CURRICULUM VITAE

CV SECTION 1: Employment History/Awards

NAME Jess Ellis Hagman (Published under Ellis prior to May 2017)

ADDRESS Department of Mathematics, Colorado State University, Weber 121

EDUCATION

2014 Ph.D. in Mathematics and Science Education, joint doctoral program
University of California San Diego & San Diego State University, San Diego, CA
2010 M.S. in Pure Mathematics
California Polytechnic University, San Luis Obispo, CA
2007 B.S. in Pure Mathematics
California Polytechnic University, San Luis Obispo, CA

ACADEMIC POSITIONS

2019 - Co-Director of the Calculus Center, Department of Mathematics, Colorado State University, Fort Collins, CO
2014 - Assistant Professor of Mathematics Education, Department of Mathematics, Colorado State University, Fort Collins, CO

CURRENT JOB DESCRIPTION

30 % Teaching 60 % Research/Creative Activity 10% Service/Outreach

HONORS AND AWARDS

2018 Colorado State University College of Natural Sciences (CNS) Early Career Faculty Excellence in Undergraduate Teaching and/or Mentoring Award
2017 Faculty Institute for Inclusive Excellence at CSU Fellow
2016 TIMES (Teaching Inquiry Materials: Establishing Supports) Fellow
2015 STaR (Service, Teaching, and Research) Fellow

CV SECTION 2: Publications/Scholarly Record

PUBLISHED WORKS (+Work with student)

Refereed Journal Articles (referenced as J#):

8. Hagman, J.E. (2019). The 8th Characteristic: Creating Successful Calculus Programs for All Students. *Problems, Resources, and Issues in Mathematics Undergraduate Studies (PRIMUS).* Published online June 23, 2019. [Borda score: 2.36, Citations: 1]
7. Rasmussen, C., Apkarian, N., Hagman, J. E., Johnson, E., Larsen, S., & Bressoud, D. (2019). Characteristics of Precalculus Through Calculus 2 Programs: Insights From a National Census Survey. *Journal for Research in Mathematics Education*, *50*(1), 98-112. [Borda score: 4.69, Citations: 3]
6. Hagman, J.E., Johnson, E., & Fosdick, B. (2017). Factors Contributing to Experiencing

a Lack of Time in College Calculus. *International Journal of STEM Education, 4*(12). DOI 10.1186/s40594-017-0070-7 [CiteScore: 2.40, Citations: 3]

5. Zandieh, M., Ellis, J., & Rasmussen, C. (2016). Student Concept Images of Function and Linear Transformation. Educ Stud Math. doi:10.1007/s10649-016-9737-0 [Borda Score: 4.58, Citations: 10]

4. Ellis, J., Fosdick, B.K., Rasmussen, C. (2016). Women 1.5 Times More Likely to Leave STEM Pipeline after Calculus Compared to Men: Lack of Mathematical Confidence a Potential Culprit. PLoS ONE 11(7): e0157447. doi:10.1371/journal.pone.0157447 [Impact Factor: 2.7, Citations: 92]

3. Johnson, E., Ellis, J., & Rasmussen, C. (2015). It's About Time: The Relationships between Coverage and Instructional Practices in College Calculus. *International Journal of Mathematical Education in Science and Technology, 1-14*. [Borda score: 3.06, Citations: 5]

2. [+]Ellis, J., Hanson, K., Nuñez, G., & Rasmussen, C. (2015). Beyond Plug and Chug: an Analysis of Calculus I Homework. *International Journal of Research in Undergraduate Mathematics Education. DOI 10.1007/s40753-015-0012-z* [Citations: 12]

1. Ellis, J., Kelton, M., & Rasmussen, C. (2014). Student perception of pedagogy and persistence in calculus. *ZDM. 46* (4)., pp. 661-673. [Borda score: 3.91, Citations: 48]

Refereed Chapters in Books (Referenced as C#):

2. Rasmussen, C., & Ellis, J. (2015). Calculus coordination at PhD-granting universities: More than just using the same syllabus, textbook, and final exam. In D. Bressoud, V. Mesa, and C. Rasmussen (Eds.), *Insights and recommendations from the MAA national study of college calculus. MAA Notes* (pp 109-117). Washington, DC: Mathematical Association of America. [Citations: 16]

1. Ellis, J. (2015). Professional Development of Graduate Students Involved in the Teaching of Calculus I. D. Bressoud, V. Mesa, and C. Rasmussen (Eds.), *Insights and recommendations from the MAA national study of college calculus. MAA Notes* (pp 121-128). Washington, DC: Mathematical Association of America. [Citations: 6]

Refereed Proceedings/Transactions (Referenced as P#):

32. [+]Vroom, K., Gehrtz, J., Alzaga Elizondo, T., Ellis, B., Apkarian, N.**,** & Hagman, J. E. (accepted for RUME 2019). First-year mathematics students' view of helpful teaching practices.

31. Hagman, J., Basile, PV., Birmingham, D., & Fosdick, B.K. (2018). Challenging the sigma of a small N: Experiences of students of color in Calculus I. In T.E. Hodges, G. J. Roy, & A. M. Tyminski, (Eds.), *Proceedings of the 40th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1339-1342). Greenville, SC: University of South Carolina & Clemson University.

30. Hagman, J., Basile, V., Birmingham, D., & Fosdick, B.K. (2018). Challenging the stigma of a small N: Experiences of students of color in Calculus I. Proceedings *of the 21st Annual Conference on Research in Undergraduate Mathematics Education,* (pp. 890-899). San Diego, CA.

29. [+]Gehrtz, J., Hagman, J, & Speer, N. (2018), Gauging College Mathematics Instructors' Knowledge of Student Thinking About Limits, *Proceedings of the 21st Annual Conference on Research in Undergraduate Mathematics Education,* (pp. 1387-1398). San Diego, CA.

28. Musgrave, S., Hagman, J.E., Melhuish, K., Thanheiser, E., & Wawro, M. (2018). MPWR-ing Women in RUME: Continuing Support, *Proceedings of the 21st Annual*

Conference on Research in Undergraduate Mathematics Education, (pp. 1631-1632). San Diego, CA.

27. [+]Bragdon, D, Ellis, J. & Gehrtz, J. (2017). Interaction, activities, & feedback: A taxonomy of GTA professional development. 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. 502-510). San Diego, CA.

26. Speer, N., Deshler, J., & Ellis, J. (2017). Evaluation of graduate student professional development and instruction by mathematics departments: Results from a national survey. 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. 1442-1448). San Diego, CA.

25. Ellis, J., Musgrave, S., Melhuish, K., Thanheiser, E., & Wawro, M. (2017). Empowered women in RUME: What have we been up to? . 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. 1573-1574). San Diego, CA.

