

Harrison E. Stalvey

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Research

Undergraduate mathematics education (RUME).

Education

- Aug 2014 **Ph.D. in Mathematics**, Georgia State University.
Dissertation: The teaching and learning of parametric functions: A baseline study.
Advisor: Dr. Draga Vidakovic.
- May 2010 **M.S. in Mathematics**, Georgia State University.
Thesis: Weak primary decomposition of modules over a commutative ring.
Advisor: Dr. Yongwei Yao.
- May 2007 **B.S. in Mathematics**, Georgia State University.

Professional Experience

- Aug 2019 – **Assistant Teaching Professor**, *Department of Mathematics*, University of Colorado Boulder.
Present
- Aug 2016 – **Lecturer**, *Department of Mathematics*, University of Colorado Boulder.
Aug 2019
- Aug 2014 – **Visiting Lecturer**, *Department of Mathematics & Statistics*, Georgia State University.
Aug 2016
- Aug 2009 – **Graduate Teaching Assistant**, *Department of Mathematics & Statistics*, Georgia State University.
Aug 2014
Principal instructor of record.
- Fall 2011 **Graduate Research Assistant**, *Draga Vidakovic*, Georgia State University.
- July 2010 **Instructor**, Early College Summer Enrichment Program, *College of Education*, Georgia State University.
- Aug 2007 – **Graduate Lab Assistant (Tutor)**, *Department of Mathematics & Statistics*, Georgia State University.
Aug 2009
- Aug 2007 – **Graduate Assistant (Tutor)**, *Athletic Department*, Georgia State University.
Aug 2009
- Aug 2004 – **Student Assistant (Tutor)**, *Department of Mathematics & Statistics*, Georgia State University.
Aug 2007

Administrative Experience

University of Colorado Boulder

- **Course Coordinator**, Precalculus, *Department of Mathematics*.
Spring 2025, Fall 2024, Spring 2024, Fall 2023.
- **Course Coordinator**, Calculus 1, *Department of Mathematics*.
Summer 2024, Summer 2023, Spring 2023, Fall 2022, Summer 2022, Spring 2022, Summer 2021, Summer 2020, Spring 2020, Fall 2019.
- **Course Coordinator**, Calculus 3, *Department of Mathematics*.
Fall 2021, Spring 2021, Fall 2020.
- **Course Coordinator**, Precalculus Supplemental Lab, *Department of Mathematics*.
Spring 2019, Fall 2018, Spring 2018.

Georgia State University

- **Course Co-coordinator**, Mathematics Education, *Department of Mathematics & Statistics*.
Spring 2016, Fall 2015, Spring 2015, Fall 2014.

Courses Taught

University of Colorado Boulder

1. **Precalculus.**
Spring 2025, Fall 2024, Fall 2023, Fall 2021, Fall 2018, Summer 2018, Spring 2018, Fall 2017, Summer 2017, Spring 2017, Fall 2016.
2. **Mathematics Teacher Training.**
Spring 2025, Fall 2024, Spring 2024, Fall 2023, Spring 2023, Fall 2022, Spring 2022, Fall 2021, Spring 2021, Fall 2020, Spring 2020, Fall 2019, Spring 2019.
3. **Calculus 1.**
Fall 2024, Summer 2024, Fall 2023, Summer 2023, Fall 2022, Summer 2022, Spring 2022, Summer 2021, Summer 2020, Spring 2020, Fall 2019, Fall 2018, Spring 2018, Fall 2016.
4. **Introduction to Discrete Mathematics.**
Spring 2024, Spring 2023, Summer 2022, Spring 2022, Fall 2021, Summer 2021, Spring 2020, Spring 2017.
5. **PhD Independent Study**, Mathematics Education.
Spring 2024.
6. **Precalculus Supplemental Lab.**
Fall 2023, Spring 2022, Spring 2019, Fall 2018, Spring 2018, Spring 2017.
7. **Calculus 3.**
Fall 2022, Fall 2021, Spring 2021, Fall 2020, Fall 2019, Spring 2019, Fall 2017.
8. **Linear Algebra for Non-Math Majors.**
Summer 2019.
9. **Calculus 2.**
Summer 2019, Summer 2018.

