **Driessen, E.P.**, Tracy, C., Beatty, A.E., Lamb, T.*, Pruett, J., Botello, J., Brittain, C., Claudio Ford, I., Josefson, C., Klabacka, R., Smith, T., Steele, A., Zhong, M., Bowling, S., Dixon, C., & Ballen, C.J. (2022). *The Struggle is Real: Sources of Student Struggle in Undergraduate Biology*. Presented at the annual meeting of the Association of College and University Biology Educators, Online. Short talk.
5. **Driessen, E.P.**, Beatty, A., & Ballen, C. (2022). Evaluating open-note examinations: student perceptions and preparation methods in an undergraduate biology course. Presented at the Annual Society for the Advancement of Biology Education Research (SABER) conference in Minneapolis, MN, on June 21st, 2022. Short talk.
6. **Driessen, E.P.**, Beatty, A., & Ballen, C. (2022). Evaluating open-note examinations: student perceptions and preparation methods in an undergraduate biology course. Presented at the 16th Annual Tennessee STEM Education Research Conference January 13-14, 2022 (p. 28). Short talk.
7. **Driessen, E.P.**, Ramsey, S.B.** , Wood, S.** , Wilson, A.E, & Ballen, C.J. (2021). Group work and student performance in biology: A meta-analysis. Presented at the Society for the Advancement of Education Research (SABER) annual meeting, online. Short talk.
8. **Driessen, E.P.**, Ramsey, S.B.** , Wood, S.** , Wilson, A.E, & Ballen, C.J. (2021). Group work and student performance in biology: A meta-analysis. Presented at the Auburn Biology Graduate Student Morning Meeting. Short talk.
9. **Driessen, E.P.**, Ramsey, S.B.** , Wood, S.** , Wilson, A.E, & Ballen, C.J. (2021). Group work and student performance in biology: A meta-analysis. Presented at the American Educational Research Association (AERA) conference, online. Short talk.
10. **Driessen, E.P.**, Ramsey, S.B.** , Wood, S.** , Wilson, A.E, & Ballen, C.J. (2021). Group work and student performance in biology: A meta-analysis. Presented at the X-Discipline-Based Education Research (X-DBER) conference, online. Short talk.
11. **Driessen, E.P.**, Jennifer K. Knight, Michelle K. Smith, & Cissy J. Ballen. (2020). *Demystifying the Meaning of Active Learning in Undergraduate Biology Education*. Presented at the annual Society for the Advancement of Biology Education Research (SABER) conference, online. Short talk.
12. **Driessen, E.P.**, Jennifer K. Knight, Michelle K. Smith, & Cissy J. Ballen. (2020). *Demystifying the meaning of active learning in post-secondary biology education*. Presented at the annual Conference on Teaching and Learning, Mobile, AL. Short talk.
13. **Driessen, E.P.**, Jennifer K. Knight, Michelle K. Smith, Brittany Woodruff**, & Cissy J. Ballen. (2019). *The curious construct of active learning in biology education research*. Presented at the annual meeting of the Association of College and University Biology Educators, Syracuse, NY. Short talk.

5 Posters

1. Amin, R., **Driessen, E.P.**, Costello, R.A., Kjolvik, M.K., Schultheis, E.H., Youngblood, R.M.** , Zemenick, A.T., Weber, M.G., & Ballen, C.J. (2023). Understanding Student Resistance to Diversity, Equity, and Inclusion Activities in Undergraduate Biology

Courses. Presented at the annual Society for the Advancement of Biology Education Research (SABER) conference in Minneapolis, MN, on July 21st, 2023. Poster.

