#### **Peter Holt Wilson**

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Ph.D., Mathematics Education, North Carolina State University	2009
M.A.Ed., Secondary Mathematics, East Carolina University	2003
B.S., Mathematics, Summa Cum Laude, East Carolina University	2000
Professional Experience	
Associate Professor, University of North Carolina at Greensboro	2015
Assistant Professor, University of North Carolina at Greensboro	2010
Post Doctoral Research Associate, North Carolina State University	2009
Graduate Research Assistant, North Carolina State University	2005
Secondary Mathematics Teacher, Johnston County Schools, NC	2000

# **Scholarship**

# **Refereed Articles**

Published

- Wilson, P.H., Sztajn, P., Edgington, C., Webb, J., & Myers, M. (in press). Changes in teachers' discourse about students in a professional development on learning trajectories. *American Educational Research Journal*.
- Edgington, C., Wilson, P.H., Sztajn, P., & Webb, J. (2016). Translating Learning Trajectories into Useable Tools for Teachers. *Mathematics Teacher Educator*, 5(1), 65 80.
- McGalliard, W. & Wilson, P.H. (2016). Prospective elementary teachers' construction of sample space. *Investigation in Mathematics Learning*.
- Myers, M., Sztajn, P., Wilson, P.H., & Edgington, C. (2015). From implicit to explicit: Articulated equitable Learning Trajectories Based Instruction. *Journal of Urban Mathematics Education*, 8(2), 11 22.
- Wilson, P.H., Sztajn, P., Edgington, C., & Myers, M. (2015). Teachers' uses of a learning trajectory in student-centered teaching practices. *Journal of Teacher Education*, 66(3), 227-244.
- Edgington, C., Sztajn, P., Wilson, P.H., Myers, M., & Webb, J. (2015). Norms for discussing students' mathematics in professional development. *Journal of Mathematics Education Leadership*, *16*(1), 12 17.
- Wilson, P.H. & Downs, H. (2014). Supporting Mathematics Teachers in the Common Core Implementation. *AASA Journal for Scholarship and Practice*, 11, 38-47.
- Wilson, P. H., Sztajn, P., Edgington, C., & Confrey, J. (2014). Teachers' use of their mathematical knowledge for teaching in learning a mathematics learning trajectory. *Journal of Mathematics Teacher Education*, 17(2), 149 175.

- Sztajn, P., Wilson, P.H., Edgington, C., & Partner Teachers. (2014). Connecting classroom practice and research innovation: Learning from professional development researchers and teachers. *ZDM: The International Journal of Mathematics Education*, 46, 201 212.
- Wilson, P.H., Sztajn, P., & Edgington, C. (2013). Designing professional learning tasks for mathematics learning trajectories. *PNA*, 7(4), 135-143.
- Sztajn, P., Wilson, P. H., Edgington, C., Myers, M., & Dick, L. (2013). Using design experiments to conduct research on mathematics professional development. *Revista Alexandria, Journal of Science and Technology Education*, 6(1), 9-34.
- Wilson, P.H, & Mojica, G.M., & Confrey, J. (2013). Learning trajectories in teacher education: Supporting teachers' understandings of students' mathematical thinking. *Journal of Mathematical Behavior*, 32, 103 121.
- Sztajn, P., Confrey, J., Wilson, P.H., & Edgington, C. (2012). Learning trajectory based instruction: Toward a theory of teaching. *Educational Researcher*, 41(5), 147 156.
- Wilson, P.H., Myers, M., Edgington, C., & Confrey, J. (2012). Fair shares, matey, or walk the plank. *Teaching Children Mathematics*, 18(8), 482 489.
- Wilson, P.H., Edgington, C., Nguyen, K.H., Pescosolido, R., & Confrey, J. (2011). Fractions: How to Share Fair. *Mathematics Teaching in the Middle School*, *17(4)*, 230-237.
- Wilson, P.H. & Journell, W. (2011). Lies, Damn Lies, and Statistics: Uncovering the Truth Behind Polling Data. Invited feature article in a special interdisciplinary issue, *Social Studies Research and Practice*, *6*(1), 169-180.
- Wilson, P.H., Lee, H.S., & Hollebrands, K.F. (2011)<sup>1</sup>. Understanding prospective mathematics teachers' processes for making sense of students' work with technology. *Journal for Research in Mathematics Education*, 42(1), 42 67.
- Wilson, P.H., Lee, H.S., & Hollebrands, K.F. (2010). An alternative development of measures of center and spread using dynamic statistics software. *The Centroid*, 36(2), 6-11.
- Wilson, P.H., Mojica, G.F., & Berenson, S.B. (2010). Supporting students' development of functions using nonstandard, dynamic representations. *Meridian: A Kindergarten through High School Information and Computing Technologies Journal*, 13(1).

## **Books**

Lee, H. S., Hollebrands, K., & Wilson, P.H. (2010). *Preparing to Teach Mathematics with Technology: An Integrated Approach*. Dubuque, IA: Kendall Hunt.

#### Chapters

deCosta, N., Ridley, K., Harris, D., Weisner, S., Cooper, J., Faircloth, B., & Wilson, P.H. (2015). Our students and the "School to Prison Pipeline." In J. Richards and K. Zenkov (Eds.), Social Justice, the Common Core, and Closing the Instructional Gap: Empowering Diverse Learners and Their Teachers. Charlotte, NC: Information Age Publishing.

Wilson, P.H., Edgington, C., Sztajn, P., & DeCuir-Gunby, J. (2014). Teachers, attribution, and students' mathematical work. In J. Lo, K. Leatham, and L. Van Zoest (Eds.), *Current Research in Mathematics Teacher Education* (pp. 115 – 132), New York, NY: Springer.

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<sup>&</sup>lt;sup>1</sup> All authors contributed equally to this research. Order of authors is in reverse alphabetical order.

Wilson, P.H. (2014). Professional development for learning trajectories in mathematics. In J. Confrey, A. Maloney, and K. Nguyen (Eds.), *Learning Over Time: Learning Trajectories in Mathematics Education*. Charlotte, NC: Information Age Publishing.

