Laura Taalman

Full Academic Curriculum Vitae

CONTACT

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EDUCATION

Duke University, Ph.D. in Mathematics, 2000
Duke University, M.A. in Mathematics, 1997
University of Chicago, B.S. in Mathematics, 1994

EMPLOYMENT HISTORY

James Madison University, Harrisonburg, Virginia
Tenured Full Professor, 2000–present (Tenured 2006, Full 2011, On leave 2015-16).

Ultimaker North America, New York City, New York
Strategic Research Consultant for Education, Spring 2016–present.

Digital Harbor Foundation, Baltimore, Maryland
Content Strategist, Fall 2015–present.

MakerBot Industries, Brooklyn, New York
Senior Product Manager for Education, Spring 2015–Fall 2015.

The National Museum of Mathematics, New York City, New York
Mathematician-in-Residence, Fall 2014–Spring 2015.

Duke University, Durham, North Carolina
Graduate Instructor, 1994–2000.

KNOT THEORY PAPERS

Sequences of Spiral Knot Determinants, with students Kim and Stees, The Journal of Integer Sequences, Vol. 19, Issue #1, 2016.

Spiral knots, with Van Wyk and students Brothers, Evans, Witczak, and Yarnall, Missouri Journal of Mathematical Sciences, Vol. 22, Issue #1, 2010.

p-Coloring classes of torus knots, with students Brieland and Oesper, Missouri Journal of Mathematical Sciences, Volume 21, Issue 2, 2009.

Counting m-coloring classes of knots and links, with students Brownell and O'Neil, Pi Mu Epsilon Journal Volume 12, Number 5, Fall 2006.

SUDOKU PAPERS

Nest graphs and minimal complete symmetry groups for magic Sudoku variants, with Arnold, Field, Lorch, Lucas, Rocky Mountain J. Math, Vol. 45, No. 3, 2015.

Minimal complete Shidoku symmetry groups, with Arnold, Field, and Lucas, J. Combinatorial Mathematics and Combinatorial Computing, Vol. 87, Nov 2013.

Gröbner basis representations of Sudoku, with Arnold and Lucas, College Math Journal, March 2010.

POKER PAPERS

Heartless poker and Diophantine Equations, with Lanphier, MOVES Research in Recreational Math, Princeton University Press, 2015.

MANCALA PAPERS

Mancala Matrices, with Tongen and students Warren, Wyrick-Flax, and Yoon, College Math Journal, Vol. 44, No. 4, 2013.

Solitaire Mancala games and the Chinese Remainder Theorem, with Jones and Tongen, American Mathematical Monthly, Vol, 120, No. 8, pp. 706-724, 2013.

ALGEBRAIC GEOMETRY PAPERS

An exact sequence of weighted Nash complexes, Illinois Journal of Mathematics, Volume 52, Number 2, 591-610, 2009.

The Nash sheaf of a complete resolution, Manuscripta Mathematica 106, no.2, 249–270, 2001.

Teaching Experience

Mathematics Courses Taught:

- Mathematics of Games and Puzzles
- The Nature of Mathematics
- Fundamentals of Mathematics
- Algebra/Precalculus Gateway
- Precalculus
- Lab Calculus with Precalculus I and II
- Calculus with Functions I and II
- Calculus I and II
- Discrete Math and Intro to Proof
- Graph Theory
- Abstract Algebra
- Linear Algebra
- Advanced Linear Algebra
- Algebraic Topology

3D Printing Classes and Workshops Taught:

- Introduction to 3D Printing
- Mathematical 3D Printing
- Knot Theory and 3D Printing
- 3D Printing for Faculty
- 3D Design Workshops
- High Resolution Resin 3D Printing

Undergraduate Research Supervised:

- Knot Theory Honors Thesis 2014-15
- 3D Printing Ind. Study 2014
- Knot Theory REU 2013
- 3D Printing MREU 2013
- Knot Theory Ind. Study 2012-13
- Knot Theory MREU 2013
- Mancala/Tchoukaillon REU 2011
- Mancala M^3 NREUP 2010
- Knot Theory REU 2007
- Sudoku Honors Thesis 2006-7
- Knot Theory REU 2004
- Knot Theory REU 2003

