

Dr. Sarah J. Greenwald  
<http://cs.appstate.edu/~sjg>

## EDUCATION

**PhD, University of Pennsylvania**, Department of Mathematics, 1998, Riemannian geometry thesis.

**BS, Union College**, Department of Mathematics, 1991, Summa Cum Laude with honors in mathematics.

## PROFESSIONAL EXPERIENCE

**Professor**, Department of Mathematics, Appalachian State University, 2009–present.

**Faculty Affiliate**, Gender, Women's & Sexuality Studies, Appalachian State University, 2002–present.

**Faculty Affiliate**, Center for Judaic, Holocaust & Peace Studies, Appalachian State University, 2016–present.

**Faculty Affiliate**, Math and Science Education Center, Appalachian State University, 2021–present.

**Interim Director**, Gender, Women's & Sexuality Studies, Appalachian State University, Spring 2018.

**Associate Professor**, Department of Mathematics, Appalachian State University, 2004–2009.

**Research Associate**, Department of Mathematics, Dartmouth College, 1999–2001.

**Assistant Professor**, Department of Mathematics, Appalachian State University, 1998–2004.

## HONORS, AWARDS AND FELLOWS

Pólya Lecturer, Mathematical Association of America, 2021–2024.

Fellow of the Association for Women in Mathematics, 2020.

Association for Women in Mathematics Service Award, 2018.

Section Lecturer, Mathematical Association of America Southeastern Section, 2017–18.

Nominated for Appalachian State University Undergraduate Research Mentorship Excellence Award, 2018.

Hubbard STEM Fellow, Faculty and Academic Development, Appalachian State University, 2015.

A “Best Reference 2011” by *Library Journal* for the *Encyclopedia of Mathematics and Society*, March 1, 2012.

Appalachian State University College of Arts & Sciences Outstanding Teacher of the Year, 2011.

Appalachian State University Wayne D. Duncan Award for Excellence in Teaching in General Education, 2010.

Inducted into Appalachian State University College of Arts & Sciences' Academy of Outstanding Teachers, 2010.

Mathematical Association of America Henry L. Alder Award for Distinguished Teaching, 2005.

National Science Foundation Research Opportunity Award, 1999–2001.

Nominated for the Appalachian State University Strickland Award for Outstanding Young Faculty, 2000.

Mathematical Association of America Project NExT (New Experiences in Teaching) Fellow, 1999.

University of Pennsylvania Mathematics Good Teaching Award, 1995 and 1996.

Phi Beta Kappa, April 1990.

## PUBLICATIONS AND EDITORIAL POSITIONS

Associate Editor of the *Association for Women in Mathematics Newsletter*, 2011–present. Six issues per volume.

Co-Editor of Media Column for the *AWM Newsletter*, 2009–present.

*PRIMUS* Editorial Board, 2006–present.

Co-Editor of *Fifty Years of Women in Mathematics: Reminiscences, History, and Visions for the Future of AWM*, with Janet L. Beery and Cathy Kessel. Springer's Association for Women in Mathematics Series 28, 2022, number of pages: 1146, ISBN 978-3-030-82657-4.

"AWM Through the Decades: A Chronology of the First Fifty Years," with Janet L. Beery and Cathy Kessel. In *Fifty Years of Women in Mathematics: Reminiscences, History, and Visions for the Future of AWM* (eds. Janet Beery, —, and Cathy Kessel). Springer's Association for Women in Mathematics Series 28, 2022, pp. 1–11.

"Remembering Eleanor Green Dawley Jones," with Bettye Anne Busbee Case, Anne Leggett and Carol Wood, *AWM Newsletter* 51(5), Sep–Oct 2021, pp. 25–28.

"A Hidden Figure in *Stitchers*," *AWM Newsletter* 51(4), Jul–Aug 2021, p. 14.

"A First-Year Seminar on STEM Breakthroughs and Controversies" in *Mathematical Themes in a First-Year Seminar* (eds. Jennifer Schaefer, Jennifer Bowen, Mark Kozek and Pamela Pierce), *MAA Notes* 91, May 2021, pp. 195–206.

"Using Technology as a Pathway Towards Equity, Diversity, and Inclusion," with Jill E. Thomley, *ICTCM 2020 Proceedings*. New Jersey: Pearson Education, 2021.

"Subversion on 9-1-1," *AWM Newsletter* 51(1), Jan–Feb 2021, pp. 22–23.

"Raising the Bar with Standards-Based Grading," with Megan E. Selbach-Allen, Amy E. Ksir, and Jill E. Thomley, *PRIMUS* 30(8–10), 2020, pp. 1110–1126, doi:10.1080/10511970.2019.1695237.

"The Diffusion of Faculty Development: A Faculty Fellows Program," with Tracy W Smith, Lillian Y Nave, Victor N Mansure, and Michael L Howell, *To Improve the Academy: A Journal of Educational Development* 39(1), Spring 2020, doi:10.3998/tia.17063888.0039.107.

"The role of prizes and awards at the MAA: Some concerns and some initiatives," by the MAA Council on Prizes and Awards, *MAA FOCUS: Newsmagazine of the Mathematical Association of America* 26(5) Dec 2019/Jan 2020, pp. 6–7.

*TAKING SIDES: Clashing Views in Science, Technology & Society* Academic Advisory Board, 2010–2019.

"Review of *Women in STEM on Television: Critical Essays*," *AWM Newsletter* 49(6) Nov–Dec 2019, pp. 20–21.

"David Blackwell and Game Theory," with Mark Ginn,  
Partial activity reprinted in *David Blackwell and the Deadliest Duel* by Robert Black, Unionville, NY: Royal Fireworks Press, 2019, pp. 100–102.  
*The Centroid—Official Journal of the North Carolina Council of Teachers of Mathematics* 29(2), Fall 2003, pp. 12–18.

"Body of Proof," with Jill Thomley, *AWM Newsletter* 49(4), Jul–Aug 2019, pp. 22–23.

Guest Co-Editor of *The Creation and Implementation of Effective Homework Assignments*, with Judy Holdener. *PRIMUS*. 2016–2019. Two special editions of a journal: 29(1), May 2019, pp. 1–102 and 29(2), May 2019, pp. 103–203.

"The Creation and Implementation of Effective Homework Assignments (Part 2): Implementation," with Judy Holdener. *PRIMUS* 29(2), May 2019, pp. 103–110.

- “The Creation and Implementation of Effective Homework Assignments (Part 1): Creation,” with Judy Holdener. *PRIMUS* 29(1), May 2019, pp. 1–8.
- “Equalities and Inequalities in *The Orville*,” with Laurie Zack, *AWM Newsletter* 49(1), Jan–Feb 2019, pp. 14–15.
- “History of Mathematics Organized by Field of Study: An Intensive Survey for In-Service Teachers,” with Greg Rhoads. In *The Courses of History: Ideas for Developing a History of Mathematics Course* (eds. Amy Shell-Gellasch and Dick Jardine), MAA Notes 87, November 2018, pp. 101–108.
- “Representations in *Young Sheldon*,” with Lauren N. Murray, *AWM Newsletter* 48(5), Sep–Oct 2018, pp. 14–15.
- “Review of *Inventing the Mathematician: Gender, Race, and Our Cultural Understanding of Mathematics*,” *AWM Newsletter* 48(2), Mar–Apr 2018, pp. 27–29.
- Co-Editor of *Women in Mathematics: Celebrating the Centennial of the Mathematical Association of America*, with Janet Beery, Jackie Jensen-Vallin and Maura Mast, Springer’s Association for Women in Mathematics Series 10, 2018, ISBN 978-3-319-66693-8.
- “Teaching Students About Women and Mathematics,” with Jacqueline M. Dewar. In *Women in Mathematics: Celebrating the Centennial of the Mathematical Association of America* (eds. Janet Beery, —, Jackie Jensen-Vallin and Maura Mast). Springer’s Association for Women in Mathematics Series 10, 2018, pp. 343–358.
- “*Bones*: A Mathematical Retrospective,” *AWM Newsletter* 48(1), Jan–Feb 2018, p. 9.
- “Actuarial Science and an All-Women’s College on *The Blacklist*,” with Ruth Haas, *AWM Newsletter* 47(6), Nov–Dec 2017, p. 16.
- “*Gifted*,” *AWM Newsletter* 47(4), Jul–Aug 2017, pp. 21–22.
- “*Hidden Figures* Video Contest Site,” *AWM Newsletter* 47(2), Mar–Apr 2017, p. 26.
- “Popular Culture in Teaching, Scholarship, and Outreach: *The Simpsons* and *Futurama*,” in *Mathematics Education: A Spectrum of Work in Mathematical Sciences Departments* (eds. Jackie Dewar, Pao-sheng Hsu, and Harriet Pollatsek) Springer’s Association for Women in Mathematics Series 7, 2017, pp. 349–362.
- “2016 Presidential Medals of Freedom,” *AWM Newsletter* 47(1), Jan–Feb 2017, pp. 12–13.
- “Blindspot,” *AWM Newsletter* 47(1), Jan–Feb 2017, p. 9.
- Erratum to “Asymptotic expansion of the heat kernel for orbifolds,” with Emily Dryden, Carolyn Gordon and David Webb, *Michigan Math. J.* 66(1), 2017, pp. 221–222.
- “Interview with Mary Gray,” *AWM Newsletter* 46(5), Sep–Oct 2016, pp. 8–16.
- “Choices on *Chicago Med*,” *AWM Newsletter* 46(5), Sep–Oct 2016, p. 17.
- “Course Design for GWS 3350.” <http://www.designlearning.org/examples-of-design/examples/>, 2016.
- “*Project Mc<sup>2</sup>*: Whose Project?,” with Sushmita Chatterjee, *AWM Newsletter* 46(2), Mar–Apr 2016, pp. 25–26.
- “An Interview with Joanne Darken,” *AWM Newsletter* 46(1), Jan–Feb 2016, pp. 4–8.
- “Katherine G. Johnson’s Presidential Medal of Freedom,” *AWM Newsletter* 46(1), Jan–Feb 2016, p. 14.
- “Math Talent in *The Mysteries of Laura*,” *AWM Newsletter* 45(6), Nov–Dec 2015, pp. 21–22.
- Committee on the Undergraduate Program in Mathematics (CUPM) geometry study group report, with William Barker, Frank Farris and Gerard Venema, Mathematical Association of America, 2015.
- “The Association for Women in Mathematics: How and Why It Was Founded, and Why It’s Still Needed in the 21st Century,” with Anne Leggett and Jill Thomley, *The Mathematical Intelligencer*, 37(3), September 2015, pp. 11–21.

