

TEO PAOLETTI
CURRICULUM VITAE

Montclair State University
Department of Mathematical Sciences
1 Normal Avenue,
Montclair, NJ07043

Assistant Professor
Mathematics Education
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EDUCATION

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| August 2015 | PhD in Mathematics Education |
| | University of Georgia |
| | <i>Supervisor: Dr. Kevin C. Moore</i> |
| | <i>Committee Members: Dr. Leslie Steffe and Dr. Sybilla Beckmann</i> |
| | Dissertation Title: Pre-service Teachers' Development of Bidirectional Reasoning |
| June 2010 | MS in Mathematics, Texas A&M University |
| December 2007 in | BA in Mathematics with 6-12 Mathematics Teacher Certification. Minor Classical Studies, The College of New Jersey |

RESEARCH EXPERIENCE

March 2017 – Present Project Lead, Investigating Middle-grade Students' Covariational Reasoning (Mid-CoRe Project)

Brief description: In the Mid-CoRe Project, I am extending my dissertation project by examining possible ways to support middle-grade students developing ideas of functions, variables, graphs, and rate of change via reasoning about relationships between quantities. The project aims to develop understandings of how to support middle school students in leveraging covariational reasoning to construct mathematical ideas and to create curricular materials teachers can use in their own classrooms for this purpose. This project has the potential to transform the ways in which 7th and 8th grade mathematics is currently taught if successful. I have developed a relationship with Pennsauken school district, have received permission to interview middle school students there, and have begun collecting pilot data. I have also submitted a small research Spencer grant to support my efforts at collecting and analysing data and disseminating important findings.

September 2016 – Present Project Lead, Examining Teachers' Understandings of Graphing Conventions

Brief description: In collaboration with Dr. Jason Silverman at Drexel University, Dr. Kevin Moore at University of Georgia and several Montclair State University graduate students, we are examining in-service teachers' understandings of various mathematical ideas in relation to graphing conventions. Serving as a natural extension of work conducted as part of the Advancing Reasoning project examining pre-service teachers' understandings of these same ideas, our goal is to examine in-service teachers' meanings for function and

rate of change in relation to graphing conventions. We also examine if an on-line intervention supported the teachers in developing more sophisticated meanings for these ideas. This project has the potential to extend into examining how efforts to scale such an intervention can serve as a productive means to support in-service teachers mathematical knowledge for teaching.

Sept 2014 – Present Research Assistant/Collaborator, Advancing Reasoning: Advancing Secondary Mathematics Teachers' Quantitative Reasoning.

Principal Investigator Dr. Kevin C. Moore.

Funded by: NSF CAREER Award DRL-1350342. \$741,491

Brief description: In collaboration with faculty and graduate students at the University of Georgia, I am a collaborator in the Advancing Reasoning project, which aims to develop case studies providing examples of students' reasoning about relationships between quantities that proved beneficial and detrimental as well as examples of students' reasoning evolving over time. One outcome of the project is the development of research-based curriculum for pre-service teachers focusing on function, covariation, modeling, graphing and other major secondary mathematics concepts.

Sept 2016 – Present Collaborator. Instruction in Undergraduate Proof-Oriented Mathematics Classes.

Brief description: In collaboration with faculty and graduate students at Rutgers University (Dr. Keith Weber) and Temple University (Dr. Tim Fukawa-Connelly), the Instruction in Undergraduate Proof-Oriented Mathematics Classes aims to examine lecturers activities in proof-based mathematics classes. For instance, the project intends to examine different ways lecturers use questions and wait time in these courses.

Jan 2016 –Present Project Lead, STEM Graphs Project

Brief description: In the STEM Graphs Project, a group of Montclair State University doctoral students and I are examining how mathematics textbooks use graphical representations and compare these uses to science and engineering textbooks and practitioner journals. By comparing and contrasting the different ways these resources represent information graphically, we intend to examine whether mathematics curriculum developers are presenting mathematics in a way that is attentive and transferable to other STEM fields.