Textbooks

Taalman/Kohn Calculus, a three-semester calculus textbook co-authored with Peter Kohn, W.H. Freeman/Macmillan, 2013. Adoption/usage list includes:

- Alabama A&M University
- Allan Hancock College
- Boise State University
- Catawba Valley Comm. College
- City College of NY, Touro Agriculture
- College of New Rochelle
- Clayton State University
- Colby College
- College of New Rochelle
- Columbia Basin College
- Framingham State College
- Georgia College and State Univ.
- Graceland College
- Haywood Community College
- Isothermal Community College
- James Madison University
- Massachusetts High Schools
- New Mexico Mining and Technology
- New York University
- North Central Michigan College
- Nova Scotia Agricultural College
- Skagit Valley College
- Southwestern University
- SUNY College at Potsdam
- Texas Bexar
- Univ. of California, Santa Barbara
- Univ. of North Carolina, Greensboro
- Univ. of Toronto-Scarboro
- Univ. of Wisconsin, Stevens Point
- Wheaton College
- York County Technical College

Calculus I with Integrated Precalculus, a two-semester textbook that combines calculus and precalculus, W.H. Freeman/Macmillan, 2013. Previous edition was titled ***Integrated Calculus***, first published with Houghton Mifflin, 2004. Adoption/usage list includes:

- Boston College
- California State Univ. Long Beach
- Centre College
- Colby College
- Connecticut High Schools
- Drexel University
- Gustavus Adolphus College
- Harvard University
- Hope College
- James Madison University
- Knox College
- Loyola University Chicago
- Meredith College
- Miami Dade Community College
- Monash University
- New Jersey High Schools
- New Mexico High Schools
- New Mexico Mining and Technology
- New York University
- North Central College
- Oxford College of Emory University
- Trinity College Hartford

- Tulane University
- St. Catherine University
- SUNY College at Potsdam
- University of the Redlands
- University of St. Thomas
- University of Wisconsin, Stout
- Urbana University
- Wheeling Jesuit College

Trade Books

Taking Sudoku Seriously: The Mathematics Behind the World's Most Popular Pencil Puzzle, with Jason Rosenhouse, Oxford University Press, 2012. Hardcover sales to date of over 5,000 copies, including Chinese and Japanese translations.

Blogs and Online Content

Hacktastic, a technical blog on math, 3D printing, and failure with over 160K visits and 30K visitors, `mathgrrl.com/hacktastic`, 2015-present.

mathgrrl on Thingiverse, shared library of nearly 200 original designs with over 570K views and 190K downloads, `thingiverse.com/mathgrrl`, followed by 1.5K users, 2013-present.

Jumpstart, an online resource for 3D design including Tinkercad, Sculptris, and OpenSCAD, `thingiverse.com/jumpstart`, 2015.

MakerBot in the Classroom: An Introduction to 3D Printing and Design, online and published lesson workbook, 2015.

MakerHome Blog, one 3D print a day for a year with tutorials and design walk-throughs, `makerhome.blogpost.com`, over 125K pageviews, 2013-14.

Expository Articles

The Mathematics behind xkcd: A conversation with Randall Munroe, Math Horizons, September 2012, cover article.

Taking Sudoku Seriously, Math Horizons, September 2007 issue, cover article.

Puzzling Over Sudoku, Madison Magazine, Fall 2007 issue.

Simplicity is not simple: Tesselations and modular architecture, Math Horizons cover article (winner of the MAA Trevor Evans Award), with Eugenie Hunsicker of Lawrence University, September 2002 issue.

Selected Media

Scientific American, Roots of Unity, "Mathematics, Live: A Conversation with Katie Steckles and Laura Taalman" by Evelyn J. Lamb, April 2015.

Science Friday, with Bre Prettis of MakerBot and host Ira Flatow, *The ABCs of 3D Printing*, July 2014.

American Mathematical Society, Blog on Math Blogs, "The Revolution Will Be 3D Printed" by Evelyn J. Lamb, January 2014.

MakerBot Stories, "Mathgrrl Makes a 3D Print a Day" by Blake Eskin, December 2013.

Taalman/Kohn Calculus on Video, co-creator and presenter in a series of calculus videos with Peter Kohn, created using SketchBook and ScreenFlow and used with W.H. Freeman's *CalcPortal* online learning center, June 2013.