24. [+]Gehrtz, J., Sampera, R., Ellis, J. (2017). Equity issues that (may) arise in active learning classrooms. 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. 1583-1584). San Diego, CA.

23. Ellis, J., Deshler, J., & Speer, N. (2016). Supporting institutional change: A two-pronged approach related to graduate teaching assistant professional development. In Fukawa-Connelly, T., Engelke Infante, N., M. Wawro, & S. Brown (Eds.) *Proceedings of the 19th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 729-736). Pittsburgh, PA.

22. Ellis, J. (2016). Learning to think, talk, and act like an instructor: A framework for novice tertiary instructor teaching preparation programs. In Fukawa-Connelly, T., Engelke Infante, N., M. Wawro, & S. Brown (Eds.) *Proceedings of the 19th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 136-150). Pittsburgh, PA.

21. Ellis, J., & Cooper, R (2016). Gender, switching, and student perceptions of Calculus I. In Fukawa-Connelly, T., Engelke Infante, N., M. Wawro, & S. Brown (Eds.) *Proceedings of the 19th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 125-135). Pittsburgh, PA.

20. Rasmussen, C., Apkarian, N., Bressoud, D., Ellis, J., Johnson, E., & Larsen, S. (2016). A national investigation of Precalculus through Calculus 2. In Fukawa-Connelly, T., Engelke Infante, N., M. Wawro, & S. Brown (Eds.) *Proceedings of the 19th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 1245-1251). Pittsburgh, PA.

19. Ellis, J., Deshler, J., & Speer, N. (2016). How do mathematics departments evaluate their graduate teaching assistant professional development programs? *Proceedings of the 40th Conference of the International Group for the Psychology of Mathematics Education,* Szeged, Hungary (pp. 227-234).

18. Deshler, J. M., & Hagman, J.E., (2017). International similarities and differences in the experiences and preparation of post-graduate mathematics students as tertiary instructors. *Proceedings of the 13th International Congress on Mathematical Education; ICME-13. Springer International Publisher: International Congress of Mathematical Education. https://link.springer.com/chapter/10.1007/978-3-319- 62597-3_120*

17. Ellis, J., Johnson, E, Fosdick, B. (2016). Feeling the Squeeze: Factors Contributing to

Experiencing a Lack of Time in College Calculus. In *Wood, M. B., Turner, E. E., Civil, M., & Eli, J. A. (Eds.). (2016). Proceedings of the 38th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Tucson, AZ: The University of Arizona.* (pp. 1317-1321).

16. Rasmussen, C., Ellis, J., & Bressoud, D. (2015). Who are the students who switch out of calculus and why? *Proceedings of the KSME 2015 International Conference on Mathematics Education*, Seoul, Korea.

15. [+]Ellis, J., Hanson, K., Nuñez, G., & Rasmussen, R. (2015). Beyond Plug and Chug: an Analysis of Calculus I Homework. *Proceedings of the 18th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 486-495). Pittsburgh, PA.

14. Johnson, E., Ellis, J., & Rasmussen, C. (2015). It's About Time: How Instructors And Students Experience Time Constraints In Calculus I. *Proceedings of the 18th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 477-486). Pittsburgh, PA.

13. Ellis, J. (2014). Preparing Future Professors: Highlighting The Importance Of Graduate Student Professional Development Programs In Calculus Instruction. In Oesterle, S., Liljedahl, P., Nicol, C., & Allan, D. (Eds.). *Proceedings of the 38th Conference of the International Group for the Psychology of Mathematics Education* Vol. 3 (pp. 9-16). Vancouver, British Columbia: PME.

12. Rasmussen, C., Ellis, J., Zazkis, D., & Bressoud., D. (2014). Features Of Successful Calculus Programs At Five Doctoral Degree Granting Institutions. In Oesterle, S., Liljedahl, P., Nicol, C., & Allan, D. (Eds.). *Proceedings of the 38th Conference of the International Group for the Psychology of Mathematics Education,* Vol. 5 (pp. 33-40). Vancouver, British Columbia: PME.

11. Johnson, E., Ellis, J., & Rasmussen, C. (2014). It's About Time: How Instructors And Students Experience Time Constraints In Calculus I. In Oesterle, S., Liljedahl, P., Nicol, C., & Allan, D. (Eds.). *Proceedings of the 38th Conference of the International Group for the Psychology of Mathematics Education,* Vol. 6 (pp. 119-120). Vancouver, British Columbia: PME.

10. Ellis, J. (2014). Graduate students Teaching Assistants' (GTAs') beliefs, instructional practices, and student success. *Proceedings of the 17th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 609-616). Denver, CO.

9. Johnson, E., Ellis, J., & Rasmussen, C. (2014). How to Make Time: The Relationships between Concerns about Coverage, Material Covered, Instructional Practices, and Student Success in College Calculus. *Proceedings of the 17th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 722-730). Denver, CO.

8. Rasmussen, C., Ellis, J., & Zazkis, D. (2014). Lessons Learned from Case Studies of Successful Calculus Programs at Five Doctoral Degree Granting Institutions. *Proceedings of the 17th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 999-1005). Denver, CO.

7. [+]Nuñez, G., Hanson, K, & Ellis, J. (2014). Beyond Plug And Chug: The Nature Of Calculus Homework At Doctoral Institutions. *Proceedings of the 17th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 971-974). Denver, CO.

6. Rasmussen, C., & Ellis, J. (2013). Who is switching out of calculus and why? In Lindmeier, A. M. & Heinze, A. (Eds.). *Proceedings of the 37th Conference of the International Group for the Psychology of Mathematics Education,* Vol. 4 (pp. 73-80). Kiel, Germany: PME.

5. Uysal, F., Ellis, J., & Rasmussen, C. (2013). What do college calculus students believe about mathematics? In Lindmeier, A. M. & Heinze, A. (Eds.). *Proceedings of the 37th*

Conference of the International Group for the Psychology of Mathematics Education, Kiel, Germany.

4. Ellis J, Rasmussen, C, Duncan, K. (2013). Switcher and Persister experiences in Calculus I. (Eds.) S. Brown, G. Karakok, K.H. Roh, and M. Oehrtman, *Proceedings of the 16th Annual Conference on Research in Undergraduate Mathematics Education*, (pp. 1-7). Denver, CO.

3. +Ellis, J., Henderson, F., Rasmussen, C., & Zandieh, M. (2012). Student reasoning about linear transformations. In (Eds.) S. Brown, S. Larsen, K. Marrongelle, and M. Oehrtman, *Proceedings of the 15th Annual Conference on Research in Undergraduate Mathematics Education*, Vol. 1 (pp. 413-421). Portland, OR.

