Ronald D. Taylor, Jr.

rtaylor@berry.edu

7 Battle Farm Road
Rome, GA 30165

(706) 378-0835 [H]
(706) 290-2677 [O]

Education

Bowling Green State University — Bowling Green, OH

Doctor of Philosophy in Mathematics — December 2000

Dissertation: *Hypercyclicity of the Operator Algebra of a Banach Space*

Advisor: Kit C. Chan

Winthrop University — Rock Hill, SC

Master of Mathematics — December 1993

Concord College — Athens, WV

Bachelor of Arts in Political Science — May 1994

Bachelor of Science in Mathematics and Computer Science — May 1991

Minor in Philosophy

Professional Positions

Berry College — Mount Berry, GA

Professor of Mathematics — August 2017 – present

Associate Professor of Mathematics — August 2007 – August 2017

Assistant Professor of Mathematics — August 2000 – August 2007

Iowa State University — Ames, IA

Visiting Scholar — Spring 2013

Bowling Green State University — Bowling Green, OH

Visiting Scholar — Summer 2001

Chapman Learning Community Math Faculty — Spring 1999 – Spring 2000

Doctoral Teaching Fellow — Fall 1995 – Spring 2000

Concord College — Athens, WV

Visiting Instructor of Business Mathematics — Summer 1994 – Summer 1995

Publications

Books and book chapters

- *Tangled tangles*, with Erik Demaine, Martin Demaine, Adam Hesterberg, Quanquan Liu and Ryuhei Uehara, Chapter 7 of *The Best Writing on Mathematics 2018*, Princeton University Press, 2019.
- *Symmetry and Group Theory with Plastic Triangles*, Chapter 6.3 of *Tactile Learning Activities in Mathematics: A Recipe Book for the Undergraduate Classroom*, MAA Press, American Mathematical Society, 2018.

- *A TEXas Style Introduction to Proof*, with Patrick X. Rault, MAA Press, American Mathematical Society, 2017.
- *Tangled tangles*, with Erik Demaine, Martin Demaine, Adam Hesterberg, Quanquan Liu and Ryuhei Uehara, Chapter 9 of *The Mathematics of Various Entertaining Subjects: Research in Games, Graphs, Counting, and Complexity (Volume 2)*, Princeton University Press, 2017.

Refereed articles

- *Domination with decay in triangular matchstick arrangement graphs*, with Jill Cochran, Terry Henderson* and Aaron Ostrander*, Involve: A Journal of Mathematics, Vol. 10 (2017), No. 5, 749–766.
- *Dead Poets Society*, with Robert Vallin, MAA FOCUS, Vol. 36, No. 1, February/March 2016, 33–35.
- *To friend or not to friend, Facebook for professional educators*, with Dana Ernst and Matthew Leingang, MAA FOCUS, Vol. 35, No. 3, June/July 2015, 6–7.
- *Bisections and reflections*, with Jorgen Berglund, Mathematics Magazine, Vol. 87, No. 4 (October 2014), 284–290.
- *The algebraic case of a conjecture of Nakanishi*, with Matt Leonard* and Ryan Hansen*, Missouri Journal of Mathematical Sciences, **21(2)** (2009) 127–135.
- *Optimization of cubic polynomial functions without calculus*, with Ryan Hansen*, Mathematics Teacher, **101(6)** (2008) 408–411.
- *Introduction to Proof*, Journal of Inquiry-Based Learning in Mathematics, **4** (2008) 1–40.
- *Tearing plastic: A laboratory exercise on fractals and hyperbolic geometry*, with Todd Timberlake, PRIMUS, **XVII(4)** (2007) 316–324.
- *Stadium Alcohol Availability and Baseball Attendance: Evidence from a Natural Experiment*, with Andrew Chupp* and Frank Stephenson, International Journal of Sport Finance, **2(1)** (2007) 36–44 .
- *Hypercyclic Subspaces of a Banach Space* with Kit C. Chan, Integral Equations and Operator Theory, **41** (2001) 381–388.