Wild about Math with Sol Lederman, podcast interview with Jason Rosenhouse about Sudoku and mathematics, February 2012.

The Spark, radio interview about mathematics and why anyone would do such a thing, WMRA, February 2012.

With Good Reason, radio interview entitled "Sudoku: The Puzzle that Ate the World," Virginia Public Radio, May 2006.

Invited Talks and Workshops

3D Printing and Mathematics at Maker Fest in Ahmedabad, India
Workshops, talks, panels, and booth activities as part of the Lady Tech Guild at a three-day event with over 30K visitors, with support from Asha Jadeja and the CEPT University FabLab, January 2014.

–Workshop: Maker Rings and Designing with Code
–Workshop: 3D-Printed Thermaform Bracelets Made With Code
–Talk: Making Mathematics Real with 3D Printing

Bringing Abstract Mathematics into Reality: 3D-Printed Catalan Wireframes
One-hour address that walks through modeling methods for creating 3D printed mathematical objects.

–UNC Greensboro Mathematics and Statistics Conference, November 2015
–NYU Martin Gardner Celebration of Mind, Courant, October 2015
–MAA Themed Paper Session (short version), DC MathFest, August 2015
–Two Sigma Investments Speaker Series, New York City, June 2015

Makerspaces in Education: Engaged Learning
Invited talk as part of the Madison Catalyst Series, Institute for Visual Studies, James Madison University, November 2015.

Level-Up Your 3D Printing Design Skills
Hands-on design workshop covering 3D design methods with Mathematica, OpenSCAD, Tinkercad, and TopMod.

–Two Sigma Investments Hacker Lab, New York City, June 2015
–Project NExT program at the DC MathFest, August 2015

Leveling Up: 3D Printing and Higher Education
Webinar presentation and discussion of strategies for bringing 3D printing and design into mathematics departments, labs, independent study courses, and general education classrooms, MakerBot Industries, August 2015.

3D Printing Mathematics
One-hour invited address about design, failure, and a tour of mathematical topics including knot theory, fractals, and polyhedra.

–Walt Whitman HS, *Nifty Fifty* USA Science & Engineering speaker, May 2015
–Friends Seminary High School, New York, November 2014
–Sacred Heart Middle and High School, New York, November 2014

15 Ways to print 15 knots
Twenty-minute walkthrough of various ways to design and print models for interesting knot conformations.

–Knot Theory Special Session, Greensboro AMS Sectional, November 2014
–MakerBot Thingiverse Make-a-Thon, Brooklyn, NY, October 2014

Making Mathematics Real: Knot Theory, Experimental Math, and 3D Printing
One-hour invited address that often includes a 3D-printing demonstration, at:

–SUMS Undergraduate Research Conference at JMU, September 2014
–NYU Courant Institute GSTEM Program, New York, August 2014
–Opening the Gate Summer Institute, New Jersey City University, July 2014
–Math Encounters Lecture at the National Museum of Mathematics, July 2014
–USA Mathematics Olympiad Award Presentations, June 2014
–Carriage House Lecture, MAA National Headquarters, DC, February 2014
–January Symposium at James Madison University, Virginia, January 2014
–Helen Barton Computational Lecture at UNC, Greensboro, November 2013
–Teaching and Learning with Technology Conference at JMU, October 2013

3D-Printing Design Workshops at the National Museum of Mathematics
Two-hour *Cross Product* workshops at MoMath available to the general public, including participants between the ages of 7 and 75, Fall 2014.

–Workshop: Introduction to 3D Printing with MakerBot printers
–Workshop: High Resolution Resin Printing with FormLabs printers
–Workshop: Trigonometric Bracelets with MakerBot printers

Making Mathematics Real: 3D Printing in the Classroom
Invited address at the Virginia Council of Teachers of Mathematics Annual Conference, March 2014.

3D-Printing Workshops at JMU 3-SPACE
Hosted groups of visitors to the JMU 3-SPACE 3D-printing classroom for hands-on workshops and 3D-printing demonstrations.