## **Presentations**

- National & International Presentations with Refereed Proceedings
- Wilson, P.H., Edgington, C., Webb, J., & Sztajn, P. (2015). Teachers' positioning in professional development: The case of age and grade. In T. Bartell, K. Bieda, R. Putnam, K. Bradfield, & H. Dominguez (Eds.), *Proceedings of the 37<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 852 859). East Lansing, MI. Michigan State University.
- Webb, J., Wilson, P.H., Reid, M., & Duggan, A. (2015). Teacher learning of instructional practices in professional development setting. In T. Bartell, K. Bieda, R. Putnam, K. Bradfield, & H. Dominguez (Eds.), *Proceedings of the 37<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 836 843). East Lansing, MI. Michigan State University.
- Jessup, N., Webb, J., & Wilson, P.H. (2015). Designing professional learning tasks for learning to pose probing questions. *Proceedings of the 37<sup>th</sup> annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (p. 99). East Lansing, MI. Michigan State University
- Edgington, C., Wilson, P.H., Webb, J., & Sztajn, P. (2015). Learning trajectories as boundary objects in professional development settings. *Proceedings of the 39th Conference of the International Group for the Psychology of Mathematics Education*. Hoburt, Tasmania, Australia: PME.
- Howell, T. & Wilson, P. H. (2014). The role of teachers' questions in support of students' articulation of their mathematical reasoning. In G. T. Matney & S. M. Che (Eds.), *Proceedings of the 41th Annual Meeting of the Research Council on Mathematics Learning* (pp. 105-112). San Antonio, TX.
- Myers, M., Edgington, C., Wilson, P. H., & Sztajn, P. (2013). Teachers' positioning of students in relation to ability/achievement in a professional development setting. In Martinez, M. & Castro Superfine, A. (Eds.), *Proceedings of the Thirty-fifth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 653-660). Chicago, II.
- Wilson, P. H., Sztajn, P, Edgington, C., Myers, M., & DeCuir-Gunby, J. (2013). Learning trajectories and student-centered teaching practices. In Lindmeier, A. M. & Heinze, A. (Eds.). *Proceedings of the 37th Conference of the International Group for the Psychology of Mathematics Education* (pp. 409 416). Kiel, Germany: PME.
- Sztajn, P., Wilson, P. H., Decuir-Gunby, J., & Edgington, C. (2012). Teachers' attributions for students' mathematical work. In L. R. Van Zoest, J.J. Lo, & J. L. Kratky (Eds), Proceedings of the Thirty-fourth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (pp. 482 487). Kalamazoo, MI.

- Wilson, P.H., Sztajn, P., & Edgington, C. (2012). Designing professional learning tasks for mathematics learning trajectories. *Proceedings of the Thirty-Sixth Annual Meeting of the Psychology of Mathematics Education* (pp. 227 233). Taipei, Taiwan: PME.
- McGalliard, B. & Wilson, P.H. (2012). Combinatorics and sample space construction: A learning process. In Reeder, S. L. (Ed.), *Proceedings of the Annual Meeting of the Research Council on Mathematics Learning* (pp. 15 23), Charlotte, NC.
- Wilson, P.H. & Confrey, J. (2011). Making sense of student work with learning trajectories. In Wiest, L.R. & Lamberg, T. (Eds.), *Proceedings of the 33<sup>rd</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 1612 1620), Reno, NV.
- Sztajn, P., Wilson, P.H., Edgington, C., & Confrey, J. (2011). Learning trajectories and key instructional practices. In Wiest, L.R. & Lamberg, T. (Eds.), *Proceedings of the 33<sup>rd</sup> Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 434 442), Reno, NV.
- Edgington, C., Sztajn, P., Wilson, P.H., & Confrey, J. (2011). Teachers' uses of a learning trajectory for formative assessment. *Proceedings of the Thirty-third Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Reno, NV.
- Wilson, P.H., Wiebe, E.N., Berenson, S.B., & Mojica, G.M. (2007). Innovative data collection technologies for design experiments. In Lamberg, T., & Wiest, L. R. (Eds.), *Proceedings of the 29th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 614 616), Stateline (Lake Tahoe), NV: University of Nevada, Reno.
- Berenson, S, Wilson, P.H., Mojica, G., Lamburtus, A., & Smith, R. (2007). Towards a theory to link mathematical tasks to student understanding. In Lamberg, T., & Wiest, L. R. (Eds.), *Proceedings of the 29th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 205 208), Stateline (Lake Tahoe), NV: University of Nevada, Reno.
- Hollebrands, K.F., Lee, H.S., & Wilson, P.H. (2007). Prospective teachers' use of a videocase to examine students' work when solving mathematical tasks using technology. In Lamberg, T., & Wiest, L. R. (Eds.), *Proceedings of the 29th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 968-974), Stateline (Lake Tahoe), NV: University of Nevada, Reno.
- Mojica, G.M., Lambertus, A.J., Berenson, S.B., & Wilson, P.H. (2007). Representations as a means for mathematical communication. In Lamberg, T., & Wiest, L. R. (Eds.), *Proceedings of the 29th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (p. 213), Stateline (Lake Tahoe), NV: University of Nevada, Reno.
- Russell, K. Wilson, P.H., Berenson, S.B., & Lambertus, A.J. (2007). Beginning algebra students' notions of change. In Lamberg, T., & Wiest, L. R. (Eds.), *Proceedings of the 29th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (p. 209), Stateline (Lake Tahoe), NV: University of Nevada, Reno.
- Wilson, P. H. & Stein, C.C. (2007). Growth of understanding in pattern finding. *Proceedings of the Ninth International Conference of the Mathematics into the Twenty-first Century Conference*, Charlotte, NC.