- “*The Librarians’ Math Girl*,” *AWM Newsletter* 45(5), Sep–Oct 2015, pp. 8–9.
- “Gender in The Math  $\beta$ ook,” with Jill Thomley, *AWM Newsletter* 45(3), May–Jun 2015, pp. 13–16.
- “The Elegant Statistician,” with Jill Thomley, *AWM Newsletter* 45(3), May–Jun 2015, p. 10.
- “Review of The Math  $\beta$ ook,” with Jill Thomley, *Notices of the American Mathematical Society* 62(4), April 2015, pp. 384–385.
- “Women in Mathematics Badge (Yes, an Actual Badge!) for Girl Scouts,” with Amber Mellon and Jill Thomley, *AWM Newsletter* 45(1), Jan–Feb 2015, pp. 17–19.
- “Ceci and Williams Are At It Again,” *AWM Newsletter* 45(1), Jan–Feb 2015, p. 10.
- “Box Plots,” with Jill Thomley, *Salem Press Encyclopedia of Science*, Research Starters, EBSCOhost, 2015.
- “Chi-squared Distribution,” with Jill Thomley, *Salem Press Encyclopedia of Science*, Research Starters, EBSCOhost, 2015.
- “Determinants,” with Jill Thomley, *Salem Press Encyclopedia of Science*, Research Starters, EBSCOhost, 2015.
- “Polyhedron/Polyhedra,” with Jill Thomley, *Salem Press Encyclopedia of Science*, Research Starters, EBSCOhost, 2015.
- “ICIAM2015 (Part 2 of 2),” *AWM Newsletter* 44(6), Nov–Dec 2014, p. 10.
- “ICIAM2015 (Part 1 of 2),” *AWM Newsletter* 44(5), Sep–Oct 2014, pp. 6–7.
- “Sherlock’s Mother,” *AWM Newsletter* 44(5), Sep–Oct 2014, p. 13.
- “Review of *Mathematics in Popular Culture: Essays on Appearances in Film, Fiction, Games, Television and Other Media*,” with Jill Thomley, *AWM Newsletter* 44(2), March–April 2014, pp. 17–19.
- “*American Horror Story: Coven*,” *AWM Newsletter* 44(1), January–February 2014, pp. 4–5.
- “*Glee: The Britanny Code*,” *AWM Newsletter* 43(6), November–December 2013, p. 22.
- “Mathematical Talent in *The Secret Life of the American Teenager*,” *AWM Newsletter* 43(4), July–August 2013, pp. 12–14.
- “In Memoriam Lu Lingzi, 1989–2013,” *AWM Newsletter* 43(4), July–August 2013, p. 26.
- “*Touch: The Amelia Sequence*,” *AWM Newsletter* 43(3), May–June 2013, p. 16.
- “Using the History of Mathematics Technology to Enrich the Classroom Learning Experience,” with Jill Thomley, *ICTCM-24 Proceedings*. New Jersey: Pearson Education, 2013, pp. 82–91.
- Encyclopedia of Mathematics and Society* Singles, with Jill Thomley, Pasadena, CA: Salem Press, Sep 2012:  
*Great Mathematicians*, ISBN: 978-1-4298-3789-7.  
*Mathematical Development & Concepts*, ISBN: 978-1-4298-3750-7.  
*Mathematics in Culture & Society*, ISBN: 978-1-4298-3751-4.  
*Mathematics & the Social Sciences*, ISBN: 978-1-4298-3752-1.  
*Engineering, Technology & Medicine*, ISBN: 978-1-4298-3753-8.  
*Space, Science & the Environment*, ISBN: 978-1-4298-3754-5.
- “The *AWM Newsletter* Archives,” *AWM Newsletter* 42(3), May–June 2012, pp. 5–6.
- “*Warehouse 13’s* Mathematical Artifact,” with Amy Ksir, *AWM Newsletter* 42(2), March–April 2012, p. 21.
- “Julia Robinson and Hilbert’s Tenth Problem on Television,” *AWM Newsletter* 42(1), January–February 2012, p. 11.
- Encyclopedia of Mathematics and Society* (3 Volumes), with Jill Thomley, Pasadena, CA: Salem Press, October 2011, ISBN: 978-1-58765-844-0, e-ISBN: 978-1-58765-848-8.

- “*Desperate Housewives*,” *AWM Newsletter* 41(5), September–October 2011, p. 21.
- “*Rites of Love and Math: The Controversy*,” *AWM Newsletter* 41(3), May–June 2011, p. 9.
- “Increasing Enjoyment in FYS: The Research Projects,” *General Education Newsletter*, Appalachian State University, 2011.
- “Inspirational Videos,” *AWM Newsletter* 40(5), September–October 2010, p. 24.
- “Math Clubs,” *AWM Newsletter* 40(4), July–August 2010, p. 15.
- “Ada Lovelace: Superwoman,” *AWM Newsletter* 39(5), September–October 2009, p. 17.
- “Diameters of 3-Sphere Quotients,” with Bill Dunbar, Jill McGowan and Catherine Searle, *Differential Geometry and its Applications* 27(2), March 2009, pp. 307–319.
- “Mathematically Talented Women in Film and Television: A Summary of the Last Five Years,” with Jill Thomley, *AWM Newsletter* 38(1), January–February 2009, pp. 8–11.
- “Evelyn Boyd Granville: Complex Solutions to Real-Life Problems,” *The Centroid—Official Journal of the North Carolina Council of Teachers of Mathematics* 38(2), Fall 2008.
- “Asymptotic Expansion of the Heat Kernel for Orbifolds,” with Emily Dryden, Carolyn Gordon and David Webb, *Michigan Mathematical Journal* 56(1), July 2008, pp. 205–238.
- Math Horizons* Editorial Board, 2003–2008.
- Guest Co-Editor of *Popular Culture and Mathematics*, with Chris Goff. *PRIMUS*. Special edition of a journal. 2006–2007.
- “To Boldly Go: Current Work and Future Directions in Mathematics and Popular Culture,” with Chris Goff, *PRIMUS* XVII(1), March 2007, pp. 1–7.
- “Mathematically Talented Women in Hollywood,” with Jill Thomley, *PRIMUS* XVII(1), March 2007, pp. 103–116.
- “*Futurama* Comedy and Writers in the Classroom,” *PRIMUS* XVII(1), March 2007, pp. 52–66.
- “Increasing the Relevance to and Engagement of Students in a Quantitative Literacy Course,” with Holly Hirst, in *Current Practices in Quantitative Literacy* (ed. Richard Gillman), MAA Notes 70, 2006, pp. 105–110.
- “Putting the Model in Mathematician Role Models,” with Jill Thomley, *The Centroid—Official Journal of the North Carolina Council of Teachers of Mathematics* 32(2), Fall 2006, pp. 20–22.
- “Complex *NUMB3RS*,” *Notices of the American Mathematical Society* 53(7), August 2006, p. 741
- “Complex *NUMB3RS*,” *MAA FOCUS: The Newsmagazine of the Mathematical Association of America* 26(5), May/June 2006, pp. 12–13
- “Girls Just Want to Have Sums,” *AWM Newsletter* 36(2), March–April 2006, p. 22–23.
- “Geometry of the Earth and Universe Computer Labs,” *ICTCM Proceedings*, March 2006, pp. 110–113.
- “Incorporating the Mathematical Achievements of Women and Minority Mathematicians into Classrooms,” in *From Calculus to Computers: Using the Last 200 Years of Mathematics History in the Classroom* (eds. Richard Jardine and Amy Shell-Gellasch), MAA Notes 68, 2005, pp. 183–200.
- “Marjorie Lee Browne: North Carolina Educator,” with Vicky Klima and Katie Mawhinney, *The Centroid—Official Journal of the North Carolina Council of Teachers of Mathematics* 31(2), Fall 2005, pp. 28–32.
- “The Shape of the Universe,” Mathematics Awareness Month Theme Essay, April 2005,  
Available: <http://www.mathaware.org/mam/05/shape.of.universe.html>
- “Mathematicians of the African Diaspora,” *AWM Newsletter* 34(6), November–December 2004, pp. 16–17.

- “Alumni Profiles: Appalachian State University,” with Holly Hirst, *Math Horizons* 12(2), November 2004, pp. 20–21.
- “Florence Nightingale, the Passionate Statistician,” with Jill Richie, *The Centroid—Official Journal of the North Carolina Council of Teachers of Mathematics* 30(2), Fall 2004, pp. 13–21  
Reprinted by editor request in the *Ontario Mathematics Gazette* 43(3), 2005, pp. 30–35.
- “*Futurama*  $\pi k$ —Mathematics in the Year 3000,” with Tom Georgoulas and Marc Wichterich, *Math Horizons* 11(4), April 2004, pp. 12–15.
- Guest Co-Editor of *Popular Culture in the Mathematics Classroom*, with Andrew Nestler. *PRIMUS*. Special edition of a journal. 2002–2003.
- “Using Popular Culture in the Mathematics and Mathematics Education Classroom,” with Andrew Nestler, *PRIMUS* XIV(1), March 2004, pp. 1–4.
- “r dr r: Engaging Students with Significant Mathematical Content from *The Simpsons*,” with Andrew Nestler, *PRIMUS* XIV(1), March 2004, pp. 29–39.
- “Taking Full Advantage of Sketchpad 4—Why You Can’t Live Without It,” with Brian Felkel, *ICTCM Proceedings*, November 2003, pp. 85–89.
- “Thomas Fuller and his Calculation Ability,” with Amy Ksir and Larry Shirley, *The Centroid—Official Journal of the North Carolina Council of Teachers of Mathematics* 30(1), Spring 2004, pp. 15–19.
- “*Simpsons* Rule!,” with Andrew Nestler, *Math Horizons* 10(4), April 2003, pp. 2 and 16.
- “David Blackwell and Game Theory,” with Mark Ginn, *The Centroid—Official Journal of the North Carolina Council of Teachers of Mathematics* 29(2), Fall 2003, pp. 12–18.
- “Hypatia, the First Known Woman Mathematician,” with Edith Prentice Mendez, *The Centroid—Official Journal of the North Carolina Council of Teachers of Mathematics*, 29(1), Spring 2003, pp. 19–24.
- “Using WebCT Instruction in Courses You Never Thought You Could,” *ICTCM (International Conference on Technology in Collegiate Mathematics) Proceedings*, November 2002, pp. 82–86.
- “Coffee Cooling on a TI-CBL Unit and in Maple,” with William Bauldry, *ICTCM (International Conference on Technology in Collegiate Mathematics) Proceedings*, November 2001, pp. 151–154.
- “African Mathematician Muhammad and his Magic Squares,” with Deanna Wasman, *The Centroid—Official Journal of the North Carolina Council of Teachers of Mathematics*, 28(2), Summer 2001, pp. 13–18.
- “Hearing the Shape of a Drum,” with Andrew Nestler, *The Centroid—Official Journal of the North Carolina Council of Teachers of Mathematics*, 28(1), Winter 2001, pp. 11–15.
- “Diameters of Spherical Alexandrov Spaces and Constant Curvature One Orbifolds,” *Indiana University Mathematics Journal*, 49(4), Winter 2000, pp. 1449–1479.
- “Women in Math: A Course with Significant Mathematical Content,” *AWM Newsletter*, 30(4), July–August 2000, pp. 12–13.
- “The Use of Writing Projects in Teaching Geometry,” *PRIMUS*, X(1), March 2000, pp. 1–14.
- “Women in Mathematics,” *AWM Newsletter* 25(5), Sep–Oct 1995, pp. 19–20.