2. Zandieh, M., Ellis, J., & Rasmussen, C. (2012). Student concept images of function and linear transformation. In (Eds.) S. Brown, S. Larsen, K. Marrongelle, and M. Oehrtman, *Proceedings of the 15th Conference on Research in Undergraduate Mathematics Education*, Vol. 1 (pp. 320-329). Portland, OR.

1. Carlson, M., Rasmussen, C., Bressoud, D., Pearson M., Jacobs, S., Ellis, J., & Weber, E. (2011). Surveying mathematics departments to identify characteristics of successful programs in college Calculus. In (Eds.) S. Brown, S. Larsen, K. Marrongelle, and M. Oehrtman, *Proceedings of the 14th Annual Conference on Research in Undergraduate Mathematics Education* (pp. 33-39). Portland, OR.

Non-Refereed Journal Articles/Chapters/Proceedings/Transactions:

4. Hagman, J.E. (November, 2018). Can Calculus Cultivate Curiosity? If so, for Whom? *Paper presented to the Reinvention Collaborative RC20/20 Project Conference.* Paper available online: https://static1.squarespace.com/static/5c5320eb71069943f80b6493/t/5c755f1b6e9a7f68047af10c/1551195931594/CSU+Hagman+Calculus+Completion.pdf

3. Rasmussen, C. & Ellis, J. (February, 2016). Calculus Coordination: A factor for success. *MAA Focus*., pp. 28-30.

2. Sonnert, G., & Ellis, J. (2015) Appendix B: Survey Questions and Codebook D. Bressoud, V. Mesa, and C. Rasmussen (Eds.), *Insights and recommendations from the MAA national study of college calculus. MAA Notes* (pp 139-169). Washington, DC: Mathematical Association of America.

1. Wawro, M., Ellis, J., & Soto-Johnson, H. (September, 2014). MPWR: Mentoring and Partnerships for Women in RUME. *American Women in Mathematics (AWM) Newsletter.*

Manuscripts Submitted for Publication:

2. Vroom, K., Gehrtz, J., Apkarian, N., Elizondo, T.A., Ellis, B., & Hagman, J.E. First-year Mathematics Students' Perceptions of Ambitious Teaching. *International Journal of Mathematics Education in Science and Technology*. Refereed.

1. DiGregorio, G., & Hagman, J.E. Towards student-ready math departments: Creating a math placement experience within an asset framed approach. *Problems, Resources, and Issues in Mathematics Undergraduate Studies (PRIMUS).* Refereed.

CONTRACTS & GRANTS

Externally-Funded Projects as PI

2016-2017 *MPWR 2016 and Beyond: Fostering sustainable networks for women in RUME,* J. Ellis (PI), S. Musgrave (Co-PI), National Science Foundation Innovations in Undergraduate STEM Education DUE- 1553278, $199,992

This is a three-year service and research oriented project that organizes, provides, and researchers the effects of a one-day seminar for women in my research area.

2014-2015 *Mentoring and Partnerships for Women in RUME II (MPWR II),* J. Ellis (PI), M. Wawro, E. Thanheiser, S. Musgrave (Senior Personnel), National Science Foundation Innovations in Undergraduate STEM Education DUE-1457785, $49,986

This is a one-year service oriented project that organizes and provides a one-day seminar for women in my research area.

Externally-Funded Projects as CoPI

2017-2019 *MPWR 2016 and Beyond: Fostering sustainable networks for women in RUME,* S. Musgrave (PI), J. Ellis (Co-PI), National Science Foundation Innovations in Undergraduate STEM Education DUE- 1553278, $199,992

This is the same grant as above, but I switched roles from PI to Co-PI.

2015-2019 *Pathways Through Calculus*, D. Bressoud (PI), L. Braddy (Co-PI), J. Ellis (Co-PI), S. Larsen (Co-PI), C. Rasmussen (Co-PI), National Science Foundation Innovations in Undergraduate STEM Education DUE- 1430540, $2,225,000.

This is a research grant. I am the PI of the CSU subaward of $242,386.

Externally-Funded Projects as Investigator or role other than PI or CoPI

2013-2014 *Mentoring and Partnerships for Women in RUME (MPWR)*, M. Wawro (PI), J. Ellis and H. Soto-Johnson (Senior Personnel), National Science Foundation Transforming Undergraduate Education in STEM DUE-1352990, $44,148.

This is a one-year service oriented project that organizes and provides a one-day seminar for women in my research area. As a graduate student, I helped to write the original grant and plan the original seminar.

PAPERS PRESENTED/SYMPOSIA/INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS (Presenter underlined) ($^{+}$Work with student)

Invited Presentations

10. *Gehrtz, J. & Hagman, J.E., (2020, January). Responsiveness as a Disposition and Its Impact on Instruction. Invited presentation at the 2020 Joint Mathematics Meeting, San Diego, CA.
9. *$^{+}$Apkarian, N., Hagman, J. E., Rasmussen, C., Bressoud, D., Johnson, E., Larsen, S., Gehrtz, J., Vroom, K., & Voigt, M. (2019). The Progress through Calculus Project: A national study of precalculus through calculus 2 programs. Special session on NSF IUSE-funded research projects at *The Joint Mathematics Meetings 2019*. Baltimore, MD.
8. *Ellis, J. (2017, April). An Overview of Two National Studies on College Calculus. Keynote speaker for the Wyoming Mathematics Institute. Casper, WY.

7. *Ellis, J. & Deshler, J. (2017, April). Findings from national survey. Invited presentation for the NSF Workshop on Preparing Mathematics Graduate Students. National Science Foundation, Arlington, VA.
6. *Ellis, J. (2017, January). Panel on Insights from MAA studies of College Algebra, Precalculus, and Calculus, Joint Mathematics Meeting, Atlanta, GA.
5. + Ellis, J., Gehrtz, J., & Bragdon, D. (2017, January). Session on *Mathematics GTA PD: Where we are and where we are going*. Joint Mathematics Meeting, Atlanta, GA.
4. *Ellis, J. & Braddy, L. (2015, April). Characteristics of Successful Calculus Programs and PIC Math. Poster presented to the Coalition for National Science Foundation (CNSF), Washington, DC.
3. *Ellis, J., (2015, February). Features Of Successful Calculus Programs At Five Doctoral Degree Granting Institutions. Invited presentation for the Front Range Math Education Seminar (FRaMES), Denver, CO.
2. *Ellis, J., (2014, November). Characteristics of Successful Programs in College Calculus. Invited Keynote presentation during the Research Session of the AMATYC conference, Nashville, TN.
1. *Zandieh, M., Ellis, J., & Rasmussen, C. (2013, January). Student concept images of function and linear transformation. Invited presentation at the 2013 Joint Mathematics Meeting, San Diego, CA.