- Lee, H.S., Hollebrands, K.F, & Wilson, P.H. (2007). The use of research-based methods and materials for preparing to teach mathematics with technology. *Proceedings of the Ninth International Conference of the Mathematics into the Twenty-first Century Conference*, Charlotte, NC.
- Wilson, P.H., Mojica, G.M, & Slaten, K.M. (2006). High school course pathways of high achieving girls. In J. Novotná (Ed.), *Proceedings of the Thirtieth Annual Meeting of the Psychology of Mathematics Education*, Prague, Czech Republic.
- Droujkova, M., Mojica, G.M, Wilson, P.H., & Slaten, K.M. (2006). "The Most Normal Path": High achieving girls choosing mathematics courses. In J. Novotná (Ed.), *Proceedings of the Thirtieth Annual Meeting of the Psychology of Mathematics Education*, Prague, Czech Republic.

# National & International Presentations

- Wilson, P.H., McCulloch, A., Webb, J., & Curtis, J. (2017, April). Supporting a State-Level Implementation of Mathematics Standards through Collaborative Design. *Symposium presented at the National Council of Teachers of Mathematics Research Conference*. San Antonio, TX.
- Curtis, J., Wilson, P.H., Ashe, L., & Webb, J. (2017, April). Research-practice partnerships for standards implementation. *Presentation at the annual meeting of the Association of State Supervisors of Mathematics*. San Antonio, TX.
- Webb, J., Wilson, P.H., Martin, M., Duggan, A., & Bryant, E. (2017, February). Learning to lead mathematics discussions in practice-focused professional development. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- Wilson, P.H. (2016, February). Project LTBI: Professional development for learning trajectories based instruction. *Invited presentation at the University of Illinois Chicago Office of Mathematics Education Colloquium Series*.
- Wilson, P.H., Webb, J., Martin, M., & Duggan, A. (January, 2016). Rehearing instructional practices in professional development. Presentation at the annual meeting of the Association of Mathematics Teacher Educators. Irvine, CA.
- Wilson, P.H., Kolb, J., Wallis, C., Joyner, J., Midgett, C., & Webb, J. (April, 2015). Rehearing student-centered instructional practices in secondary mathematics professional development. Presentation at the annual meeting of the National Council of Supervisors of Mathematics
- Edgington, C., Webb, J., Wilson, P.H., Sztajn, P., & Myers, M. (February, 2015). Designing boundary objects for learning trajectories. Presentation at the annual meeting of the Association of Mathematics Teacher Educators. Orlando, FL.
- He, Y., Cooper, J., & Wilson, P.H. (February, 2015). Working with English Language Learners in secondary mathematics classrooms. Presentation at the annual conference of the Association of Teacher Educators.
- Wilson, P. H., Sztajn, P., Edgington, C, Myers, M., & Webb, J. (2014, April). *Teacher learning of learning trajectories in professional development*. Poster presented at the 2014 National Council of Teachers of Mathematics Research Pre-session, New Orleans, LA.
- Sztajn, P., Wilson, P. H., Edgington, C., Myers, M. (July, 2013). Teacher learning of student thinking: Globalizing the challenge. Poster presented at the 2013 annual meeting of *The Commission for the Study and Improvements of Mathematics Teaching (CIEAEM)*, Torino, Italy.

- Howell, T. & Wilson, P.H. (2013, April). Teachers' support for developing students' mathematical argumentation. Presentation at the Research Pre-session of the National Council of Teachers of Mathematics, Denver, CO.
- Edgington, C., Sztajn, P., & Wilson, P.H. (2013, April). Teachers' stereotypes of students' mathematical work. Research symposium and papers presented at the Research Pre-session of the National Council of Teachers of Mathematics, Denver, CO.
- Smith High School PLC. (2013, February). On the same page: A secondary mathematics professional learning community. Presentation at the National Professional Development School Conference, New Orleans, LA.
- Howell, T. & Wilson, P.H. (2013, January). Supporting mathematics discourse in traditionally low performing schools. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- Wilson, P.H., Edgington, C., Sztajn, P., & Decuir-Gunby, J. (2013, January). Promoting instruction organized around students' learning trajectories. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Orlando, FL.
- Wilson, P.H., Sztajn, P., Barrett, J., Baek, J., Cullen, C., Battista, M., Clements, D., & Sarama, J. (2012, April). Teacher learning of learning trajectories. Research symposium and papers presented at the Research Pre-session of the National Council of Teachers of Mathematics, Philadelphia, PA.
- Wilson, P.H., Richardson, K., Seaman, C., Floyd, A., & Rich, W. (2012, February). Core-Math: Designing professional learning in preparation of the Common Core State Standards. Presentation at the Annual Meeting of the Research Council on Mathematics Learning, Charlotte, NC. February, 2012.
- Schwartz, K., Wilson, P.H., Hendrix, T., Mawhinney, K., & Midgett, C. (2012, February). Examining teachers' integration and use of multiple domains of mathematics knowledge for teaching in simulated contexts of practice. Presentation at the Annual Meeting of the Research Council on Mathematics Learning, Charlotte, NC. February, 2012.
- Edgington, C., Wilson, P.H., & Sztajn, P. (2012, February). Connecting Learning Trajectories and Mathematical Knowledge for Teaching in Professional Development Settings.

  Presentation at the annual meeting of the Association of Mathematics Teacher Educators.
- Wilson, P.H., Richardson, K., Seaman, C., Floyd, A., & Rich, W. (2012, February). Exploring the Common Core Standards through Learning Trajectories. Presentation at the annual meeting of the Association of Mathematics Teacher Educators.
- Dick, L, Mawhinney, K., Schwartz, K., Hendrix, T., & Wilson, P.H. (2012, February). Partnering to Teach K-8 Teachers: Reflections from a Statewide MSP Project. Presentation at the annual meeting of the Association of Mathematics Teacher Educators.
- Seaman. C. & Wilson, P.H. (2011, June). Foregrounding and backgrounding: An approach for secondary mathematics teacher preparation. Presentation at the Annual Meeting of the Science and Mathematics Teaching Imperative group, Portland, Oregon.
- Wilson, P. H. (2011, April). Learning trajectories as instructional guides. Paper accepted for presentation at the Annual Meeting of the American Education Research Association, New Orleans, LA.
- Sztajn, P., Wilson, P.H., Confrey, J., & Edgington, C. (2011, April). Using a Professional Development Environment to Examine Teacher Learning of the Equipartitioning Learning Trajectory: Reconsidering Mathematical Knowledge for Teaching. Paper presented at the Annual Meeting of the American Education Research Association, New Orleans, LA.