## SESSIONS ORGANIZED

Transforming Higher Education to Achieve Equity, AMS Committee on Equity, Diversity, and Inclusion Panel, with Jim Lewis, Seattle, WA, April 2022.

MAA Contributed Paper Session on Promoting Women in Mathematics, with Anila Yadavalli, Francesca Bernardi, Judy Holdener, and Semra Kilic-Bahi, sponsored by the AWM 50th Anniversary Committee, the Joint Committee on Women (JCW), the MAA Committee on the Participation of Women, PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies, and Spectra, JMM Virtual, January 2021.

MAA Contributed Paper Session on Teaching Mathematics with Humor or Pop Culture, with Semra Kilic-Bahi and Cesar Martínez-Garza, Denver, CO, January 2020.

Women in Mathematics Badge/Patch for Girl Scouts, with Amber Mellon and Jill Thomley,  
Appalachian State University:  
November 3, 2018.  
September 24, 2016.  
September 26, 2015.  
November 22, 2014.

*The Creation and Implementation of Effective Homework Assignments*, MAA Special Session, with Judy Holdener, Atlanta, GA, January 2017.

*Applications of Gapminder for Undergraduate Mathematics and Statistics Courses*, MAA Workshop, with Bill Bauldry and Samuel Tunstall, Seattle, WA, January 2016.

*Riemannian Geometry, 40 Years and Counting: AWM's Celebration of Women in Mathematics*, Brown University, September 17–18, 2011.

*Visualization in Mathematics*, MAA Special Session, with Walter Whiteley, San Francisco, CA, January 2010.

*Mathematics and Hollywood: A Conversation with Mathematical Hollywood Writers and Mathematics Faculty*, MAA Panel Discussion, with Chris Goff, Joint Mathematics Meetings, San Diego, CA, January 2008.

*Appalachian State University Vertically Integrated Workshop for Women*, with Holly Hirst, Vicky Klima, Katie Mawhinney, Trina Palmer, and Jill Thomley, 2005–2007.

*Mathematics and Popular Culture*, MAA Special Session,  
with Christopher Goff, MathFest, Knoxville, TN, August 2006.  
with Christopher Goff, Joint Mathematics Meetings, San Antonio, TX, January 2006.  
with Andrew Nestler, MathFest, Burlington, VT, August 2, 2002.

*Teaching a Course on Women and/or Minorities in Mathematics*, Association for Women in Mathematics Panel Discussion, with Terri Bennett, Joint Mathematics Meetings, San Antonio, TX, January 2006.

*Geometry and Visualization*,  
with Cathy Gorini and Mary Platt, Joint Mathematics Meetings, Atlanta, GA, January 2005.  
with Cathy Gorini and Mary Platt, Joint Mathematics Meetings, Baltimore, MD, January 2003.

*Documenting Excellence in Teaching*, Project NExT Panel Discussion, Joint Mathematics Meetings, Washington, D.C., January 2000.

*Looking Toward the Future of Women in Science Panel*, South Eastern Women's Studies Association Meeting, April 2000.

## KEYNOTES, PLENARY AND INVITED PRESENTATIONS

*Pathways Toward EDI that are Flexible with Bounds: Making "Math Feel Like a Safe Space"*, Project NExT, MAA Missouri Section Meeting, April 8, 2022.

*Popular Culture and Mathematics: Gender, Race, and Broader Implications*

MAA Wisconsin Spring Meeting, March 31, 2022.  
Fall Meeting of the Eastern Pennsylvania and Delaware (EPaDel) section of the MAA, November 7, 2020.  
Sonia Kovalevsky Day, Winthrop University, May 19, 2018.  
Saint Louis University, April 27, 2018.  
Furman University, April 3, 2018.  
Mathematical Association of America Southeastern Section Meeting, March 24, 2018.  
Association for Women in Mathematics Triangle Conference for Undergraduate and Graduate Students, February 17, 2018.  
UNC Chapel Hill, Girls Talk Math: Engaging Girls Through Math Media program, June 28, 2017.  
Columbia State Community College, March 15, 2017.

*Mathematical Morsels from 'The Simpsons' and 'Futurama'*

MAA Missouri Section Meeting, April 8, 2022.  
Fall Meeting of the Northeastern section of the MAA, November 19, 2021.  
Summer Ventures, July 2021.  
Summer Ventures, July 2020.  
Summer Ventures, July 2019.  
Governor's School West, July 2019.  
Summer Ventures, July 2018.  
Governor's School West, July 2018.  
Summer Ventures, July 2017.  
Governor's School West, July 2017.  
Mathemati-Con, Joint Mathematics Meetings, Atlanta, GA, Jan 7, 2017.  
Kenyon College, October 2016.  
Summer Ventures, July 2016.  
Governor's School West, July 2016.  
Ontario Association for Mathematics Education Annual Conference, May 7, 2016.  
Summer Ventures, July 2015.  
Governor's School West, July 2015.  
University of Central Oklahoma, March 12, 2015.  
Lee University, November 13, 2014.  
Spartanburg Methodist College, October 6, 2014.  
Summer Ventures, July 2014.  
Governor's School West, July 2014.  
Alamance Community College, April 29, 2014.  
Indiana Section of the MAA, April 4, 2014.  
Wellesley College, March 11, 2014.  
Union College Seminar, October 21, 2013.  
Governor's School West, July 2013.  
Summer Ventures, July 2013.  
Walter Payton College Prep: An Illinois International High School, Chicago, IL, November 28, 2012.  
Governor's School West, July 9, 2012.  
Summer Ventures, July 8, 2012.  
Wake Forest University, November 16, 2011.  
Museum of Mathematics, Manhattan, NY, October 5, 2011.  
Summer Ventures, July 12, 2011.  
Governor's School West, July 8, 2011.  
Bryn Mawr College, April 11, 2011.  
Pacific Math Day Conference, Pacific University, March 8, 2011.  
Summer Ventures, July 14, 2010.



Governor's School West, July 12, 2010.  
Rose-Hulman Undergraduate Mathematics Conference, March 26–27, 2010.  
Alamance Community College, March 24, 2010.  
Governor's School West, July 6, 2009.  
Summer Ventures, July 2, 2009.  
Annual Meeting of the Michigan Section of the MAA, Central Michigan University, May 8, 2009.  
Dartmouth College, April 30, 2009.  
Annual Meeting of the Ohio Section of the MAA, Bowling Green State University, April 4, 2009.  
Wofford College, October 16, 2008.  
Summer Ventures, Appalachian State University, July 3, 2008.  
Governor's School West, Salem College, June 25, 2008.  
Annual Meeting of the Pacific Northwest Section of the MAA, Carroll College, June 19–21, 2008.  
Annual Meeting of the Texas Section of the MAA, Tarleton State University, April 3–5, 2008.  
Lenoir-Rhyne College, Feb 29, 2008.  
University of Wisconsin, La Crosse, October 11, 2007.  
Summer Ventures, Appalachian State University, July 11, 2007.  
Governor's School West, Salem College, July 2, 2007.  
Western Washington University, May 19, 2007.  
20th Century Fox Studios, Los Angeles, CA, March 15, 2007.  
University of Virginia, Charlottesville, November 12, 2006.  
American University, October 27, 2006.  
Lewis and Clark College, October 19, 2006.  
Davidson College, September 27, 2006.  
Horizons School, Atlanta, GA, September 1, 2006.  
Spelman College, August 31, 2006.  
Governor's School West, Salem College, July 28, 2006.  
Summer Ventures, Appalachian State University, July 20, 2006.  
MathMovesU, Raytheon, Upper Senate Park, Capitol Hill, Washington, DC, with Sen. Edward Kennedy,  
Rep. Joanne Davis, Dr. Jonathan Farley and gold Olympic medalist Apolo Ohno, April 24, 2006.  
US Naval Academy, April 18, 2006.  
MAA State Dinner, Wake Forest University, April 12, 2006.  
Dartmouth College, November 17, 2005.  
Macalester College, November 3, 2005.  
MSRI (Mathematical Science Research Institute), with Ken Keeler and Jeff Westbrook, October 16, 2005.  
26th Annual Krost Symposium on The Creative Journey: Creativity at the Intersection of Art and Science,  
Texas Lutheran University, September 29, 2005.  
Simon's Rock College, September 22, 2005.  
Salem State College, September 19, 2005.  
Cal State Northridge, with Andrew Nestler, May 13, 2005.  
Western Carolina University, April 13, 2005.  
Cal Poly Pomona, with Andrew Nestler, April 7, 2005.  
MathClub, Hollywood, CA, with Andrew Nestler, April 6, 2005.  
High Point University, January 26, 2005.  
University of Pennsylvania, Pi Mu Epsilon, April 21, 2004.  
Walter Payton College Prep: An Illinois International High School, Chicago, IL, November 22, 2003.  
Metropolitan Mathematics Club of Chicago, with Andrew Nestler, Chicago, IL, November 21, 2003  
Union College, October 23, 2003.  
Fall Meeting of the Eastern Pennsylvania and Delaware (EPaDel) section of the MAA, with Andrew  
Nestler, University of Pennsylvania, November 9, 2002.  
Davidson College, October 24, 2002.

