Jill E. Thomley

Department of Mathematical Sciences, 228 Walker Hall
Appalachian State University, Boone, NC 28608
(828) 262-2383 • thomleyje@appstate.edu

EDUCATION

PhD in Decision Sciences and Engineering Systems (focus in statistical methods), August 2000
Department of Decision Sciences and Engineering Systems, Rensselaer Polytechnic Institute, Troy, NY

MS in Industrial/Organizational Psychology, December 1992
Department of Psychology, Rensselaer Polytechnic Institute, Troy, NY

AB in Psychology, June 1990
Department of Psychology, Harvard University, Cambridge, MA

PROFESSIONAL EXPERIENCE

Professor, 2012 to Present; Associate Professor, 2006 to 2012; Assistant Professor, 2000 to 2006
Department of Mathematical Sciences, Appalachian State University, Boone, NC

Adjunct Faculty, 2019 to 2024
Department of Academic Nursing, Wake Forest University School of Medicine, Winton-Salem, NC

Research Editor, 2003 to Present
Journal of Developmental Education

Editorial Board, 2001 to Present
The Centroid—Official Journal of the North Carolina Council of Teachers of Mathematics

Reviewer, 2024 to Present
Journal of Statistics and Data Science Education

Reviewer, 2013
Journal of Computational Science Education

Research Course Instructor, 2011-2013
Summer Ventures in Science and Mathematics, Appalachian State University, Boone, NC

Associate Editor, 2009
Journal of Science in Society

Reviewer, 2006
Primus (special issue on popular culture in the classroom)

Senior Teaching Associate, 1997 to 2000
Department of Decision Sciences and Engineering Systems, Rensselaer Polytechnic Institute, Troy, NY

Adjunct Instructor, 1999
Mathematics Department, Russell Sage College, Troy, NY

Research Health Science Specialist, 1992 to 1995
Samuel S. Stratton Veterans Administration Medical Center, Albany, NY

Research Assistant, 1990-1992
Department of Psychology, Rensselaer Polytechnic Institute, Troy, NY

PUBLICATIONS

Greenwald, Sarah J. and Thomley, Jill E. (2024). "How *The Sex Lives of College Girls* May Shape Perceptions on the Culture of Mathematics." In H. Verrill, K. Kattchee, S.L. Gould, and E. Torrence (Eds.), *Proceedings of Bridges 2024: Mathematics, Art, Music, Architecture, Culture*, pp. 77–84. Tesselations Publishing. http://archive.bridgesmathart.org/2024/bridges2024-77.html

Kelly, Melissa, Braswell, April A., Thomley, Jill E. (2024). "Optimizing Sexual and Gender Minority Adolescent Health: Evidence into Practice." *Journal of Pediatric Health Care*, 38(4), pp. 495–603. https://doi.org/10.1016/j.pedhc.2024.02.004

Greenwald, Sarah J. and Thomley, Jill E. (2020). "Using Technology as a Pathway Towards Equity, Diversity, and Inclusion." In *Proceedings of the 32nd International Conference on Technology in Collegiate Mathematics*. https://www.pearson.com/us/about/news-events/events/ictcm-archive-2020.html

Selbach-Allen, Megan E., Greenwald, Sarah J. Ksir, Amy E., and Thomley, Jill E. (2020). "Raising the Bar with Standards-Based Grading." *PRIMUS*, 30(8–10), pp. 1110–1126. https://doi.org/10.1080/10511970.2019.1695237 | *Note: This article was chosen as 2024 PRIMUS Editors' Pick, Most Downloaded Article, announced in January 2025*

Greenwald, Sarah J. and Thomley, Jill E. (2019). "Body of Proof." *Association for Women in Mathematics Newsletter*, 49(4), pp. 22–23. https://awm-math.org/publications/newsletter/

Henson, Kevin S., Thomley, Jill E., Lowrie, Lynn J., and Walker, Deborah. (2019). "Comparison of Selected Outcomes Associated with Two Post-Operative Analgesia Approaches in the Total Knee Arthroplasty Patient." *AANA Journal*, 87(1), pp. 51–57. https://doi.org/10.1016/j.jclinane.2021.110257

Thomley, Jill E. (2018). "The History of Statistics: A Discussion-Intensive Seminar on 20th Century Development and Beyond." In A. Shell-Gellasch and D. Jardine (Eds.), *The Courses of History: Ideas for Developing a History of Mathematics Course*. Washington, DC: MAA Press.

Thomley, Jill E. (2018). "Example of a Well-Designed Course in Statistics." *Designing Significant Learning Experiences: Course Examples.* http://www.designlearning.org/examples-of-design/examples/ (link no longer available)

Santisteban, Maria S., Thomley, Jill E., and Bullard-Dillard, Rebecca. (2017). "S-STEM Scholarship Program at UNC Pembroke: a COMPASS for Science Majors." In *Proceedings of the ASEE Annual Conference & Exposition*, pp. 5984–6005. Washington, DC: American Society for Engineering Education. https://doi.org/10.18260/1-2--27733

Hahn, D. Caldwell, Wingfield, John C., Fox, David M., Walker, Brian G., and Thomley, Jill E. (2017). "Maternal Androgens in Avian Brood Parasites and Their Hosts: Responses to Parasitism and Competition?" *General and Comparative Endocrinology*, 240, pp. 143–152. http://doi.org/10.1016/j.ygcen.2016.10.004

Greenwald, Sarah J., Leggett, Anne M., and Thomley, Jill E. (2015). "The Association for Women in Mathematics: How and Why It Was Founded, and Why It's Still Needed in the 21st Century." *The Mathematical Intelligencer*, 37(3), pp. 11–21. http://doi.org/10.1007/s00283-015-9539-8

