

Dr. Sarah J. Greenwald
Department of Mathematics
Appalachian State University
<http://www.mathsci.appstate.edu/~sjg>

EDUCATION

Ph.D., University of Pennsylvania, Department of Mathematics, 1998, Riemannian geometry thesis.

B.S., Union College, Department of Mathematics, 1991, Summa Cum Laude with honors in mathematics.

PROFESSIONAL EXPERIENCE

Associate Professor, Department of Mathematics, Appalachian State University, 2004 - Present.

Women's Studies Core Faculty Member, Department of IDS, Appalachian State University, 2002 - Present.

Research Associate, Department of Mathematics, Dartmouth College, 1999 - 2001.

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

HONORS AND AWARDS

Nominated for the College of Arts and Sciences Academy of Outstanding Teachers, Appalachian State University, 2006-2007.

Nominated for the Wayne D. Duncan Appalachian State University Faculty Enrichment and Teaching Fellowship, 2007.

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.

REFEREED PUBLICATIONS

Diameters of 3-Sphere Quotients, with Bill Dunbar, Jill McGowan and Catherine Searle, to appear, *Differential Geometry and its Applications*.

Asymptotic Expansion of the Heat Kernel for Orbifolds, with Emily Dryden and Carolyn Gordon, to appear, *Michigan Mathematical Journal*, Volume 56, 2008.

To Boldly Go: Current Work and Future Directions in Mathematics and Popular Culture, with Chris Goff, *PRIMUS*, Volume XVII, Number 1, March 2007, pp. 1-7.

Mathematically Talented Women in Hollywood, with Jill Thomley, *PRIMUS*, Volume XVII, Number 1, March 2007, pp. 103-116.

'Futurama' Comedy and Writers in the Classroom, *PRIMUS*, Volume XVII, Number 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, Volume 70, 2006, pp. 105-110.

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, Volume 68, 2005, pp. 183-200.

Using Popular Culture in the Mathematics and Mathematics Education Classroom, with Andrew Nestler, PRIMUS, Volume XIV, Number 1, March 2004, pp. 1-4.

r dr r: Engaging Students with Significant Mathematical Content from 'The Simpsons', with Andrew Nestler, PRIMUS, Volume XIV, Number 1, March 2004, pp. 29-39.

Diameters of Spherical Alexandrov Spaces and Constant Curvature One Orbifolds, Indiana University Mathematics Journal, Volume 49, Number 4, Winter 2000, pp. 1449-1479.

The Use of Writing Projects in Teaching Geometry, PRIMUS, Volume X, Number 1, March 2000, pp. 1-14.

PEER REVIEWED COLUMNS, PROCEEDINGS, AND ESSAY PUBLICATIONS

Women and Minorities in Mathematics: Incorporating Their Mathematical Achievements into School Classrooms
Column for The Centroid - Official Journal of the North Carolina Council of Teachers of Mathematics
Putting the Model in Mathematician Role Models, with Jill Thomley, Volume 32, Number 2, Fall 2006, pp. 20-22.

Marjorie Lee Browne: North Carolina Educator, with Vicky Klima and Katie Mawhinney, Fall 2005, pp. 28-32.

Florence Nightingale, the Passionate Statistician, with Jill Richie, Volume 30, Number 2, Fall 2004, pp. 13-21

(reprinted by editor request in the Ontario Mathematics Gazette, Volume 43, Number 3, pp. 30-35).

Thomas Fuller and his Calculation Ability, with Amy Ksir and Larry Shirley, Volume 30, Number 1, Spring 2004, pp. 15-19.

David Blackwell and Game Theory, with Mark Ginn, Volume 29, Number 2, Fall 2003, pp. 12-18.

Hypatia, the First Known Woman Mathematician, with Edith Prentice Mendez, Volume 29, Number 1, Spring 2003, pp. 19-24.

African Mathematician Muhammad and his Magic Squares, with Deanna Wasman, Volume 28, Number 2, Summer 2001, pp. 13-18.

Hearing the Shape of a Drum, with Andrew Nestler, Volume 28, Number 1, Winter 2001, pp. 11-15.

Complex NUMB3RS,

Notices of the AMS, Volume 53, Number 7, August 2006, p. 741

FOCUS, Volume 26, Issue 5, May/June 2006, pp. 12-13

Association for Women in Mathematics Newsletter

Girls Just Want to Have Sums, Volume 36, Number 2, March-April 2006, p. 22-23.

Mathematicians of the African Diaspora, Volume 34, Number 6, November-December 2004, pp. 16-17.

'Women in Math': A Course with Significant Mathematical Content, Volume 30, Number 4, July-August 2000, pp. 12-13.

ICTCM (International Conference on Technology in Collegiate Mathematics) Proceedings

Geometry of the Earth and Universe Computer Labs, March 2006, pp. 110-113.

Taking Full Advantage of Sketchpad 4 - Why You Can't Live Without It, with Brian Felkel, November 2003, pp. 85-89.