University of Minnesota Duluth Spectrum Lecture, October 17, 2002.

Undergraduate Connecticut Valley Colloquium, with Andrew Nestler, Amherst College, September 26, 2002.

Southern California MAA meeting, with Andrew Nestler, Cal Tech, March 16, 2002.

Harvey Mudd College, with Andrew Nestler, March 14, 2002.

UNC Asheville, February 21, 2002.

*Celebrating the 50th Anniversary of the Association for Women in Mathematics: How and Why it was Founded and Why It's Still Needed*

Fall Meeting of the Ohio Section of the MAA, October 16, 2021

Kenyon College, April 19, 2021.

*Geometry of the Earth and Universe*

Fall Meeting of the Ohio Section of the MAA, October 15, 2021

MathFest, Falconer invited paper session, August 3, 2018.

Eagle Undergraduate Mathematics Conference and Georgia MAA State Luncheon, April 14, 2018.

South Carolina MAA State Dinner, November 3, 2017.

Purdue University Calumet, April 3, 2014.

Western Washington University, March 3, 2007.

University of Minnesota, Duluth, October 31, 2005.

*Hands-on Geometry Explorations*, Banff International Research Station for Mathematical Innovation and Discovery (BIRS) Geometry: Education, Art, and Research, 21w2240, February 20, 2021.

*How to Create Effective Homework Assignments*

Project NExT Online Seminar, July 29, 2020.

Project NExT Southeastern Section, Clemson University, March 23, 2018.

*Mathematical Identities: Representing the Underrepresented*, UNC Chapel Hill, Workshop on Inclusive Teaching Practices, April 13, 2019.

*Promoting Women in Mathematics*, Brigham Young University, March 14, 2019.

*$\pi$ -day with 'The Simpsons' and 'Futurama'*

Brigham Young University, March 14, 2019.

Edinboro University, March 26, 2018.

UNCA, March 14, 2010.

*The Calculus of Comedy: Mathematics in The Simpsons, Futurama, and The Big Bang Theory*, Institute for Pure and Applied Mathematics (IPAM), October 25, 2017.

*Incorporating the Contributions of Women and Minorities into Classrooms: David Blackwell, Evelyn Boyd Granville and Mary Gray*, AWM Research Symposium, History of Mathematics Session, April 8, 2017.

*The Association of Women in Mathematics: How and Why It Was Founded, and Why It's Still Needed*  
Virginia Tech, April 8, 2015.

Clemson University, March 10, 2015.

Women's Studies Distinguished Lecture, Appalachian State University, October 22, 2014.

*Research Roundtable on Faculty Development*, University of Central Oklahoma, March 12, 2015.

*Developing Spatial-Visual Reasoning in Classrooms and the CUPM Geometry Study Group Report*,  
Fields Institute for Research in Mathematical Sciences, Canada, August 9, 2014.

Project NExT Panel on *Implementing a New Course*, Joint Mathematics Meetings, Baltimore, MD,  
January 16, 2014.

*Reasoning and Proof with 'The Simpsons' and 'Futurama'*, NCTM Regional Conference and Exposition, Chicago, IL, November 28, 2012.

*Geometric Properties of Orbifolds*

MD/DC/VA section of the MAA, Randolph-Macon College, April 16, 2011.

Pacific Math Day Conference, Pacific University, March 7, 2011.

EPaDel/New Jersey MAA section meeting, Philadelphia, PA, November 6, 2010.

Rose-Hulman Undergraduate Mathematics Conference, March 26–27, 2010.

Special Section on the Geometry and Topology of Orbifolds, Sectional Meeting of the AMS, San Francisco State University, April 25–26, 2009.

Guy Jacobsohn Memorial Collegiate Mathematics Colloquium Series, Wofford College, October 16, 2008.

Lenoir-Rhyne College, February 29, 2008.

University of Wisconsin, La Crosse, October 12, 2007.

Spelman College, August 30, 2006.

Dartmouth College Geometry Topology Seminar, November 18, 2005.

Simon's Rock College, September 23, 2005.

AMS Special Session on Inverse Spectral Problems, Joint Mathematics Meetings, Atlanta, GA, January 8, 2005.

US Naval Academy, September 4, 2003.

University of Minnesota, Duluth, October 18, 2002.

Valley Geometry Seminar, University of Massachusetts Amherst, September 27, 2002.

High Point University, February 2000.

Davidson College, March 1999.

*Fun and Fame with Mathematics: Spherical Rubik's Cubes to Cartoons*, Women in Mathematics Colloquium, Saint Mary's University of Minnesota, March 17, 2011.

*The Art of Equations*, High Point University, October 27, 2010.

*Teaching Undergraduate Geometry—Satisfying Course Goals While Increasing Student (and Teacher) Enjoyment*, Project NExT, Pittsburgh, PA, August 3, 2010.

*Joining the Mathematical Community*, Project NExT, Pittsburgh, PA, August 2, 2010.

*Careers in Mathematics*, STEM-ICT 3D Summer Academy, Appalachian State University, June 21, 2010.

*Teaching a First Year Seminar on STEM Breakthroughs and Controversies*, Winston-Salem State University, April 14, 2010 and June 12, 2010.

*Truth Values: One Girl's Romp Through M.I.T.'s Male Math Maze*

Moderated a panel discussion after the performance at Zeum Theater, sponsored by the Mathematical Science Research Institute with proceeds benefiting the Association for Women in Mathematics, January 15, 2010.

*What is a Mathematician? Math is Not Only a Young Man's Game*

Distinguished Lecture Series on Women, Sex, and Gender, Appalachian State University, Sep 11, 2008.

Annual Meeting of the Pacific Northwest Section of the MAA [3 hour mini-course], June 19–21, 2008.

Annual Meeting of the Texas Section of the MAA, Tarleton State University, April 3–5, 2008.

Teaching Fellows Seminar, Appalachian State University, February 11, 2008.

Lecture preceded a theatrical performance of *Proof*, Appalachian State University, October 5, 2006.

Spelman College Women's Center, August 31, 2006.

*Flatland: The Movie, Mathematics, and Popular Culture*, Math for America, NY, December 14, 2007.

*A Brief History of Calculus: People and Activities*, Western Washington University, May 19, 2007.

*The Rich History of  $\pi$* , Western Washington University, March 3, 2007.

*Connecting Students to Mathematics Using History, Visualization, and Pop Culture*, Alder Award Presentation, MathFest, Albuquerque, NM, August 6, 2005.

*Thomas Fuller and his Calculation Ability*, North American Study Group on Ethnomathematics (NASGEM), Philadelphia, PA, April 22, 2004.

*Incorporating Women's Mathematical Achievements into the Classroom*, North Carolina A&T Sonia Kovalevsky High School Mathematics Day, November 2000.

## OTHER PRESENTATIONS

*Seeds of Scholarship: Springer Book, Plenary Talks, Articles and More*, S-STEM Seminar, Appalachian State University, March 18, 2022.

*Using Technology as a Pathway Towards Equity, Diversity, and Inclusion*, with Jill E. Thomley, ICTCM 2020 Virtual.

*Maximizing Inclusion and Engagement while Raising the Bar with Second Chance Homework*, MAA Contributed Paper Session on The Scholarship of Teaching and Learning in Collegiate Mathematics, Joint Mathematics Meetings, Denver, CO, January 15, 2020.

Panel member, UNC Chapel Hill, Workshop on Inclusive Teaching Practices, April 13, 2019.

*Women in Mathematics Badge/Patch for Girl Scouts*, MAA Contributed Paper Session on Inclusive Excellence—Attracting, Involving, and Retaining Women and Underrepresented Groups in Mathematics, Joint Mathematics Meetings, Baltimore, MD, January 19, 2019.

*Raising the Bar with Standards-Based Grading*, with Megan E. Selbach-Allen, Amy E. Ksir, and Jill E. Thomley, MAA Session on Mastery Grading, MathFest, Denver, CO, August 3, 2018.

*Success in STEM*, Women in Computer Science Club, Appalachian State University, March 15, 2018.

*Geometry of the Earth and Universe*, Colloquium, Appalachian State University, January 26, 2018.

*Breakthroughs and Controversies in Science and Mathematics: Standards-based Learning in a First-Year Seminar*, MAA Session on Mathematical Themes in a First-Year Seminar, Joint Mathematics Meetings, San Diego, CA, January 11, 2018.

*Designing Effective Homework Systems*, S-STEM Seminar, Appalachian State University, December 1, 2017.

*Incorporating the Contributions of Women and Minorities into Classrooms: David Blackwell, Evelyn Boyd Granville and Mary Gray*. MAA Session on The Contributions of Minorities to Mathematics Throughout History, Joint Mathematics Meetings, Seattle, WA, January 8, 2016.

*Teaching Students about Women and Mathematics: A Dialogue between Two Course Designers*, with Jackie Dewar. MAA Session on The Contributions of Women to Mathematics: 100 Years and Counting, MathFest, Washington, DC, August 8, 2015.

*SoTLE: Assessing the Effectiveness of Moodle Glossaries*, with Jill Thomley. MAA Session on The Scholarship of Teaching and Learning in Collegiate Mathematics, MathFest, Washington, DC, August 5, 2015.

*Linear Algebra with the Hand and Eye*. MAA Session on Innovative and Effective Ways to Teach Linear Algebra, Joint Mathematics Meetings, San Antonio, TX, January 11, 2015.

*Engaging Students with Mathematical Humor: "The Simpsons," Comics and More*, MAA Session on Humor and Teaching Mathematics, Joint Mathematics Meetings, San Antonio, TX, January 10, 2015.

*Local-to-Global Learning Goals in a STEM First Year Seminar: Moving Beyond the Controversy*, First Year Seminar Retreat, May 14, 2014.