Greenwald, Sarah J. and Thomley, Jill E. (2015). "Gender in *The Mαth βook: From Pythagoras to the 57th Dimension, 250 Milestones in the History of Mathematics* by Clifford A. Pickover." *Association for Women in Mathematics Newsletter*, 45(3), pp. 13–16. https://awm-math.org/publications/newsletter/

Greenwald, Sarah J. and Thomley, Jill E. (2015). "WIMM Watch: Resurrection and the Elegant Statistician." *Association for Women in Mathematics Newsletter*, 45(3), p. 10. https://awm-math.org/publications/newsletter/

Greenwald, Sarah J. and Thomley, Jill E. (2015). "Review of *The Mαth βook: From Pythagoras to the 57th Dimension, 250 Milestones in the History of Mathematics* by Clifford A. Pickover." *Notices of the American Mathematical Society*, 62(4), pp. 384–385. https://www.ams.org/notices/201504/rnoti-p384.pdf

Greenwald, Sarah J., Mellon, Amber L., and Thomley, Jill E. (2015). "Women in Mathematics Badge (Yes an Actual Badge!) for Girl Scouts." *Association for Women in Mathematics Newsletter*, 45(1), pp. 17–19. https://awm-math.org/publications/newsletter/

Greenwald, Sarah J. and Thomley, Jill E. (2014). "Review of *Mathematics in Popular Culture: Essays on Appearances in Film, Fiction, Games, Television and Other Media* by J.K. Sklar and E.S. Sklar." *Association for Women in Mathematics Newsletter*, 44(2), pp. 17–19. https://awm-math.org/publications/newsletter/

Greenwald, Sarah J. and Thomley, Jill E. (2013). "Using the History of Mathematics Technology to Enrich the Classroom Learning Experience." In P. Bogacki (Ed.), *Proceedings of the 24th International Conference on Technology in Collegiate Mathematics*, pp. 82–91. New Jersey: Pearson Education, Inc.

Greenwald, Sarah J. and Thomley, Jill E. (Eds). (2012). *Encyclopedia of Mathematics and Society Singles*. Pasadena, CA: Salem Press.

- *Engineering, Technology & Medicine*. ISBN: 978-1-4298-3753-8, e-ISBN: 978-1-4298-3758-3
- *Great Mathematicians*. ISBN: 978-1-4298-3789-7, e-ISBN: 978-1-4298-3790-3
- *Mathematical Development & Concepts*. ISBN: 978-1-4298-3750-7, e-ISBN: 978-1-4298-3755-2
- *Mathematics in Culture & Society*. ISBN: 978-1-4298-3751-4, e-ISBN: 978-1-4298-3756-9
- *Mathematics & the Social Sciences*. ISBN: 978-1-4298-3752-1, e-ISBN: 978-1-4298-3757-6
- *Space, Science & the Environment*. ISBN: 978-1-4298-3754-5, e-ISBN: 978-1-4298-3759-0

Neufeld, Howard S., Peoples, Seth J., Davison, Alan W., Chappelka, Arthur H., Somers, Greg L., Thomley, Jill E., and Booker, Fitzgerald L. (2012). "Ambient Ozone Effects on Gas Exchange and Total Non-structural Carbohydrate Levels in Cutleaf Coneflower (*Rudbeckia laciniata L.*) Growing in Great Smoky Mountains National Park." *Environmental Pollution*, 160(1), pp. 74–81. https://doi.org/10.1016/j.envpol.2011.09.010

Greenwald, Sarah J. and Thomley, Jill E. (Eds). (2011). *The Encyclopedia of Mathematics and Society*, Vols. 1-3. Pasadena, CA: Salem Press. ISBN: 978-1-58765-844-0, e-ISBN: 978-1-58765-848-8 (https://www.salempress.com/Encyclopedia-of-mathematics) | *Note: This work was chosen as 2001 Library Journal Best Reference.*

In addition to being a co-editor, I am a co-author on thirty (30) articles: Western Asia; Clubs and Honor Societies; Cocktail Party Problem; Comparison Shopping; Curves; Data Analysis and Probability in Society; Educational Manipulatives; Fantasy Sports Leagues; Fertility; Graphs; Learning Models and Trajectories; Measures of Center; Pacemakers; Polyhedra; Probability; Proof; Radiation; Randomness; Schools; Similarity; Social Networks; Statistics Education; Surfaces; Mathematics in Television; Tides and Waves; Transformations; Visualization; Weather Scales; and Writers, Producers, and Actors.

Greenwald, Sarah J. and Thomley, Jill E. (2009). "Mathematically Talented Women in Film and Television: A Summary of the Last Five Years." *Association for Women in Mathematics Newsletter*, 38(1), pp. 8–11. https://awm-math.org/publications/newsletter/

Thomley, Jill E. and Searcy, Mary E. (2009). "Computational Science: Not Just for Researchers Any More." *The International Journal of Science in Society*, 1(3), pp. 27–42. https://doi.org/10.18848/1836-6236/CGP/v01i03/51481

Searcy, Mary E. and Thomley, Jill E. (2009). "Changing Education to Reflect Changes in Science: Using Innovation Diffusion Theory to Transform How and What We Teach." *The International Journal of Science in Society*, 1(3), pp. 154–165. https://doi.org/10.18848/1836-6236/CGP/v01i03/51485

Thomley, Jill E. and Greenwald, Sarah J. (2008). "Florence Nightingale, the Passionate Statistician." *St. Louis Confluence*, 5(1), pp. 8–14. [Reprinted from *The Centroid* by request of the *St. Louis Confluence* editor.]