Jan 2016 –Present Consultant, Adjunct Mathematics Instructor Resources and Support: Improving Undergraduate Precalculus Teaching and Learning Experience

Principal Investigator Dr. Eileen Murray and co-PI Dr. Amir Golnabi.

Funded by: NSF CAREER Award IUSE-1712058. \$300,000

Brief description: In collaboration with Dr. Eileen Murray and Dr. Amir Golnabi, we are exploring how we can better support adjunct precalculus instruction at Montclair State University through a combination of (a) course coordination, (b) adopting a research-based reform-oriented curriculum, and (c) providing professional development in the form of a summer workshop and weekly meetings. With the growing prevalence of introductory mathematics courses being taught by adjuncts across the country, this project will provide valuable insights into ways in which MSU and other universities can support their adjuncts in better preparing their students for calculus and, eventually, continuing into STEM degrees.

Sept 2013 – August 2015 Dissertation Study. University of Georgia

Supervised by Dr. Kevin C. Moore

Brief description: I conducted a semester long teaching experiment with two undergraduate students to investigate how they could leverage reasoning about relationships between quantities to improve their function and inverse function understandings. Specifically, I

examined how they could leverage making sense of relationships bidirectionally, understanding that two quantities simultaneously covaried and neither quantity was inherently the input quantity, to reconstruct their function and inverse function understandings.

Sept 2011 – June 2014 Research Assistant. University of Georgia

Supervised by Dr. Kevin C. Moore

Brief description: We conducted several rounds of data collection involving both clinical interviews and teaching experiments. The goal of the project was to investigate pre-service teachers' reasoning about relationships between quantities in order to make sense of mathematics content. The teaching experiment focused on four students developing understandings of the polar coordinate system through their reasoning about relationships between quantities. The clinical interviews examined students' meanings for function, inverse function, graphs, and relationships which directly influenced my dissertation research project.

RESEARCH SUPERVISION AND MENTORING

I have supervised and mentored the following graduate students:

2015 - Present

Montclair State University

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| Zareen Rahman | Doctoral student (Committee Member) |
| Jacqueline Dauplaise | Doctoral student (Committee Member) |
| Madhavi Vishnubhotla | Doctoral student (Committee Member) |
| CJ Walker | Doctoral student (Committee Member) |
| Matthew Wright | Doctoral student (Committee Member) |
| Zareen Rahman | Graduate Research Assistant for the STEM Graphs project |
| Debasmita Basu | Graduate Research Assistant for the STEM Graphs project |
| Justin Seventko | Graduate Research Assistant for the STEM Graphs project |
| Madhavi Vishnubhotla | Graduate Research Assistant for the STEM Graphs project |
| Erell Germia | Graduate Research Assistant for the Teacher Conventions project |
| Zareen Rahman | Graduate Research Assistant for the Teacher Conventions project |
| Ceire Monahan | Graduate Research Assistant for the Teacher Conventions project |
| Madhavi Vishnubhotla | Graduate Research Assistant for the Teacher Conventions project |
| Madhavi Vishnubhotla | Graduate Assistant for Technology Tips project |
| Ceire Monahan | Graduate Assistant for Technology Tips project |

UNIVERSITY TEACHING EXPERIENCE

Mathematics For Teaching (MATH 370), Instructor, Undergraduate course, Montclair State University, Fall 2015 (one course), Spring 2016 (one course), Fall 2017 (one course).

Mathematics in Elementary Schools P- 6 (MTHM 201), Instructor, Undergraduate course, Montclair State University, Fall 2015 (two courses), Spring 2016 (one course), Fall 2016 (one course), Fall 2017 (one course).

Mathematics in Elementary Schools P-6 II (MTHM 302), Instructor, Undergraduate course, Montclair State University, Fall 2016 (one course).

Mathematical Modeling for Middle Level & High School Grades (MATH 812), Instructor, Doctoral course, Montclair State University, Spring 2017 (one course).

Dissertation Proposal Seminar (MATH 830), Instructor, Doctoral course, Montclair State University, Spring 2016 (one course).