*How to Effectively Use Clickers in Mathematics Classrooms*, Graduate Seminar, Appalachian State University, February 2014.

*40+ Years of the Association for Women in Mathematics*. MAA Session on the History of Mathematical Communities, Joint Mathematics Meetings, Baltimore, MD, January 16, 2014.

*Using the History of Mathematics Technology to Enrich the Classroom Learning Experience*, with Jill Thomley, International Conference on Technology in Collegiate Mathematics, Orlando, FL, March 2012.

*Teaching a First Year Seminar on STEM Breakthroughs and Controversies*, Session on First Year Seminar/First Year Experience Mathematics Courses, MathFest, Pittsburgh, PA, August 2010.

*Activities to Enliven a Course on Euclidean and non-Euclidean Geometries*, Session on Geometry Topics That Engage Students, MathFest, Pittsburgh, PA, August 2010.

*Teaching a Senior Seminar in Humanistic Mathematics*, with Eric Marland, Joint Mathematics Meetings, San Francisco, CA, January 2010.

*Historical Resources for Multivariable Calculus and Differential Geometry*, with Greg Rhoads, Joint Mathematics Meetings, Washington, DC, January 2009.

*Vertically Integrated Workshop for Women in Mathematics*, with Katie Mawhinney, Joint Mathematics Meetings, New Orleans, LA, January 2007.

*Geometry of the Earth and Universe Computer Labs*  
 Key Curriculum Press Sketchpad Users Group Meeting, Joint Mathematics Meetings, San Antonio, TX, January 2006.  
 Key Curriculum Press Sketchpad Users Group Meeting, Joint Mathematics Meetings, Atlanta, GA, January 2005.  
 ICTCM (International Conference on Technology in Collegiate Mathematics), New Orleans, LA, October 31, 2004.  
 Joint Mathematics Meetings, Baltimore, MD, January 18, 2003.

*Benjamin Franklin's Codicil—Financial Mathematics*, MathFest, Albuquerque, NM, August 5, 2005.

*Popular Culture in the Classroom: Mathematics from The Simpsons*, NCTM, Anaheim, CA, April 7, 2005. 90 minute workshop.

*A North Carolina Middle Mathematics Project Class in Geometry and Measurement*, MathFest, Providence, RI, August 12, 2004.

*Futurama  $\pi k$ —Mathematics in the Year 3000*, Joint Mathematics Meetings, Phoenix, AZ, January 9, 2004.

*A Workshop on Student Writing—A Hands on Approach*, MathFest, Boulder, CO, August 2, 2003.

*Taking Full Advantage of Sketchpad 4—Why You Can't Live Without It*, with Brian Felkel, ICTCM, Orlando, FL, November 2002.

*r dr r: Engaging Students with Significant Mathematical Content from 'The Simpsons'*, MathFest, Burlington, VT, August 2, 2002.  
 MathFest, with Andrew Nestler, Madison, WI, August 3, 2001.

*Geometric Properties of Spherical Orbifolds,*

Poster session for the Program for Women in Mathematics 10th Anniversary Reunion, May 17, 2003.  
Poster session for the Journal of Differential Geometry Conference, Harvard University, May 3, 2002.  
Spectral Geometry Conference, Dartmouth College, June 29, 2001.

*Quantitative Literacy as an Alternative to College Algebra,* with Holly Hirst, Joint Mathematics Meetings, San Diego, CA, January 9, 2002.

*Using WebCT Instruction in Courses You Never Thought You Could,* ICTCM, Baltimore, MD, November 2001.

*Tracing the Historical Progression of Mathematics and the Changing Roles of Women and Minorities with Student Projects,* MathFest, Madison, WI, August 2, 2001.

*Coffee Cooling on a CBL Unit and in Maple,* with Bill Bauldry

ICTCM, Atlanta, GA, November 2000.

Joint Mathematics Meetings, Washington, D.C., January, 2000.

*Women in Math: A Course Combining the Disciplines of Mathematics, Women's Studies and History,* MathFest, Los Angeles, CA, August 2000.

*Maple and WebCT in Modern Algebra,* MathFest, Los Angeles, CA, August 2000.

*Diameters of Quotients of Spheres*

Dartmouth College, August 5 and 12, 1999.

Olga Taussky Todd Celebration of Careers for Women in Mathematics, MSRI, July 1999.

Lehigh University Geometry/Topology Conference, June 1998.

Joint Mathematics Meetings, Baltimore, MD, January 1998.

*'Proof-Checking' a Collaborative Group's Geometers Sketchpad Proof During a Computer Lab,* MathFest, Providence, RI, July, 1999.

*The Use of Letter Writing Projects in Teaching Geometry*

MAA Southeastern Section Meeting, Memphis, TN, March 1999.

Joint Mathematics Meetings, San Antonio, TX, January 1999.

**SELECT MEDIA COVERAGE, REVIEWS, INTERVIEWS, AND PERFORMANCES**

**Book Reviews on *Women in Mathematics: Celebrating the Centennial of the Mathematical Association of America***

Reviewed by Juliette Kennedy, June 2019, *Isis*, 110(2), pp. 427–428.

Reviewed by Katie Spurrier Quertermous, March 2019, *Notices of the American Mathematical Society*, 66(3), pp. 395–398.

Reviewed by Fernando Q. Gouvêa, July 16, 2018, Mathematical Association of America.

**Select Interviews and Media Coverage in Newsletters, Newspapers and Magazines**

*President's Message: Series Expansion,* by Lisa Marano and Jenny Quinn, MAA Focus April/May 2022, pp. 26–30.

*Fifty Years of Women in Mathematics,* by Dahlia Fisch, AWM Newsletter 52(1), Jan–Feb 2022, pp. 22–23.

*Greenwald recognized for advancing women in mathematics,* Watauga Democrat, Nov 10, 2019, p. 21.

*The Appalachian State Gender, Women's and Sexuality Studies program,* by Mariah Reneau, The Appalachian, March 29, 2018.

*ASU Professors Create Girl Scout Badge to Encourage Girls to Pursue Mathematics.* All About Women (AAWMAG.com), March 2015, p. 7.

*Matemáticas en el año 3000: Una profesora estadounidense desvela los guiños científicos de la serie du cultor*

- '*Futurama*', by Patricia Fernández de Lis, Público Edición Nacional, Number 212, Domingo 27 de Abril de 2008, pp. 36.
- The Problem With 'NUMB3RS'*, by Xiao-bo Yuan, The Chronicle of Higher Education, 52(47), July 28, 2006, p. A4.
- MathTrek: Simpsons Numbers*, by Ivars Peterson, Science News, June 9, 2006.
- Women in Mathematics: WHS Students Participate in ASU Workshop*, by Mike Shands, The Mountain Times, April 13, 2006.
- Tune into math 'The Simpsons' way*, by Michael Bemis, *Curriculum Review*, 43(4), December 2003, p. 9.
- The Simpson Scholars: ASU's Satellite Q&A Forum*, by Leigh Ann Henion, The Mountain Times, February 20, 2003, p. 13.
- '*Simpsons' fans unite for 300th episode*, by Carrie Baker, Appalachian Online, 77(35), February 18, 2003.
- The real first family: How did The Simpsons get to be such a cultural touchstone?*, by Bob Baker, Los Angeles Times, February 16, 2003, p. E1.
- Math on The Simpsons*, by Carli Entin, Scholastic Math, 23(9), February 14, 2003, cover story and pp. 4–5.
- The Simpsons by the Numbers*, by Brian C. Fenton, Sound & Vision Magazine, June 2002, p. 20.
- '*Simpsons' Analysts Show How Math Figures into Episodes: Professors Use Popular Cartoon to Demonstrate that Subject Doesn't Have to Be Intimidating*, by Matthew Chin, LA Times Inland Valley Edition, March 19, 2002, p. 2.
- Deconstructing The Simpsons*, by Jayson Blair, New York Times Upfront, November 12, 2001, 134(5), pp. 26–27.

### **Book Reviews on *The Encyclopedia of Mathematics and Society***

- Reviewed by Gizem Karaali, *The College Mathematics Journal*, 44(4), September 2013, pp. 332–335.
- Reviewed by Voelker, Tammy J. Eschedor and Nancy E. Carter, *Reference & User Services Quarterly*, 51(4), Summer 2012, p. 368.
- Reviewed by Stephanie Farnlacher, *School Library Journal*, 58(4), April 2012, p. 70.
- Best Reference 2011, *Library Journal*, March 1, 2012.
- Reviewed by David Tyckoson, *Booklist*, 108(13), 3/1/2012, p. 60.
- Reviewed by Michael Bemis, *Library Journal*, 137(3), February 15, 2012, p. 127.

### **DVD Movies, Television and Video Interviews and Performances**

- Erie News, Erie, PA, March 26, 2018.
- WAC Presents: A Guide for Student Writing at ASU*, 2010.
- MTN 18 Evening news, Boone, NC, June 21, 2010.
- Greenwaldian Theorem. *Bender's Big Score*, 20th Century Fox. DVD Release November 27, 2007. Original Television Airdate on Comedy Central: March 23, 2008.
- Interactive *Futurama* Math Lecture Feature. *Bender's Big Score*. 20th Century Fox, DVD Release November 27, 2007.
- Television Documentary Series. *FANatical*. Original Airdate on TVtropolis: January 30, 2007.
- The Simpsons* Season 7 DVD Audio Commentary, *Treehouse of Horror VI* [3F04] Homer<sup>3</sup>, DVD Release December 13, 2005.
- ABC (WDIO) and NBC (KBJR) 10 o'clock news, Duluth, Minnesota, October 17, 2002.

### **Select Radio Interviews**

- More or Less*, British Broadcasting Company, Radio 4, May 5, 2008.
- Freestyle*, Canadian Broadcasting Company, February 8, 2007.
- Popular Math*, National Public Radio's *Science Friday*, April 29, 2005, 3–4 pm,  
Available: <https://www.npr.org/templates/story/story.php?storyId=4624842>
- Using The Simpsons and Other Innovative Approaches to Teach Mathematics*, Math Medley,

WARL 1320 AM, October 11, 2003, 12–1 pm.  
Minnesota News Network, October 17, 2002.