  * Berry College student

Works in progress

- *Multiple Integrals and the Human Condition*, with Douglas T. Pfeffer and Garner Cochran, submitted as a book chapter to *Cross-Curricular Applications for Pure Mathematics Courses*, MAA Press, American Mathematical Society
- *The octahedral number of knots*, with Ivy Colins* and Davis Murphy*
- *The domination number of knots*, with Pam Marples and Randal Tuggle*
- *Domination in Shogi*, with Evan Fennell* and Davis Murphy*
- *Symmetric circles in SET space*, with Nathan Gaby*
- *Domination in hexagonal grid graphs*, with Luke Steel*, Evan Fennell*, Davis Murphy* and Randal Tuggle*
- *Separable equivalence*, with Michael Papazian and Carter Smith*
- *Tanglegram mosaics*, with Tim Chartier
- *Color addition across the spectrum of mathematics*
- *Roots of polynomials with generalized Fibonacci number coefficients*, with Jill Cochran and Eric McDowell

- *Exponential domination in grid graphs*, with Lynette Boos

  * Berry College student

Student Research

Honors Theses

- Alex Crouchman, *Defining the unsplicing number of knots*, 2017.
- Rachel Stewart, *A Novel Idea: Using Fiction to Teach Mathematics*, 2011.
- Melissa Cook, *BRT Polynomials of a Link Family*, 2009.
- Matt Leonard, *The algebraic cases of Nakanishi's (2,2)-move Conjecture and Przytycki's (2,3)-move Conjecture*, 2005.

  –All students gave public presentations of their results at Berry College.

Research Presentations by Students

- *The octahedral number of knots*, Ivy Collins, 2021.
  - Presented at Berry College Symposium on Student Scholarship (BC-SSS)
- *Symmetric Circles in SET space*, Nathan Gaby, 2019.
  - Presented at Berry College Symposium on Student Scholarship (BC-SSS) and MAA Southeastern Section Meeting (MAA-SE)
- *Domination in hexagonal grid graphs*, Luke Steel, 2019.
  - Posters presented at BC-SSS and MAA-SE
- *Separable equivalence*, Carter Smith and Michael Papazian$^{\diamondsuit}$, 2016.
  - Posters presented at BC-SSS and MAA-SE
- *Derived sequences*, Adam Cronan and Sarah Myers, 2015.
  - Posters presented at BC-SSS and MAA-SE
- *The value of π in different metrics*, Afzal Fazal, 2014.
  - Posters presented at BC-SSS and MAA-SE
- *Inscribing circles in polygons*, Sarah Myers, 2014.
  - Posters presented at BC-SSS and MAA-SE
- *The positive triangle game*, Robby Quarles, 2014.
  - Posters presented at BC-SSS and MAA-SE
- *Exponential domination of triangular grid graphs*, Terry Henderson, Aaron Ostrander and Jill Cochran$^{\diamondsuit}$, 2012.
  - Poster presented at MAA-SE
- *Investigation of the theoretical limitations of knotted polycarbon molecules via computational mathematics*, Dillon Yost and Ken Martin$^{\diamondsuit}$, 2012.
  - Poster presented at BC-SSS
- *An investigation of the knotting properties of polypeptides*, Daniel Murhpree and Ken Martin$^{\diamondsuit}$, 2006.
  - Published in The Berry College Journal of Chemistry, Volume 8, Number 1, Spring 2006, 25–34.
- *Bisections and reflections: A geometric investigation*, Carrie Carden and Jessie Penley, 2006.

  - Presented at University of Dayton Undergraduate Math Day (UD-UMD)
- *The algebraic case of a conjecture of Nakanishi*, Matt Leonard and Ryan Hansen, 2005.
  - Presented at BC-SSS, MAA-SE and Morehouse College Harriett J. Walton Symposium on Undergraduate Mathematics Research (MC-HJWS)
- *Optimization of cubic polynomial functions without calculus*, Ryan Hansen, 2005.
  - Presented at MC-HJWS
- *The limit of a sequence of inscribed polygons*, Matt Marsico, 2003.
  - Presented at UD-UMD