Greenwald, Sarah J. and Thomley, Jill E. (2007). "Mathematically Talented Women in Hollywood: Fred in *Angel*," *PRIMUS*, XVII(1), pp. 105–118. [Special issue about popular culture in the mathematics classroom.] https://doi.org/10.1080/10511970601126928

Thomley, Jill E. and Searcy, Mary E. (2007). "The National Computational Science Institute: The Development of a Professional Community." In E. Milková and P. Prăzák (Eds.), *Proceedings of the 8th International Conference on Technology in Mathematics Teaching*. Prague, Czech Republic: Informatics and Management, University of Hradec Králové.

Searcy, Mary E. and Thomley, Jill E. (2007). "Barriers to Interdisciplinary Computational Innovations in Education." In E. Milková and P. Prăzák (Eds.), *Proceedings of the 8th International Conference on Technology in Mathematics Teaching*. Prague, Czech Republic: Informatics and Management, University of Hradec Králové.

Greenwald, Sarah J. and Thomley, Jill E. (2006). "Putting the Model in Mathematician Role Models." *The Centroid*, 32(2), pp. 20–22. https://www.ncctm.org/activities/the-centroid1/centroid-issue-archive/fall-2006/

Venable, Mark E., Froehlich, Lisa M., Sloan, Eldon F. and Thomley, Jill E. (2006). "Shift in Sphingolipid Metabolism Leads to an Accumulation of Ceramide in Replicative Senescence." *Mechanisms of Ageing and Development*, 127(5), pp. 473–480. https://doi.org/10.1016/j.mad.2006.01.003

Thomley, Jill E. and Greenwald, Sarah J. (2005). "Florence Nightingale, the Passionate Statistician." *Ontario Mathematics Gazette*, 43(3), pp. 30–35. [Reprinted from *The Centroid* by request of the *Ontario Mathematics Gazette* editor.]

Searcy, Mary E. and Richie, Jill T. (2004). "Investigating the Development of a Computational Science Education Community." In D.E. McDougall and J.A. Ross (Eds.), *Proceedings of the 26th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education,* Vol. 2, pp. 896–897). Toronto: OISE/UT. https://www.pmena.org/pmenaproceedings/PMENA%2026%202004%20Proceedings%20Vol%202.pdf

Searcy, Mary E. and Richie, Jill T. (2004). "The Notion of Community in United States Computational Science Education Initiatives." In M. Bubak, G.D. van Albada, P.M.A. Sloot, and J.J. Dongarra (Eds.), *Computational Science – ICCS 2004: Proceedings of the 4th International Conference on Computational Science*, pp. 726–730. New York: Springer-Verlag. https://doi.org/10.1007/978-3-540-24687-9_112

Richie, Jill T. and Greenwald, Sarah J. (2004). "Florence Nightingale, the Passionate Statistician." *The Centroid*, 30(2), pp. 13–21. https://www.ncctm.org/activities/the-centroid1/centroid-issue-archive/fall-2004/

Arunasalam, Ruthra G., Richie, Jill T., Egan, W William, Gür Ali, Özden, and Wallace, William A. (1999). "Reengineering Claims Processing Using Probabilistic Inductive Learning." *IEEE Transactions on Engineering Management*, 46(3), pp. 335–345. [Special issue about technology management in the health care sector.] https://doi.org/10.1109/17.775285

Richie, Jill T. and Raghavachari, Madabhushi. (1999). "Canonical Correlation Analysis for Rank Order Data." In *Proceedings of the Section on Government Statistics and Section on Social Statistics, American Statistical Association*, pp. 137–142. Alexandria, VA: American Statistical Association.

Engelhardt, Joseph E., Toseland, Ronald W., O'Donnell, John C., Richie, Jill T., Jue, Donald, and Banks, Steve. (1997). "Duplicate Publication of Data." *Journal of the American Geriatrics Society*, 45(2), p. 250. [Response to an incorrect assertion of duplicate publication.] https://doi.org/10.1111/j.1532-5415.1997.tb04520.x

Toseland, Ronald W., O'Donnell, John C., Engelhardt, Joseph E., Richie, Jill T., Jue, Donald, and Banks, Steve M. (1997). "Outpatient Geriatric Evaluation and Management: Is There an Investment Effect?" *The Gerontologist*, 37(3), pp. 324–332. https://doi.org/10.1093/geront/37.3.324

Engelhardt, Joseph E., Toseland, Ronald W., O'Donnell, John C., Richie, Jill T., Jue, Donald, and Banks, Steve. (1996). "The Effectiveness and Efficiency of Outpatient Geriatric Evaluation and Management." *Journal of the American Geriatrics Society*, 44(7), pp. 847–856. https://doi.org/10.1111/j.1532-5415.1996.tb03747.x

Toseland, Ronald W., O'Donnell, John C., Engelhardt, Joseph E., Hendler, Scott A., Thomley, Jill E., and Jue, Donald. (1996). "Outpatient Geriatric Evaluation and Management: Results of a Randomized Trial." *Medical Care*, 34(6), pp. 624–640. https://doi.org/10.1097/00005650-199606000-00011

Toseland, Ronald W., O'Donnell, John C., Engelhardt, Joseph B., Hendler, Scott A., Thomley, Jill E., and Jue, Donald. (1994). "The Short-Term Impact of Geriatric Evaluation and Management in an Outpatient Clinic: Results of a Randomized Trial." In J.C. Rey and C. Tilquin (Eds), *SYSTED '94: Proceedings of the 5th International Conference on Systems Science in Health-Social Services for the Elderly and the Disabled*. Geneva: Swiss Institute for Public Health Press.