Invited Department Colloquia and Seminars

20. *Hagman, J.E., (2019, April). *An update on characteristics of successful college calculus programs*, Montana State University, Bozeman, MT.
19. *Hagman, J. E. (2018, March). *Studying Successful Calculus Programs: With ALL students in mind,* University of Northern Colorado School of Mathematical Sciences Research Seminar, Greeley, CO.
18. *Ellis, J. (2017, April). The features of college calculus programs: An overview of the MAA two calculus projects' main findings. Invited speaker for the Department of Applied Mathematics and Statistics (AMS) Colloquium at Colorado School of Mines, Golden, CO.
17. *Ellis. J. (2017, March). An Overview of the MAA's Calculus Projects' Main Findings. Invited speaker for the Fisk Distinguished Speaker Series, University of Wyoming, Laramie, WY.
16. *Ellis, J., (2016, March). The Role of Calculus in the STEM "Gender Filter". Invited colloquium for the Department of Mathematics, University of Oklahoma, Norman, OK.
15. *Ellis, J., (2016, March). The Role of Calculus in the STEM "Gender Filter". Invited colloquium for the Department of Mathematics, University of Arkansas, Fayetteville, AK.
14. *Ellis, J., (2016, March). The features of successful college calculus programs: An overview of the CSPCC project's main findings. Invited colloquium for the Department of Mathematics, University of Arkansas, Fayetteville, AK.
13. *Ellis, J., (2015, December). The Role of Calculus in the STEM "Gender Filter". Invited colloquium for the Department of Mathematics, Montana State University, Bozeman, MT.
12. *Ellis, J., (2015, November). Teaching Undergraduate Mathematics with the Common Core in Mind. Discussion leader for the teacher presentation at Colorado State University Math Day, Fort Collins, CO.

11. *Ellis, J., (2015, October). The features of successful college calculus programs: An overview of the CSPCC project's main findings. Invited colloquium for the Department of Mathematics, Metropolitan State University, Denver, CO.
10. *Ellis, J., (2015, May). The features of successful college calculus programs: An overview of the CSPCC project's main findings. Invited colloquium for the Department of Mathematics, Oregon State University, Corvalis, OR.
9. *Ellis, J., (2015, May). Supporting Graduate Students as Innovative Instructors. Invited colloquium for the STEM Center, Oregon State University, Corvalis, OR.
8. *Ellis, J., (2015, May). The features of successful college calculus programs: An overview of the CSPCC project's main findings. Invited colloquium for the Department of Mathematics, California Polytechnic University, San Luis Obispo, CA.
7. *Ellis, J., (2015, April). The features of successful college calculus programs: An overview of the CSPCC project's main findings. Invited colloquium for the Department of Mathematics, Ohio State University, Columbus, OH.
6. *Ellis, J., (2015, April). The features of successful college calculus programs: An overview of the CSPCC project's main findings. Invited colloquium for the Department of Mathematics, University of Wyoming, Laramie, WY.
5. *Ellis, J., (2014, January). Preparing Future College Instructors: The Role of Graduate Student Teaching Assistants (GTAs) in Successful College Calculus Programs. Invited colloquium for the Department of Mathematics, Portland State University, Portland, OR.
4. *Ellis, J., (2014, January). Preparing Future College Instructors: The Role of Graduate Student Teaching Assistants (GTAs) in Successful College Calculus Programs. Invited colloquium for the Department of Mathematics, Colorado State University, Fort Collins, CO.
3. *Ellis, J., (2013, December). Preparing Future College Instructors: The Role of Graduate Student Teaching Assistants (GTAs) in Successful College Calculus Programs. Invited colloquium for the Department of Mathematics, Montclair State University, Montclair, NJ.
2. *Ellis, J. (2013, October). Students who switch out of calculus and their perceptions of pedagogy. Invited colloquium for the Department of Mathematics and Statistics, California State Polytechnic University, Pomona, CA.
1. *Ellis, J. (2013, October). Student Perceptions of Pedagogy and Persistence in Calculus. Invited seminar talk for the Department of Mathematics and Statistics, California State University, San Diego, CA.

Conference Presentations and Posters (refereed proposals with extended abstracts)

58. Hagman, J.E., (August, 2019). A vision for the future of college calculus and how to get there. Paper presented at the Conference on Calculus in upper secondary and beginning university mathematics, Kristansaand, Norway.
57. +Gehrtz, J. & Hagman, J.E., (March, 2019). Responsiveness as a Disposition and Its Impact on Instruction. Paper presented at the 22nd Annual Conference on Research in Undergraduate Mathematics Education, Oklahoma City, OK.
56. +Ellis, B., Elizondo, T.A., & Hagman, J.E. (March, 2019). A Glimpse of Change in GTA PD Programs in U.S. Mathematics Departments. Poster presented at the 22nd Annual Conference on Research in Undergraduate Mathematics Education, Oklahoma City, OK.
55. +Vroom, K., Gehrtz, J., Elizondo, T.A., Ellis, B., Apkarian. N., & Hagman, J.E.

(March, 2019). First-year Mathematics Students' View of Helpful Teaching Practices. Paper presented at the 22nd Annual Conference on Research in Undergraduate Mathematics Education, Oklahoma City, OK.