Teaching Secondary School Mathematics III (EMAT 4900), Instructor, Undergraduate course, University of Georgia, Fall 2014 (one course), Spring 2015 (one course).

Field Experience (EMAT 4900L), Instructor, one-credit observation course, Undergraduate course, University of Georgia, Fall 2014 (one course), Spring 2015 (one course).

Teaching Secondary School Mathematics III (EMAT 4900), Teaching Assistant, Undergraduate course, University of Georgia, Spring 2014 (one course).

Field Experience (EMAT 4900L), Teaching Assistant, one-credit observation course, Undergraduate course, University of Georgia, Spring 2014 (one course).

Connections in Secondary School Mathematics I (EMAT 3700), Teaching Assistant, Undergraduate course, University of Georgia, Fall 2012 (one course), Spring 2012 (one course), Fall 2013 (one course).

Student Teaching Supervisor, Undergraduate pre-service teacher content supervisor, University of Georgia, Fall 2013 (one student), Spring 2014 (one student), Fall 2014 (one student).

K-12 TEACHING EXPERIENCE

Middle and High School Mathematics Teacher, Moorestown School District, Moorestown, NJ (January, 2008 – June, 2011). I taught the following courses: Accelerated 7th grade, Honors/On-Level/Inclusion Algebra I, On-level/Inclusion Geometry, Discrete Mathematics, Statistics, Calculus AB, and Calculus BC. Further, I wrote curricula for Discrete Mathematics and Algebra I to accommodate changing standards within the state.

PUBLICATIONS

Paoletti, T., Stevens, I. E., Hobson, N. L. F., Moore, K. C., & LaForest, K. R. (in press) Inverse function: Pre-service teachers' techniques and meanings. *Educational Studies in Mathematics*.

Paoletti, T. & Moore, K. C. (in press) The parametric nature of two students' covariational reasoning. *The Journal of Mathematical Behavior*.

Paoletti, T., Stevens, I., & Moore, K. C. (2017) Tricks may inhibit student reasoning. *Mathematics Teacher*, 110(6), 446-453.

Paoletti, T., Monahan, C., & Vishnubhotla, M. (2017). Designing GeoGebra applets to maximize student engagement. *Mathematics Teacher*, 110(8), 628-630.

Paoletti, T. & Moore, K. C. (2016) Covariational and parametric reasoning. In T. Fukawa-Connelly, N. Infante, M. Wawro, & S. Brown (Eds.), *Proceedings of the Nineteenth Annual Conference on Research in Undergraduate Mathematics Education* (pp. 368–382). Pittsburgh, PA: West Virginia University.

Moore, K. C., Stevens, I. E., Paoletti, T., & Hobson, N. L. F. (2016). Graphing habits: “I just don’t like that”. In T. Fukawa-Connelly, N. Infante, M. Wawro, & S. Brown (Eds.), *Proceedings of the Nineteenth Annual Conference on Research in*

Undergraduate Mathematics Education (pp. 16–30). Pittsburgh, PA: West Virginia University.