Georgia State University

1. **Multivariate Calculus.**
Summer 2016, Spring 2015.
2. **Calculus II.**
Spring 2016, Fall 2015, Spring 2015, Fall 2014, Spring 2014, Fall 2013, Spring 2013, Fall 2012, Summer 2012.
3. **Honors Calculus II.**
Spring 2016.
4. **College Trigonometry.**
Spring 2016.
5. **Calculus I.**
Fall 2015, Summer 2015, Fall 2014.
6. **Linear Algebra I.**
Summer 2015.
7. **College Geometry.**
Fall 2014.
8. **Algebraic Concepts.**
Summer 2013, Spring 2012, Fall 2011, Summer 2011, Spring 2011.
9. **Introduction to Mathematical Modeling**
Fall 2011, Summer 2011, Fall 2010, Spring 2010, Fall 2009.

Contract Work

- May 2023 – **Curriculum Development**, Calculus 1–3, *Department of Mathematics*.
Aug 2024 Collaborative work with Jack Dalton, Rebekah Jones, Kevin Manley, Andrew Meier, Lee Roberson, and Joseph Timmer.
- May 2022 – **Course Redesign**, Precalculus, *Department of Mathematics*.
Aug 2022 Collaborative work with Kevin Manley, Lee Roberson, and Joseph Timmer.
- Jun 2021 – **Course Design**, Calculus 1 Supplemental Lab, *Department of Mathematics*.
Aug 2023 Inaugural semester: Fall 2023
- Jul 2020 – **Research Consultant**, SEMINAL Grant, *National Science Foundation*.
Jul 2022 Student Engagement in Mathematics through an Institutional Network for Active Learning.
- Aug 2020 – **Technical Support**, *Department of Mathematics*, University of Colorado Boulder.
Dec 2020 Provided technical support and faculty training for using learning management systems during remote instruction in response to COVID-19.

Service

University of Colorado Boulder

- Aug 2022 – **Mentor**, Teaching Postdoctoral Scholars, *Department of Mathematics*.
Present Cohort 1: Rebekah Jones (2022-2024) & Andrew Meier (2022-Present).
Cohort 2: Justin Barhite & Jack Dalton (2023-Present).
- Aug 2023 – **Mentor**, Teaching Assistant for Inclusive Pedagogy, *Department of Mathematics*.
Present Courtney Hauf (2024-present), Maggie Reardon (2023-2024).

- Aug 2021 – **Committee Member**, Diversity Committee, *Department of Mathematics*.
Present
- Aug 2018 – **Placement Coordinator**, Precalculus Supplemental Lab, *Department of Mathematics*.
Present
- Aug 2018 – **Mentoring Coordinator**, Mentoring Program for New Lecturers, *Department of Mathematics*.
Present
- Aug 2021 – **Committee Member**, Seminar on Undergraduate Mathematics Education (SUME),
May 2024 *Department of Mathematics*.
Committee Chair from Aug 2023 to May 2024.
- Aug 2022 – **Committee Member**, Undergraduate Committee, *Department of Mathematics*.
May 2023 Upper division sub-committee.
- Apr 2023 **Committee Chair**, Hiring Committee for Teaching Postdoctoral Scholars, *Department of Mathematics*.
Successful search: Justin Barhite & Jack Dalton.
- Mar 2022 **Committee Member**, Hiring Committee for Teaching Postdoctoral Scholars, *Department of Mathematics*.
Successful search: Rebekah Jones & Andrew Meier.

Georgia State University

- Mar 2016 – **Member**, SALT-UM Steering Committee, *Department of Mathematics & Statistics*.
Aug 2016 Seminar on Active Learning and Teaching in Undergraduate Mathematics.
- Sep 2015 – **Member**, Math & Stat Club Board of Advisors, *Department of Mathematics & Statistics*.
Aug 2016
- 2011 **Member**, Curriculum Development Committee for the Life Sciences Calculus Sequence, *Department of Mathematics & Statistics*.