–MD/DC/VA MAA Spring Section Workshop, April 2014
–Raw Learning personalized education group, March 2014
–First Lego League Virginia State Championships, December 2013
–Loudon County Mercer Middle School, November 2013

Spiral Knots
Twenty-minute invited knot theory research talks in the following sessions:

–Open & Accessible Problems in Knot Theory, Hartford MathFest, August 2013
–UnKnot Conference, Denison University, Granville, Ohio, July 2009.

Patterns, Proofs, and Purity
One-hour invited address or colloquium talk about knot theory, Sudoku, 3D printing, and the process of mathematical inquiry given at:

–UT Undergraduate Math Conference, University of Tennessee, April 2013
–Institute for Visual Studies Lecture Series, James Madison Univ., March 2013
–Mu Alpha Theta Induction, Maggie Walker Governor's School, February 2013
–Longwood College colloquium series, January 2013

Sudoku Questions, Variations, and Research
One-hour invited address on Sudoku and mathematical research questions given at many conferences, events, and universities, including:

–Pi Mu Epsilon Induction Ceremony, Mount St. Mary's University, March 2012
–Moravian Student Mathematics Conference, February 2012
–University of Mary Washington Speaker Series, November 2010
–Notre Dame Lectures for Undergraduates Series, September 2010
–Allegheny MAA Section Meeting, Univ. of Pittsburgh at Johnstown, April 2010
–GRCTM High School Math Conference, JSR Community College, March 2010
–NE MAA Section Meeting, Western New England College, November 2009
–Illinois MAA Section Meeting, Bradley University, Peoria, IL, March 2009
–University of Chicago chapter of the AWM, Chicago, IL, March 2009
–Columbia College Lecture Series, Chicago, IL, March 2009
–EPaDel MAA Section Meeting, Gettysburg College, PA, March 2009
–CURM/MAA Conference, Brigham Young University, Provo, UT, March 2009
–V2CTM Teachers Conference, Rockingham County, VA, November 2008
–Roanoke College, MAA Conversation Series, VA November 2008
–AMTNYS Summer Institute for Math Teachers, Syracuse, NY, August 2008
– MAA Lecture for Students, MathFest 2008, Madison, WI, August 2008
–University of Virginia, Public Lecture Series, Charlottesville, VA, April 2008
–Service Academy Student Math Conference, US Naval Academy, April 2008
–St. Mary's College of MD, Natural Science & Math Colloquium, February 2008
–Maggie Walker Governors School, Mu Alpha Theta Series, December 2007

–Maggie Walker Governors School, Student Research Group, December 2007
–Gettysburg College, Undergraduate Colloquium Series, PA, November 2007
–Eastern Mennonite University, Student Research Group, September 2007
–James Madison University, Colloquium, Harrisonburg, VA, September 2007
–Madison Area Technical College, Sudoku Master Competition, WI, April 2007
–MAA Carriage House Opening Ceremonies, Washington, DC, April 2007
–American University, Fool's Feast Celebration, Washinton, DC, March 2007
–Sam Houston State Univ., Piney Woods Series, Huntsville, TX, March 2007
–Longwood University, Mathematics Colloquium, Farmville, VA, March 2007
–Harvey Mudd College, Invited Lecture Series, Claremont, CA, January 2007
–University of Maryland, Graduate Minicourse Series, VA, November 2006
–Washington and Lee University, Colloquium, Lexington, VA, November 2006
–Gems of Recreational Mathematics, MAA MathFest, Knoxville, August 2006
–Wake Forest University, Mathematics Colloquium Series, April 2006
–MD/DC/VA MAA Section Meeting, Loyola College, April 2006
–Kentucky Project NExT/MAA Section Meeting, Centre College, March 2006

Functioning in Calculus: Functioning in Calculus: Combining Algebra, Precalculus, and Calculus for underprepared college students, a workshop or presentation at each of the following events:

–Madison MathFest workshop for Project NExT Fellows, August 2012.
–Pittsburgh MathFest workshop for Project NExT Fellows, August 2010.
–Kentucky MAA Section Meeting closing address, March 2011.

Teaching Proofs at the Undergraduate Level, Brown Bag lunch seminar series with the JMU Center for STEM Education and Outreach, November 2009.

