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EDUCATION

1995–2000   Bowling Green State University
Bowling Green, OH 43403
Ph.D. 2000
Mathematics
Dissertation: *Hypercyclicity of the Operator Algebra of a Banach Space*

1993–1994   Concord College
Athens, WV 24712
B.A. 1994
Political Science

1992–1993   Winthrop University
Rock Hill, SC 29733
M.M. 1993
Mathematics

1987–1992   Concord College
Athens, WV 24712
B.S. 1991
Mathematics/Computer Science
Minor in Philosophy

PRESENT POSITION

2007–present   Associate Professor of Mathematics
Berry College
Mount Berry, GA 30149

PROFESSIONAL EXPERIENCE

2000–2007   Assistant Professor of Mathematics
Berry College
Mount Berry, GA 30149

1995–2000	Doctoral Teaching Fellow
	Department of Mathematics and Statistics
	Bowling Green State University
	Bowling Green, OH 43403

1994–1995	Visiting Lecturer in Business Mathematics
	Division of Business and Economics
	Concord College
	Athens, WV 24712

1994	Adjunct Instructor of Business Mathematics
	Division of Business and Economics
	Concord College
	Athens, WV 24712

PUBLICATIONS

Textbooks and Book Chapters

- *A T$_E$Xas Style Introduction to Proof*, with Patrick Rault, MAA. (in press)
- *Tangled tangles*, with Erik Demaine, Martin Demaine, Adam Hesterberg, Quanquan Liu and Ryuhei Uehara, to appear in *The Mathematics of Various Entertaining Subjects: Research in Recreational Math (Volume 2)*, Princeton University Press (in press)
- *Symmetry and Group Theory with Plastic Triangles*, to appear in *Tactile Learning Activities in Mathematics: A Recipe Book for the Undergraduate Classroom*, MAA. (in press)

Refereed Articles

- *Domination with decay in triangular matchstick arrangement graphs*, with Jill Cochran, Terry Henderson and Aaron Ostrander, Involve: A Journal of Mathematics (in press)
- *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), pp. 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 .
- *The algebraic case of a conjecture of Nakanishi*, with Matt Leonard and Ryan Hansen, Proceedings of the Third Annual Harriet J. Walton Symposium on Undergraduate Mathematics Research, 2005.
- *Finding relative extreme values of cubic functions using algebraic methods*, With Ryan Hansen, Proceedings of the Third Annual Harriet J. Walton Symposium on Undergraduate Mathematics Research, 2005.
- *Hypercyclic Subspaces of a Banach Space* with Kit C. Chan, Integral Equations and Operator Theory, **41** (2001) 381–388.

FUNDED GRANTS

- *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.
- Summer course development grant to create guided inquiry materials and attend a workshop to learn technology to implement in MAT 312, $1000.
- Grant for textbook purchase for Project SUCCESS. Funded by The Educational Advancement Foundation in the amount of $787.80
- Attended the National Critical Thinking Training Academy (with Alvin Smith) at Sonoma State University in July 2002. Funded by a Faculty Development Grant in the amount of $1700.
- 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 in the amount of $1000.

PROFESSIONAL DEVELOPMENT

- MAA MathFest, Columbus, OH, August 2016.
- 12th Gathering 4 Gardner, Atlanta, GA, April 2016.
- MAA Southeastern Section Meeting, University of Alabama–Birmingham, Birmingham, AL, March 2016.
- Joint Mathematics Meetings, Seattle, WA, January 2016.
- MAA MathFest, Washington, DC, August 2015.

- Museum of Mathematics MOVES Conference, New York, NY, August 2015.

- MAA Southeastern Section Meeting, University of North Carolina at Wilmington, Wilmington, NC, March 2015.

- 11th Gathering 4 Gardner, Atlanta, GA, March 2014.

- MAA Southeastern Section Meeting, Tennessee Technological University, Cookeville, TN, March 2014.

- Joint Mathematics Meetings, Baltimore, MD, January 2014.

- Museum of Mathematics MOVES Conference, New York, NY, August 2013.

- MAA MathFest, Hartford, CT, August 2013.

- 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 Meeeting, Iowa State University, Ames, IA, April 2013.

- MAA Southeastern Section Meeting, Winthrop University, Rock Hill, SC, March 2013.

- Joint Mathematics Meetings, San Diego, CA, 2013.

- *AAC&U Next Generation STEM Learning: Investigate, Innovate, Inspire*, Kansas City, MO, November 2012.

- Legacy of R.L. Moore Conference, June 2012, Austin, TX. (Co-organizer, non-attendee)

- MAA MathFest, August 2–4, 2012, Madison, WI

- MAA MathFest, August 4–6, 2011, Lexington, KY

- 3rd Research Experience for Undergraduate Faculty, American Institute of Mathematics, Palo Alto, CA, July 2011.

- Legacy of R.L. Moore Conference, June 2011, Washington, DC. (Co-organizer)

- Legacy of R.L. Moore Conference, July 2010, Austin, TX. (Co-organizer)

- Legacy of R.L. Moore Conference, July 2009, Austin, TX. (Co-organizer)

- MAA MathFest, July 28–August 2, 2008, Madison, WI

- Legacy of R.L. Moore Conference, July 2008, Austin, TX.

- MAA MathFest, August 3–5, 2007, San Jose, CA

- Teaching Professor Conference, May 2007, Atlanta, GA.

- Legacy of R.L. Moore Conference, April 2007, Austin, TX.

- Association for Integrative Studies Meeting, October 2006, Atlanta, GA.

- MAA MathFest, August 10–12, 2006, Knoxville, TN.

- IBL Workshop, July 15–23, 2006, Costa Mesa, CA.