54. Hagman, J.E., Basile, V., Fosdick, B.K., & Birmingham, D. (2018, November). *Challenging the Stigma of a Small N: Experiences of Students of Color in Calculus 1,* Paper presented at the 40th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education, Greenville, SC.
53. Hagman, J.E. (2018, November). *Enhancing Progress through Calculus Completion to Increase Graduation Rates in STEM Majors: Twelve Institution Study on P2C2 and Student Success,* Reinvention Collaborative Biennial National Conference, Arlington, VA
52. Hagman, J.E. (2018, September). Fostering Diversity, Equity, and Inclusion in Introductory STEM Courses. Presentation for the 2018 Colorado State University Diversity Symposium, Fort Collins, CO.
51. Hagman, J. E. (2018, April). *Studying Successful Calculus Programs: With ALL students in mind,* Mathematics Association of America Rocky Mountain Sectional Meeting, Greeley, CO.
50. +Gehrtz, J., Hagman, J, & Speer, N. (2018, February), *Gauging College Mathematics Instructors' Knowledge of Student Thinking About Limits,* Paper presented at the 21st Annual Conference on Research in Undergraduate Mathematics Education, San Diego, CA.
49. Hagman, J., Basile, V., Birmingham, D., & Fosdick, B.K. (2018, February). *Challenging the sigma of a small N: Experiences of students of color in Calculus I.* Paper presented at the 21st Annual Conference on Research in Undergraduate Mathematics Education, San Diego, CA.
48. +Hagman, J., Voigt, M., Kress, N., & Gehrtz, J. (2018, February). *Exploring Student's Reports of Exclusion in Calculus II.* Poster presented at the 21st Annual Conference on Research in Undergraduate Mathematics Education, San Diego, CA.
47. +Gehrtz, J., Hagman, J, & Speer, N. (2018, January) *Investigating Calculus Instructors' Responsiveness to and Interpretation of Student Thinking.* Paper presented at the Joint Mathematics Meeting, San Diego, CA.
46. +Hagman, J., Voigt, M., Kress, N., & Gehrtz, J. (2018, January). *Exploring the inequitable experiences of students in Calculus II.* Paper presented at the Joint Mathematics Meeting, San Diego, CA.
45. +Ellis, J., Bragdon, D., & Gehrtz, J. (2017, February). Interaction, activities, and feedback: A taxonomy of GTA Professional Development. Paper presented at the 20th Annual Conference on Research in Undergraduate Mathematics Education, San Diego, CA.
44. Ellis, J., Musgrave, S., Melhuish, K., Thanheiser, E., & Wawro, M. (2017, February). Empowered Women In RUME: What Have We Been Up To? Poster presented at the 20th Annual Conference on Research in Undergraduate Mathematics Education, San Diego, CA.
43. Speer, N., Ellis, J., & Deshler, J. (2017, February). Evaluation of Graduate Student Professional Development and Instruction by Mathematics Departments: Results from a National Survey. Paper presented at the 20th Annual Conference on Research in Undergraduate Mathematics Education, San Diego, CA.
42. +Gehrtz, J., Sampera, R., & Ellis, J. (2017, February). Equity Issues That (May) Arise in Active Learning Classrooms. Poster presented at the 20th Annual Conference on Research in Undergraduate Mathematics Education, San Diego, CA.
41. Ellis, J., Johnson, E, Fosdick, B. (2016, November). Feeling the Squeeze: Factors

Contributing to Experiencing a Lack of Time in College Calculus. Paper presented at the 38th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education, Tucson, AZ.

40. Ellis, J & Fosdick, B.K. (2016, September). Gender Disparity in STEM: Confidence and Calculus to Blame? Presentation for the 2016 Colorado State University Diversity Symposium, Fort Collins, CO.
39. Ellis, J., Deshler, J., & Speer, N. (2016, August). How do mathematics departments evaluate their graduate teaching assistant professional development programs? Paper presented at the 40th Conference of the International Group for the Psychology of Mathematics Education, Szeged, Hungary.
38. Rasmussen, C., & Ellis, J., (2016, July). Results of the U.S. national study of calculus. Poster presented at the 13th International Congress on Mathematics Education, Hamburg, Germany.
37. Ellis, J., Deshler, J., & Speer, N. (2016, February). Supporting institutional change: A two-pronged approach related to graduate teaching assistant professional development. Paper presented at the 19th Annual Conference on Research in Undergraduate Mathematics Education, Pittsburgh, PA.
36. Ellis, J. (2016, February). Learning to think, talk, and act like a professor. Paper presented at the 19th Annual Conference on Research in Undergraduate Mathematics Education, Pittsburgh, PA.
35. Ellis, J., & Cooper, R. (2016, February). Gender, switching, and student perceptions of Calculus I. Paper presented at the 19th Annual Conference on Research in Undergraduate Mathematics Education, Pittsburgh, PA.
34. Rasmussen, C., Apkarian, N., Bressoud, D., Ellis, J., Johnson, J.,& Larsen, S.(2016, February). A national investigation of Precalculus through Calculus 2. Paper presented at the 19th Annual Conference on Research in Undergraduate Mathematics Education, Pittsburgh, PA.
33. Ellis, J., Speer, N., & Bookman, J. (2016, January). Preparing our future colleagues: A report on the national landscape of graduate student instructor professional development programs. Presentation at the 2016 Joint Mathematics Meeting, Seattle, WA.
32. Ellis, J., & Cooper, R. (2016, January). Gender, switching, and student perceptions of Calculus I. Presentation at the 2016 Joint Mathematics Meeting, Seattle, WA.
31. Bressoud, D., Ellis, J., Larsen, S., & Rasmussen, C. (2016, January). Progress through Calculus. Poster at the MAA Poster Session on Projects Supported by the NSF Division of Undergraduate Education at the 2016 Joint Mathematics Meeting, Seattle, WA.
30. Ellis, J., (2016, January). MPWR II: Mentoring and Partnerships for Women in RUME. Poster at the MAA Poster Session on Projects Supported by the NSF Division of Undergraduate Education at the 2016 Joint Mathematics Meeting, Seattle, WA.
29. Ellis. J. (2015, April). Supporting Graduate Students as Innovative Instructors. Paper presented at the 2015 Annual meeting of the American Education Research Association, Chicago, IL.
28. Ellis, J., Hanson, K., Nuñez, G., & Rasmussen, C., (2015, February). The Structure, Content, and Feedback of Calculus I Homework at Doctoral Degree Granting Institutions and the Role of Homework in Students' Mathematical Success. Paper presented at the 18th Annual Conference on Research in Undergraduate Mathematics Education, Pittsburgh, PA.