◊ Berry College faculty colleague

Professional Presentations

Invited presentations

- *The Patterns of Play: A Recreational View of Mathematics*, Mercer University Math Honor's Day, Mercer University, March 2022.
- *Mastery Based Grading in the Mathematics Classroom*, Mercer University Math Chat, Mercer University, March 2022.
- *Tangled up in red, green and blue (with apologies to Bob Dylan): An introduction to the mathematical theory of knots*, Governor's Honors Program, Berry College, Mount Berry, GA, July 2021.
- *The Patterns of Play: A Recreational View of Mathematics*, MAA Southeastern Section Meeting Invited Plenary, Northern Alabama University (remote presentation) March 2021.
- *The difference between a small infinity and a big zero*, Mathematics Seminar, Lenoir-Rhyne University, (remote presentation) February 2021.
- *Color Addition Across the Spectrum of Mathematics*, MAA MathFest, Undergraduate Student Activity, Cincinnati, OH, August 2019.
- *Teaching as an act of paying it forward*, Berry College Honors Convocation Address, April 2019.
- *The Patterns of Play: A Recreational View of Mathematics*, MAA Illinois Section Meeting Invited Plenary, Southern Illinois University, Carbondale, Carbondale, IL, March 2019.
- *Recreational Mathematics in the Classroom*, MAA Illinois Section Meeting Preconference Teaching Workshop, Southern Illinois University, Carbondale, Carbondale, IL, March 2019.
- *Tangled Up In Red, Green and Blue (with Apologies to Bob Dylan) An Introduction to the Mathematical Theory of Knots*, Parsons Student's Lecture, University of North Carolina Asheville, Asheville, NC, March 2019.
- *The Patterns of Play: A Recreational View of Mathematics*, Parsons Lecture, University of North Carolina Asheville, Asheville, NC, March 2019.
- *Pursuing New Directions in Your Academic Career*, MAA Professional Development Panel, Joint Mathematics Meetings, Baltimore, MD, January, 2019.
- *Teaching as an act of paying it forward*, Haimo Teaching Award Address, Joint Mathematics Meetings, San Diego, CA, January 2018.
- *Color addition across the spectrum of mathematics*, Mathematics Colloquium, Winthrop University, Rock Hill, SC, November 2016.

- *Tangled up in red, green and blue (with apologies to Bob Dylan): An introduction to the mathematical theory of knots*, Mathematics Seminar, University of North Alabama, Florence, AL, November 2016.
- *Color addition across the spectrum of mathematics*, MathILy Daily Gather, Bryn Mawr College, Bryn Mawr, PA, July 2016.
- *Color addition across the spectrum of mathematics*, Invited Plenary Address, Francis Marion Undergraduate Mathematics Conference, Francis Marion University, Florence, SC, April 2016.
- *Color addition across the spectrum of mathematics*, Invited Plenary Address, Eagle Undergraduate Mathematics Conference, Georgia Southern University, Statesboro, GA, February 2016.
- *Mid-career faculty: Charting the next half of your career*, MAA Committee on Professional Development Panel Discussion, Joint Math Meetings, Seattle, WA, January 2016.
- *Explorations into preparing a successful tenure portfolio*, MAA Project NExT Panel, MAA MathFest, Washington, DC, August, 2015.
- *An introduction to the mathematical theory of knots*, MathILy Daily Gather, Bryn Mawr College, Bryn Mawr, PA, August 2015.
- *Implementations of active learning in the mathematics classroom*, Faculty Session, Kennesaw Mountain Undergraduate Mathematics Conference, Kennesaw, GA, October 2014.
- *Strategies for improving recruitment and retention of mathematics majors*, MAA Project NExT Workshop, MAA MathFest, Portland, OR, August 2014.
- *Teachers: Beloved and Admired*, Invited Plenary Address, MAA Southeastern Section Meeting, Tennessee Tech, Cookeville, TN, March 2014.
- *Flipped classrooms*, MAA Project NExT Workshop, MAA MathFest, Hartford, CT, August 2013.
- *Implementations of active learning in the mathematics classroom*, Mathematics Colloquium, Iowa State University, Ames, IA, April 2013.
- *Tangled up in red, green and blue (with apologies to Bob Dylan): An introduction to the mathematical theory of knots*, Mathematics Talk, Central College, Pella, IA, April 2013.
- *Tangled up in red, green and blue (with apologies to Bob Dylan): An introduction to the mathematical theory of knots*, Mathematics Colloquium, Kenyon College, Gambier, OH, March 2013.
- *Tangled up in red, green and blue (with apologies to Bob Dylan): An introduction to the mathematical theory of knots*, Mathematics Seminar, Slippery Rock University, Slippery Rock, PA, March 2013.
- *Color addition and binary arithmetic*, University of Nebraska at Omaha Math Teachers Circle, Omaha, NE, March 2013.
- *Tangled up in red, green and blue (with apologies to Bob Dylan): An introduction to the mathematical theory of knots*, Mathematics Seminar, University of Nebraska at Omaha, Omaha, NE, March 2013.
- *Using mathematical games for classroom instruction*, MAA-SE Project NExT Workshop, Winthrop University, Rock Hill, SC, March 2013.
- *The difference between a small infinity and a big zero*, Mathematics Colloquium, State University of New York at Geneseo, Geneseo, NY, October 2012.