Topology and the Euler Characteristic, as a workshop or presentation at the following events at James Madison University:

–Expanding Your Horizons Conference, April 2010
–Expanding Your Horizons Conference, April 2009
–Expanding Your Horizons Conference, April 2008
–Conversations Between Mathematicians Project, January 2008
–Conversations Between Mathematicians Project, January 2006

Modular Origami Polyhedra, a one-hour workshop for middle and high school teachers at JMU's Content Teaching Academy, June 2009.

Math*⇔*Art, Institute for Visual Studies, Class Seminar, James Madison University, April 2009.

Math*⇔*Patterns, a discussion and and presentation for high school students interested in mathematics, at the following events at James Madison University:

– Bridge Program Summer Camp, June 2010
– Bridge Program Summer Camp, June 2009
– Bridge Program Summer Camp, June 2008

Mathematical projects for science fairs and symposia, invited address with Peter Kohn and Carla Martin, Meetings of the Valley of Virginia Council of Teachers of Mathematics (V2CTM), November 2007.

Brainwashing and Great Expectations: Thoughts about teaching, persuasion, intimidation, expectations, bribes, and humor in the classroom

–MAA MD-DC-VA Project NExT, Montgomery College, November 2005.
–Alder Awards Session, MAA MathFest, Albuquerque, August 2005.

How not to give a talk, Research Experience for Undergraduates Seminar, James Madison University, July 2005.

Integrated Calculus, Precalculus, and Algebra: Teaching calculus to underprepared students, Houghton Mifflin Mathematics Faculty Workshop, Chicago, June 2004.

Contributed Presentations

3D-printed research: Combining mathematics and art to introduce students to knot theory, MAA Session on Mathematics and the Arts, Joint Winter Meetings, San Antonio, TX, January 2015.

Kick-starting undergraduate research, MAA Session on Mentoring Undergraduate Students in Research, Joint Winter Meetings, San Antonio, TX, January 2015.

JMU 3-SPACE: 3D printing in the classroom, MD/DC/VA Fall Sectional Meeting of the Mathematical Association of America, Longwood, Virginia, October 2013.

16 is not enough: The minimum clue conjecture for Sudoku, Gathering For Gardner Conference 10, Atlanta, Georgia, March 2012.

Homework is Dead, Long Live Homework, Contributed Paper Session at the MAA MD/DC/VA Fall Meetings, Christopher Newport University, November 2011.

Pi Scarf, at the juried exhibition of *Fibre Art and Mathematics*, Joint Winter Meetings, Washington, DC, January 2009.

Spiral Knots, with Len Van Wyk, Contributed Paper Session, AMS/MAA Joint Winter Meetings, San Diego, CA, January 2008.

Teaching the derivative one rule at a time, Contributed Paper Session, MAA MathFest, Knoxville, 2006.

Sudoku Variations, Contributed Paper Session, MAA MD/DC/VA Fall Meetings, Montgomery College, 2005.

An exact sequence of weighted Nash complexes, Contributed Paper Session, MAA MathFest, Albuquerque, 2005.

Problem Zero: Encouraging students to read math and make it their own
–MAA MD-DC-VA Fall Meetings, University of Virginia, 2005
–Concepts Through Writing Session, MAA MathFest, Providence, 2004.

Tracking student success in an integrated calculus/precalculus course, General Contributed Paper Session, Joint Math Meetings, Phoenix, 2004.

The Nash bundle and the Nash sheaf, Mathematics Colloquium, James Madison University, 2002.

Integrated Calculus: A combination course to effectively train math and science majors, Contributed Paper Session, Joint Math Meetings, San Diego, 2002.

Developing combined calculus/precalculus courses from both traditional and reform perspectives, Project NExT Session, MAA MD-DC-VA Meetings, Virginia Military Institute, 2001.

Complete resolutions, Hsiang-Pati coordinates, and the Nash sheaf, AMS Western Section Meetings, San Francisco State University, 2000.

Panel Sessions

3D Printing in Education, Inside 3D Printing Conference, New York, April 2014.

Benefits of hosting a Regional Undergraduate Mathematics Conference, AMS/MAA Joint Winter Meetings, New Orleans, January 2011.

Obtaining funding for and maintaining REU Programs, Project NExT Meeting at the Pittsburgh MathFest, August 2010.

Making the math major work for the underprepared student, Project NExT Meeting at the AMS/MAA Joint Winter Meetings, San Diego, CA, January 2008.