- Wilson, P.H. (2011, January). Learning trajectories in practice. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- Wilson, P.H, Mojica, G., & Confrey, J. (2010, May). Learning trajectories in teacher development. Paper presented at the annual meeting of the American Education Research Association, Denver, CO.
- Confrey, J., Maloney, A., Wilson, P.H., & Nguyen, K. (2010, May). Understanding over time: The cognitive underpinnings of learning trajectories. Paper presented at the Annual Meeting of the American Education Research Association, Denver, CO.
- Mojica, G. & Wilson, P.H. (2010, January). Elementary teachers' uses of a learning trajectory. Presentation at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- Confrey, J., Mojica, G., & Wilson, P.H. (2009, March). A learning trajectory for equipartitioning. Presentation at the Research Presession of the National Council of Teachers of Mathematics, Washington, DC.
- Confrey, J., Maloney, A., Nguyen, K., Wilson, P.H., & Mojica, G. (2008, April). Synthesizing research on rational number reasoning. Working Session at the Research Pre-session of the National Council of Teachers of Mathematics, Salt Lake City, UT.
- Lee, H., Alston, A., Gallmon, R., Hollebrands, K. F, Lui, Y., Maher, C., Mojica, G. M., Pedrick, L., M. & Wilson, P.H. (2007, March). Learning to Teach Probability with a Simulation Approach: Focus on Teachers. Research symposium and papers presented at the Research Pre-session of the National Council of Teachers of Mathematics, Atlanta, GA.
- Wilson, P.H., Lee, H. S., & Hollebrands, K.F. (2007, March). Integrating content, pedagogy, and technology: Teacher education materials. Poster presented at the Research Pre-session of the National Council of Teachers of Mathematics, Atlanta, GA.
- Wilson, P.H., Hollebrands, K.F., Lee, H.S. (2007, January). Preparing to teach mathematics with technology: Prospective teachers' interpretations of students' mathematical thinking. Paper presented at the annual meeting of the Association of Mathematics Teacher Educators, Irvine, CA.
- Wilson, P. H., & Hollebrands, K. F. (2006, January). Preparing to teach mathematics with technology: An integrated approach. Poster session presented at the annual meeting of the Association of Mathematics Teacher Educators, Tampa, FL.

## National & International Under Review

- Bryant, E., Duggan, A., Martin, M., & Wilson, P.H. (under review). Design-based implementation research as an approach to designing virtual spaces for mathematics teacher learning. *Poster Presentation at the North American Chapter of the International Group for the Psychology of Mathematics Education*. Indianapolis, IN. Purdue University.
- Hewitt, K., Webb, J., Curtis, J. & Wilson, P.H. (under review). Leaders helping Leaders: building leadership capacity to support standards implementation. *Presentation at the North American Chapter of the International Group for the Psychology of Mathematics Education*. Indianapolis, IN. Purdue University.
- Mawhinney, M., Curtis, J., Hewitt, K., McCulloch, A., Stephan, M., & Wilson, P.H. (under review). Research-practice partnerships: design based implementation research efforts on a statewide scale. *Poster Presentation at the North American Chapter of the International Group for the Psychology of Mathematics Education*. Indianapolis, IN. Purdue University.

- McCulloch, A., Wonsavage, F.P., Webb, J., Curtis, J., & Wilson, P.H. (under review). Creating spaces for statewide teacher collaboration: emerging practices in virtual sessions designed to support teachers in the implementation of new standards. *Presentation at the North American Chapter of the International Group for the Psychology of Mathematics Education*. Indianapolis, IN. Purdue University.
- Wilson. P.H., McCulloch, A., Webb, J., Stephan, M., Mawhinney, K., Hewitt, K., & Curtis, J. (under review). Partnering for professional development at scale. *Presentation at the North American Chapter of the International Group for the Psychology of Mathematics Education*. Indianapolis, IN. Purdue University.

## State & Local

- Wilson, P.H., Webb, J., & Curtis, J. (2017, March). What is Our Message? Invited presentation at the Spring Leadership Conference of the North Carolina Council of Teachers of Mathematics (NCCTM). Greensboro, NC.
- Wilson, P.H., Hewitt, K.K., Curtis, J., Buckner, S., Barnette, S., & Baucom, L. (2017, February). Research-practice partnerships for standards implementation. *Presentation at the Annual Meeting of the North Carolina Chapter of the American Staff Development Council*, Pinehurst, NC.
- Wilson, P.H., Curtis, J., Webb, J., Stephan, M., Mawhinney, K., McCullough, A., ...Bryant, E. (2017, January). The North Carolina Collaborative for Mathematics Learning. Content Sessions presented at the North Carolina Department of Public Instruction High School Math Summit. Greensboro, NC.
- Wilson, P.H. (2016, October). 2016 Revisions to the North Carolina High School Mathematics Standards. Presentation at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.
- Duggan, A., Okeyo, S., Partner Teachers, & Wilson, P.H. (2016, October). Video clubs to support teachers' learning of core practices. Presentation at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.
- Wilson, P.H. (2015, September). Designing for Teacher Learning in Mathematics Professional Development. *University of North Carolina at Chapel Hill School of Education*.
- Wilson, P.H. (2015, September). Designing STEM Learning Environments. *University of North Carolina at Chapel Hill School of Education*.
- Webb, J., Martin, M., Duggan, A., & Wilson, P.H. (2015, November). Rehearsing ambitious mathematics instruction in professional development. Presentation at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.
- Wilson, P.H. (2015, April). The push of context, the pull of commitment, and the lift of learning. Presentation at the UNCG School of Education Research Awards Ceremony, Greensboro, NC.
- Edgington, C., Webb, J., Wilson, P.H., Sztajn, P., & Myers, M. (2014, October). Linking Research and Practice: Learning Trajectory Based Instruction. Poster presented at the Bridging the Gap STEM Education Conference, Raleigh, NC,
- Webb, J., Kolb, J., Wallis, C., & Wilson, P.H. (2014, October). Developing Rehearsal tasks for PD. Presentation at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.