- *Tangled up in red, green and blue (with apologies to Bob Dylan): An introduction to the mathematical theory of knots*, Mathematics Seminar, Concord University, Athens, WV, October 2012.
- *Deciding how to teach*, MAA Project NExT Workshop, MAA MathFest, Madison, WI, August 2012.
- *The many faces of Inquiry Based Learning*, Faculty Session, Kennesaw Mountain Undergraduate Mathematics Conference, Kennesaw, GA, November 2011.
- *Creative assessment methods*, with Yuliya Babenko, MAA-SE Project NExT Workshop on Neat Teaching Ideas, MAA Southeastern Section Meeting, University of Alabama, Tuscaloosa, AL, March 2011.
- *The difference between a small infinity and a big zero*, Invited Plenary Address, 2010 Texas Undergraduate Mathematics Conference, Tyler, TX, October 2010.
- *An introduction to Inquiry Based Learning in mathematics*, MAA Texas Section NExT Meeting, Tyler, TX, October 2010.
- *Professors and other students, or students and other teachers*, Berry College Honors Convocation Address, April 2009.
- *Innovative teaching methods in established courses*, MAA Project NExT Workshop, MAA MathFest, Madison, WI, July 2008.
- *Building fractal models in a liberal arts class*, MAA-SE Project NExT Workshop on Neat Teaching Ideas, MAA Southeastern Section Meeting, Charleston, SC March 2008.
- *Tearing plastic: A laboratory exercise on fractals and hyperbolic geometry*, MAA-SE Project NExT Workshop on Neat Teaching Ideas, MAA Southeastern Section Meeting, Statesboro, GA March 2007.
- *Tearing plastic: A laboratory exercise on fractals and hyperbolic geometry*, MAA-SE Project NExT Workshop on Neat Teaching Ideas, MAA Southeastern Section Meeting, Auburn University, Auburn, AL April 2006.
- *Tangled up in red, green and blue (with apologies to Bob Dylan): An introduction to the mathematical theory of knots*, Invited Talk at James Madison University, Harrisonburg, VA March 2006.
- *How big is the Cantor set?*, with Todd Timberlake, Mathematics Colloquium, Lee University, Cleveland, TN March 2006.
- *Tangled up in red, green and blue (with apologies to Bob Dylan): An introduction to the mathematical theory of knots*, Lee University Mathematics Seminar, Cleveland, TN October 2005.
- *Tangled up in red, green and blue (with apologies to Bob Dylan): An introduction to the mathematical theory of knots*, Mu Alpha Theta National Conference, Huntsville, AL, July 2004.
- *The difference between a small infinity and a big zero*, Mu Alpha Theta National Conference, Huntsville, AL, July 2004.
- *The difference between a small infinity and a big zero*, Math Coffee, Davidson College, Davidson, NC, March 2004.
- *Presenting mathematical masterpieces and powerful techniques of effective thinking to non-science students*, Key College Undergraduate Mathematics Education Workshop, Georgia State University, Atlanta GA, February 2004.

- *Using critical thinking skills to improve student learning*, with Alvin H.F. Smith, Berry College Center for Teaching Excellence Workshop, March 2003.