## INTERNAL GRANTS AND FUNDING

### Appalachian State University

*Online Course Development for Linear Algebra*, with Vicky Klima, 2020 [\$4000 awarded].  
*2019 Curriculum Mapping Grant*, with Vicky Klima and Trina Palmer, Institutional Research, Assessment, and Planning, 2019 [\$1500 awarded].  
*Course (Re)Design Institute*, 2016 [\$300 awarded].  
*Mentor for STEM Faculty Teaching First Year Seminar*, 2015 [\$200 awarded].  
*Local to Global Facilitators for First Year Seminar*, 2014 [\$300 awarded].  
*E-Portfolio Grant*, 2014 [\$250 awarded].  
*The Value of a Liberal Arts Education: A First Year Seminar Curriculum Development Grant*, with Tommy Brown, Recreation Management and University College, Tim Silver, History, and Mike Wade, History, 2012 [\$2000 awarded].  
*Shared Learning Outcomes Development Grant for Math 1010*, Office of General Education, with Lisa Maggiore, Sharareh Nikbakht, Trina Palmer and Nathan Weigl, 2012 [\$1000 awarded].  
*The General Education Program's Alternative Assessment Process for "Think Critically and Creatively"*, Office of General Education, 2012 [\$100 awarded].  
*Foundation Fellows Grant—Website for Mathematics History in Multivariable Calculus and Differential Geometry Courses*, with Greg Rhoads, 2007–2008 [\$4700 awarded].  
*External Scholars Grant—Jeff Weeks and the Shape of Space*, Hubbard Center, 2006 [\$700 awarded].  
*Grant to Support the Scholarship of Teaching*, Hubbard Center, Various Conferences and Minicourses.  
*Research in Geometry*, URC, 1999–2000 [\$500 awarded].  
*Women in Mathematics Course*, Women's Studies, 1999 [course buyout awarded].

## EXTERNAL GRANTS, FUNDING AND DONATIONS

### External Travel Funding for Conferences, Workshops and Colloquia

MAA, October 2021.  
UNC Chapel Hill, April 2019.  
Brigham Young University, March 2019.  
Winthrop University, May 2018.  
Saint Louis University, April 2018.  
Eagle Undergraduate Mathematics Conference and Georgia MAA State Luncheon, April 2018.  
Furman University, April 2018.  
Edinboro University, March 2018.  
Association for Women in Mathematics Triangle Conference for Undergraduate and Graduate Students, February 2018.  
South Carolina MAA State Dinner, November 2017.  
Institute for Pure and Applied Mathematics (IPAM), October 2017.  
Representations of Riemannian Geometry Conference, August 2017.  
UNC Chapel Hill, July 2017.  
Association for Women in Mathematics Research Symposium, April 2017.  
Columbia State Community College, March 2017.  
Kenyon College, October 2016.  
Ontario Association for Mathematics Education Annual Mathematics Conference, May 2016.  
Virginia Tech, April 2015.  
University of Central Oklahoma, March 2015.



Clemson University, March 2015.  
 Lee University, November 2014.  
 Spartanburg Methodist College, October 2014.  
 Fields Institute for Research in Mathematical Sciences, Canada, August 2014.  
 Wellesley College, March 2014.  
 Indiana Section of the MAA, April 2014.  
 AWM Travel Grant to work with Anne Leggett, September and November 2013.  
 NCTM Regional Conference and Exposition, Chicago, IL, November 2012.  
 40 Years and Counting: AWM's Celebration of Women in Mathematics, Brown University,  
 September 17–18, 2011.  
 MD/DC/VA section of the MAA, Randolph-Macon College, April 2011.  
 Pacific Math Day Conference, Pacific University, March 8, 2011.  
 EPaDel/New Jersey MAA section meeting, Philadelphia, PA, November 2010.  
 International Conference on Spectral Geometry, July 16–23, 2010.  
 Rose-Hulman Undergraduate Mathematics Conference, March 26–27, 2010.  
 Annual Meeting of the Michigan Section of the MAA, Central Michigan University, May 2009.  
 Annual Meeting of the Ohio Section of the MAA, Bowling Green State University, April 2009.  
 Annual Meeting of the Pacific Northwest Section of the MAA, Carroll College, June 19–21, 2008.  
 Annual Meeting of the Texas Section of the MAA, Tarleton State University, April 3–5, 2008.  
 Lilly South Conference on Teaching and Learning, Greensboro NC, February 8–10, 2008.  
 Geometry Festival, University of Maryland, College Park, April 2007.  
 26th Annual Krost Symposium on The Creative Journey: Creativity at the Intersection of Art and Science,  
 Texas Lutheran University, September 2005.  
 DIMACS Reconnect Folding and Unfolding in Computational Geometry Travel Grant, July 11–17, 2004,  
 St. Mary's College.  
 Association for Women in Mathematics Leadership Workshop Travel Grant, March 12–14, 2004,  
 University of Maryland, College Park.  
 Fall Meeting of the Eastern Pennsylvania and Delaware (EPaDel) section of the MAA,  
 University of Pennsylvania, November 9, 2002.  
 Inverse Spectral Geometry Workshop Travel Grant, June 20–22, 2002, University of Kentucky.  
 Journal of Differential Geometry Conference Travel Grant, May 3–5, 2002, Harvard University.  
 Spectral Geometry Conference Travel Grant, June 23–30, 2001, Dartmouth College.  
 MAA Professional Enhancement Programs (PREP), Teaching Undergraduate Geometry.  
 Olga Taussky Todd Celebration Travel Grant, July, 1999.

**Walmart** Community Foundation Grant. *Women in Math Badge for Girls*. \$500, awarded May, 2016.

**Ingels** food donation for 2015 Girl Scout Women in Mathematics Badge.

### **National Science Foundation**

Co-Principal Investigator for *Success in Calculus through Active Learning and Algebraic Reasoning (SCALAR)*,  
 with Vicky Klima, Katie Mawhinney, and Trina Palmer. Student Engagement in Mathematics through  
 Institutional Network for Active Learning (SEMINAL) partnership, 2017,  
 [Not funded, ranked competitive].  
 Principal Investigator for DMS 1034766 *PRISM: Appalachian Ambassadors for Research in Mathematics  
 and Science*, with Carol Babyak, Chuanhui Gu, Vicky Klima and Steve Williams, 2010, [Not funded,  
 but reviews included 3 good ratings].  
 Principal Investigator for HRD 0936606 *GSE/RES A Global Investigation of Pipeline Issues in STEM*,  
 with Carol Pollard, David Hunsinger, Dolores Parks, and Phillip Russell, 2009, [Not funded].  
 Principal Investigator for DRL 0731557 *Historical Modules for the Teaching and Learning of Mathematics:  
 An Evaluative Study Using Multiple Populations*, with Kathy Clark & Victor Katz, 2007, [Not funded].  
 Senior Personnel Member for *Appalachian Undergraduate Academy of Science*, Rahman Tashakkori, 2006,

[Not funded].

Principal Investigator for DUE 0536280 *Website for Math History Across the Curriculum*, with Greg Rhoads, 2005, [Not funded, but reviews included 1 good, 4 very good, and 2 excellent ratings].

Faculty Participant for *Integrating Writing and Mathematics Instruction to Optimize Student Learning*, Joe Kirtland and Pau-San Haruta, 2003, [Not funded].

Principal Investigator for 0072533 *Research Opportunity Award: Inverse spectral problems in Riemannian geometry*, with Carolyn Gordon, 2000–2001 [\$8762.00 awarded].

Principal Investigator for 9972304 *Research Opportunity Award: Problems in global Riemannian geometry*, with Carolyn Gordon, 1999–2000 [\$14,542.14 awarded].

### **Mathematical Association of America Tensor Foundation**

Principal Investigator for *Appalachian State University Vertically Integrated Workshop for Women*, with Vicky Klima, Katie Mawhinney, Trina Palmer, and Jill Thomley, 2006–2007 [\$3100.00 awarded].

Principal Investigator for *Appalachian State University Vertically Integrated Workshop for Women*, with Holly Hirst and Jill Thomley, 2005–2006 [\$3000.00 awarded].

### **Department of Education**

Faculty Mentor, *McNair Scholars Program*, [Not funded].

### **American Mathematical Society**

Principal Investigator for *Early Career Profiles*, 2005–2006 [\$1200.00 awarded].

## **CONFERENCES, WORKSHOPS AND LEARNING COMMUNITIES ATTENDED**

MAA Missouri Spring Meeting, April 2022.

MAA Wisconsin Spring Meeting, March 2022.

Campus Controversies Learning Community, Appalachian State University, 2022.

MAA Ohio Fall Meeting, October 2021.

Banff International Research Station for Mathematical Innovation and Discovery (BIRS) Geometry: Education, Art, and Research, 21w2240, 2021.

Joint Mathematics Meetings, January 1999–2000, 2002–2010, 2012, 2014–2021.

Fall Meeting of the Eastern Pennsylvania and Delaware (EPaDel) section of the MAA, November 7, 2020.

*Mathematics for Human Flourishing* Book Club, Math & Science Education Center, 2020.

Online Teaching Excellence Institute, Appalachian State University, Summer 2020.

Workshop on Inclusive Teaching Practices, UNC Chapel Hill, April 13, 2019.

On the Road to Online, Appalachian State University, Spring 2019.

MathFest, August 1999–2006, 2010, 2015, 2018.

Mathematical Association of America Southeastern Section Meeting, March 2018.

Association for Women in Mathematics Triangle Conference for Undergraduate and Graduate Students, February 17, 2018.

BRIDGES Academic Leadership for Women, Fall 2017.

*Transformative Conversations: A Guide to Mentoring Communities and Colleagues in Higher Education* book group, Fall 2017.

Association for Women in Mathematics Research Symposium, April 2017.

First Year Seminar Faculty Learning Community on Science in US Society, 2016–2017.

Ontario Association for Mathematics Education Annual Mathematics Conference, May 2016.

Course (Re)Design Institute, Appalachian State University, May 2016.

Workshop on Making Models: Stimulating Research In Rigidity Theory And Spatial-Visual Reasoning, Fields Institute for Research in Mathematical Sciences, Canada, August 5–9, 2014.

Indiana Section of the MAA, April 2014.

NCTM Regional Conference and Exposition, Chicago, IL, November 28–29, 2012.

ICTCM, November 2000–2002, 2004, 2012.