Baron, Robert A. and Thomley, Jill E. (1994). "A Whiff of Reality: Positive Affect as a Potential Mediator of Pleasant Fragrances on Task Performance and Helping." *Environment and Behavior*, 26(6), pp. 776–784. https://doi.org/10.1177/0013916594266003

PRESENTATIONS & WORKSHOPS

Greenwald, Sarah J. and Thomley, Jill E. (August 2024). "How *The Sex Lives of College Girls* May Shape Perceptions on the Culture of Mathematics." Bridges 2024, Richmond, Virginia, USA.

Greenwald, Sarah J. and Thomley, Jill E. (April 2020). "Using Technology as a Pathway towards Equity, Diversity, and Inclusion," International Conference on Technology in Collegiate Mathematics (ICTCM), Virtual.

Selbach-Allen, Megan E., Greenwald, Sarah J., Ksir, Amy E., and Thomley, Jill E. (August 2018). "Raising the Bar with Standards-Based Grading." MAA MathFest, Denver, Colorado, USA.

Santisteban, Maria S., Thomley, Jill E., and Bullard-Dillard, Rebecca. (June 2017). "S-STEM Scholarship Program at UNC Pembroke: a COMPASS for Science Majors." ASEE Annual Conference & Exposition, Columbus, Ohio, USA.

Salinas, Tracie M., Searcy, Mary E., McCalister, Linda M., Lambert, Monica A., Thomley, Jill E., Wiley, David A. (February 2016). "Looking Inward, Looking Outward: Revisioning Teacher Education Stakeholder Engagement through Self Study." American Association of Colleges of Teacher Education, Las Vegas, Nevada, USA.

Greenwald, Sarah J. and Thomley, Jill E. (August 2015). "SoTLE: Assessing the Effectiveness of Moodle Glossaries." MAA MathFest, Washington, DC, USA.

Marland, Eric S. and Thomley, Jill E. (October 2013). "Beyond Warren Buffett." North Carolina Council of Teachers of Mathematics (NCCTM) State Conference, Greensboro, North Carolina, USA.

Kelly, Ginger M., Taubman, Brett F., Perry, L. Baker, Sherman, James P., Thomley, Jill E., Patoprsty, Wendy. (November 2012). "CAN-DOO Informal Climate Science Education: A University and K-12 Partnership." Southeastern Division of the Association of American Geographers (SEDAAG), Asheville, North Carolina, USA.

Greenwald, Sarah J. and Thomley, Jill E. (March 2012). "Using the History of Mathematics Technology to Enrich the Classroom Learning Experience." International Conference on Technology in Collegiate Mathematics (ICTCM), Orlando, Florida, USA.

Thomley, Jill E. and Searcy, Mary E. (March 2012). "Learning to Think Flexibly about Graphs: Lessons Learned from Computational Science Education Innovations." International Conference on Technology in Collegiate Mathematics (ICTCM), Orlando, Florida, USA.

Neufeld Howard S., Peoples, Seth J., Davison, Alan W., Chappelka, Arthur H., Somers, Greg L., Thomley, Jill E., and Booker, Fitzgerald L. (May 2011). "Ambient Ozone Effects on Gas Exchange and Total Non-structural Carbohydrate Levels in Cutleaf Coneflower (*Rudbeckia laciniata L.*) Growing in Great Smoky Mountains National Park." International Air Pollution Workshop, Fort McMurray, Alberta, Canada.

Thomley, Jill E. (March 2011). "Java Applets for Probability and Statistics." North Carolina Council of Teachers of Mathematics (NCCTM) Western Region Conference, Boone, North Carolina, USA.

Thomley, Jill E. and Searcy, Mary E. (August 2009). "Computational Science: Not Just for Researchers Any More." International Conference on Science in Society, Cambridge, United Kingdom.

Searcy, Mary E. and Thomley, Jill E. (August 2009). "Changing Education to Reflect Changes in Science: Using Innovation Diffusion Theory to Transform How and What We Teach." International Conference on Science in Society, Cambridge, United Kingdom.

Searcy, Mary E. and Thomley, Jill E. (March 2009). "Innovation Diffusion Theory." Department of Mathematical Sciences Graduate Seminar Series, Appalachian State University, Boone, North Carolina, USA.

Searcy, Mary E. and Thomley, Jill E. (July 2007). "Barriers to Interdisciplinary Computational Innovations in Education." 8th International Conference on Technology in Mathematics Teaching (ICTMT8), Hradec Králové, Czech Republic.

Thomley, Jill E. and Searcy, Mary E. (July 2007). "The National Computational Science Institute: The Development of a Professional Community." 8th International Conference on Technology in Mathematics Teaching (ICTMT8), Hradec Králové, Czech Republic.

Huyler, Ann G., Neufeld, Howard S., Burkey, Kent O. and Thomley, Jill E. (April 2007). "The Lack of Effect of Chronic and Acute Short-Term Ozone Exposure on the Antioxidant Content of Tulip Poplar, *liriodendron tulipifera*." 39th Air Pollution Workshop, Guadalajara, Mexico.

Greenwald, Sarah J. and Thomley, Jill E. (May 2006). "Mathematics in the Whedonverses." The *Slayage* Conference on the Whedonverses, Barnesville, Georgia, USA.

Thomley, Jill E. (April 2006). "A Brief Introduction to Social Networks." North Carolina Mini Conference on Combinatorics, Graph Theory and Computing, Boone, North Carolina, USA.

Searcy, Mary E., Thomley, Jill E. and Greenwald, Sarah J. (January 2006). "Mathematics and Science in the Whedon Universe (*Buffy the Vampire Slayer*, *Angel*, and *Firefly*)." Mathematical Association of America (MAA) and American Mathematical Society (AMS) Joint Mathematics Meeting, San Antonio, Texas, USA.

