

## **Jennifer S. Crooks Monastra**

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### **EDUCATION**

- 2021 Ph.D. in Teaching and Learning, University of South Carolina (Columbia, SC)  
Focus Area: Undergraduate Mathematics Education  
Dissertation: *Planning and Teaching for Student Learning in Mathematics: How Graduate Student Instructors Develop and Implement Instruction*
- 2001 M.M. in Mathematics, University of South Carolina (Columbia, SC)
- 1999 B.A. in Mathematics, Malone College (Canton, OH)

### **PROFESSIONAL EXPERIENCE**

- 2021-Present Research Associate at the Research, Evaluation and Measurement Center
- 2016-2021 Research Assistant at the Research, Evaluation and Measurement Center
- Assist with data collection, analysis and report writing for grant projects
- 2005-Present Mathematics Instructor at University of South Carolina
- Teach and coordinate Mathematics courses for the Opportunity Scholars Program
  - Support first generation college students
- 2010-2016 McNair GRE Tutor for University of South Carolina TRIO
- Prepare students for Quantitative Reasoning section of Graduate Records Exam
- 2012 University Supervisor at University of South Carolina
- Supervise student teachers during internships
- 2011 AP Calculus Exam Reader for ETS
- 2005 Adjunct Mathematics Instructor at Midland's Technical College
- 2001-2005 High School Mathematics Teacher at White Knoll High School
- Taught AP Calculus AB and BC, Calculus CP, Precalculus CP, Math Tech I & II, SAT Prep
  - Coached math team
- 2001 Upward Bound Instructor for University of South Carolina TRIO
- 1999-2001 Graduate Teaching Assistant in Mathematics at University of South Carolina

### **UNIVERSITY TEACHING EXPERIENCE**

- Basic College Mathematics/College Algebra (MATH 111)
- Precalculus (MATH 115)
- Calculus for Business and Social Sciences (MATH 122)
- Calculus I (MATH 141)
- Calculus II (MATH 142)
- Workshop for Calculus II (MATH 152)
- Finite Mathematics (MATH 170)
- Math Concepts for Elementary Teachers I (MATH 221)

- Math Concepts for Elementary Teachers II (MATH 222)
- Conceptual History of Mathematics (MATH 401)
- An Inductive Approach to Geometry (Cotaught MATH 602)

### CONFERENCE PRESENTATIONS

- Lotter, C., & **Crooks-Monastra, J.** (2023, February). Challenges and Supports for Secondary Science and Mathematics Teacher Retention. In A. Starrett (Chair), *South Carolina Teacher Retention*. Symposium conducted at the annual meeting of the South Carolina Educators for the Practical Use of Research, Columbia, SC.
- Crooks-Monastra, J.**, & Yee, S.P. (2023, February). *What is so difficult about teaching precalculus for the first time? Graduate student's perspectives on learning to teach*. Research in Undergraduate Mathematics Education (RUME), Omaha, NE.
- Crooks-Monastra, J.**, Fan, X., D'Amico, L., Costner, K., & Adgerson, A. (2022, March). *STEM Teachers' Experiences with COVID: How it Shaped their Teaching and Career Intentions*. South Carolina Educators for the Practical Use of Research, Virtual.
- Monastra, J.C.**, & Yee, S. (2022, February). *Goals for Student Learning among Mathematics Graduate Student Instructors (MGSIs)*. Research in Undergraduate Mathematics Education (RUME), Boston, MA.
- Lotter, C., **Monastra, J.C.**, Irdam, G., & Yow, J. (2021, April). *Challenges and Supports for Secondary Science and Mathematics Teacher Retention*. National Association for Research in Science Teaching (NARST), Virtual.
- Monastra, J.C.**, & Yee, S.P. (2021, February). *Mathematics Graduate Student Instructors (MGSIs) Goals for Student Learning*. Research Council on Mathematics Learning (RCML) Conference, Virtual.
- Monastra, J.C.** (2019, October). *Mathematics Graduate Student Instructors Planning and Teaching for Student Learning*. Mid-Atlantic Research in Undergraduate Mathematics Education (MA-RUME) Conference, Harrisonburg, VA.
- Panelist. (2017, December). *Teaching First Generation College Students*, Center for Teaching Excellence, University of South Carolina, Columbia, SC.
- Monastra, J.C.**, & Yee, S.P. (2017, March). *Math is not a Race: A Students' Journey from Basic Algebra to Doctoral Work*. Research Council on Mathematics Learning (RCML) Conference, Ft. Worth, TX.
- Monastra, J.C.**, & Yee, S.P. (2016, November). *Math is not a Race: From High School Dropout to Mathematics Doctoral Student*. South Carolina Council of Teachers of Mathematics (SCCTM) Conference, Greenville, SC.
- Monastra, J.C.**, & Geddings, D. (2016, October). *Becoming a Reflective Practitioner through Co-Teaching*. North Carolina Council of Teachers of Mathematics (NCCTM) Conference, Greensboro, NC.

### PUBLICATIONS

- Monastra, J.C.**, & Yee, S.P. (2022). *Goals for Student Learning among Mathematics Graduate Student Instructors (MGSIs)*. In Karunakaran, S.S., & Higgins, A. (Eds.), *Proceedings of the 24<sup>th</sup> Annual Conference on Research in Undergraduate Mathematics Education (RUME)*, p. 143-151, Boston, MA. <http://sigmaa.maa.org/rume/Site/Proceedings.html>
- Monastra, J.C.**, & Yee, S.P. (2017). *Math is Not a Race: One Students' Journey from Basic*

Algebra to Doctoral Classes. In T. Olson & L. Venenciano (Eds.), *Proceedings of 44<sup>th</sup> Annual Research Council on Mathematics Learning* (RCML, pp.65-72), Fort Worth, TX: Research Council on Mathematics Learning (RCML).