Getting your first textbook published, Project NExT, Joint Math Meetings in New Orleans, 2007.

Strategies for establishing a research/scholarship agenda, James Madison University Center for Faculty Innovation, Faculty Workshop Series, 2006.

Tenure and Pre-Tenure Review, Project NExT Meeting at the Knoxville MathFest, 2006.

Teaching Issues in Calculus, Thomson/Brooks-Cole/Cengage Learning Workshop, San Francisco, CA, September 2007.

Finding your classroom style, Project NExT Meeting at the MAA Kentucky Spring Meetings, Centre College, 2006.

Conferences and Sessions Organized

MOVES Conference Director, in conjunction with MoMath, the National Museum of Mathematics, in New York City. This conference on the Mathematics of Various Entertaining Subjects drew about 250 mathematicians and educators from around the world to see two keynote addresses, six featured talks, 38 research talks, 17 family track activities, and mathematical evening entertainment.

SUMS Conference Director, with Elizabeth Brown, for the yearly Shenandoah Undergraduate Mathematics and Statistics (SUMS) Conference, funded by an National Science Foundation MAA RUMC grant as well as support from JMU and various publishers. Each year we host 200-360 attendees, 25–45 student talks, 20–30 student posters, and two invited keynote addresses from prominent speakers. Co-organizer for the first nine years of the conference, from 2005–2014.

Program Chair, MAA MD/DC/VA Section, organizer for two conferences a year for the regional section of the Mathematical Association of America in 2006-2007 and 2007-2008. Each of the four meetings involved 100–200 attendees, 20–40 faculty and student talks, and 3–4 invited speakers. Also Program Chair Elect in 2005 and organizer of the undergraduate portion of the Spring Meeting in 2009.

Organizer of Paper Sessions, organizer or co-organizer for invited or contributed MAA paper sessions, each involving 8–21 speakers:

–*What Can a Mathematician Do With a 3D Printer?*, DC MathFest 2015
–*Knot Theory and its Applications*, AMS Section Meeting 2014
–*The Mathematics of Sudoku and other Pencil Puzzles*, Joint Math Meetings 2012
–*The Mathematics of Games and Puzzles*, Joint Math Meetings 2011
–*Open and Accessible Problems in Knot Theory*, Portland MathFest 2009
–*The Mathematics of Games and Puzzles*, Joint Math Meetings 2009
–*The Mathematics of Sudoku and Other Puzzles*, Joint Math Meetings 2007

Organizer of Panel Sessions, for the MAA or Project NExT, at the following Joint Math Meetings:

–*Integrating Calculus, Precaluclus, and Algebra*, Joint Math Meetings 2003
–*Project NExT Pedagogy Swap*, Joint Math Meetings 2001

Puzzle Books

Eight books with combined total sales to date of over 60,000 copies:

Rainbow Sudoku, with Philip Riley, popular and colorful Sudoku variants. Brainfreeze Puzzles and Puzzle Wright Press, to appear 2016.

Ninecraft, with Philip Riley, 9×9 puzzles with 8-bit themes and missing 9's. Brainfreeze Puzzles and Puzzle Wright Press, to appear 2016.

Double Trouble Sudoku, with Philip Riley, 8×8 and 10×10 Sudoku variants with polyomino regions. Brainfreeze Puzzles and Puzzle Wright Press, 2014.

Fifty Shades of Sudoku, with Philip Riley, 10×10 Sudoku variants with 50 shaded cells in each puzzle. Brainfreeze Puzzles and Puzzle Wright Press, 2014.

Beyond Sudoku, with Philip Riley, popular variations of Sudoku puzzles. Brainfreeze Puzzles and Puzzle Wright Press, 2012.

No-Frills Sudoku, with Philip Riley, minimal-clue Sudoku puzzles. Brainfreeze Puzzles and Puzzle Wright Press, 2011.

Naked Sudoku, with Philip Riley, arithmetic Sudoku variants. Brainfreeze Puzzles and Puzzle Wright Press, 2009.

Color Sudoku, with Philip Riley, popular and colorful Sudoku variants. Brainfreeze Puzzles and Sterling Publishing, 2007.