St. John, Kristen, Thomley, Jill E., Westerhold, Thomas, Flower, Benjamin P., and Krissek, Lawrence A. (December 2005). "Time Series Analysis of Ice-Rafted Debris Accumulation in the Irminger Basin, 0-630 ka." American Geophysical Union (AGU) Meeting, San Francisco, California, USA.

Searcy, Mary E. and Richie, Jill T. (October 2004). "Investigating the Development of a Computational Science Education Community." North American Chapter of the International Group for the Psychology of Mathematics Education Conference, Toronto, Ontario, Canada.

Richie, Jill T. (June 2004). "Teaching Circular Statistics to Undergraduates: Where Do the Rattlesnakes Go?" Hawaii International Conference on Statistics, Mathematics and Related Fields, Honolulu, Hawaii, USA.

Searcy, Mary E. and Richie, Jill T. (June 2004). "The Notion of Community in United States Computational Science Education Objectives." International Conference on Computational Science (ICCS), Krakow, Poland.

Richie, Jill T. (April 2004). "Univariate Data Analysis and Discrete Probability." Advanced Functions and Modeling Workshop Series for High School Mathematics Teachers, Appalachian State University, Boone, North Carolina, USA.

St. John, Kristen, Richie, Jill T., Flower, Benjamin P., and Krissek, Lawrence A. (December 2003). "Orbital and Sub-orbital Periodicities in East Greenland Ice-Rafting Since 630 ka." American Geophysical Union (AGU) Annual Meeting, San Francisco, California, USA.

Richie, Jill T. (November 2003). "Some Interesting Regression Examples for Introductory Statistics." Department of Mathematical Sciences Graduate Seminar Series, Appalachian State University, Boone, North Carolina, USA.

Richie, Jill T. (October 2003). "Go for the Gold: Statistics Activities Using Olympic Data." North Carolina Council of Teachers of Mathematics (NCCTM) State Conference, Greensboro, North Carolina, USA.

Hahn, D. Caldwell, Wingfield, John C., Fox, David M, Walker, Brian G., and Richie, Jill T. (August 2003). "Environmental Endocrinology and Invasive Cowbird Species." Ecological Society of America Meeting, Savannah, Georgia, USA.

Richie, Jill T. (November 2002). "Discrete Probability." Discrete Mathematics Workshop Series for High School Mathematics Teachers, Appalachian State University, Boone, North Carolina, USA.

Richie, Jill T. (October 2001). "Statistical Data Analysis Using the TI83 Plus Workshop." North Carolina Council of Teachers of Mathematics (NCCTM) Western Region Conference, Asheville, North Carolina, USA.

Richie, Jill T. (March 2001). "Statistics and the TI-83 Plus Workshop." North Carolina Mathematics Association of Two-Year Colleges (NCMATYC)/South Carolina Mathematics Association of Two-Year Colleges (SOCMATYC) Conference, Spindale, North Carolina.

Richie, Jill T. (March 2001). "Using Projects in Introductory Statistics Classes." Department of Mathematical Sciences Pedagogy Seminar Series, Appalachian State University, Boone, North Carolina, USA.

Richie, Jill T. and Raghavachari, Madabhushi. (August 1999). "Canonical Correlation Analysis for Rank Order Data." Joint Statistical Meetings (JSM), Baltimore, Maryland, USA.

Richie, Jill T. and Raghavachari, Madabhushi. (April 1998). "Factor Analysis Using Rank Correlation Matrices." Institute for Operations Research and the Management Sciences (INFORMS) Conference, Montreal, Quebec, Canada.

Richie, Jill T. and Raghavachari, Madabhushi. (March 1998). "Factor Analysis Using Rank Correlation Matrices." Albany Chapter of the American Statistical Association (ASA) Conference, Albany, New York, USA.

Thomley, Jill E., Engelhardt, Joseph B., Toseland, Ronald W., O'Donnelll, John C., Hendler, Scott A., and Jue, Donald. (April 1994). "The Short-Term Impact of Geriatric Evaluation and Management in an Outpatient Clinic: Results of a Randomized Trial." Department of Veterans Affairs Research and Development Services Chautauqua Conference, White River Junction, Vermont, USA.

OTHER EDUCATIONAL SESSIONS/WORKSHOPS

Girl Scout Women in Mathematics Merit Badge, program created and organized with Sarah Greenwald and Amber Mellon, Fall 2014, 2015, and 2016 (https://cs.appstate.edu/~sjg/awm/earnedbadge.html) – This program was funded in 2016 by a grant from the Wal-Mart foundation via their Community Grant Program for Career Opportunity/Women's Economic Empowerment ($500)

ASU Vertically Integrated Workshop for Women, program created and organized with Sarah Greenwald, Holly Hirst, Vicky Klima, Katherine Mawhinney, and Katrina Palmer, 2005, 2006, and 2007 – This program was funded in 2005 and 2006 by grants from the Mathematical Association of America via their Tensor Foundation ($3000 and $3100)

Mathematics Education Leadership Training (MELT)—Advanced Placement (AP) Statistics, organized with Gregory Foley, Summer 2001 and Summer 2004

Richie, Jill T. (January 2003). "Gambling Doesn't Pay," Watauga College Misfit Lecture Series" – This was the inaugural presentation of the Misfit Lecture Series (http://www.news.appstate.edu/2003/01/09/misfit/)

Mathematics Education Leadership Training (MELT)—Dealing with Data, organized with Gregory Foley, Summer 2002

GRANTS—Internal Funding

Searcy, Mary E. and Thomley, Jill E. (2019). "The Academy at Middle Fork Research Cluster." Special Innovation Grant from the Office of the Chancellor: course release and variable stipend.