Contributed presentations

- *Symmetric Circles in SET space*, with Nathan Gaby, MOVES 2019, CUNY Graduate Center, New York, NY, August 2019.
- *Build Your IBL Community* (poster), with Ryan Gantner, Amy Ksir, Patrick X. Rault, Christine von Renesse and Nina White, National Inquiry-Based Learning and Teaching Conference, Denver, CO, June, 2019.
- *Mathematics of color addition games*, Gathering 4 Gardner 13, Atlanta, GA, April 2018.
- *Two family oriented color addition games*, MOVES 2017, CUNY Graduate Center, New York, NY, August 2017.
- *Separable equivalence*, with Carter Smith*, Joint Mathematics Meetings, Atlanta, GA, January 2017.
- *Dead Poets Society*, with Robert Vallin, MAA MathFest, Columbus, OH, August 2016.
- *Dead Poets Society*, MAA Southeastern Section Meeting, Birmingham, AL, March 2016.
- *Planar tanglegrams*, MOVES 2015, Baruch College, New York, NY, August 2015.
- *Roots of polynomials with Fibonacci number coefficients*, MAA Southeastern Section Meeting, Wilmington, NC, March 2015.
- *2013 MAA PREP Workshop : Supporting research in mathematics for teachers of post-calculus students* (poster), with Lynette Boos, Joint Mathematics Meetings, Baltimore, MD, January 2014.
- *Sequential mathematical games based on additive and subtractive color mixing arithmetic*, MOVES 2013, Baruch College, New York, NY, August 2013.
- *Transfer of innovative teaching methods between STEM disciplines*, with Ken Martin and Todd Timberlake, AAC&U Next Generation STEM Learning: Investigate, Innovate, Inspire, Kansas City, MO, November 2012.
- *Roots of polynomials with Fibonacci number coefficients*, MAA MathFest, Madison, WI, August 2012.
- *Preliminary results on the exponential graph domination of a rectangular grid graph*, 3rd Research Experience for Undergraduate Faculty, American Institute of Mathematics, Palo Alto, CA, July 2011.
- *Assessment in an IBL classroom*, with Jacqueline Jensen-Vallin, Legacy of R.L. Moore Conference, Washington, DC, June 2011.
- *Inquiry Based Learning across the curriculum*, with Dan Robb, Kevin Hoke, Chuck Lane, Eric McDowell and Michael Papazian, Legacy of R.L. Moore Conference, Austin, TX, July 2009.
- *Active learning at Berry College*, with Chuck Lane and Todd Timberlake, Legacy of R.L. Moore Conference, Austin, TX, July 2008.
- *Update on the Berry College IBL Project*, Legacy of R.L. Moore Conference, Austin, TX, May 2007.
- *Bisections and reflections*, MAA Southeastern Section Meeting, Statesboro, GA March 2007.
- *Using art to teach mathematics*, Association for Integrative Studies Meeting, Atlanta, GA, October 2006.
- *Bisections and Reflections*, MAA MathFest, Knoxville, TN, August 2006.
- *Preliminary report on the Berry College IBL project*, Legacy of R.L. Moore Conference, Austin, TX, May 2006.

- *The algebraic case of a conjecture of Nakanishi*, MAA Southeastern Section Meeting, Auburn University, Auburn, AL April 2006.
- *Unknotting and colorability of knots and links*, Georgia Academy of Science Meeting, Georgia Perimeter College, Lawrenceville, GA, March 2006.
- *Interdisciplinary guided inquiry learning at Berry College: A preliminary report*, with Ken Martin, Legacy of R.L. Moore Conference, Austin, TX, April 2005.
- *Optimization of cubic functions without calculus*, MAA Southeastern Section Meeting, Meredith College, Raleigh, NC, March 2005.
- *The equal length stick number of the* 8_{19} *knot*, University of Dayton Undergraduate Mathematics Day, March 2004.
- *Reflections on Moore method teaching: A view from a non-Moore perspective*, Legacy of R.L. Moore Conference, Austin, TX, March 2004.
- *Using critical thinking to link mathematics and writing instruction*, with Alvin H.F. Smith, Joint Mathematics Meetings, Baltimore, MD, January 2003.
- *Hypercyclic subspaces of a Banach space*, Bowling Green State University Analysis Seminar, April 2000
- *A Banach space operator with a prescribed orbit*, Bowling Green State University Analysis Seminar, October 1999
- *A Hilbert space of hypercyclic vectors*, Bowling Green State University Analysis Seminar, November 1988