- Legacy of R.L. Moore Conference, April 2006, Austin, TX.
- MAA PREP Workshop, Making Math Visible, June 2005, Bellarmine University, Louisville, KY.
- Legacy of R.L. Moore Conference, April 2005, Austin, TX.
- MAA Ohio Section Workshop on Knot Theory, June 2–5, 2004, Ohio Northern University, Ada, OH.
- MAA PREP Workshop on Knot Theory, May 9–13, 2003, Wake Forest University, Winston-Salem, NC.
- Legacy of R.L. Moore Conference, March 2004, Austin, TX.
- MAA MathFest, July 29–August 2, 2003, The University of Colorado at Boulder, Boulder, CO.
- Legacy of R.L. Moore Conference, March 2003, The University of Texas at Austin, Austin, TX.
- Chautauqua Short Course, Abandoning Dead Ends: Presenting the Heart of Mathematics to All Students, May 23–25, 2002, The University of Texas at Austin, Austin, TX.
- MAA PREP Workshop, Presenting Mathematical Masterpieces and Powerful Techniques of Effective Thinking to Non-Science Students, May 28–31, 2002, The University of Texas at Austin, Austin, TX.
- NSF Workshop, Workshop PreCalculus, June 19–24, 2002, Dickinson College, Carlisle, PA.
- MAA MathFest, August 1–3, 2002, The University of Vermont, Burlington, VT.

PROFESSIONAL PRESENTATIONS

Invited

- *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, Invited Talk at 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*, Davidson College Math Coffee. 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

- *Dead Poets Society*, 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

RECOGNITIONS

- 2013 MAA Southeastern Section Distinguished Teaching Award
- 2012 Martindale Award of Distinction
- 2012 Dave and Lu Garrett Award for Meritorious Teaching
- 2010 First Year Advocate Award
- 2008 Vulcan Materials Teaching Excellence Award
- 2005 Martin Luther King Jr. Leadership Award
- 2002-2003 MAA Project NExT Fellow
- Member of Sigma Xi

SERVICE

Institutional

- Committees:
  - Appeals Committee, Chair 2009–2010
  - Center for Teaching Excellence Advisory Committee, 2004–2009 & 2010–2013

- Honors Committee, 2004–2015
- Interdisciplinary Studies Committee, 2004–2009
- Athletic Committee, 2002–2003, 2005–2009 & 2014–present
- Student Work and Experiential Learning Advisory Committee, 2006–2013
- Student Orientation Advising and Registration Advisory Committee, 2007–2015
- MNS School Promotion and Tenure Committee, 2010–2014
- Ad Hoc Committee on Athletic Affiliation, 2007–2008
- Institutional Review Board, 2001–2007, Chair 2003–2004
- Faculty Assembly Executive Committee, Parliamentarian, 2003–2006
- Local Arrangements Committee for the Georgia Academy of Science Meeting, 2003-2004
- Writing Across the Curriculum Committee, 2001–2004
- Various extra-departmental search committees

- Co-facilitator for Professional Development Workshop in Mathematics for Floyd County Elementary School teachers, Berry College, July 2012.

- Co-facilitator for Professional Development Workshop in Mathematics for Floyd County High School and Middle School teachers, Berry College, July 2011.

- Academy of Inquiry Based Learning, Teaching Mentor, 2010–present

- Berry College Putnam Exam Administrator (2007-present)

- Berry College Virginia Tech Regional Mathematics Exam Supervisor (2009–present)

- Facilitator for Summer Mathematics Camp, Berry College, July 2008.

- Assisted with scoring of Berry College intercollegiate basketball games, (2002–present)

- Served as Institutional representative to the 2001, 2003, 2006, 2009, 2010, 2011 and 2013 Joint Mathematics Meetings to search for a new faculty member for the Department of Mathematics and Computer Science

- Faculty Advisor for Berry College Orgami Club (2003–2005)

- Faculty Advisor for Berry College Junior Class (2003–2004)

- Assisted with scoring of Berry College intercollegiate baseball games, (2001 & 2002)

Professional

- Member: Mathematical Association of America (MAA)
- MAA Departmental Liaison
- Faculty Advisor for Berry College Chapter of Kappa Mu Epsilon
- Faculty Advisor for Berry College Student Chapter of the MAA
- Faculty Supervisor for Mathematics Department Student Workers
- Academy of Inquiry Based Learning, Teaching Mentor, 2010–present

- Legacy of R.L. Moore Conference Organizing Committee, 2009–13, Co-chair, 09–12
- MAA Southeastern Section Beginning Faculty Activities Coordinator (2011–present)
- Coordinator of MAA-SE Mathematics **Jeopardy!** Contest, (2010–present)
- Co-director Project NExT Southeast, (2008–2013)
- MAA Project NExT Consultant, 2007–08, 2015–16
- Reader for College Board AP Calculus Exam, (2010–present)
    - Table Leader: 2015–present
    - AP Calculus Math *Jeopardy!* Contest Organizer, 2016
- Reviewer for *Rose Hulman Undergraduate Math Journal*, *PRIMUS*, *Notices of the AMS*

Community
- Instructor at Seo's Martial Arts
- Participant in First Year Service Day

TEACHING SCHEDULE

Fall 2016
MAT 201 – Multivariable Calculus
MAT 305 – Proof Structures and Techniques (2 sections, writing intensive)
BCC 100 – First Year Seminar
KIN 155 – Martial Arts: Tae Kwon Do

Spring 2017
MAT 150H – Mathematics and Origami
MAT 203 – Multivariable Calculus (2 sections)
KIN 155 – Martial Arts: Tae Kwon Do