40 Years and Counting: AWM's Celebration of Women in Mathematics, Brown University, September 17–18, 2011

MD/DC/VA section of the MAA, Randolph-Macon College, April 15–16, 2011.

Pacific Math Day Conference, Pacific University, March 8, 2011.

EPaDel/New Jersey MAA section meeting, Philadelphia, PA, November 6, 2010.

International Conference on Spectral Geometry, July 16–23, 2010.

General Education Faculty Learning Community, organized by Joe Gonzalez, 2009–2010.

Rose-Hulman Undergraduate Mathematics Conference, March 26–27, 2010.

Annual Meeting of the Michigan Section of the MAA, Central Michigan University, May 8, 2009.

Sectional Meeting of the AMS, San Francisco State University, April 25–26, 2009.

Annual Meeting of the Ohio Section of the MAA, Bowling Green State University, April 4, 2009.

Annual Meeting of the Pacific Northwest Section of the MAA, Carroll College, June 19–21, 2008.

Annual Meeting of the Texas Section of the MAA, Tarleton State University, April 3–5, 2008.

Lilly South Conference on Teaching and Learning, Greensboro NC, February 8–10, 2008.

Appalachian State University Vertically Integrated Workshop for Women, 2005–2007.

Geometry Festival, April 1999–2001 and 2007.

History of Mathematics Workshop, Western Washington University, March 3, 2007.

26th Annual Krost Symposium on The Creative Journey: Creativity at the Intersection of Art and Science, Texas Lutheran University, September 29, 2005.

NCTM, April 2004–2005.

DIMACS Reconnect Satellite Conference on Folding and Unfolding in Computational Geometry, St. Mary's College, July 11–17, 2004.

Association for Women in Mathematics Leadership Workshop, University of Maryland, College Park, March 12–14, 2004.

Fall Meeting of the Eastern Pennsylvania and Delaware (EPADEL) section of the MAA, November 9, 2002.

Inverse Spectral Geometry Workshop, University of Kentucky, June 20–22, 2002.

Annual Meeting of the Southern California Section of the MAA, March 16, 2002.

Spectral Geometry Conference, Dartmouth College, June 23–30, 2001.

Lehigh Geometry/Topology Festival, June 2001.

National Science Foundation UFE (Undergraduate Faculty Enhancement) Teaching Undergraduate Geometry Workshop, Cornell University, June 2000 and June 2001 (mentor).

North Carolina A&T q Kovalevsky High School Mathematics Day, November 2000.

Barrett Lectures in Geometry, University of Tennessee at Knoxville, May 11–13, 2000.

IFTT Laptop Initiative WebCT Workshop, Appalachian State University, March 13–15, 2000.

Olga Taussky Todd Celebration of Careers in Mathematics for Women, MSRI, 1999.

## COMMITTEE WORK AND SERVICE

### Select Service to the Department of Mathematics, Appalachian State University

Department Personnel Committee, 2003–2005, 2019–2020, 2021–present.

Alternate of Post-Tenure Review (PTR) Committee, 2021–present.

Co-Advisor of Pi Mu Epsilon, 2003–present.

Undergraduate Math Advisor, 2001–2017, 2018–present.

Web, News, and Social Media Committee,

Chair 2017, 2018–present.

Member 1998–2016.

Departmental Analytics Committee, 2019–2020.

Search Committee, 2019–2020.

Search Committee, 2018–2019.

Online Policy Committee, 2018–2019.

Peer Review of Teaching Committee, 2017–2018.

Geometry and Topology courses, 2017.  
 1005/1010 General Education Assessment, 2017.  
 DPC, 2016–2017.  
 Calculus II committee, 2017.  
 Advisor of AWM Student Chapter, 2015–2017.  
 Departmental Outcome 2.2 Assessment Committee, 2016.  
 Chair of General Education Committee for Capstone Courses, 2015–2016.  
 General Education Committee for Introduction to Mathematics, 2015–2016.  
 Co-organized STEAM Expo Mathematics Table for the NC Science Festival, with the AWM Student Chapter and Tracie Salinas, 2015–2016.  
 Undergraduate Mathematics Assessment Committee, 2010–2012, 2014–2015.  
 BA curriculum committee, 2014.  
 Undergraduate Mathematics Secondary Education Assessment Committee, 2012–2014.  
 Departmental QL Statement Committee, 2012.  
 Chair Advisory Committee, 2008–2010.  
 Department Retreat Planning Committee, 2008.  
 Departmental QL Statement Committee, 2008.  
 Mathematics 1010 Committee, 2004–2006, and 2007–2008.  
 Scholarship Committee, 2004 and 2007.  
 Mathematical Sciences Curriculum Revision Steering Committee, 2003–2005.  
 Tea Committee, 1998–2004.  
 Co-Advisor of the Mathematics Club, 1998–2003.  
 MA Math Committee, 1998–2000.  
 Activities Committee, 1998–2000.  
 Colloquium Committee, 1998–2000.  
 Textbook Adoption Committees for MAT 4710, MAT 4140, MAT 3610, MAT 3110, and MAT 3130.  
 Organized weekly tea for students and faculty, September 1998.

### **Service to the College and University, Appalachian State University**

Faculty Advisory Board for the Center for Judaic, Holocaust, and Peace Studies, 2005–present.  
 General Education Faculty Coordinating Committee for First Year Seminar, 2008–2011, 2014–2019.  
 Gender, Women’s and Sexuality Studies Curriculum Committee, 2016–2017, Fall 2018–2019.  
 Interim Director of Gender, Women’s and Sexuality Studies (GWS), Spring 2018

As Interim Director of GWS, I was an ex-officio members of all standing GWS committees, and worked with the two faculty housed in that program within the Department of Cultural, Gender, and Global studies (CGG), as well as 54 GWS faculty affiliates. My duties included:

- Scheduling GWS courses
- Recruiting qualified faculty to teach courses
- Advising GWS majors and minors
- Recruiting and retaining GWS majors and minors
- Organizing meetings with GWS faculty
- Coordinating GWS committees
- Mentoring of current and potential GWS faculty
- Coordinating GWS assessment
- Managing operating and foundation budgets for GWS
- Managing program communication to students and faculty alike, including regular emailing, periodic website updates, and ongoing social media activity
- Attending CGG meetings and providing regular input to the chair
- Supervising a 20-hour GA
- Advocating for GWS within the department, the College, and across campus
- Coordinating campus-wide co-curricular programming

DPC for University College, 2015–2017.  
 Gender, Women’s and Sexuality Studies Executive Committee, 2014–2016.  
 Search Committee, Department of Cultural, Gender and Global Studies, 2016.  
 Facilitator for *Change the Story Change the Future*, 2016.  
 College of Arts and Sciences Academy of Outstanding Teachers Selection Committee, 2012–2016.  
 Faculty Development Council, 2014–2015.  
 Digital Measures Task Force, 2015.  
 Mentor for STEM Faculty Teaching First Year Seminar, 2015.  
 Facilitator for *This Changes Everything*, 2015.  
 Women’s Studies Curriculum Task Force, 2014.  
 First Year Seminar Faculty Facilitator on Incorporating the Local-to-Global Learning Goals, 2014.  
*Women’s Studies and Transformative Knowledge Building* Panel, February 28, 2014.  
 Student Faculty Exchange, 2008, 2009, 2011.  
 First Year Seminar Faculty Coordinator Search Committee, 2011.  
 Writing in the Discipline Consultant for Writing Across the Curriculum, 2009–2010.  
 Women’s Studies Curriculum Committee, 2010.  
 Hubbard Center Faculty and Academic Development Advisory Council Committee, 2003–2010.  
 Chair of the Committee for Tenured Mid-Career Foundation Fellows Grants, 2007–2008, 2010.  
 Web Page Coordinator for the Jewish Students Hillel Association, 1998–2008.  
 Web Page Coordinator for the Center for Judaic, Holocaust, and Peace Studies, 2004–2008.  
 Provost’s Task Force on Watauga College, 2007–2008.  
 Women’s Studies Grant and Fundraising Committee, 2006–2008.  
 Instructor of Freshman Seminar, 2007.  
 Discussion Group Leader for the Summer Reading Program, 2000 and 2007.  
 Leader of Summer Ventures Research Group, 2007.  
 Advisor of the Jewish Students Association, 2002–2004.  
 Diversity Committee for College of Arts and Sciences, 2001–2002.  
 Watauga College Curriculum Committee, 2000–2001.  
 Search Committee for Director of Women’s Studies, 2000.  
 The Scoop for New Faculty Panel Discussion, 1999 and 2000.  
 Organizer of Women in Higher Education Teleconference Satellite Site, 2000.

### **External Service to the Mathematics Profession**

American Mathematical Society Council, 2021–present.  
 American Mathematical Society Committee on Equity, Diversity and Inclusion, 2021–present.  
 Association for Women in Mathematics Media Committee, 2015–2018, 2019–present.  
 Executive Committee for the Association for Women in Mathematics  
     Invited guest spot as part of the Associate Editor position, 2012–present.  
     Member 2008–2012.  
 Book Editor Consultant for the Association for Women in Mathematics, 2003–present.  
 American Mathematical Society Representative to the AMATYC-AMS-ASA-AWM-IMS-MAA-NAM-NCTM  
 -SIAM Committee on Women in the Mathematical Sciences, 2019–2022.  
 United States Department of Labor (USDOL) Occupational Information Network (O\*NET) participating  
 expert for the occupation of Mathematicians, 2021.  
 Mathematical Association of America Council on Prizes and Awards, 2015–2021.  
 Judge for Who Wants to Be a Mathematician? JMM 2020.  
 Policy and Advocacy Committee for the Association for Women in Mathematics,  
     Member 2008–2016.  
     Chair 2010–2012.  
 Committee on the Undergraduate Program in Mathematics (CUPM) geometry study group, 2012–2015.  
 Mathematical Association of America Trevor Evans Award Committee,

Chair 2013–2015.  
Member 2011–2013.  
Search Committee for the Editor of the *College Mathematics Journal*, 2012.  
Judge at North Carolina Region 7 Science Fair, February 18, 2012  
Association for Women in Mathematics Newsletter Editorial Team, 2009–2011.  
Project NExT Consultant, 2006–2008, 2010–2011.  
Chair of the Mathematical Association of America Committee on the Henry L. Alder Awards, 2008–2011.  
Mathematical Association of America Committee on Policies on Science, 2001–2007.  
Joint Policy Board for Mathematics Advisory Panel for Mathematics Awareness Month on the  
*Mathematics of the Cosmos*, 2004–2005.  
Search Committee for the Editor of JOMA (Journal of Online Mathematics and its Applications),  
2004–2005.  
Judge for Math Fair, NCCTM, 2003–2004.  
Mathematical Association of America Program Committee for the 2004 Joint Mathematics Meetings,  
2002–2003.  
Organizing Committee for Park City/IAS Math Institute Women’s Program, 1995–1998.