Using WebCT Instruction in Courses You Never Thought You Could, November 2002, pp. 82-86.

Coffee Cooling on a TI-CBL Unit and in Maple, with William Bauldry, November 2001, pp. 151-154.

The Shape of the Universe, Mathematics Awareness Month Theme Essay, April 2005,
Available: <http://www.mathaware.org/essays/shape.of.universe.html>

Math Horizons

Alumni Profiles: Appalachian State University, with Holly Hirst, Volume 12, Number 2, November 2004, pp. 20-21.

Futurama πk - Mathematics in the Year 3000, with Tom Georgoulias and Marc Wichterich, Volume 11, Number 4, April 2004, pp. 12-15.

Simpsons Rule!, with Andrew Nestler, Volume 10, Number 4, April 2003, pp. 2 and 16.

SELECT MEDIA COVERAGE, INTERVIEWS, AND PERFORMANCES

Bender's Big Score, 20th Century Fox *Futurama* Movie, Interactive *Futurama* Math Lecture Feature, DVD Release November 27, 2007. Available: <http://www.foxstore.com/detail?item=3324>

Freestyle, CBC Radio Interview, February 8, 2007.

FANatical, TVtropolis Television Documentary Series, original airdate January 30, 2007.

The Problem With 'NUMB3RS', *The Chronicle of Higher Education*, by Xiao-bo Yuan, Volume 52, Issue 47, July 28, 2006, p. A4.

MathTrek: Simpsons Numbers, *Science News*, by Ivars Peterson, June 9, 2006, Available: http://blog.sciencenews.org/mathtrek/2006/06/simpsons_numbers.1.html

Women in Mathematics: WHS Students Participate in ASU Workshop, *The Mountain Times*, April 13, 2006.

The Simpsons Season 7 DVD Audio Commentary, *Treehouse of Horror VI* [3F04] Homer³, DVD Release December 13, 2005. Available: <http://www.mathsci.appstate.edu/~sjg/simpsonsmath/dvd.html>

Popular Math, National Public Radio's *Science Friday* Radio Interview, April 29, 2005, 3-4 pm, Available: http://www.sciencefriday.com/pages/2005/Apr/hour2_042905.html

Using The Simpsons and Other Innovative Approaches to Teach Mathematics, Math Medley Radio Interview, WARL 1320 AM, October 11, 2003, 12-1 pm.

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*, Volume 77, Number 35, February 18, 2003.

The real first family: How did The Simpsons get to be such a cultural touchstone? We meet the enemy - and they are us, by Bob Baker, *Los Angeles Times*, February 16, 2003, p. E1.

Math on The Simpsons, by Carli Entin, *Scholastic Math*, Volume 23, Number 9, February 14, 2003, cover story and pp. 4-5.

Television Interviews, ABC (WDIO) and NBC (KBJR) 10 o'clock news, Duluth, Minnesota, October 17, 2002.

Radio Interview, Minnesota News Network, October 17, 2002.

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, *New York Times Upfront*, November 12, 2001, Vol. 134, No. 5, pp. 26-27.

SESSIONS ORGANIZED

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.

INVITED COLLOQUIA AND PRESENTATIONS

Mathematical Morsels from 'The Simpsons' and 'Futurama'

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.
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.

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

Annual Meeting of the Pacific Northwest Section of the MAA, 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.

Geometric Properties of Orbifolds,

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.

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.

Geometry of the Earth and Universe,

Western Washington University, March 3, 2007.
University of Minnesota, Duluth, October 31, 2005.

The Rich History of π , 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.

r dr r: Engaging Students with Significant Mathematical Content from 'The Simpsons', with Andrew Nestler, Metropolitan Mathematics Club of Chicago, Chicago, IL, November 21, 2003.

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

OTHER PEER REVIEWED PRESENTATIONS

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.

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

Futurama πk - 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.

INTERNAL GRANTS

Appalachian State University

Foundation Fellows Grant - Website for Mathematics History in Multivariable Calculus and Differential Geometry Courses, with Greg Rhoads, 2007-2008 [\$4700.00 awarded].

External Scholars Grant - Jeff Weeks and the Shape of Space, Hubbard Center, 2006 [\$700.00 awarded].
Grant to Support the Scholarship of Teaching, Hubbard Center, Various Conferences and Minicourses.

Research in Geometry, URC, 1999-2000 [\$500.00 awarded].

Women in Mathematics Course, Women's Studies, 1999 [course buyout awarded].

EXTERNAL GRANTS

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].

National Science Foundation

Principal Investigator for *Historical Modules for the Teaching and Learning of Mathematics: An Evaluative Study Using Multiple Populations*, with Kathy Clark and Victor Katz, 2007, [Not funded].

Senior Personnel Member for *Appalachian Undergraduate Academy of Science*, Rahman Tashakkori, 2006, [Not funded].

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

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

Faculty Mentor, *McNair Scholars Program*, Department of Education [under review].

Principal Investigator for *Early Career Profiles*, American Mathematical Society, 2005-2006 [\$1200.00 awarded].