Thomley, Jill E. (2016). "Incorporating Standards-Based Grading Pedagogy in STT 3850 Statistical Data Analysis I." Appalachian State University Course (Re)Design Institute: $300.

Thomley, Jill E. (2005). "Textbooks for a Proposed Social Network Theory Special Topics Course." Appalachian State University Faculty and Academic Development (FAD) Teaching Enhancement Grant: $250.

Searcy, Mary E. and Richie, Jill T. (2004). "Investigating the Development of a Computational Science Education Community." Appalachian State University Research (URC) Council Competitive Grant: $4,814.

GRANTS—Evaluator

Fanatico, A. and Gibbard, L. (Appalachian State University). "Going Whole Hog: Sustainable Livestock and Agroforestry Training for Military Veterans," United State Department of Agriculture, Nationanal Institute of Food and Agriculture, Beginning Farmer and Rancher Development Program (#2020-03834): $599,684. [2024 to Present]

Santisteban, M. and Bullard-Dillard, R. (University of North Carolina at Pembroke). "Creating Opportunities for Students in Science (COMPASS) Scholarship Program," National Science Foundation (DUE #1356582): $618,993. [2015 to 2019]

Panoff, R.M. (Shodor Education Foundation), Sendlinger, S.C. (North Carolina Central University), Jacobs, P. (Shodor Education Foundation), Ragan, S. (Maryland Virtual High School of Science & Mathematics). "CI-TEAM Implementation Project: Computing MATTERS: Pathways to Cyberinfrastructure," National Science Foundation (DUE #1043453): $875,000. [2011 to 2014]

Bennett, N.S. and Cartaya-Marin, C. (Appalachian State University). "Appalachian Chemistry Research Experience in Energy and the Environment (ACREE) Program," National Science Foundation (CHE #1004896): $257,106. [2011 to 2013]

Taubman, B., Perry, B., and Sherman, J. (Appalachian State University). "Climate Action Network through Direct Observations and Outreach (CAN-DOO): Promoting Climate Science Awareness through Public Outreach, STEM Education, and Citizen Science," National Aeronautics and Space Administration, Science Mission Directorate Education & Public Outreach Program (#NNX10AC92G): $500,000. [2010 to 2013]

Babyak, C.M., Sigmann, S.B., and Tuberty, S.R. (Appalachian State University). "Improving Laboratory Experiences for Science Majors and Non-Majors at Appalachian State University through Implementation of Inquiry-Based Learning with State of the Art Equipment," National Science Foundation (DUE #0633550): $75,000. [2007 to 2011]

Stuart, A.E. (University of North Carolina Chapel Hill). "Neurons in Action Version 2: Understanding the Behavior of Normal and Abnormal Neurons," National Science Foundation (DUE #0442748): $379,561. [2007 to 2009]

DeBellis, V.A. (Shodor Education Foundation). "Discrete Mathematics for Prospective K-8 Teachers," National Science Foundation (DUE #0443317): $267,539. [2006 to 2007]

Gordon, S.I. (Ohio Supercomputer Center), Carey, C.M. (Ohio Learning Network), and Vakalis, I.E. (Capital University). "CI-Team: Leveraging Cyberinfrastructure to Scale-Up a Computational Science Undergraduate Curriculum," National Science Foundation (OCI #0537405): $250,000. [2005 to 2009]

Panoff, R.M. (Shodor Education Foundation) and Hirst, H.P. (ASU, Shodor Education Foundation). "The National Computational Science Institute," National Science Foundation (DUE #0127488): $2,757,944. [2002 to 2005]

STUDENT RESEARCH – Graduate

John Sevier, Curriculum and Instruction, Department of Mathematics and Statistics, University of North Carolina Charlotte (2019) – Doctoral Dissertation Committee, "Engaging Developmental Mathematics Students in Problem Posing"

Fern Perkins, Biology (2009) – Master's Thesis Statistical Consultant, "Morphological and Physiological Responses of the Lichen *Umbilicaria mammulata* to an Existing Nitrogen Deposition Gradient in the Northeastern U.S. and *In Situ* Nitrogen Fertilization"

Lisa Maggiore, Mathematical Sciences (2009) – Master's Product of Learning Advisor, "A Model for Math Placement without Placement Exams"

Evan Lacy Pannkuk, Biology (2008) – Master's Thesis Statistical Consultant, "Comparative Microscopic Anatomy and Tensile Strength of Plumage from Various Color Phases in the Eastern Screech Owl (*Megascops asio*)"

Ann Slate, Mathematical Sciences (2008) – Master's Product of Learning Advisor, "Algebra 1 Placement at North Surry High School"

Ann Huyler, Biology (2007) – Master's Thesis Statistical Consultant, "Antioxidant Response of Tulip Poplar (*Liriodendron tulipifera L.*) Leaves to Short Term Exposures of Acute and Chronic Ozone"

Stephanie Squires, Psychology (2007) – Master's Thesis Committee, "The Reliability of Difference Scores: Implications for Testing and Research in Psychology" (Note: This thesis won the 2008 ASU Social Science & Education Thesis Award.)