PUBLISHED PUZZLES

Various Sudoku Puzzles and Variations; as part of Brainfreeze Puzzles (with Riley), have provided Sudoku puzzles or variations to a wide variety of publications, books, and institutions, only some of which are listed here:

–Mathematical Association of America, website, MathFest, Joint Meetings
–Millennium Mathematics Project, *+plus Magazine*, Cambridge University
–*For All Practical Purposes*, a COMAP textbook published by W.H. Freeman
–*Mythematics*, Michael Huber, Princeton University Press
–Text and Academic Authors Association, website and Conference Program
–*The BIG Notebook*, MAA Business, Industry, and Government SIGMAA
–*Math Horizons*, as part of contests and back-page features
–*The Addict's Guide to Sudoku*, Fiorella Grossi, Fair Winds Press
–FOCUS Newsletter of the Mathematical Association of America
–Journal of Online Mathematics (JOMA), in a research article
–*Who Wants to be a Sudoku Master?*, Madison Area Technical College
–*Suki and the Beasts*, a Sudoku Odyssey, Galewski, Chapman, and Schuman
–*Harvey Mudd College Bulletin*, the alumni magazine of Harvey Mudd
–MAA Carriage House website and opening ceremonies
–dozens of regional colloquia, conferences, newsletters, and contests
–many dozens of colleges each year as part of Pi Day celebrations

Sudoku Puzzle Syndication; as part of Brainfreeze Puzzles (with Riley), provided weekly Sudoku syndication for the following college newspapers in 2007–2011:

- *The Breeze*, James Madison Univ.
- *The Collegian*, Kansas State Univ.
- *GW Hatchet*, George Washington U.
- *The New Hampshire*, UNH
- *The Temple News*, Temple Univ.
- *The Manitau Messenger*, St. Olaf
- *The Scarlet*, Clark University
- *The Oswegonian*, SUNY Oswego
- *The Bucknellian*, Bucknell Univ.
- *The Utah Statesman*, Utah State Univ.
- *The Reveille*, Nebraska Wesleyan U.
- *The Creightonian*, Creighton Univ.
- *The Davidsonian*, Davidson College
- *The Voice*, Westfield State College
- *The Globe*, Point Park University
- *The Lance*, Evangel University
- *The Trinitonian*, Trinity University
- *The Review*, University of Deleware
- *The Oregon Daily Emerald*, U. Oregon
- *George-Anne Daily*, Georgia Southern
- *The Daily O'Collegian*, Oklahoma S.U.
- *Manitau Messenger*, St. Olaf College
- *The Lafayette*, Lafayette College
- *The Skyline*, Sul Ross State University
- *The Daily Pennsylvanian*, U. Penn
- *The Lode*, Michigan Technological U.
- *The Mesa Journal*, UT Permian Basin
- *The Bona Venture*, St. Bonaventure U.
- *The Crusader*, Holy Cross
- *The Maroon*, University of Chicago

Editorial Experience

Math Horizons Editorial Board, board of the undergraduate magazine of the Mathematical Association of America, 2008–present.

Peer Reviews of Mathematical Articles, for College Math Journal, Math Horizons, Mathematics Magazine, and the American Mathematical Monthly, 2001–present.

Freelance Mathematical Accuracy-Checker, including extensive work on *Calculus* (Smith and Minton), *Elementary Linear Algebra* (Anton and Rorres), *Visual Linear Algebra* (Herman and Pepe), *The Art and Craft of Problem Solving* (Zeitz), *College Algebra* (Young), and *Technical Mathematics* (Calter), 2001–2009.

Manuscript Reviewer, including *Precalculus: Concepts in Context* (Moran, Davis, and Murphy) and *Applied Calculus*, (Hughes-Hallet, et al), 2000–2002.

Editor and Founder, *Online Journal of Undergraduate Papers in Knot Theory*, a resource where undergraduates interested in knot theory can find papers written by their peers, established 2003.

***MATHCOUNTS* Proofreader and Mathematical Accuracy-Checker**, for Handbook problems and National and State competition problems, 2002–2008.

Editor, *Problem of the Week*, James Madison University Department of Mathematics and Statistics, 2003–2008.

Editor, *JMU High School Mathematics Contest*, James Madison University Department of Mathematics and Statistics, 2003 and 2004.

Committees and Service

MAA Social Media Task Force, member of this committee reporting to the Executive Committee and Board of Governors of the Mathematical Association of America, 2016-present.