Professional Development & Workshops

- 2022 **Co-Facilitator**, Learning by Design Program, *ASSETT's Active Learning Academy*, University of Colorado Boulder, Fall Semester.
Facilitators: Leilani Arthurs (Department of Geological Sciences), Amanda McAndrew (ASSETT, Center for Teaching & Learning), and Karen Crouch (ASSETT, Center for Teaching & Learning).
- 2021 **Participant**, CoMInDS, *Mathematical Association of America*, July 19–22.
College Mathematics Instructor Development Source. Workshop on providing professional development to graduate students.
- 2020 **Participant**, Learning by Design Program, *ASSETT's Active Learning Academy*, University of Colorado Boulder, Fall Semester.
- Sep 2019 – **Participant**, New Faculty Development Program, *College of Arts and Sciences*, University of Colorado Boulder.
Apr 2020
- 2019 **Participant**, TRESTLE Scholars, University of Colorado Boulder, Spring Semester.
Transforming Education, Supporting Teaching and Learning Excellence.
- 2018 **Co-organizer (with Tatjana Budimirovic)**, Lecturer Workshop on Active Learning, *Department of Mathematics*, University of Colorado Boulder, November 8.

Professional Affiliations

- Mathematical Association of America (MAA).
- Special Interest Group of Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME).

Honors and Awards

- 2011 **Best Teaching Assistant Award**, *Department of Mathematics & Statistics*, Georgia State University.
- 2010 **Best Teaching Assistant Award**, *Department of Mathematics & Statistics*, Georgia State University.

Scholarship

Peer-Reviewed Journal Articles

1. Stalvey, H. E., Burns-Childers, A., Chamberlain, D., Jr., Kemp, A., Meadows, L. J., & Vidakovic, D. (2019). Students' understanding of the concepts involved in one-sample hypothesis testing. *Journal of Mathematical Behavior*, 53, 42–64.
2. Stalvey, H. E., & Vidakovic, D. (2015). Students' reasoning about relationships between variables in a real-world problem. *Journal of Mathematical Behavior*, 40, 192–210.

Peer-Reviewed Conference Proceedings

1. Burns-Childers, A.* , Chamberlain, D., Jr., Kemp, A., Meadows, L., Stalvey, H.* , & Vidakovic, D. (2018). Reasoning about one population hypothesis testing: The case of Steve. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, & S. Brown (Eds.), *Proceedings of the 21st annual conference on Research in Undergraduate Mathematics Education* (pp. 703–710). San Diego, CA: SIGMAA on RUME.
2. Burns-Childers, A.* , Chamberlain, D., Jr., Kemp, A.* , Meadows, L.* , Stalvey, H., & Vidakovic, D. (2017). Students' understanding of test statistics in hypothesis testing. In A. Weinberg, C. Rasmussen, J. Rabin, M. Wawro, & S. Brown (Eds.), *Proceedings of the 20th annual conference on Research in Undergraduate Mathematics Education* (pp. 82–92). San Diego, CA: SIGMAA on RUME.
3. Stalvey, H. E.* , & Vidakovic, D. (2015). The generalization of the function schema: The case of parametric functions. In T. Fukawa-Connelly, N. Engelke Infante, K. Keene, & M. Zandieh (Eds.), *Proceedings of the 18th annual conference on Research in Undergraduate Mathematics Education* (pp. 953–959). Pittsburgh, PA: SIGMAA on RUME.

Conference & Seminar Presentations, Session Organization

1. Meier, A., & Stalvey, H. (2024). Lecturing for engagement. *Seminar in Undergraduate Mathematics Education*, University of Colorado Boulder. Boulder, CO, March 8.
2. Stalvey, H. E. (2019). Epistemology, psychology, and the concept of function. *Math Club*, University of Colorado Boulder. Boulder, CO, October 2.