John Sealy, Biology (2006) – Master's Thesis Statistical Consultant, "Aspects of the Reproductive and Movement Ecology of the Timber Rattlesnake (*Crotalus horridus*) in the Upper Piedmont of North Carolina"

Amanda Aldridge, Biology (2005) – Master's Thesis Statistical Consultant, "Genetic Basis of Female Mate Preference in *Drosophila melanogaster*"

Athena Anderson, Biology (2004) – Master's Thesis Statistical Consultant, "Factors Influencing Surface Abundance of Desert Scorpions"

C. Elizabeth Duea, Computer Science (2004) – Master's Thesis Committee, ""Modeling the Human Immunodeficiency Virus"

Shay Dumas, Biology (2004) – Master's Thesis Statistical Consultant, "Community and Ecosystem Responses Following Fire in the Linville Gorge Wilderness Area"

Alex Martin, Biology (2004) – Master's Thesis Statistical Consultant, "A Floristic Survey and Wetland Vegetation Analysis of Tater Hill Preserve"

Heather Stockdale, Biology (2004) – Master's Thesis Statistical Consultant, "Male Courtship Behavior in a *Drosophila melanogaster* Vestigial Winged Stock: Sex, Flies and Videotape"

Jason Bulluck, Biology (2003) – Master's Thesis Statistical Consultant, "The Importance of Southern Appalachian Wetlands to Breeding Birds"

Beth Hudson, Biology (2003) – Master's Thesis Statistical Consultant, "Homologous vs. Nonhomologous Chromosome Pairing in the Interspecific Lily Hybrid, Lilium X 'Black Beauty'"

Robert Pleszewski, Biology (2003) – Master's Thesis Statistical Consultant, "Pre- and Post-fire Microarthropod Assemblages on Ridge, Cliff Face and Cliff Base Habitats within the Linville Gorge Wilderness Area, North Carolina"

Lara Souza, Biology (2003) – Master's Thesis Statistical Consultant, "Seasonal Development of Ozone-induced Foliar Injury on Tall Milkweed (*Asclepias exaltata*) in Great Smoky Mountains National Park"

I served as a statistical consultant for the following Mathematical Sciences graduate students on their products of learning: Levonda Rutherford (2010), Amy Maxey (2009), Claudette Reep (2009), Matthew Lee (2008), Karen Perry (2008), Michelle Rogers (2008), Amber Candela (2006), Angela Smith (2006), Shana King (2004), Krista Cornehl (2003), Star Edwards (2003), James Hale (2001), and Derrick Murphy (2001)

I served as a statistical consultant for the following Biology graduate students on non-thesis research projects: Melany Fisk (2005), Daniel Dietrich (2004), and Bradley Miller (2004).

STUDENT RESEARCH – Undergraduate

Molly Martin, Mathematical Sciences (2020) – Honors Thesis Advisor, Topic: statistical analysis of the reasons for social services home removal of children ages 0 to 3, nationally and in Catawba Valley, NC.

Allison Staley, Mathematical Sciences (2019) – Honors Thesis Advisor, "Child Maltreatment in the United States: Where are we now?"

Madeline Faddoul, Sociology (2019) – Honors Thesis Statistical Consultant, Topic: How the framing of media coverage on the opioid epidemic shapes sentiments expressed by Facebook users.

Brian Clee, Computer Science (2015) – Honors Thesis Committee Member, "On Virtual Reality as Viable Medium for Competency Based Education"

Ciera Ferrone, Psychology (2015) – Honors Thesis Committee Member, "Examining Gender Role Stereotypes on Sexual Assault Court Case Decisions"

Joshua Watson, Biology (2015) – Honors Thesis Committee Member, "A Comparison of the Efficiency in Finding Genes between Sequences Enriched for Hypo-methylated Regions and Whole Genome Shotgun Sequences in Bread Wheat"

William Bradley, Mathematical Sciences (2012) – Honors Thesis Advisor, "Exploring Cross-Cultural Biases in International Trials"

Kayla Corkery, Mathematical Sciences (2011) – Directed Research Co-Advisor with Sarah Greenwald, “Women in Mathematics”

Justin Vidovich, Finance and Banking (2010) – Honors Thesis Co-Advisor, “Using Statistics to Beat Blackjack”

Mitchell Jareo, Mathematical Sciences (2008) – Honors Thesis Advisor, “Structural Characteristics of the MySpace Social Network”

Kristen Cawthon, Psychology (2007) – Honors Thesis Committee Member, “Can Women Foresee Fat Talk? Examining the Predictability of Body Talk in Female's Responses to another Female's Body Presentational Style”

Henry Rose, Psychology (2007) – Honors Thesis Committee Member, “The Effects of Self-Monitoring, Task Clarification, and Performance Feedback on Lifeguard Cleaning Behaviors”

Beckwith Kloss, Psychology (2006) – Honors Thesis Committee Member, “Working Memory's Attentional Capacity as a Predictor of the Ability to Enter Flow States”

UNIVERSITY SERVICE

- CURRENT: Institutional Review Board (IRB), Spring 2013 to Present; Deputy Chair, Fall 2024 to Present
- College of Arts and Sciences Sustainability Focus Group, Spring 2020
- Institutional Review Board (IRB) Physical Activity Guidelines Committee, Fall 2018
- Pagan Student Association Advisor, Spring 2007 to Spring 2018
- Statistics in Theses and Dissertations Workgroup, Summer 2014
- Student/Faculty Exchange, Fall 2009, Fall 2011, Fall 2013, Fall 2014
- Appalachian Paranormal Study Organization Advisor, Spring 2010 to Spring 2013
- College of Arts and Sciences Assessment Committee, Fall 2009 to Spring 2013
- Graduate Science and Technology Thesis Award Committee, Spring 2011
- Quantification Across the Curriculum Committee, Fall 2008
- Graduate Social Science and Education Thesis Award Committee, Spring 2008
- University Statistical Consultant, Fall 2007
- Graduate Council and Graduate Student Affairs Committee, Fall 2006 to Spring 2007
- College of Arts and Sciences Dean’s Advisory Council, Fall 2002 to Spring 2005
- William C. Strickland Young Faculty Award Committee, Fall 2004
- College of Arts and Sciences Faculty Reassigned Time Committee, Spring 2003 to Fall 2003