2. Adams, P.E., **Driessen, E.P.**, Granados, E., Ragland, P., Henning, J.A., Beatty, A. E., & Ballen, C.J. (2023). Embracing the inclusion of societal concepts in science leads to better understandings of their impacts. Presented at the Gordon Research Conference Maine on June 27th, 2023. Poster.
3. Adams, P.E., **Driessen, E.P.**, Granados, E., Ragland, P., Henning, J.A., Beatty, A. E., & Ballen, C.J. (2023). Embracing the inclusion of societal concepts in science leads to better understandings of their impacts. Presented at the Gordon Research Seminar Maine on June 24th, 2023. Poster.
4. **Driessen, E.P.**, Abby E. Beatty, Enya Granados, Isabell Wagner**, Penny Ragland, & Cissy Ballen. (2022). *Making Connections: Bridging biology and society with an ideological awareness curriculum*. Presented at the Annual Society for the Advancement of Biology Education Research (SABER) conference in Minneapolis, MN, on June 19th, 2022. Poster.
5. **Driessen, E.P.**, Dunn, A.**, Sallah, K.**, Wilhelm, J. & Cole, M. (2018). *Examining middle level science teacher and student understanding of engineering at two schools: a qualitative study*. Re-centering scientific literacy in an era of science mistrust and misunderstanding, the 91st Annual Conference of the National Association for Research in Science Teaching, Atlanta, GA. Poster.

1 Roundtable

1. **Driessen, E.P.**, Beatty, A., & Ballen, C. (2022). Evaluating open-note examinations: student perceptions and preparation methods in an undergraduate biology course. Presented at the Annual American Education Research Association (AERA) conference in San Diego, CA, on April 21st, 2022. Roundtable.

Select Contributed Presentations: [Presenting Mentee(s) Bolded]

1. **Hammerstrom, E.**,** Kivett, A.**, Driessen, E.P., Schneider, J., Casper, A.M., Eddy, S., Lane, A.K., What's in a Definition Anyway? A Survey of College Biology Instructor Definitions of Sex/Gender. Poster presentation at the Annual Society for the Advancement of Biology Education Research (SABER) conference in Minneapolis, MN, on July 11th, 2024.
**Mentored undergraduate Hammerstrom on data analysis and presentation.*
2. **Kivett, A.**,** Hammerstrom, E.**, Driessen, E.P., Malmquist, S., Lane, A.K. (2024). How is one university doing in regards to teaching sex, gender, and reproduction topics inclusively? LGBTQ+ students respond. Poster presentation at the Annual Society for the Advancement of Biology Education Research (SABER) conference in Minneapolis, MN, on July 11th, 2024.
**Mentored undergraduate Kivett on data analysis and presentation.*
3. Driessen, E.P., **Brewer, P.**,** Hall, I.,** Odom, S. Ramsey, S.B.**, Wood, S.**, Wilson, A.E. & Ballen, C.J. (2023). Group work and student performance in biology: A meta-analysis. Presented at the 2023 Auburn College of Science and Mathematics Undergraduate Research Poster Presentation.

*Mentored undergraduate Brewer on presentation; she *received the 2023 Undergraduate Poster Award*

4. **Youngblood, R. ****, Costello, R.A., Driessen, E.P., Le, J., Radocha, A.R., Kjelvik, M.K., Schultheis, E.H., Zemenick, A.T., Weber, M.G., & Ballen C.J.(2023). Exposure to counterstereotypical scientific role models impacts how students relate to scientists. Society for the Advancement of Biology Education Research (SABER) National Meeting, Minneapolis, MN.

*Mentored undergraduate Youngblood on presentation, for which she *received the 2023 SABER Undergraduate Poster Award*

5. **Gonzalez-Napoleoni**, J., Jones, J.,**** Wilhelm, J. & Driessen, E.P. (2019, April). Investigating Middle Level Students' Spatial Sense, Pre-Understandings of Lunar Phases, and the Influence of Media. Presented at the annual meeting of the Council on Undergraduate Research, Kennesaw, GA.

*Mentored undergraduates Gonzalez and Jones on data analysis and presentation.

6. **Dunn, A.****, **Sallah, K.****, Wilhelm., J. & Driessen, E.P. (2018, April) Ways to assess views of engineering in science (WAVES). Presented at the annual meeting of the Council on Undergraduate Research, Edmond, OK.

*Mentored undergraduates Dunn and Sallah on data analysis and presentation.