- Wilson, P.H., Richardson, K., Seaman, C., & McCullough, M. (2014, September). Creating P-12 and postsecondary partnerships for improved mathematics instruction. Presentation at the NC Ready for Success Mathematics Summit, Charlotte, NC.
- Cooper, J., He, Y., Ray, M., & Wilson, P.H. (2014, September). Mathematics teachers' interpretations and implementation of the CCSSM with English learners. Presentation at the NC Ready for Success Mathematics Summit, Charlotte, NC.
- Webb, J., Howell, T., Ray, M., & Wilson, P.H. (2013, October). Math II: Navigating the Seven C's of the CCSSM. Presentation at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.
- Wilson, P.H. & Mojica, G. (2010, October). Using Digital Video in Instruction and Assessment. Presentation at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.
- Mojica, G. & Wilson, P.H. (2010, October). Using Multimedia Tools to Enhance 3-5 Data Collection. Presentation at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.
- McGalliard, W. & Wilson, P.H. (2010, October). Using *Tinkerplots* to Enhance Data Analysis. Presentation at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.
- Wilson, P.H. & Mojica, G. (2010, February). Supporting statistical investigations with *Tinkerplots*. Meeting of the Eastern Region of the North Carolina Council of Teachers of Mathematics.
- Mojica, G. & Wilson, P.H. (2010, February). Data and probability in the middle grades. Meeting of the Eastern Region of the North Carolina Council of Teachers of Mathematics.
- Wilson, P.H. & Mojica, G. (2009, October). Using *Tinkerplots* to support statistical investigations. Working session presented at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.
- Wilson, P.H., Myers, M., & Mojica, G.M. (2008, October). Reasoning about fair shares. Meeting of the North Carolina Association of Mathematics Teacher Educators, Greensboro, NC.
- Wilson, P.H. & Mojica, G.M. (2008, October). Statistical inference informally. Meeting of the North Carolina Association of Mathematics Teacher Educators, Greensboro, NC.
- Wilson, P.H. & Lee, H.S. (2007, October). From univariate to bivariate analysis with Fathom. Presentation at the National Council of Teachers of Mathematics Regional Conference, Kansas City, MO.
- Stein, C. & Wilson, P.H. (2007, October). Growth of understanding in patterns: Findings from research. Presentation at the North Carolina Council of Teachers of Mathematics Regional Conference, Greensboro, NC.
- Lee, H.S., Hollebrands, K.F., & Wilson, P.H. (2007, April). Preparing to teach mathematics with technology: Research-based materials. Poster presented at the Meeting of the North Carolina Association of Mathematics Teacher Educators, Greensboro, NC.
- Berenson, S.B., Lambertus, A.J., Mojica, G.M., & Wilson, P.H. (2007, February). Young women in STEM careers—9 years of research. Poster presentation at Transforming Higher Education: Building a Women's Agenda Symposium at North Carolina State University, Raleigh, NC.
- Wilson, P. H., Hollebrands, K. F., & Lee, H. S. (2006, October). From univariate to bivariate analysis with Fathom. Presentation at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.

- Barnes, P.A., & Wilson, P.H. (2006, October). Ideas for Java Sketchpad. Presentation at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.
- Lee, H. S., Hollebrands, K. F., Wilson, P. H. (2006, October). PTMT: An integrated approach. Presentation at the annual meeting of the North Carolina Council of Teachers of Mathematics, Greensboro, NC.
- Wilson, P. H. & Dowd, K.F. (2004, February). Sequences and series with manipulatives and technology in Algebra I through Precalculus. Presentation at the North Carolina Council of Teachers of Mathematics Eastern Regional Conference, Raleigh, NC.
- Wilson, P.H. (2003, Fall). Using Fathom in algebra. Invited presentation to the Student Gamma Chapter of North Carolina Councils of Teachers of Mathematics at East Carolina University, Greenville, NC.
- Wilson, P.H. (2003, March). Sketchpad? This is an algebra class! Poster Session at the North Carolina Council of Teacher of Mathematics Eastern Regional Conference, Greenville, NC.

# **Grants & Contracts**

# **External**

- Principal Investigator. *Expanding the NC Collaboration for Mathematics Learning (NC<sup>2</sup>ML)*. NC Department of Public Instruction, co-PIs Lisa Ashe (NCDPI), Jennifer Curtis (NCDPI), Katherine Mawhinnery (Appalachian State), Allison McCulloch (NSCU), Catherine Schwartz (ECU), Michelle Stephan (UNCC). 2017-2018.
- Principal Investigator. Supplement NC Collaboration for Mathematics Learning (NC<sup>2</sup>ML). NC Department of Public Instruction, co-PIs Jennifer Curtis (NCDPI), Kim Kappler Hewitt (UNCG), Katherine Mawhinnery (Appalachian State), Allison McCulloch (NSCU), Michelle Stephan (UNCC). 2017.
- Project Director. *CMaPSS II: Sustaining Core Mathematics Instructional Practices in Secondary Schools.* NC QUEST NC's ESEA Title II-A Improving Teacher Quality Grants, Co-Directors Tracey Howell & Rodney Shotwell. 2017 2018.
- Principal Investigator. *NC Collaboration for Mathematics Learning (NC<sup>2</sup>ML)*. NC Department of Public Instruction, co-PIs Jennifer Curtis (NCDPI), Kim Kappler Hewitt (UNCG), Katherine Mawhinnery (Appalachian State), Allison McCulloch (NSCU), Michelle Stephan (UNCC). 2016-2017.
- Co-Principal Investigator. Supplement Building a Conceptual Model for Learning Trajectory-based Instruction. National Science Foundation DRL# 1008364, PI Paola Sztajn (NCSU). 2016.
- Project Director. *CMaPSS: Core Mathematics Instructional Practices in Secondary Schools* NC QUEST NC's ESEA Title II-A Improving Teacher Quality Grants, Co-Directors Carol Seaman & Rodney Shotwell. 2016 2017.
- Co-Principal Investigator. *Project LEAD: Leading, Empowering, Assisting, and Developing Secondary Mathematics Teachers to Increase Student Achievement.* North Carolina Mathematics and Science Partnership Grant, PI Julie Kolb, Meredith College, Co-PI Charles Wallis, Brevard College. 2014 2017.
- Co-Director. *Preparing Teachers to Address LGBTQ Bullying in Schools*. Guilford Green Foundation, Director Beverly Faircloth. 2015.
- Project Director. Core-Math III: Supporting Teachers in Using Learning Trajectories to Implement the Common Core State Standards for Mathematics NC QUEST NC's ESEA