27. Johnson, E., Ellis, J., & Rasmussen, C., (2015, February). It's About Time: How instructors and students experience time constraints in Calculus I. Paper presented at the 18th Annual Conference on Research in Undergraduate Mathematics Education, Pittsburgh, PA.
26. Ellis, J. (2014, November). Lesson Study as a Tool for Preparing Graduate Students as Future Faculty. Paper presented at the 10th Annual Conference on the World Association of Lesson Study (WALS). Bandung, Indonesia.
25. Rasmussen, C., & Ellis, J. (2014, October). Features Of Successful Calculus Programs At Five Doctoral Degree Granting Institutions. Paper presented at the Transforming Institutions: 21st Century Undergraduate STEM Education Conference, Indianapolis, IN.
24. Ellis, J. (2014, July). Preparing Future Professors: Highlighting The Importance Of Graduate Student Professional Development Programs In Calculus Instruction. Paper presented at the 38th Conference of the International Group for the Psychology of Mathematics Education, Vancouver, British Columbia.
23. Rasmussen, C., Ellis, J., Zazkis, D., & Bressoud., D. (2014, July). Features Of Successful Calculus Programs At Five Doctoral Degree Granting Institutions. Paper presented at the 38th Conference of the International Group for the Psychology of Mathematics Education, Vancouver, British Columbia.
22. Johnson, E., Ellis, J., & Rasmussen, C. (2014, July). It's About Time: How Instructors And Students Experience Time Constraints In Calculus I. Paper presented at the 38th Conference of the International Group for the Psychology of Mathematics Education, Vancouver, British Columbia.
21. Wawro, M., Ellis, J., Soto-Johnson, H. (2014, August). MPWR: Mentoring and Partnerships for Women in RUME. Paper presented at the Mathematical Association of America's (MAA) MathFest, Portland, OR.
20. Ellis, J. (2014, February). Graduate students Teaching Assistants' (GTAs') beliefs, instructional practices, and student success. Paper presented at the 17th Annual Conference on Research in Undergraduate Mathematics Education, Denver, CO.
19. Rasmussen, C., Ellis, J., Zazkis, D. (2014, February). Lessons Learned from Case Studies of Successful Calculus Programs at Five Doctoral Degree Granting Institutions. Paper presented at the 17th Annual Conference on Research in Undergraduate Mathematics Education, Denver, CO.
18. Hanson, K., Nunez, G., Ellis, J. (2014, February). Beyond Plug and Chug: The nature of calculus homework at doctoral institutions. Poster presented at the 17th Annual Conference on Research in Undergraduate Mathematics Education, Denver, CO.
17. Ellis, J. (2013, November). Highlighting the Importance of Graduate Student Professional Development Programs in STEM Education. Poster presented at the Association of American Colleges and Universities (AAC&U) Conference for Transforming STEM Education: Inquiry, Innovation, Inclusion, and Evidence, San Diego, CA.
16. Rasmussen, C. & Ellis, J. (2013, November). Who is switching out of calculus and why? Paper presented at the 35th Annual Conference of the North American Chapter of the International Group for the Psychology of Mathematics Education, Chicago, IL.
15. Rasmussen, C. & Ellis, J. (2013, July). Who is switching out of calculus and why? Paper presented at the 37rd Conference of the International Group for the Psychology of Mathematics Education, Kiel, Germany.
14. Uysal, F., Ellis, J., & Rasmussen, C. (2013, July). What do college calculus students

believe about mathematics? Paper presented at the 37rd Conference of the International Group for the Psychology of Mathematics Education, Kiel, Germany.

13. Ellis, J. (2013, June). Highlighting the Importance of Graduate Student Professional Development Programs in STEM Education. Poster presented at the 1st Annual Working Conference on Preparing Graduate Students to Teach Undergraduate Mathematics, Cambridge, MA.
12. Rasmussen, C., Ellis, J., Duncan, K., Bressoud, D., & Carlson, M. (2013, May). Who are the students that switch out of Calculus, and why? Presentation at the 2013 Annual meeting of the American Education Research Association, San Francisco, CA.
11. Zandieh, M., Ellis, J., & Rasmussen, C. (2013, February). Students Reconciling Notions of One-to-One Across Two Contexts. Paper presented at the 16th Annual Conference on Research in Undergraduate Mathematics Education, Denver, CO.
10. Ellis, J., & Rasmussen, C. (2013, February). Switcher and Persister Experiences in Calculus I. Paper presented at the 16th Annual Conference on Research in Undergraduate Mathematics Education, Denver, CO.
9. Ellis, J, Rasmussen, C, Duncan, K. (2013, February). Students' differing experiences in Calculus I. Paper presented at the 16th Annual Conference on Research in Undergraduate Mathematics Education, Denver, CO.
8. Ellis, J., & Rasmussen, C. (2013, January). Students' Differing Experiences in Calculus I. Presentation at the 2013 Joint Mathematics Meeting, San Diego, CA.
7. Ellis, J. (2012, June). Students' perceptions of pedagogy and the relation to persistence. Poster presented at the Second Conference on Transforming Research in Undergraduate STEM Education, St. Paul, MN.
6. Ellis, J. (2012, March). A Report on a National Study of College Calculus: Who is Switching out of STEM and Why? Presentation at the Student Research Symposium at San Diego State University, San Diego, CA.
5. Ellis, J., Henderson, F., Rasmussen, C., & Zandieh, M. (2012, February). Student reasoning about linear transformations. Paper and poster presented at the 15th Annual Conference on Research in Undergraduate Mathematics Education, Portland, OR.
4. Zandieh, M., Ellis, J., & Rasmussen, C. (2012, February). Student concept images of function and linear transformation. Paper presented at the 15th Annual Conference on Research in Undergraduate Mathematics Education, Portland, OR.
3. Ellis, J. (2012, February). Students' perceptions of pedagogy and the relation to persistence. Poster presented at the 15th Annual Conference on Research in Undergraduate Mathematics Education, Portland, OR.
2. Ellis, J. (2012, January). Student reasoning about linear transformations. Poster presented at the Judy Sowder Tribute, San Diego, CA.
1. Carlson, M., Rasmussen, C., Bressoud, D., Pearson M., Jacobs, S., Ellis, J., & Weber, E. (2011, February). Surveying mathematics departments to identify characteristics of successful programs in college Calculus. Paper presented at the 14th Annual Conference on Research in Undergraduate Mathematics Education, Portland, OR.

COLLABORATIVE, INETRCOLLEGIATE & INTERDISCIPLINARY SCHOLARSHIP

I have previously published with Bailey K. Fosdick (CSU Statistics) in which we collaboratively analyzed data coming from my calculus research. Fosdick led a regression analysis studying the relationship between gender and student persistence in calculus [J4], which was published in PLoS ONE and reported on in various media outlets.

We have extended this collaboration to include Vincent Basile and Daniel Birmingham (both CSU School of Education). Together we are now examining the relationship between race and ethnicity and student persistence in calculus. Fosdick is leading the quantitative analysis, Basile is leading the critical literature review, and Birmingham is leading the qualitative analysis. I am providing the data and connecting this work to the larger literature base of RUME. This work has thus far resulted in conference presentations and one proceeding, and we intend to submit this work for publication.

Additionally, I mentored Gaye DiGregorio (executive Director of the Collaborative for Student Achievement, CSU) during her doctoral work, and this has blossomed into a collaboration resulting in one recently submitted paper and a internal CSU initiative related to infusing growth mindset into the mathematics placement messaging.