Professional Development

- MAA Southeastern Section Meeting, various locations, 2005–2019, 2021
- PEDESTALS 2: Teaching Mathematics Remotely and Doing It Well, online, 2020
- AP Calculus Reading, Kansas City, MO, 2010–2019
- AP Calculus Reading, online, 2020, 2021
- Gathering 4 Gardner, Atlanta, GA, 2014, 2016, 2018
- Joint Mathematics Meetings, various locations, 2000, 2001, 2003, 2005–2007, 2009–2014, 2016–2019
- MAA MathFest, various locations, 2002, 2003, 2006–2008, 2011–2016, 2018–2019
- MAA Illinois Section Meeting, Southern Illinois University at Carbondale, Carbondale, IL, 2019
- Mathematics of Various Entertaining Subjects (MOVES), New York, NY, 2013, 2015, 2017, 2019
- IBL Conference (formerly Legacy of R.L. Moore Conference), various locations, 2003–2011, 2014, 2016
- AIM Research SQuaRE, *Exponential Graph Domination*, American Institute of Mathematics, Palo Alto, CA, July 2013.
- MAA PREP Workshop, *Supporting Research in Mathematics for Teachers of post-Calculus Students*, University of Nebraska, Lincoln, NE, July 2013.
- AMS Section Meeting, Iowa State University, Ames, IA, April 2013.

- *AAC&U Next Generation STEM Learning: Investigate, Innovate, Inspire*, Kansas City, MO, November 2012.
- 3rd Research Experience for Undergraduate Faculty, American Institute of Mathematics, Palo Alto, CA, July 2011.
- The Teaching Professor Conference, Atlanta, GA, May 2007.
- Association for Integrative Studies Meeting, Atlanta, GA, October 2006.
- Inquiry Based Learning Workshop, Costa Mesa, CA, July 2006.
- MAA PREP Workshop, *Making Math Visible*, Bellarmine University, Louisville, KY, June 2005.
- MAA Ohio Section Workshop on Knot Theory, Ohio Northern University, Ada, OH, June 2004.
- Georgia Academy of Science Meeting, Berry College, Mount Berry, GA, March 2004.
- MAA PREP Workshop, *Knot Theory*, Wake Forest University, Winston-Salem, NC, May 2003.
- Chautauqua Short Course, *Abandoning Dead Ends: Presenting the Heart of Mathematics to All Students*, The University of Texas at Austin, Austin, TX, May 2002.
- MAA PREP Workshop, *Presenting Mathematical Masterpieces and Powerful Techniques of Effective Thinking to Non-Science Students*, The University of Texas at Austin, Austin, TX, May 2002.
- NSF Workshop, *Workshop PreCalculus*, Dickinson College, Carlisle, PA, June 2002.
- MAA Ohio Section Meeting, Bowling Green State University, Bowling Green, OH, March 2001.

Recognitions

- Berry College Teaching Excellence Award, 2008, 2018
- Mathematical Association of America Deborah and Franklin Tepper Haimo Award, 2018
- MAA Southeastern Section Distinguished Teaching Award, 2013
- Martindale Award of Distinction, Berry College, 2012
- Dave and Lu Garrett Award for Meritorious Teaching, Berry College, 2012
- Berry College First Year Advocate Award, 2011
- Berry College Martin Luther King Jr. Leadership Award, 2005
- MAA Project NExT Fellow, 2002–2003
- Member of Sigma Xi

Funded Grants

- Berry College Innovative Teaching Grant to take take a graduate course at Western New England University, MAMT 574: Origami in Mathematics and Education. Funded by Berry College, $1000. (2022)
- Berry College Faculty Development Grant to attend MAA PREP Workshop and AIM SQuaRE. Funded by Berry College, $1233. (2013)
- *Berry College Inquiry Based Learning Initiative*, with Andy Bressette, Ken Martin, Eric McDowell, Todd Timberlake and Kristen Diliberto-Macaluso. Funded by the Educational Advancement Foundation, $27,820. (2007)

- Berry College Summer Course Development Grant to create guided inquiry materials and attend a workshop to learn technology to implement in a college geometry course. Funded by Berry College, $1000. (2005)
- Grant for textbook purchase for Project SUCCESS. Funded by The Educational Advancement Foundation, $787.80. (2004)
- Berry College Faculty Development Grant to attend the National Critical Thinking Training Academy (with Alvin H.F. Smith) at Sonoma State University. Funded by Berry College, $1700. (2002)
- Visiting Scholar at Bowling Green State University, Summer 2001, Research on TA Training with Barbara Moses and Keshav Jaggannathan, Funded by The College of Arts and Sciences, BGSU, $1000.