- Title II-A Improving Teacher Quality Grants, Co-Directors Carol Seaman, Kerri Richardson, Kim Hewitt, & Rodney Shotwell. 2014 2015.
- Co-Principal Investigator. *Implementing CCSS and WIDA in Secondary Math Instruction*. NC Core to College Grant, PI Jewell Cooper, Co-PI Ye He. 2013-2014.
- Project Director. Core-Math II: Assisting Teachers' Implementation of the Common Core State Standards for Mathematics with Learning Progressions, Reform-Oriented Pedagogy, and Instructional Support. NC QUEST NC's ESEA Title II-A Improving Teacher Quality Grants, Co-Directors Carol Seaman, Kim Hewitt, Rodney Shotwell, Julie Brady, & Tammie Abernethy. 2013 2014.
- Project Director. *Core-Math: Supporting the Implementation of the Mathematics Common Core State Standards Using Learning Trajectories*. NC QUEST NC's ESEA Title II-A Improving Teacher Quality Grants, Co-Directors Carol Seaman, Kerri Richardson, Diane Frost, & Tammie Abernethy. 2011 2013.
- Co-Principal Investigator. *Building a Conceptual Model for Learning Trajectory-based Instruction*. National Science Foundation DRL# 1008364, PI Paola Sztajn (NCSU). 2010 2014.

#### Internal

- Co-Director. The CMaPSS Video Club: Supporting the Enactment of Core Mathematics Instructional Practices in Secondary Schools through Collaborative Analysis of Videos of Teaching. Piedmont Triad Educational Consortium USTEP Mini-Grant, Director Charles Perkins. 2015 2016.
- Co-Director. Supporting Teachers in Learning Student-Centered Mathematics Instructional Practices Piedmont Triad Educational Consortium USTEP Mini-Grant, Director Leigh Jones. 2014 2015.
- Project Co-Director. 'Windows on Mathematical Meaning': Supporting Students in Learning Mathematics in the Era of Common Core Piedmont Triad Educational Consortium USTEP Mini-Grant, Director Anthony Tangredi. 2012 2013.
- Principal Investigator. *Authentic Mathematics Teaching & Learning: Representations of Practice* UNCG ATL, Co-PI Kerri Richardson. 2011.
- Co-Principal Investigator. *Linking Student Achievement in Mathematics with Teacher Practices in Graduate Programs*. UNCG Summer Excellence Grant, PI Kerri Richardson. 2011.

# **Teaching**

#### Courses

- TED 223 Mathematics for Teaching Middle Grades
- TED 465 Student Teaching Seminar
- TED 495 Middle Grades Capstone
- TED 557 Teaching Practices and Curriculum in Mathematics
- TED 558 Middle Grades Mathematics Education
- TED 630 Mathematics Teaching in Middle and Secondary Schools
- TED 665 Diagnosis and Corrective Teaching in Mathematics
- TED 667 Technology in Mathematics Education
- TED 668 Seminar in Mathematics Pedagogy
- TED 668 K-5 Measurement and Data Analysis: Classroom Discourse
- TED 688 Directed Readings in Algebra and Advanced Mathematical Thinking

- TED 668 Directed Readings in Mathematics Professional Development
- TED 668 Directed Readings in Elementary Mathematics Education
- TED 688 Contemporary Issues in Mathematics Education
- TED 670 Research in Mathematics Education
- TED 671 Thinking & Learning in Middle & Secondary Mathematics: Number & Algebra
- TED 673 Thinking & Learning in Middle & Secondary Mathematics: Geometry & Statistics
- TED 728 Research in Science and Mathematics Education
- TED 735 Design-Based Research in Education
- TED 775 Directed Doctoral Research
- TED 799 Dissertation
- TED 802 Dissertation Extension

#### **Advising**

Doctoral Committee Chair

- Floyd, Ana, PhD., Curriculum & Instruction: Mathematics Education concentration.
  - Dissertation: *Understanding Instructional Change in Elementary Mathematics Classrooms*. Graduated: Fall 2016
- Rich, Wendy, PhD., Curriculum & Instruction: Mathematics Education concentration.
  - Dissertation: Designing Professional Development to Engender Student-Centered Mathematics Instructional Practices. Graduated: Fall 2016
- Saunders, Audrea, PhD., Curriculum & Instruction: Mathematics Education concentration.
  - Dissertation: Characterizing Effective Facilitation of Mathematics Professional Development. Graduated 2016.
- Martin, Megan, PhD., Curriculum & Instruction: Mathematics and Science Education concentration. Tentative Dissertation: *Discursive Changes in Secondary Mathematics Classrooms: Exploring the Impact of Practice-Focused Professional Development on Student Positioning.* Anticipated Graduation: 2018
- Okeyo, Sherrad, PhD., Curriculum & Instruction: Mathematics Education concentration. Tentative Dissertation: *Teachers' Interpretations of High Quality Mathematics Instruction through Enacted Beliefs about Teaching and Learning*. Anticipated Graduation: 2017
- Webb, Jared, PhD., Curriculum & Instruction: Mathematics Education concentration. Tentative Dissertation: Designing Professional Learning Tasks for Teacher Learning of Core Practices of High Quality Mathematics Instruction in Professional Development. Anticipated Graduation: 2018

# Doctoral Committee Co-Chair

- Howell, Tracey, Ph.D., Curriculum & Instruction: Mathematics Education concentration. Dissertation: *The Role of Teachers' Questions in Support of Students' Mathematical Argumentation*. Graduated 2013.
- McGalliard, Bill, Ph.D., Curriculum & Instruction: Mathematics Education concentration. Dissertation: Constructing Sample Space with Combinatorial Reasoning: A Mixed Methods Study. Graduated 2012.