OTHER ACTIVITIES/ACCOMPLISHMENTS REPRESENTING CONTRIBUTIONS TO THE DISCIPLINE

Public Outreach and Media Coverage

10. TEDx talk at Colorado School of Mines: https://www.youtube.com/watch?v=GNQcKRhKE0Y
9. The Huffington Post, "This Popular Math Class Is At The Heart Of The STEM Gender Gap, Study Suggests" by Dominique Mosbergen; August 4, 2016
8. Vocativ, "The Math Problem Diverting Women Out Of STEM Careers" by Allee Manning; August 2, 2016
7. Science Careers, "Low math confidence discourages female students from pursuing STEM disciplines" by Maggie Kuo; July 22, 2016
6. U.S. News, "Calculus Steers Women Away From STEM" by Lauren Camera; July 21, 2016
5. Arizona Public Media, "Study: College Calculus Deters Women from STEM fields" by Melissa Sevignu; July 18, 2018
4. Washington Post, "Calculus apprehensions may steer women away from science careers" by Rachel Feltman; July 14, 2016
3. Denver Business Journal, "Why do women students drop out of STEM majors? New study pinpoints a culprit" by Caitlin Hendee; July 14, 2016
2. Source, "Calculus I factors women out of STEM degrees, researchers find" by Katie Courage; July 13
1. Arkansas Online, "Calculus class kicking women off career path, expert says" by Jaime Adame; April 3, 2016

Consulting

3. (2018-2020) Project Evaluator for *Pathways to Preparing Future Mathematics Faculty to Transform Undergraduate Mathematics Teaching and Learning* (NSF-EHR-DUE 1323753).
2. (2017) Content expert for *The Mathematical Education of Teachers as an Application of Undergraduate Mathematics* (DUE 1726624).
1. (2015-2017) The Ohio State University Calculus Redesign

CV SECTION 3:
EVIDENCE OF TEACHING AND ADVISING EFFECTIVENESS

TEACHING:

Year	Term.	Course No./Title	Cr. Hrs.	Enrollment
2019	Fall	MATH 230** – Discrete Mathematics for Educators	3	8
		MATH 235 – Introduction to Mathematical Reasoning	2	23
		MATH 117 - College Algebra in Context (In Person)	1	26
		MATH 584 – Supervised College Teaching	1	11
2019	Spring	MATH 676 – Research in Undergraduate Mathematics Education Seminar	3	3
2018	Fall	MATH 230* – Discrete Mathematics for Educators	3	8
		MATH 584 – Supervised College Teaching	1	12
2018	Spring	MATH 160 – Calculus 1 for Engineers	4	31 (sec 1) 28 (sec 2)
2016	Fall	Math 366 – Introduction to Abstract Algebra	3	33
		MATH 230* – Discrete Mathematics for Educators	3	19
2016	Spring	Math 470 - Euclidean and Non-Euclidean Geometry	3	28
2015	Fall	MATH 230* – Discrete Mathematics for Educators	3	14
2015	Spring	Math 470 – Euclidean and Non-Euclidean Geometry	3	15
2014	Fall	MATH 230* – Discrete Mathematics for Educators	3	31

Note: I did not teach in Spring or Fall 2017 due to scheduling.

*MATH230 is taught exclusively to education majors and I teach it to emphasize interdisciplinary aspects of mathematics education students required knowledge for teaching.
**In Fall 2019, MATH235 and MATH 230 were combined for 2 hours a week, with an additional hour for only MATH 230 students, due to low enrollment of math education majors into MATH 230.

Course Syllabi, Assignments, and Other Materials

In the appendix section 1, I include the following course materials:

- A syllabus, final exam, and final project for MATH 230; since taking the lead in teaching the course, I have put significant effort into creating a course that addresses the needs of the mathematics education majors as current undergraduate students and as future middle or secondary teachers.
- A syllabus, final exam, and final project for MATH 366; in Fall 2016 I participated in a semester-long professional development as part of a research project focused on inquiry-oriented abstract algebra.
- A syllabus, final exam, and final project for MATH 470; I made significant changes to this course when I taught it from how it was previously taught by bringing in more self-discovery, group work, and inquiry. It continues to be taught in a similar vein, though with more attention paid to hyperbolic geometry.

Peer Evaluations of Teaching

In the appendix section 2, I include peer evaluations from colleagues. These observations highlight the interactive nature of my classes, supporting students to inquire into the mathematics while I inquire into their thinking, and include the following:

- Observation of MATH 470 by Patrick Shipman;
- Observation of MATH 366 by Paul Kennedy (UDTS);
- Observation of MATH 230 by Anton Betten;
- Observation of MATH 676 by Anton Betten.

Student Course Surveys

Here I include a sample of average evaluation ratings from the course surveys. These questions and their high scores reflect students' appreciation of my teaching, specifically my ability to create a learning environment that is respectful of varied student ideas and that facilitates learning.

Course (# of responses)	Semester	How do you rate this instructor?	How well did the instructor create an atmosphere that was respectful of student opinions, ideas, and differences?	How effectively did the instructor facilitate student learning?
Math 230 (3)	FA 2018	5.00	5.00	5.00
Math 160 (37)	SP 2018	4.62	4.57	4.51
Math 230 (20)	FA 2016	4.89	4.84	4.95
Math 366 (32)	FA 2016	4.69	4.81	4.69
Math 470	SP 2016	Course survey results not available online		
Math 230 (14)	FA 2015	4.69	4.54	4.62
Math 470 (14)	SP 2015	4.79	4.79	4.64
Math 230 (12)	FA 2014	4.25	4.42	4.42

Examples of Course Improvements

- **2016** – MATH 366, Introduction to Abstract Algebra, is an important course for mathematics majors and minors. In 2016, I participated in a national professional development for teaching this course using active learning approaches. This involved daily group work where students actively reinvented notions of Abstract Algebra, and I formalized these to match the mathematical conventions. More about this curriculum can be found at: https://taafu.org/ioaa/
- **2014** – I began teaching MATH 230 when I arrived at CSU. This course functions as an introduction to mathematical proofs for students, although this was only originally making up a small portion of the focus, and the proof related courses that mathematics educations majors are required to take are both critically important for this population of students are historically difficult. This course is now taught as an introduction to proofs, including a focus on discrete number systems. The design of this improvement was informed by speaking to colleagues in the department who teach the subsequent proof-based courses, my own experience in the course, mathematics education literature related to proof education, and discussions with the previous faculty member who taught the course.

Development of New Courses

- **2019** – As part of a Student Success Initiative 2 funded project, I created a face to face version of MATH 117. MATH117 is part of Paced Algebra to Calculus electronically (PACe), which is Precalculus taught exclusively via computer. This course was taught an in person course for women, students of color, first generation, and low income students who were STEM intending and whose advisor's thought they would benefit from an in person setting. The design of this improvement was informed by discussions with Rebecca Richards, the main advisor of mathematics 2018-2019, Alexandra Keller, the CNS Learning Community Director, the directors and co-Directors of PACe, and students who have been in the course.
- **2018** – New graduate student teaching assistants in the CSU Mathematics Department have always enrolled in MATH 584, Supervised College Teaching, but did not attend a class for this credit as it was viewed as part of their course preparation. In 2018, I began teaching a one-credit course for these students who are new to teaching. The focus of this course is to provide just-in-time support for teaching, learning how to be responsive to student thinking, and incorporating more active learning into their teaching while balancing the expectations of the coordinator and their other responsibilities as graduate students.
- **2019** – I had the opportunity to teach a research seminar for graduate students interested in mathematics education research. This course was taught in Spring 2019 to three graduate students studying mathematics education. The focus of the course was on Research in Undergraduate Mathematics Education (RUME). This course operated as a reading seminar and engaged the students in critical reading, presentations, and critique and synthesis of existing literature.