**Monastra, J.C.** (2014). The Pen Pal Journal Project. *The MathMate*, 36(1), 9-14.

### **TECHNICAL AND EVALUATION REPORTS**

**Monastra, J.C.**, D'Amico, L.K., & Leverage, L. (2022, March). *University of South Carolina Science and Mathematics Teachers Initiative: Phase 2 Year 5 evaluation report*. Prepared for University of South Carolina and National Science Foundation.

**Monastra, J.C.**, D'Amico, L.K., & Fan, X. (2021, March). *University of South Carolina Science and Mathematics Teachers Initiative: Phase 2 Year 4 evaluation report*. Prepared for University of South Carolina and National Science Foundation.

D'Amico, L.K., **Monastra, J.C.**, Zhang, X., & Pompey, K. (2020, July). *Developing master teachers: University of South Carolina Science and Mathematics Teacher Leaders Program (SMTL) Year 6 evaluation report*. Prepared for University of South Carolina and National Science Foundation.

D'Amico, L.K., **Monastra, J.C.**, Fan, X., & Zhang, X. (2020, March). *University of South Carolina Science and Mathematics Teachers Initiative: Phase 2 Year 3 evaluation report*. Prepared for University of South Carolina and National Science Foundation.

D'Amico, L.K., **Monastra, J.C.**, & Fan, X. (2019, July). *Developing master teachers: University of South Carolina Science and Mathematics Teacher Leaders Program (SMTL) Year 5 evaluation report*. Prepared for University of South Carolina and National Science Foundation.

D'Amico, L.K., **Monastra, J.C.**, & Fan, X. (2019, March). *University of South Carolina Science and Mathematics Teachers Initiative: Phase 2 Year 2 evaluation report*. Prepared for University of South Carolina and National Science Foundation.

D'Amico, L.K. & **Monastra, J.C.** (2018, July). *Developing master teachers: University of South Carolina Science and Mathematics Teacher Leaders Program (SMTL) Year 4 evaluation report*. Prepared for University of South Carolina and National Science Foundation.

D'Amico, L.K., & **Monastra, J.C.** (2018, March). *University of South Carolina Science and Mathematics Teachers Initiative: Phase 2 Year 1 evaluation report*. Prepared for University of South Carolina and National Science Foundation.

D'Amico, L.K. & **Monastra, J.C.** (2017, July). *Developing master teachers: University of South Carolina Science and Mathematics Teacher Leaders Program (SMTL) Year 3 evaluation report*. Prepared for University of South Carolina and National Science Foundation.

### **GRANTS**

**Monastra, J.C.** (2021). *Planning and Teaching for Student Learning in Mathematics: How Graduate Student Instructors Develop and Implement Instruction*. University of South Carolina SPARC Graduate Research Grant: \$4919.03

**Monastra, J.C.** (2019). *Decisions, Decisions, How Do I Teach? An Exploratory Qualitative Case Study of Mathematics Graduate Student Instructors Thinking*. University of South Carolina SPARC Graduate Research Grant (unfunded)

## EVALUATION EXPERIENCE

### Current Projects

- Institute in Measuring Methodology in Rural STEM Education for Postdoctoral Research Fellowships (2022 – present)
- Science and Mathematics Teachers Initiative: Phase 3 (2022 – present)\*
- Teen Science Ambassadors Program (2021 – present)\*
- Teacher Quality Partnership (2019 - present)

### Former Projects

- Science and Mathematics Teachers Initiative: Phase 2 (2017 – 2022)\*
- Developing Master Teachers through the South Carolina Science and Mathematics Teacher Leaders Program (2016 – 2020)
- Science and Mathematics Teachers Initiative: Phase 1 (2016)

\*Indicates projects on which I served/serve as project lead or co-lead

## SERVICE

2022-present	Committee member: REM Center Graduate Student Professional Development
2022-present	Course coordinator for Math 170
2022	Dissertation committee member Annabelle Merg, Curriculum and Instruction, University of South Carolina Chair: Leigh D'Amico (Curriculum Studies) Defended dissertation on March 15, 2022
2022	Committee member: planning Mathematics Department Instructor Orientation
2022	Grant reviewer for National Science Foundation (NSF)
2022	Conference proposal reviewer for the Conference of the Association of Mathematics Teacher Educators (AMTE)
2021	Proceedings reviewer for Research Council on Mathematics Learning (RCML)
2020-present	Proceedings reviewer for Research in Undergraduate Mathematics Education (RUME)
2020-present	Co-chair faculty development team for the Opportunity Scholars Program
2020	Veteran TA panelist for Graduate Student Orientation
2020	Faculty caller for Continuing Student Outreach Initiative for College of Arts and Science
2018	Facilitate faculty orientation Session First-Generation College Students: Teaching Strategies for Underrepresented Learners
2016-present	Co-lead faculty session for Opportunity Scholars Program Freshman Orientation
2013-2019	Registration volunteer for AP Calculus Day
2013-2019	Assist with High School Math Contest
2011, 2013	Textbook Selection Committee Member for Math 111 and Math 122
2006-2013	Mathematics Education Committee Member

## LOCAL PRESENTATIONS

Opportunity Scholars Program 50<sup>th</sup> Anniversary Reception, University of South Carolina,  
October 28, 2022

Advisory Board presentation for Teen Science Ambassador Program, virtual, May 24, 2022

Opportunity Scholars Program Senior Night, Virtual, March 18, 2021

## **RESEARCH INTERESTS**

- Program Evaluation
- Undergraduate Mathematics Education
- Active Learning
- Teacher Goals, Beliefs, Attitudes and Dispositions
- Graduate Student Instructor Preparation
- First-generation College Students