## Doctoral Advising

Bryant, Emily, Ph.D., Curriculum & Instruction: Mathematics Education concentration.

Zimmerman, Stacey, PhD., Curriculum & Instruction: Mathematics Education concentration. Duggan, Arren, Ph.D., Curriculum & Instruction: Mathematics Education concentration.

#### Doctoral Committee Member

# Current

Fede, Bryan, Ph.D., Curriculum & Instruction: Mathematics Education concentration, The University of North Carolina at Chapel Hill. Anticipated graduation: Spring 2017.

Hewitt, Amy, Ph.D., Mathematics Education concentration.

Jessup, Naomi, Ph.D., Mathematics Education concentration.

Smithey, Montana, Ph.D., Mathematics Education concentration.

# Graduated

- Beeson, Melissa, Ph.D., Curriculum & Instruction: Instructional Technology concentration.

  Dissertation: *Meaningful Technology Integration in Elementary Classrooms: Case Studies of Decisions Made During Planning*. Graduated 2013.
- Edgington, Cyndi, Ph.D., Mathematics Education, North Carolina State University. Dissertation: *Teachers' Uses of a Learning Trajectory to Support Attention to Students' Mathematical Thinking*. Graduated 2012.
- Myers, Marrielle, Ph.D., Mathematics Education, North Carolina State University. Dissertation: The Use of Learning Trajectory Based Instruction (LTBI) in Supporting Equitable Teaching Practices in Elementary Classrooms: An Embedded Case Study. Graduated Spring 2014.
- Payne, Nancy, Ph.D., Curriculum & Instruction: Mathematics Education concentration. Dissertation: *Tasks That Promote Functional Reasoning In Early Elementary School Students*. Graduated 2012.
- Perkins, Tiffany, Ed.D, Educational Leadership. Dissertation: *The Gendering of Educational Leadership Styles Mentoring and the Deconstruction of Binaries that Influence Women's Access to the Superintendency*. Graduated Spring 2014.
- Scott, Cathy, Ph.D., Curriculum & Instruction: Science Education concentration. Dissertation: Contextually Authentic Science For Young Children: A Study Of Two Summer Herpetology Programs. Graduated 2012.
- Store, Jessie, Ph.D., Curriculum & Instruction: Mathematics Education concentration.

  Dissertation: Conceptualizing Routines Of Practice That Support Algebraic Reasoning In Elementary Schools: A Constructivist Grounded Theory. Graduated 2012.

## Master's Advisees

# Current

Renee Adams, Paul Wonsavage (Anticipated Graduation 2017)

Amanda Luck, Maggie McKee, Beth Roberts, Britn'y Towns (Anticipated Graduation 2018)

# Graduated

Emily Bryant, Lisa Gilbert, Phil Gerringer, Nicolas Simonetti, Megan Smith, Andrea Sobiesiak, Shywanda Surgeon (Graduated 2016)

Michelle McCullough, Cameron Powell (Graduated 2014)

Lindsay Averett, Kristin Bowles, Stacy Corne, Nequai Decosta, Natasha Frye, Shanna Good, Dawn Harris, William Holland, Cheryl Love, Angel Minor, Christopher Pierce, Martha Ray, Kenyetta Ridley, Phil Smith, Shawn Weisner, Amy Whicker (Graduated 2013)

Matthew Jackson, Anthony Tangredi (Graduated 2012)

# **K-12 Professional Development**

Guilford County Schools. Project LEAD. 2016 – 2017.

Rockingham County Schools. CMaPSS Project. 2016 – 2017.

Rockingham County Schools. CMaPSS Video Club. 2016.

Rockingham County Schools. Project LEAD. 2015 – 2016.

Randolph County Schools, Montgomery County Schools, Asheboro City Schools, Thomasville City Schools. Project LEAD. 2014 – 2015.

Rockingham County Schools. Student-Centered Mathematics Instruction. 2015.

PTEC. Instructional Tasks for High School Mathematics. 2014.

Rockingham County Schools. *Core-Math II: Supporting the Implementation of the Common Core State Standards for Mathematics with Learning Trajectories*. 2013 – 2014.

Richmond County Schools. TAP Math IHE Content Days. 2013-2014.

PTEC. Common Core State Standards for Mathematics & Your 6-8 Classroom. 2013.

Rockingham County Schools. *The Common Core State Standards for Mathematics and Your 6-8 / 9-12 Classroom*. 2013.

NCDPI. Navigating the Seven C's Secondary Mathematics: Math II. 2013-2014.

Wake County Schools. *Mathematics Learning Trajectories for Elementary Number*. 2013 – 2014.

Asheboro City Schools. 5 Practices for Orchestrating Productive Classroom Discussions. USTEP. 2012 – 2013.

Richmond County Schools, Davidson County Schools, Johnston County Schools. *TAP Math IHE Content Days*. 2012-2013.

SAS Institute. Connecting Big Ideas: SAS Math Summit on Implementing the Common Core. 2012.

Asheboro City Schools. *The Common Core State Standards for Mathematics and Your 9-12 Classroom*. 2012.

Ashe County Schools. *The Common Core State Standards for Mathematics and Your Mathematics Classroom*. 2012.

Rockingham County Schools. *The Common Core State Standards for Mathematics and Your Mathematics Classroom*. 2012.