- Paoletti, T.** (2015). Reasoning Quantitatively to Develop Inverse Function Meanings. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, & H. Dominguez (Eds.), *Proceedings of the 37th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 780-787). East Lansing, MI: Michigan State University.
- Paoletti, T.,** Mauldin, K. D., Moore, K. C., Stevens, I. E., Hobson, N. L. F., & LaForest, K. L. (2015). Changing Cones: Students' Images of a Dynamic Situation. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, & H. Dominguez (Eds.), *Proceedings of the 37th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 472). East Lansing, MI: Michigan State University.
- Stevens, I. E., Hobson, N. L. F., Moore, K. C., **Paoletti, T.,** LaForest, K. L., & Mauldin, K. D. (2015). Changing Cones: Themes in Students' Representations of a Dynamic Situation. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, & H. Dominguez (Eds.), *Proceedings of the 37th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 363-372). East Lansing, MI: Michigan State University.
- Stevens, I. E., LaForest, K. L., & Hobson, N. L. F., **Paoletti, T.,** & Moore, K. C. (2015). Making sense of inverses: Preservice Teachers' Inverse Strategies and Meanings. In T. G. Bartell, K. N. Bieda, R. T. Putnam, K. Bradfield, & H. Dominguez (Eds.), *Proceedings of the 37th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 262). East Lansing, MI: Michigan State University.
- Paoletti, T.** (2015) Students' reasoning when constructing quantitatively rich situations. In T. Fukawa-Connolly, N. E. Infante, K. Keene, & M. Zandieh (Eds.), *Proceedings of the Eighteenth Annual Conference on Research in Undergraduate Mathematics Education* (pp. 845-852). Pittsburgh, PA: West Virginia University.
- Paoletti, T.,** Stevens, I. E., Hobson, N. L. F., LaForest K., & Moore, K. (2015) Pre-service teachers' inverse function meanings. In T. Fukawa-Connolly, N. E. Infante, K. Keene, & M. Zandieh (Eds.), *Proceedings of the Eighteenth Annual Conference on Research in Undergraduate Mathematics Education* (pp. 853-867). Pittsburgh, PA: West Virginia University.
- Moore, K. C., & **Paoletti, T.** (2015) Bidirectionality and covariational reasoning. In T. Fukawa-Connolly, N. E. Infante, K. Keene, & M. Zandieh (Eds.), *Proceedings of the Eighteenth Annual Conference on Research in Undergraduate Mathematics Education* (pp. 774-781). Pittsburgh, PA: West Virginia University.
- Moore, K. C., **Paoletti, T.,** & Musgrave, S. (2014). Complexities in students' construction of the polar coordinate system. *The Journal of Mathematical Behavior*, 36, 135-149.
- Moore, K. C., Silverman, J., **Paoletti, T.,** & LaForest, K. (2014). Breaking conventions to support quantitative reasoning. *Mathematics Teacher Educator*, 2(2), 141-163.
- Moore, K. C., **Paoletti, T.,** & Musgrave, S. (2013). Covariational reasoning and invariance among coordinate systems. *The Journal of Mathematical Behavior*, 32(3), 461-473.

- Paoletti, T.** (2013) Cracking codes and launching rockets. *Mathematics Teacher*, 107(4), 266-270.
- Paoletti, T.** (2013) A historical approach to infinity: Are all infinities created equal?. *Mathematics Teacher*, 107(2), 98-103.
- Moore, K. C., Liss II, D. R., Silverman, J., **Paoletti, T.**, LaForest, K. R., & Musgrave, S. (2013). Pre-service teachers' meanings and non-canonical graphs. In Martinez, M. & Castro Superfine, A. (Eds.), *Proceedings of the 35th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 441-448). Chicago, IL: University of Illinois at Chicago.
- Moore, K. C., Silverman, J., **Paoletti, T.**, Liss, D., LaForest, K. R., & Musgrave, S. (2013). The primacy of mathematical conventions in student meanings. In Martinez, M. & Castro Superfine, A. (Eds.), *Proceedings of the 35th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 837-840). Chicago, IL: University of Illinois at Chicago.
- LaForest, K. R., Moore, K. C., Silverman, J., **Paoletti, T.**, Musgrave, S., & Liss, D. (2013). Common treatments of function: Where's the relationship?. In Martinez, M. & Castro Superfine, A. (Eds.), *Proceedings of the 35th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 563). Chicago, IL: University of Illinois at Chicago.
- Moore, K. C., **Paoletti, T.**, Gammara, J., & Musgrave, S. (2013). Covariational reasoning and graphing in polar coordinates. In S. Brown, G. Karakok, K. H. Roh, & M. Oehrtman (Eds.), *Proceedings of the Sixteenth Annual Conference on Research in Undergraduate Mathematics Education* (pp. 351-365). Denver, CO: University of Northern Colorado.
- Paoletti, T.**, Moore, K. C., Gammara, J., & Musgrave, S. (2013). Students' emerging understandings of the polar coordinate system. In S. Brown, G. Karakok, K. H. Roh, & M. Oehrtman (Eds.), *Proceedings of the Sixteenth Annual Conference on Research in Undergraduate Mathematics Education* (pp. 366-380). Denver, CO: University of Northern Colorado.
- Paoletti, T.** (2006) Leonard Euler's solution to the Konigsberg bridge problem. *Convergence: A Magazine of the Mathematical Association of America*.