## REVIEWS, FIELD TESTING, AND CONSULTING

**PRIMUS** Referee, 2002–present

Promotion and Reviews

Emily Proctor, Middlebury College, Promotion to Full Professor Review, 2021

Janet Beery, University of Redlands, Faculty Review, 2019

Emily Proctor, Middlebury College, Tenure Review, 2012

Colm Mulcahy, Spelman College, Full Professor Review, 2011

**Macmillan**, *Quantitative Literacy*, 2020

**Springer** *Introduction to Linear and Matrix Algebra*, 2019

**ALEKS**, Liberal Arts Mathematics, 2019

**Knewton**, Knewton Alta, 2019

**zyBooks**

Quantitative Reasoning, 2019

Exploring test banks, labs, and exercises for Linear Algebra, 2019

Linear Algebra zyBook, 2018

Consulting for an international research firm, 2017

**CRC Press**, *A Short Introduction to Linear Algebra*, 2017

**McGraw-Hill**

*Math in our World*, 4/e, 2018

*Liberal Arts Math & Quantitative Reasoning* digital review, 2016

**John Wiley & Sons**

*Heart of Mathematics* concept checks, 2016

*Heart of Mathematics* online activities, 2016

*Heart of Mathematics* videos, 2015

*College Geometry*, 2010

*Quantitative Reasoning*, 2010

*Geometry and Symmetry*, 2009  
*Heart of Mathematics*, 3rd Edition, 2009  
*Visual Linear Algebra*, 2004

### **Pearson**

*Applied Calculus*, 2016  
*Quantitative Reasoning Focus Group*, March 2012

**Mathematical Association of America**, Centennial celebration articles on women in the organization, 2015

Erdős Bacon Documentary, 2015

### **National Science Foundation**

Proposal review, 2014  
Program panel review meeting, 2013  
Panel chair, program panel review meeting, 2012  
Program panel review meeting, 2010  
Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP) program panel review meeting, 2008  
Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP) program panel review meeting, 2007  
Course, Curriculum, and Laboratory Improvement (CCLI) program panel review meeting, 2004

### **Princeton University Press**

*Gaming Your Way Through Math*, 2012  
*Mathematics Goes to the Movies*, 2010  
*Great Zeus!: Solving the Twelve Labors of Hercules*, 2007

**The Centroid**, *Gender Research*, 2011

### **Key College**

Sketchpad 5, 2008–2009, 2010  
*College Geometry*, 2003–2005  
*Geometry and Symmetry*, 2006–2007  
*Heart of Mathematics*, 3rd Edition, 2007–2008  
*Geometry Website*, 2006  
*Transforming Mathematics with The Geometer's Sketchpad*, 2005  
*Understanding Shape*, 2004  
*Workshop Geometry: Mathematics for Teaching Elementary School*, 2004  
*Heart of Mathematics*, 2nd Edition, 2002–2003

### **Mathematical Reviews**

“Huber’s Theorem for Hyperbolic Orbisurfaces,” Emily Dryden et al., *Canad. Math. Bull.* 52(1), 2009, pp. 66–71. Reviewed in 2009  
“Hearing the Weights of Weighted Projective Planes,” Miguel Abreu, Emily Dryden, Pedro Freitas, Leonor Godinho, *Ann. Global Anal. Geom.* 33(4), 2008, pp. 373–395. Reviewed in 2008  
“One Cannot Hear Orbifold Isotropy Type,” Naveed Shams, Elizabeth Stanhope and David L. Webb, *Archiv der Mathematik* 87(4), October, 2006, pp. 375–385. Reviewed in 2007  
“How Tightly Can You Fold a Sphere?,” Jill McGowan and Catherine Searle, *Differential Geometry and its Applications* 22(1), January 2005, pp. 81–104. Reviewed in 2005

### **20th Century Fox**

*Futurama: Bender’s Big Score*, 2006–2007

**Flat World Productions, LLC**

*Flatland: The Movie*, 2006–2007

**Raytheon**

*MathMovesU*, 2006

**Prentice Hall**

*Mathematics for Elementary Teaching*, 2006

*Teachers Mathematics*, 2006

*Geometric Structures*, 2005

*Women in Mathematics*, 2001

**JOMA (Journal of Mathematics and its Applications)**

Volumes 1 and 2, 2001–2002

**MENTORING OF STUDENT RESEARCH AND TEACHING**

One differential geometry capstone, 2020

Summer Assistantship with Sophia Cole, Summer 2020

Five differential geometry capstones, 2020

Teaching Apprenticeship with Charlotte Cave, Summer 2018

*Gender and Mathematics* with Tameshia Fisher, Wilt Latham, Lauren Murray, and David Sawyer, 2018

*Motivation and Standards-Based Engagement* with Russell Chamberlain, 2018

*Classification in Geometry and Topology*, with Stephen Graham, 2018

One gender and mathematics capstone, 2018

Seven differential geometry capstones, 2018

Mentor Carter Murray for MAT 1010, Fall 2017

*Gender and Mathematics* with Russell Chamberlain, Sergei Miles, and Lauren Murray, 2017

Instructional Assistance with Tyler Patrick, Fall 2015

Eighteen senior capstone mini theses on all different topics, 2015

Teaching Apprenticeship with Elizabeth Tadvickis, Summer 2015

Twenty senior capstone mini theses on all different topics, 2014

Eighteen senior capstone mini theses on all different topics, 2011–2013

*The Association for Women in Mathematics* with Alison McClay, 2012–2013

*Dynamic Geometry Learning* with Callie Edwards, 2010–2011

*Women in Mathematics* with Kayla Corkery, 2010–2011

Instructional Assistant with Erica Davis, Fall 2010

Instructional Assistant with Erica Davis and Travis Lucas, Spring 2010

*Humanistic Mathematics in the Classroom* with Misty Silver, 2009–2010

*Visualization* with Kristen Eure, 2009–2010

Instructional Assistant with Hannah Smith, Fall 2009

*The Importance of Spherical Geometry and Trigonometry* with Griffin Dodd, 2009

Second Reader on *Group Discussions* with Jennifer Wilkinson, 2009

Teaching Apprenticeship with Nicholas Schwab, Fall 2008

Teaching Apprenticeship with Lisa Maggiore, Spring 2008

Instructional Assistant with Terrell Wilson and Andrew Wright, Spring 2008

Instructional Assistant with Zachary Beam, Fall 2007

Teaching Apprenticeship with Jason Sain, Fall 2007

*Solutions to Laplace's Equation for Ion Dynamical Studies* with Bailee Christopher, 2007

*Mathematics Research* with Summer Ventures, 2007

*Mathematics as a Universal Language* with Jenn Schroeder, 2007



Instructional Assistant with Eric Adams and Jenn Schroeder, Spring 2007  
Instructional Assistant with Lynzi Clark, Fall 2006  
*Visualizing Differential Geometry* with Nathan Crowder, 2006  
Instructional Assistant with Courtney King, Spring 2005  
*Classification of Geometries* with John Foley, 2004  
*Active Learning in Geometry* with Gina Banks, 2004  
Instructional Assistant with Tim Larick, Spring 2004  
Instructional Assistant with Sarah Patterson, Fall 2003  
Instructional Assistant with Tamara Couture, Fall 2002  
Teaching Apprenticeship with Amanda Poteet, Fall 2002  
Teaching Apprenticeship with Frank Edge, Fall 2001  
Instructional Assistant with Brandon Brooks, Fall 2000  
*Geometry of Metrics on the Plane and Sphere, and Higher Dimensional Geometry* with Virginia Culyer, 2000

## COURSES TAUGHT

MAT 1010 Introduction to Mathematics  
WRC 1010 Introduction to Mathematics for Watauga Residential College  
US 1150 Freshman Seminar  
UCO 1200 First-Year Seminar on Breakthroughs and Controversies in Science and Mathematics  
MAT 130 Calculus  
MAT 151 Calculus for Social Sciences  
MAT 1120 Calculus and Analytic Geometry II  
MAT 2130 Calculus and Analytic Geometry III  
MAT 2240 Introduction to Linear Algebra  
MAT 2500 Geometry for Teachers of Grades 6–8  
MAT 3010/5125 History of Mathematics  
MAT 3110 Introduction to Modern Algebra  
MAT 3130 Introduction to Differential Equations  
GWS 3350 Gender, Media and Popular Culture  
MAT 3500 Mathematics as a Universal Language  
MAT 3510 Applications of Geometry  
MAT 3520 Instructional Assistant  
MAT 3531 Teaching High School Geometry  
MAT 3610 Introduction to Geometry  
MAT 4010/IDS 3530 Women and Minorities in Mathematics  
MAT 4010/IDS 3530 Women in Mathematics  
MAT 4010 Seminar in Humanistic Mathematics  
MAT 4040 Mathematics Capstone  
MAT 4140/5530 Differential Geometry  
MAT 4141 Differential Geometry Capstone  
MAT 4510 Senior Honors Thesis  
MAT 4710/5710 Introduction to Topology  
MAT 5420 Teaching Apprenticeship  
MAT 5500 Independent Study  
MAT 5525 Product of Learning  
MAT 5530 Geometry of Surfaces and Higher Dimensions  
MAT 5530 Topics in Non-Euclidean Geometry  
MAT 5530 Selected Topics in Differential Geometry  
MAT 5600 Directed Research

MAT 5920 Linear Algebra for Teachers

MAT 5980 Geometry for Teachers of Grades 6–8

MAT 5980 History of Mathematics for Teachers of Grades 9–12

See <http://cs.appstate.edu/~sjg/teaching.html> for detailed course web pages and daily activities

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## **PROFESSIONAL SOCIETIES**

American Mathematical Society

Association for Women in Mathematics

Mathematical Association of America