3. Vidakovic, D., Stalvey, H., Chamberlain, D., Jr., Kemp, A., Meadows, L., & Kellam, A. (2018). Co-organizers of the special session on Active Learning in Undergraduate Mathematics, *2018 MAA spring southeastern sectional meeting*. Clemson, SC, March 23–24.
4. Vernerey, D., Machen, R.* , & Stalvey, H. E.* (2017). Developing an active learning environment in precalculus. Special session on Active Learning in Undergraduate Mathematics, *AMS spring southeastern sectional meeting*. Charleston, SC, March 10–12.
5. Vidakovic, D., Stalvey, H., Chamberlain, D., Jr., Kemp, A., & Meadows, L. (2017). Co-organizers of the special session on Active Learning in Undergraduate Mathematics, *AMS spring southeastern sectional meeting*. Charleston, SC, March 10–12.
6. Vernerey, D., Stalvey, H., & Machen, R. (2017). A collaboration between faculty & student affairs: MATH 1151 Precalculus Supplemental Lab. *Advisor Day*, University of Colorado Boulder. Boulder, CO, February 14.
7. Vidakovic, D., Stalvey, H., Chamberlain, D., Jr., Kemp, A., & Meadows, L. (2016). Co-organizers of the special session on Active Learning in Undergraduate Mathematics, *AMS spring southeastern sectional meeting*. Athens, GA, March 5–6.
8. Chamberlain, D., Jr.* , Kemp, A.* , Meadows, L.* , Stalvey, H., Vidakovic, D., Burns, A. (2016). The emporium model for elementary statistics: A preliminary report. Special session on Active Learning in Undergraduate Mathematics, *AMS spring southeastern sectional meeting*. Athens, GA, March 5–6.
9. Stalvey, H. E.* , & Vidakovic, D. (2016). Water coolers and parametrizations. MAA session on Research on the Teaching and Learning of Undergraduate Mathematics, *Joint Mathematics Meetings*. Seattle, WA, January 6–9.
10. Grinshpon, M., Brazas, J., Rizzo, R.* , Stalvey, H.* , & Wang, C.* (2015). Rethinking calculus: In search of new platforms, different approaches, and more interactivity. University System of Georgia STEM mini-grant results presentation, Georgia State University. Atlanta, GA, October 9.
11. Stalvey, H. E. (2015). Parametric functions: Second-semester calculus students' conceptions and misconceptions. Seminar presentation, School of Mathematical Sciences, University of Northern Colorado. Greeley, CO, January 27.
12. Stalvey, H. E.* , & Vidakovic, D. (2015). Students' reasoning when sketching graphs of plane curves defined parametrically. MAA session on Research on the Teaching and Learning of Undergraduate Mathematics, *Joint Mathematics Meetings*, San Antonio, TX, January 10–13.
13. Stalvey, H. E.* , Vidakovic, D., Montiel, M. (2014). Developing the notion of function between sets of equivalence classes from the APOS perspective. MAA session on Research on the Teaching and Learning of Undergraduate Mathematics, *Joint Mathematics Meetings*, Baltimore, MD, January 15–18.
14. Stalvey, H. E. (2012). Epistemology of mathematical concepts with particular reference to the concept of function and the notion of well-defined. *Mathematics graduate student miniconference*, Georgia State University. Atlanta, GA, March 30.
15. Stalvey, H. E. (2006). Introduction to trigonometry: Through the right-angled triangle or wrapping function? *Undergraduate RIMMES conference*, Georgia State University. Atlanta, GA, April 21. (Mentor: Dr. Draga Vidakovic)

Grants

1. Grinshpon, M., Chahine, I., Fanoë, A., & Stalvey, H. (2016). Incorporating “just in time” teaching to enhance the newly changed lecture/recitation format in calculus. *University System of Georgia STEM Mini-Grant*.
2. Grinshpon, M., Chahine, I., Fanoë, A., & Stalvey, H. (2016). Adapting to trig: Using the ALEKS adaptive technology to improve students’ learning and retention in the college trigonometry course. *University System of Georgia STEM Mini-Grant*.
3. Grinshpon, M., Brazas, J., Rizzo, R., & Stalvey, H. (2015). Rethinking calculus: In search of new platforms, different approaches, and more interactivity. *University System of Georgia STEM Mini-Grant*.