INVITED TALKS

- Paoletti, T.** (2015, December). *Examining and Supporting Pre-Service Teachers' Inverse Function Meanings*. Presentation for the Mathematics Education Seminar Series at Montclair State University, Montclair, NJ.
- Paoletti, T.** (2015, November). *Considering and Studying Students' Mathematics: A Journey from TCNJ to a Ph.D. in Mathematics Education*. Presentation for the College of New Jersey Mathematics Department, Ewing, NJ.
- Paoletti, T.**, Stevens, I. E., Hobson, N. L. F., & LaForest, K. L. (2015, February). *College Students' Inverse Function Meanings*. Presentation for the University of Georgia Mathematics Club, Athens, GA.

CONFERENCE PRESENTATIONS

- Paoletti, T.** (Submitted). *Katlyn's Inverse Dilemma: School Mathematics Versus Quantitative Reasoning*. Paper submitted to the Twenty-First Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. San Diego, CA.
- Paoletti, T., Silverman, J., Moore, K. C., Vishnubhotla, M., Rahman, Z., Monahan, C., & Germia, E. F.** (Submitted). *Reasoning about Quantities or Conventions: Investigating Shifts in In-service Teachers' Meanings after an On-line Graduate Course*. Paper submitted to the Twenty-First Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. San Diego, CA.
- Paoletti, T., Silverman, J., Moore, K. C., Liss, D. R., Musgrave, S., Vishnubhotla, M., & Rahman, Z.** (Submitted). *Conventions or Constraints? Pre-service and In-service Teachers' Understandings*. Paper submitted to the Twenty-First Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. San Diego, CA.
- Vishnubhotla, M., **Paoletti, T.**, & Monahan, C. (Accepted) *Exploring Limits and Approximations of Definite Integrals Using GeoGebra*. Presentation at the Annual Meeting and Exposition of the National Council of Teachers of Mathematics (NCTM). Washington, DC.
- Paoletti, T.** (Accepted) *Quantitative Reasoning and Inverse Function: A Mismatch*. Paper presented at the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Indianapolis, IA.
- Paoletti, T., Silverman, J., Monahan, C., Rahman, Z., Vishnubhotla, M., & Germia, E. F.** (Accepted) *Graphing Rules or Understandings? Teachers Understandings*. Poster presented at the 39th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Indianapolis, IA.
- Paoletti, T., Monahan, C., & Vishnubhotla, M.** (2017, April) *Designing Geogebra Applets to Maximize Student Engagement*. Burst session presentation at the Annual Meeting and Exposition of the National Council of Teachers of Mathematics (NCTM). San Antonio, TX.
- Paoletti, T., Vishnubhotla, M., Rahman, Z., Seventko, J. & Basu, D.** (2017, February) *Comparing graph use in STEM textbooks and practitioner journals*. Paper presented at the Twentieth Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. San Diego, CA.
- Paoletti, T., Krupnik, V., Papadopoulos, D., Olsen, J., Fukawa-Connelly, T. & Weber, K.** (2017, February) *Examining Lecturer's Questioning in Advanced Proof-Oriented Mathematics Classes*. Paper presented at the Twentieth Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. San Diego, CA.
- Stevens, I. E., **Paoletti, T.**, Moore, K. C., Liang, B., & Hardison, H. H. (2017, February) *Principles for Designing Tasks that Promote Covariational Reasoning*. Paper presented

at the Twentieth Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. San Diego, CA.

Paoletti, T., Moore, K. C., & Stevens, I. E. (2016, July). *Task-design principles for covariational reasoning*. Paper presented at the 13th International Congress on Mathematical Education. Hamburg, Germany.