Service

Professional

- MAA Southeastern Section Meeting, Local Organizer, 2022
- MAA SIGMAA-Rec, Chair, 2020-present
- MAA Southeastern Section, Section Lecturer, 2020-21
- MAA Committee on Sections, 2020-present
- Member of MAA Textbooks Series Editorial Board, 2018–present
- Academy of Inquiry Based Learning
  - Teaching Mentor, 2010–present
  - Small grants reviewer, 2013–2014
- Berry College Center for Teaching Excellence Teaching Fellow, 2008–present
- External reviewer for LaGrange College Summer Research Grants, 2018–present
- National Inquiry-Based Learning and Teaching Conference[1]
  - Organizing Committee, 2009–13
  - Co-chair, 09–12
- MAA Departmental Liaison, 2007–2016
- MAA Project NExT Consultant, 2007–08, 2015–16
- MAA Project NExT-SE, Co-director, 2008–13
- MAA Southeastern Section Beginning Faculty Activities Coordinator, 2011– 2017
- MAA-SE Mathematics *Jeopardy!* Competition
  - Organizer, 2009–present
  - Question Writer, 2017–present
- Reader for College Board AP Calculus Exam, 2010–present
  - Table Leader, 2015–present
  - Early Table Leader, 2020–present
  - Question Team Member, 2019
  - AP Calculus Math *Jeopardy!* Contest Organizer, 2016–19, 2022

[1] Formerly the Legacy of R.L. Moore Conference

- Reviewer for *Rose Hulman Undergraduate Math Journal*, *PRIMUS*, *Notices of the AMS*

Institutional

- Committees:
  - Academic Affairs Reopening Committee, 2020
  - Ad Hoc Committee on Athletic Affiliation, 2007–2008
  - Appeals Committee, Chair 2009–2010
  - Athletic Committee, 2002–2003, 2005–2009 & 2014–2018
  - Berry College First Year Experience Book Selection Committee, 2016–2017
  - Center for Teaching Excellence Advisory Committee, 2004–2009, 2010–2012, 2019–2020
  - Faculty Assembly Executive Committee, Parliamentarian, 2003–2006
  - Honors Committee, 2004–2015, 2018–2020
  - Institutional Review Board, 2001–2007, Chair 2003–2004
  - Interdisciplinary Studies Committee, 2004–2009
  - Local Arrangements Committee for the Georgia Academy of Science Meeting, 2003-2004
  - MNS Museum Committee, 2015–present
  - MNS Scheduling Committee, 2014–present
  - Student Work and Experiential Learning Advisory Committee, 2006–2013
  - SOAR Advisory Committee, 2007–2015
  - Writing Across the Curriculum, 2001–2004
  - Various departmental and extra-departmental search committees
- Berry College Athletics Scoring Staff, 2001–present
  - Men's Football, Scoreboard Operator, 2015–present
  - Men's and Women's Basketball, Various positions, 2002–present
  - Men's Baseball, Official Scorer, 2001–2002
- Berry College Putnam Exam Administrator, 2007–present
- Berry College Virginia Tech Regional Mathematics Exam Supervisor, 2009–present
- Facilitator for Math Science Partnership Summer workshops for Floyd County teachers, Berry College, Summer 2011 & 2012
- Facilitator for Summer Mathematics Camp, Berry College, July 2008
- Faculty Advisor for Berry College Origami Club, 2003–2005, 2017–present
- Faculty Supervisor for Mathematics Department Tutoring Lab, 2004–2016
- Faculty Advisor for Berry College Junior Class, 2003–2004
- Phi Kappa Phi, Secretary/Treasurer, 2015–2017

Community

- Berry College First Year Service Day, 2007, 2008, 2010–2016, 2018–2019
- Rome Braves Professional Baseball Club, Official Scorer, 2003–2009
- Seo's Martial Arts Staff, 2010–2017
  - Instructor, 2015–2017
  - Assistant Instructor, 2010–2015

Memberships

- Fellow of the Academy of Inquiry Based Learning
- Member of the Georgia Academy of Science
- Member of the Mathematical Association of America
- Member of Phi Kappa Phi
- Member of Sigma Xi: The Scientific Research Society

Creative works

Non-juried exhibitions

- *Home Grown Exhibition*, Berry College – Moon Gallery, Mount Berry, GA, February 2022
  - *Origami Dymaxion Globe*
- *Adjacent* (a display of Mathematical Art), Mercer University – Frances Sewell Plunkett Gallery, Macon, GA, March 2017
  - *3D MAA Logo in origami*