Puzzle Editor, FOCUS, editor of puzzle column in each issue of the magazine of the Mathematical Association of America, 2011-2015.

Project NExT Mentor and Consultant, mentor and consultant on the section and national levels, 2006–2013.

Allendorfer Award Committee, national committee of the Mathematical Association of America, 2008–2011.

Columnist, College Math Journal, for the *Media Highlights* section of the journal, 2008–2009.

Carriage House Advisory Board, national committee of the Mathematical Association of America, 2005–2009.

Program Chair, MD/DC/VA Section of the Mathematical Association of America, 2006–2007. (Program Chair-Elect 2005, Outgoing Program Chair 2008).

Trevor Evans Award Committee, national committee of the Mathematical Association of America, 2005–2008.

Shenandoah Valley Science Fair Judge, Mathematics, computer science, consumer science categories, James Madison University, 2003–2009.

JMU Service and Committees, including Faculty Senate, Academic Programs, Academic Integrity Task Force, Honor Board, Judicial Board, Goldwater Scholarship Committee, Faculty Senate Alternate, Pure Math, Recruitment and Activities, Search, Program Review, and Calculus committees, 2000–present.

Grants

Regional Undergraduate Mathematics Conference (RUMC), a National Science Foundation grant via the Mathematical Association of America, with Elizabeth Brown, $2,500–$3,000 yearly for the SUMS Conference each year 2005–2015.

Funds for Group Learning Classroom, obtained a contribution of $3,000 from the Center for Faculty Innovation at James Madison University for the purchase of tables to convert a classroom to a group learning environment, Fall 2011.

National Research Experience for Undergraduates Program (NREUP), MAA grant "M3: Mentoring for Minorities in Mathematics, Mancala-type games and numerical solution of ODEs," co-PI under Anthony Tongen, $27,499, Summer 2010.

CCLI (Phase II) Grant, from the National Science Foundation, titled "Advancing Assessment of Scientific and Quantitative Reasoning," co-PI under Donna Sundre; $498,765 renewed November, 2009.

HONORS

Distinguished Scholar Award, recognition from the Department of Mathematics and Statistics at James Madison University for active scholarly work in research publications, 2014.

SCHEV Outstanding Faculty Award, the Commonwealth's highest honor for faculty at Virginia's public and private colleges and universities, for superior accomplishments in teaching, research, and public service, from the State Council of Higher Education for Virginia, 2013.

PROSE Award, the American Publishers Awards for Professional and Scholarly Excellence, for the book *Taking Sudoku Seriously* in the category of Best Popular Science and Mathematics book of 2012.

Distinguished Teacher Award, given annually to one faculty member in the College of Science and Mathematics at James Madison University, 2008.

Texty Award, the national Textbook Excellence Award from Text and Academic Authors Association (TAA), for the textbook *Integrated Calculus: Calculus with Precalculus and Algebra*, 2006.

***Be the Change* Representative**, as one of many James Madison University people whose profiles are featured as part of the national *Be the Change* campaign, and one of twelve people on the 2007 JMU calendar, 2006–present.

Departmental Distinguished Teacher Award, given annually to one faculty member in the Department of Mathematics and Statistics at JMU, 2006.

Alder Award, a national MAA award that recognizes talented young mathematics teachers whose teaching has had influence beyond their own classrooms, 2005.

Trevor Evans Award, a national MAA award for exceptional articles that are accessible to undergraduates and published in the magazine *Math Horizons*, 2003.

Project NExT Fellow, a competitive fellowship for new mathematicians and teachers of mathematics, part of the *New Experiences in Teaching* professional development program of the Mathematical Association of America, 2000–2001 Fellowship year.

L.P. and Barbara Smith Award for Excellence in Teaching, sole recipient for two years running of the highest graduate teaching award given by the Duke University Mathematics Department, 1998 and 1999.

Dean's Award for Excellence in Teaching, one of two recipients (on two occasions) of this university-wide annual award from the Duke University Graduate School, 1997 and 1999.

Duke Mathematics Teaching Award, annual award given by the Duke University Mathematics Department to graduate student teachers, 1997.

MEMBERSHIPS

Mathematical Association of America
Lady Tech Guild
Text and Academic Authors Association