Written Comments from Students

Written comments from students are included in the appendix section 3. Across all courses and semesters, students point to a few common aspects of my teaching:

- their appreciation for being asked to critically think, make sense of other students' thinking, and construct their own knowledge with supports from other students and from me;
- the culture of my classroom, where mutual respect and care for one another's ideas and as people;
- their enjoyment of mathematics because of this environment.

Participation in Professional Development Activities Related to Teaching

- **2019** – Led a workshop at the National Inquiry-Based Learning and Teaching Conference on entry level approaches for Inquiry Based Learning, titled "Dipping, Wading, and Diving into IBL."
- **2016 – 2019** – Facilitator at the Academy of Inquiry Based Learning Workshop at CU Boulder, CO (2016), San Luis Obispo, CA (2017), Chicago (2018), and equity Team (2019), a workshop for mathematics faculty and instructors on active teaching in mathematics

ADVISING:

STUDENT ADVISING/GRADUATE SUPERVISION

UNDERGRADUATE STUDENTS:

0 Current Undergraduate Advisees (Note the advising of undergraduate students has been streamlined by the front office, and all of my past advisees have since graduated).
2 Previous Undergraduate Advisees - 2018
4 Previous Undergraduate Advisees - 2017
6 Previous Undergraduate Advisees - 2016
4 Previous Undergraduate Advisees - 2015
2 Previous Undergraduate Advisees - 2014

GRADUATE STUDENTS:

Current Graduate Advisees:
Ben Sencindiver (PhD; expected graduation Spring 2020)
Shannon Golden (MS; expected graduation Spring 2020)
Current Graduate Committee Memberships (excluding those chaired):
1 PhD (Education)
Graduate Committee Memberships (for past 5 years, not including those above)
1 PhD (Education)
1 MS (Statistics)
Graduate Degrees Completed Under my Supervision:
Jessica Gehrtz (PhD Mathematics, 2019)

POSTDOCTORAL STUDENTS/RESEARCH ASSOCIATES:

Current
Nolisa Malluwawadu (PhD)

Descriptions of Mentoring Activities

- Co-Founder and Organizer of Mentoring and Partnerships for Women in RUME (MPWR) 2014, 2015, 2016, 2017, held in Denver CO (2014), Pittsburgh, PA (2015 and 2016), and San Diego, CA (2017 and 2018)
- Mentor of 20 CSU undergraduate students as their main advisor, 6 CSU undergraduate students on their honors thesis, 3 students outside of CSU applying to graduate programs in mathematics as part of the F-GAP program from the Math Alliance, 3 CSU graduate students, 1 visiting graduate student from Capital Normal University in Beijing, China, and 1 post-doctoral fellow at CSU
- Mentor for Expanding Your Horizons (EYH, 2016), a workshop for middle school girls interested in STEM

OTHER ACTIVITIES/ACCOMPLISHMENTS – TEACHING/ADVISING

- **2019** – I supervised an undergraduate research assistant, Rachel Tremaine from the Department of Mathematics at CSU. I mentored her related to conducted research in undergraduate mathematics education, and this mentoring resulting in the submission of one conference proposal.
- **2019** – I supervised a Masters in Applied Statistics student, Kate Yang, from the Department of Statistics at CSU. I mentored her related to cleaning a large data set and presenting the results of her work to a research team.
- **2018** – I mentored a visiting graduate student, Chuhan Zhang from Capital Normal University in China. I mentored her related to research and writing.

CV SECTION 4: Evidence of Outreach/Service

COMMITTEES

Department and University Committees

Search Committee for two tenure-stream Mathematics Education positions in the Department of Mathematics, Colorado State University (2019)

Faculty advisor for the Colorado State University Student Chapter of the Association for Women in Mathematics, 2018-present

Executive Committee member for the Mathematics Department, 2016-2017

Search Committee for Mathematics Post-Doctoral fellow position in the Department of Mathematics, Colorado State University (2017)

Department representative, secretary (2015-2016), Vice Chair (2016-2017), and Chair (2017-2018) of the Rocky Mountain Mathematics Consortium (RMMC)

Search Committee for the Special Faculty Position in the Department of Mathematics, Colorado State University (2016)

Committee for the Online Masters in Mathematics with an emphasis in Education in the Department of Mathematics, Colorado State University (2016)

Co-Founder and Organizer of the Front Range Mathematics Education Seminar (FRaMES) (2015), hosted at CU Denver (3 times) and Colorado State University, Fort Collins (once)

National

Equity and Mentoring Committee Member for the SIGMAA on RUME (2017)

Program Committee member for the Conference on Research in Undergraduate Mathematics Education, 2015 - 2017

Contributor to the MAA Instructional Practice Guide

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Editorial Boards
Editorial Board Member, American Mathematical Society (AMS) blog on teaching and learning, 2016 - 2017

Membership in professional societies
AWM – Association for Women in Mathematics, 2014 - Present

MAA – Mathematical Association of America, 2010 - Present

RUME – SIGMAA on Research in Undergraduate Mathematics Education, 2010 - Present

AMTE – Association of Mathematics Teacher Educators, 2014 - 2015

NCTM – National Council of Teachers of Mathematics, 2014 - Present

CCTM – Colorado Council of Teachers of Mathematics, 2014 – Present

NAM – National Association of Mathematicians, 2017 - present

Grant Referring
Reviewer for NSF; Ad hoc reviewer for IUSE (April, 2019; December, 2017), IUSE panel (March, 2017)

Manuscript Referring

Reviewer for journals (Mathematical Thinking and Learning (MTL), Journal of Mathematics Teacher Education (JMTE), Research in Mathematics Education (RME), Educational Studies in Mathematics (ESM), International Journal for Research in Undergraduate Mathematics Education (IJRUME), Journal for Research in Mathematics Education (JRME), ZDM: The International Journal of Mathematics Education)

Reviewer for conferences (38th Conference of the North American Group for the Psychology of Mathematics Education, Tucson, AZ; Eighteenth Conference on Research in Undergraduate Mathematics Education, Pittsburgh, PA; Seventeenth Conference on Research in Undergraduate Mathematics Education, Denver, CO; Sixteenth Conference on Research in Undergraduate Mathematics Education, Denver, CO; 37th Conference of the North American Group for the Psychology of Mathematics Education, Chicago, IL)

OTHER ACTIVITIES/ACCOMPLISHMENTS – SERVICE/OUTREACH

I am currently serving as the co-Director of the Calculus Center. This role will be focused on supporting coordinators, instructors, and students of all calculus courses at CSU.