Asheboro City Schools and Randolph County Schools, NC. *Core-Math: Supporting the Implementation of the Common Core State Standards for Mathematics with Learning Trajectories*. 2011 – 2012.

Rockingham County Schools, Union County Schools, Catawba County Schools, Lincoln County Schools, Avery County Schools. *TAP Math IHE Content Days*. 2011-2012.

Caswell County Schools. K- 5 Data Analysis & Measurement. 2011.

EK Powe Elementary, Durham NC. *Mathematics Learning Trajectories for Elementary Number*. 2012 – 2013.

Forest View Elementary, Durham, NC. *Mathematics Learning Trajectories for Equipartitioning*. 2010 – 2012.

Forest View Elementary, Durham, NC. Common Core State Standards for Mathematics. 2010 – 2012

Meredith Mathematics Institute, Raleigh, NC. Patterns of Growth and Change. 2008.

Buncombe County Schools, Asheville, NC. Early Rational Number Reasoning. 2008.

Nash-Rocky Mount Public Schools, Rocky Mount, NC. Geometer's Sketchpad. Workshop for high school mathematics and science teachers. 2008.

Johnston County Schools, Smithfield, NC. Using Sketchpad in algebra. 2003.

Johnston County Schools, Smithfield, NC. Using the TI-83 in Algebra I. 2002.

Johnston County Schools, Smithfield, NC. Eighth grade Algebra I & the TI-83. 2001.

Johnston County Schools, Smithfield, NC. The TI-83 and Algebra I. 2001.

# **Service**

# University

Representative. Faculty Senate Research and Grants Committee. 2016 – 2019.

Committee Member. TEHE Recruitment Task Force. 2015 – current.

Committee Member. Science Education Faculty Search. 2016.

FAEC Liaison. SOE Promotion and Tenure Committee. 2015-2016.

Member. UNCG Chapter of the NC Council of Teachers of Mathematics. 2014 – current.

Committee Member. Chancellor's Advisory Committee for EDIE. 2014 – 2015

Committee Chair. SOE Faculty Access & Equity Committee. 2014-2015

Committee Member. SOE Faculty Access & Equity Committee. 2013 - current

Committee Member. TEHE Social Justice Committee. 2013 - current

Committee Member. University Textbook Advisory Committee. 2011 – current.

Committee Member. Council of Program Coordinators. 2010 – current.

Committee Member. Yopp Professor of Mathematics Education Search. 2011-2012.

Committee Member. TEHE Merit Committee. 2011, 2012.

Committee Member. Secondary Teacher Education Program. 2010 – 2015.

Committee Member. Middle Grades Education Program. 2010 – current.

# National

Chair. Association of Mathematics Teacher Educators Conference Program Committee. 2017.

Participant. Mathematical Knowledge for Equitable Teaching Workshop, March 17-19, 2016 (NSF DRL-1222843, PI Imani Goffney). 2016

Assistant Chair. Association of Mathematics Teacher Educators Conference Program Committee. 2016.

Member. Editorial Advisory Board for the *Handbook of Research on Transforming Mathematics Teacher Education in the Digital Age*. 2015.

Adviser. AIM: All Included in Mathematics (NSF DRL-1020177, PI Paola Sztajn). 2014.

Member. Association of Mathematics Teacher Educators Program Committee Program Committee. 2013 – 2016.

Panel Member. NSF DRK-12 CAREER Grant. 2012.

Adviser. FACETS: Formative Assessment in the Mathematics Classroom: Engaging Teachers and Students (NSF DRL-0918438, PI Fred Gross). 2012, 2013

Adviser. Diagnostic e-Learning Trajectories Assessment (NSF DRL-0758151, PI Jere Confrey). 2010

Reviewer. Mathematical Thinking and Learning. 2016 - current

Reviewer. Journal of Mathematics Teacher Education. 2012 – current.

Reviewer. Journal for Research in Mathematics Education Monograph. 2012, 2013, 2014.

Reviewer. Mathematics Teaching in the Middle School. 2011 – current.

Reviewer. Social Studies Research and Practice. 2011 - current.

Reviewer. The High School Journal. 2009 - current.

Reviewer. Journal of Mathematical Behavior. 2011 – current.

Reviewer. American Educational Research Association. 2010 – current.

Reviewer. Association of Mathematics Teacher Educators. 2008 – current.

Reviewer. NCTM Research Pre-session. 2006-07; 2011-current.

#### State

Judge. NCCTM Central Region Math Fair Competition. 2016.

Committee Member. AMTE-NC Nominations Committee. 2016.

Committee Member. NCDPI High School Mathematics Standards Revision Work Group. 2016.

Judge. NCCTM State Math Fair Final Competition. 2013, 2014, 2015.

Conference Chair. NC Council of Teachers of Mathematics Central Region Conference. 2012.

Regional Vice President. North Carolina Council of Teachers of Mathematics. 2011-13.

Regional Vice President. North Carolina Council of Teachers of Mathematics. 2007-09.

Committee Member. NC Council of Teachers of Mathematics Student Affiliate. 2011- current

Panel Member. Presidential Award for Excellence in Math & Science Teaching. 2011.

Co-Editor. Meridian: A Middle School Computer Technologies Journal. 2007 - 2008.

Editorial Board. Meridian: A Middle School Computer Technologies Journal. 2006-2010.

# Awards

Distinguished Researcher Award. The University of North Carolina at Greensboro School of Education. 2014.

National Council of Teachers of Mathematics *Linking Research to Practice Outstanding Publication Award*. 2012.

## **Certifications**

NC Teaching License: D K-12 Mathematics, Curriculum Specialist. National Board of Professional Teaching Standards: AYA Mathematics.

# **Professional Organizations**

American Educational Research Association. 2008 – 2014.

Psychology of Mathematics Education – North America. 2007 – current.

Association of Mathematics Teacher Educators. 2005 – current.

National Council of Teachers of Mathematics. 2002 – current.

North Carolina Council of Teachers of Mathematics. 1998 – current.