DEPARTMENT SERVICE

- CURRENT: STT 1810 Course Convener, Fall 2023 to Present
- CURRENT: Appointment, Promotion, and Tenure Committee, Fall 2023 to Present
- CURRENT: Pi Mu Epsilon (PME) Mathematics Honor Society Advisor, Fall 2001 to Present
- Workload Policy Committee, Fall 2023 to Spring 2024
- Assessment Objectives Committee, Fall 2022 to Spring 2023
- STT 1810 Redevelopment Committee, Fall 2021 to Spring 2023
- Department Curriculum Committee, Fall 2019 to Spring 2020
- Department Analytics Committee, Fall 2018 to Spring 2019, Chair Fall 2019 to Spring 2020
- Assessment Coordinator, Student Learning Outcomes, Spring 2011 to Spring 2018
- Hiring Committee, Mathematics Education Tenure-Track Position, Fall 2016 to Spring 2017
- General Education Goals Assessment Committee for Writing in the Discipline, Fall 2016 to Fall 2017
- General Education Goals Assessment Committee for STT1810, Fall 2016 to Fall 2017
- Hiring Committee, Statistics Tenure-Track Position, Fall 2015 to Spring 2016
- Personnel Committee, Fall 2004 to Spring 2005, Fall 2007 to Spring 2009, Fall 2011 to Spring 2013, Fall 2014 to Spring 2016
- Quantitative Literacy Recertification Committee for STT1810, Spring 2015
- Chair Advisory Committee, Fall 2001 to Spring 2003, Fall 2013 to Spring 2015
- Quantitative Literacy Credit Hours Departmental Statement Committee, Fall 2012
- Graduate Research Guidelines Committee, Spring 2007 to Fall 2008

- Travel Guidelines Committee, Fall 2006
- Curriculum Review Committee, Fall 2006
- General Education Committee, Spring 2006
- Curriculum Steering Subcommittee for Mathematics History, Spring 2006
- Mathematics and Computer Science Scholarship Committee, Spring 2004
- Tea Committee, Fall 2001 to Spring 2004

CLASSES TAUGHT

Undergraduate Courses at Appalachian State University
- STT 1810 Basic Statistics
- STT 2810 Introduction to Data Analysis and Statistical Inference
- STT 2860 Introduction to Data Management and Visualization
- STT 3500 Independent Study: Ethics in Statistical Practice
- STT 3500 Independent Study: Intermediate Data Visualization in R
- STT 3500 Independent Study: SAS Programming
- STT 3500 Independent Study: US Wage Gaps
- STT 3520 Instructional Assistant
- STT 3530 Special Topics: Data Science 1 (now offered as STT2860)
- STT 3530 Special Topics: History of Statistics
- STT 3820 Statistical Methods I
- STT 3830 Statistical Methods II
- STT 3840 Elementary Probability and Survey Sampling
- STT 3850 Statistical Data Analysis I
- STT 4250 Probability Modeling with Applications
- STT 4811 Statistical Concepts and Applications I
- STT 4812 Statistical Concepts and Applications II with Probability Modeling
- STT 4820 Design of Experiments
- STT 4830 Linear Regression Models
- STT 4870 Senior Seminar in Statistics
- MAT 4510 Senior Honors Thesis
- HON 4010 Senior Honors Thesis

Graduate Courses at Appalachian State University
- STT 5820 Design of Experiments
- STT 5830 Linear Regression Models
- MAT 5420 Teaching Apprenticeship
- MAT 5500 Independent Study: Multivariate Statistics with SAS
- MAT 5500 Independent Study: Practical Experience in Data Analysis
- MAT 5525 Product of Learning
- MAT 5600 Directed Research in Mathematical Sciences

Undergraduate Courses at Other Institutions
- MAT 113 Precalculus (Russell Sage College)
- MAT 220 Statistical Methods I (Russell Sage College)
- MGMT 2010 Statistics for Management (Rensselaer Polytechnic Institute)
- ENGR 2600 Modeling and Analysis of Uncertainty (Rensselaer Polytechnic Institute)
- ENGR 4750 Engineering Economics (Rensselaer Polytechnic Institute)

Graduate Courses at Other Institutions
- NRS 775 Biostatistics & Epidemiology (Doctor of Nursing Practice Program, Wake Forest University School of Medicine)

HONORS AND AWARDS

- *PRIMUS* Editors' Pick for Most Downloaded Article in 2024, "Raising the Bar with Standards-Based Grading" (2025)
- ASU-CSIL "Outstanding Religious and Spiritual Organization Award" to ASU Pagan Student Association (2014)
- A "Best Reference 2011" in *Library Journal* for the *Encyclopedia of Mathematics and Society* (2012)
- Calvin M. Woodward High School Alumni Hall of Fame (2006)
- Nominee for Outstanding Advisor Award, College of Arts and Sciences, Appalachian State University (2006)
- Karger Dissertation Prize, Decision Sciences and Engineering Systems, Rensselaer Polytechnic Institute (2001)
- Outstanding Teaching Assistant, Decision Sciences and Engineering Systems, Rensselaer Polytechnic Institute (2000)
- Rensselaer Founders Award of Excellence (1999)
- Outstanding Student Paper, Portland International Conference on Management of Engineering & Technology (1997)
- Alpha Pi Mu Industrial Engineering Honor Society (1996)
- Rensselaer Graduate School Fellowship (1995)
- Rensselaer Merit Scholarship (1990)

PROFESSIONAL ORGANIZATIONS

- American Statistical Association (ASA)
- Association for Women in Mathematics (AWM)
- Association of Mathematics Teacher Educators (AMTE)
- International Association for Statistical Education (IASE)
- National Council of Teachers of Mathematics (NCTM)
- North Carolina Council of Teachers of Mathematics (NCCTM)