Paoletti, T. & Moore, K. C. (2016, February) *Covariational and parametric reasoning*. Paper presented at the Nineteenth Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. Pittsburgh, PA.

Moore, K. C., Paoletti, T., Stevens, I. E., & Hobson, N. L. F. (2016, February) *Graphing habits: "I just don't like that"*. Paper presented at the Nineteenth Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. Pittsburgh, PA.

Paoletti, T. (2015, November). *Reasoning Quantitatively to Develop Inverse Function Meanings*. Paper presented at the 37th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, East Lansing, MI.

Stevens, I. E., Hobson, N. L. F., Moore, K. C., Paoletti, T., LaForest, K. L., & Mauldin, K. D. (2015, November). *Changing Cones: Themes in Students' Representations of a Dynamic Situation*. Paper presented at the 37th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, East Lansing, MI.

Stevens, I. E., LaForest, K. L., & Hobson, N. L. F., Paoletti, T., & Moore, K. C. (2015, November). *Making sense of inverses: Preservice Teachers' Inverse Strategies and Meanings*. Poster presented at the 37th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, East Lansing, MI.

Paoletti, T., Mauldin, K. D., Moore, K. C., Stevens, I. E., Hobson, N. L. F., & LaForest, K. L. (2015, November). *Changing Cones: Students' Images of a Dynamic Situation*. Poster presented at the 37th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, East Lansing, MI.

Paoletti, T. (2015, February) *Students' reasoning when constructing quantitatively rich situations*. Paper presented at the Eighteenth Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. Pittsburgh, PA.

Paoletti, T., Stevens, I. E., Hobson, N. L. F., LaForest K., & Moore, K. (2015, February) *Pre-service teachers' inverse function meanings*. Paper presented at the Eighteenth Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. Pittsburgh, PA.

Moore, K. C., & Paoletti, T. (2015, February) *Bidirectionality and covariational reasoning*. Paper presented at the Eighteenth Annual Special Interest Group of the Mathematical

Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. Pittsburgh, PA.

Moore, K. C., Liss, D., Silverman, J., **Paoletti, T.**, LaForest, K. R., & Musgrave, S. (2013, November). *The primacy of mathematical conventions in student meanings*. Paper presented at the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Chicago, IL.

Moore, K. C., Silverman, J., **Paoletti, T.**, Liss, D., LaForest, K. R., & Musgrave, S. (2013, November). *Pre-service teachers' meanings and non-canonical graphs*. Paper presented at the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Chicago, IL.

LaForest, K. R., Moore, K. C., Silverman, J., **Paoletti, T.**, Musgrave, S., & Liss, D. (2013, November). *Common treatments of function: Where's the relationship?* Poster presented at the 35th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Chicago, IL.

Paoletti, T., Moore, K. C., Gammara, J., & Musgrave, S. (2013, February) *Students' emerging understandings of the polar coordinate system*. Paper presented at the Sixteenth Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. Denver, CO.

Moore, K. C., **Paoletti, T.**, Gammara, J., & Musgrave, S. (2013, February) *Covariational reasoning and graphing in polar coordinates*. Paper presented at the Sixteenth Annual Special Interest Group of the Mathematical Association of America on Research in Undergraduate Mathematics Education (SIGMAA on RUME) Conference. Denver, CO.

Moore, K. C., & **Paoletti, T.**, (2012, September) *Quantitative reasoning and graphing conventions: A mismatch?* Poster presented at the Studying the Emerging Challenges of the CCSSM symposium organized by University of Georgia and University of Missouri. Columbia, MO.

Paoletti, T. (2011, October) *Launching rockets and secret sharing in Algebra I*. Presentation at the 2011 National Council of Teachers of Mathematics Regional Conference and Exposition, Atlantic City, NJ.

OTHER PUBLICATIONS

Paoletti, T. (2015) The Norm Chronicles: Stories and Numbers about Danger and Death [Review of the book The Norm Chronicles: Stories and Numbers about Danger and Death by M. Blastland & D. Spiegelhalter]. *Mathematics Teacher*. 109(2), 158-159.