Peer Reviewed Travel Grants for Conferences and Workshops

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

Geometry Festival, University of Maryland, College Park, April 2007.

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.

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.

CONFERENCES AND WORKSHOPS ATTENDED

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.
Joint Mathematics Meetings, January 1999 - 2000 and 2002 - 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.
MathFest, August 1999 - 2006.
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.
ICTCM, November 2000 - 2002 and 2004.
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 Sonia 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.

COMMITTEE WORK

Select Service to the Department, Department of Mathematics, Appalachian State University
Co-Advisor of Pi Mu Epsilon, 2003 - Present.
Undergraduate Math Advisor, 2001 - Present.
Web Committee, 1998 - Present.
Departmental QL Statement Committee, 2008.
Scholarship Committee, 2004 and 2007.
Mathematics 1010 Committee, 2004 - 2006, and 2007
Department Personnel Committee, 2003 - 2005.
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

Interdisciplinary Executive Faculty Committee, 2008 - Present.

General Education Faculty Coordinating Committee for First Year Seminar, 2008 - Present.

Women's Studies Grant and Fundraising Committee, 2006 - Present.

Faculty Advisory Board for the Center for Judaic, Holocaust, and Peace Studies, 2005 - Present.

Web Page Coordinator for the Center for Judaic, Holocaust, and Peace Studies, 2004 - Present.

Hubbard Center Faculty and Academic Development Advisory Council Committee, 2003 - Present.

Women's Studies Core Faculty Member, 2002 - Present.

Web Page Coordinator for the Jewish Students Association, 1998 - Present.

Provost's Task Force on Watauga College, 2007 - 2008.

Chair of the Committee for Tenured Mid-Career Foundation Fellows Grants, 2007-2008.

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

Executive Committee for the Association for Women in Mathematics, 2008 - Present.

Mathematical Association of America Committee on the Henry L. Alder Awards, 2008 - Present.

PRIMUS Editorial Board, 2006 - Present.

Project NExT Consultant, 2006 - Present.

Book Editor Consultant for the Association for Women in Mathematics, 2003 - Present.

Math Horizons Editorial Board, 2003 - 2008.

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.

REFeree WORK, REVIEWS, AND CONSULTING

Key College

Heart of Mathematics, 3rd Edition, 2007 - 2008.

Geometry and Symmetry, 2006-2007.

Geometry Website, 2006.

Transforming Mathematics with The Geometer's Sketchpad, 2005.

College Geometry: A Computer Activity Approach, 2003 - 2005.

Understanding Shape, 2004.

Workshop Geometry: Mathematics for Teaching Elementary School, 2004.

Heart of Mathematics, 2nd Edition, 2002 - 2003.

National Science Foundation,

Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP) program panel
review meeting, November 5-6, 2007.

Course, Curriculum, and Laboratory Improvement (CCLI) program panel review meeting, July 28-31, 2004.

Mathematical Reviews,

One Cannot Hear Orbifold Isotropy Type, 2007.

How Tightly Can You Fold a Sphere?, 2005.

PRIMUS

Referee, 15 Articles from 2002 - 2007.

Guest Editor of Special Edition on Popular Culture and Mathematics, 2006 - 2007.

Guest Editor of Special Edition on Popular Culture in the Mathematics Classroom, 2002 - 2003.

Futurama: Bender's Big Score, 2006-2007.

Flatland: The Movie, 2006-2007.

Princeton University Press, *Great Zeus!: Solving the Twelve Labors of Hercules*, 2007.

MathMovesU, Raytheon, 2006.

Prentice Hall

Mathematics for Elementary Teaching, 2006.

Teachers Mathematics, 2006.

Geometric Structures, 2005.

Women in Mathematics, 2001.

Wiley, *Visual Linear Algebra*, 2004.

JOMA (Journal of Mathematics and its Applications), Volumes 1 and 2, 2001 - 2002.

STUDENT RESEARCH

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

Visualizing Differential Geometry with Nathan Crowder, 2006

Classification of Geometries with John Foley, 2004

Active Learning in Geometry with Gina Banks, 2004

Geometry of Metrics on the Plane and Sphere, and Higher Dimensional Geometry with Virginia Culyer, 2000

COURSES TAUGHT

MAT 1010 Introduction to Mathematics

US 1150 Freshman Seminar

MAT 130 Calculus

MAT 151 Calculus for Social Sciences

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

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 4010/5530 Differential Geometry

MAT 4510 Senior Honors Thesis
MAT 4710/5710 Introduction to Topology
MAT 5420 Teaching Apprenticeship
MAT 5525 Product of Learning
MAT 5530 Geometry of Surfaces and Higher Dimensions
MAT 5980 Geometry for Teachers of Grades 6-8
MAT 5980 History of Mathematics for Teachers of Grades 9-12

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

PROFESSIONAL SOCIETIES

American Mathematical Society

Association for Women in Mathematics

Mathematical Association of America

National Council of Teachers of Mathematics