MENTEES

*Master Student; **Undergraduate Student

§EDU-STEM Scholar; * Dean's Research Award Winner; ^Award-Winning Presentation

1. Abbi Kivett**, University of Minnesota
 2. Cas Stromberg**, University of Minnesota
 3. Emma Hammerstrom**, University of Minnesota
 4. Barret Seeley**, University of Minnesota
 5. Keenan Walker**, University of Minnesota
 6. Todd Lamb*, Auburn University
 7. Rachel Youngblood**^, Auburn University
 8. Peyton Brewer**\$^, Auburn University
 9. Ian Hall**\$, Auburn University
 10. Kate Kiani**, Auburn University
 11. Isabel Wagner**, Auburn University
 12. Taylor Gusler**, Auburn University
 13. Brandon Dye**, Auburn University
 14. Sara Beth Ramsey**, Auburn University
 15. Alexis Stokes**, Auburn University
 16. Sara Wood**, Auburn University
 17. Taylor McKibben**, Auburn University
 18. Brittany Woodruff**, Auburn University
 19. Sara Odom*, Auburn University
 20. Jasmine Jones**, University of Kentucky
 21. Javier Gonzalez-Napoleoni**, University of Kentucky
 22. Kameisha Anderson**, University of Kentucky
 23. Ashely Dunn**, University of Kentucky
-

OUTREACH / SERVICE

- 2024** National Science Foundation (NSF) Panel Reviewer
- 2023 - 2024** The Society for the Advancement of Biology Education Research (SABER) Buddies Program.
- 2023 – 2024** The Society for the Advancement of Biology Education Research (SABER) Annual Meeting 5k Fun Run Organizer
- 2021 – 2024** Abstract Reviewer for the Society for the Advancement of Biology Education Research (SABER) Annual Conference
- 2024** Focus Scientist for the Biology Saves the World Course at the University of Minnesota
- 2021 – 2023** Judge at Auburn College of Science and Mathematics Undergraduate Research Poster Presentation
- 2022** Gross Out Camp Leader. A one-week camp that hosts K-8th grade students to teach them about biology in an outdoor setting.
- 2022** Santa’s Little Scientists Leader. A holiday-themed outreach event where K-8 students learn more about science.
- 2020 – 2022** Graduate Advisor to Operation Smile at Auburn University
- 2021** Judge at BEST Regional Robotics Championship
- 2021** Volunteer Proctor for Regeneron International Science and Engineering Fair
- 2020** Driessen E.P. *Non-traditional Path to Professional Happiness*. (2020). Presented at EmpowHER outreach event for 8th-11th grade girls interested in STEM disciplines. Auburn University, Auburn, AL.
- 2018 – 2019** University of Kentucky Student Government Association Graduate Student Representative
- 2017 – 2019** University of Kentucky Graduate Student Council Representative for the College of Education
- 2017 – 2019** University of Kentucky Semi-Annual STEM night for K-12 students
-

PEER REVIEW

(Number of articles reviewed in parentheses)

- Advances in Physiology Education* (1)
- Cogent Education* (1)
- Ecology and Evolution* (2)
- Frontiers* (1)
- Journal of Microbiology & Biology Education* (5)
- Journal of Science Education and Technology* (1)
- Nordic Journal of STEM Education* (2)
- Physical Review Physics Education Research* (5)
-

SOCIETY MEMBERSHIPS

- American Education Research Association (AERA)
- National Science Teachers Association (NSTA)
- Society for the Advancement of Biology Education Research (SABER)

PROFESSIONAL DEVELOPMENT

- 2024** Learning from Place: Bdote. A one-day-long experience to learn about indigenous relationships to the land in Minnesota and unlearn history that portrayed settlers as benevolent.
 - 2024** National Science Foundation (NSF) Education Research Core Principal Investigator Meeting Attendee. A two-day-long conference focused on grant writing and getting NSF funding.
 - 2024** Inclusive Teaching for the Multilingual Classroom: Content Delivery, Inclusive Teaching for the Multilingual Classroom Training Cohort. A semester-long working group to improve understanding of multilingual student experiences in the classroom.
 - 2023** Professional Development for Emerging Education Researchers (PEER) Institute. A three-day-long grant writing workshop.
 - 2023** Conflict Management Course. A semester-long course focused on leadership, including how to talk about and manage conflict.
 - 2023** Fair Play Workshop. A one-day long workshop focused on race and racism in academia.
 - 2021** Equity and Diversity in Undergraduate STEM (EDU-STEM) Scholars Mentor Training. A semester-long training to learn how to be a better mentor with a focus on diversity, equity, and inclusion.
 - 2021** Safe Zone Training. A two-day-long training focused on making more inclusive spaces for LGBTQIA+ students
-