Paoletti, T. (2006) Leonard Euler's solution to the Konigsberg bridge problem. *Convergence: A Magazine of the Mathematical Association of America*.

GRANT ACTIVITY

Aug 2017 – Present Principal Investigator
The Mid-CoRe project: Investigating Middle-grade Students'
Covariational Reasoning
Submitted to: Spencer Foundation

Jan 2016 – Present Consultant

Adjunct Mathematics Instructor Resources and Support: Improving Undergraduate Precalculus Teaching and Learning Experience.
Principal Investigator Dr. Eileen Murray.
Funded by: NSF IUSE-1712058. \$300,000

Sept 2014 – Present Research Assistant/Collaborator

Advancing Reasoning: Advancing Secondary Mathematics Teachers' Quantitative Reasoning.
Principal Investigator Dr. Kevin C. Moore.
Funded by: NSF CAREER Award DRL-1350342. \$741,491

AWARDS – HONORS

Conference on Research in Undergraduate Mathematics Education Honorable Mention for Best

Paper Award, 2016. For Moore, K. C., Stevens, I. E., Paoletti, T., & Hobson, N. L. F. (2016). Graphing habits: “I just don’t like that”. In T. Fukawa-Connelly, N. Infante, M. Wawro, & S. Brown (Eds.), *Proceedings of the Nineteenth Annual Conference on Research in Undergraduate Mathematics Education* (pp. 16–30). Pittsburgh, PA: West Virginia University.

AMTE STaR Fellow (Association of Mathematics Teacher Educators Service, Teaching, and Research in Mathematics Education) awarded by The Association of Mathematics Teacher Educators (<http://starfellows.com/>), 2016

Doctoral Faculty status awarded by Montclair State University, 2016-2020

Outstanding Teaching Assistant Award, University of Georgia, 2015

University of Georgia Presidential Fellowship, 2012

Phi Beta Kappa, National Honor Society Inductee, 2007

Kappa Delta Pi, Education Honor Society Inductee, 2006

Pi Mu Epsilon, Mathematics Honor Society Inductee, 2006

PROFESSIONAL MEMBERSHIPS

- National Council of Teachers of Mathematics (NCTM)
- National Association of Mathematics Teacher Educators (AMTE)
- North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA)

OTHER TRAINING

- STaR program, Association of Mathematics Teacher Educators, June 2016.
- New faculty program, Montclair State University, AY 2015-2016

- CITI Training Qualification, Montclair State University, September 2015.

SERVICE

Member of the College of Science and Mathematics Honors Committee to create document to launch the CSAM Honors Program at Montclair State University, Fall 2016- Spring 2017.

Member of the Department of Mathematical Sciences Scholarship Committee at Montclair State University, Fall 2015 – present.

Member of the Department of Mathematical Sciences Scheduling at Montclair State University, Fall 2016 – present.

Chair of the Department of Mathematical Sciences Curriculum Committee at Montclair State University, Fall 2016 – present.

Reviewer for the journals: Mathematics Teacher (2010 – Present), The Mathematics Educator (2012 – Present), Mathematics Teaching in the Middle School (2017 – Present), The Journal of Mathematical Behavior (2017 – Present).

Reviewer for papers for the Conference of the Psychology of Mathematics Education - North American Chapter, Spring 2013, Spring 2015.

Reviewer for papers for the National Teachers of Mathematics Research Conference, Fall 2016.

Reviewer for papers for the Special Interest Group of the Mathematical Association of America Conference on Research in Undergraduate Mathematics Education (RUME), Fall 2013, Fall 2015, Fall 2016.

Reviewer for proceedings for the Special Interest Group of the Mathematical Association of America Conference on Research in Undergraduate Mathematics Education (RUME), Fall 2015.

CSAM Volunteer Faculty Ambassador for Red Hawk Day, Fall 2016, Fall 2017.