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Last updated April 12, 2013

EDUCATION

Vanderbilt University, Nashville, Tennessee, 1997-2002

Ph.D. May 2002, M.S. May 1999

University of Delaware, Newark, Delaware, 1991-1995

B.A., *cum laude*, Mathematics

PROFESSIONAL EXPERIENCE

Associate Professor of Mathematics, Bates College, 2008-present, Lewiston, Maine

Assistant Professor of Mathematics, Bates College, 2002-2008, Lewiston, Maine

Ph.D. student and Teaching Assistant, Vanderbilt University, 1998-2002, Nashville, Tennessee

Summer Hire, The Aerospace Corporation, 2000, Colorado Springs, Colorado

Instructor of English as a Second Language, Yale Academy of Language Education, 1995-1996,
Taegu, South Korea

PUBLICATIONS

Planning for the Long Term. Meredith L. Greer. To appear in the MAA Notes volume Undergraduate Mathematics for the Life Sciences: Models, Processes, and Directions, ed. Glenn Ledder, Jenna P. Carpenter, and Timothy D. Comar (2013).

Senior Seminar: Across a Department and Across the Years. Meredith L. Greer and Chip Ross, PRIMUS (Problems, Resources, and Issues in Mathematics Undergraduate Studies), to appear in vol. 23 (2013).

Students in Differential Equations and Epidemiology model a campus outbreak of pH1N1. Meredith L. Greer and Karen A. Palin. Journal of Microbiology & Biology Education vol. 13, pp. 183-185 (2012).

The Effect of Mixing Events on the Dynamics of pH1N1 Outbreaks at Small Residential Colleges. Meredith L. Greer and Karen A. Palin, Journal of American College Health vol. 60, no. 6, pp. 485-489 (2012)

New Expectations for the Training of Medical Students. Meredith L. Greer, FOCUS vol. 29, no. 5, p. 20 (2009)

New Expectations for the Training of Medical Students: An Undergraduate Preparation Perspective.
Meredith L. Greer, SMB Newsletter vol. 22, no. 3, pp. 8-9 (2009)

Blogs Hit Classroom: Students Start Reading. Meredith L. Greer and Benjamin Reed (Bates '08),
PRIMUS (Problems, Resources, and Issues in Mathematics Undergraduate Studies) vol. 18, no. 2,
pp. 139-148 (2008)

Effects of General Incidence and Polymer Joining on Nucleated Polymerization in a Model of Prion Proliferation. Meredith L. Greer, Pauline van den Driessche, Lin Wang, and Glenn F. Webb,
SIAM Journal on Applied Mathematics vol. 68, pp. 154-170 (2007)

A Mathematical Analysis of the Dynamics of Prion Proliferation. Meredith L. Greer, Glenn F. Webb,
and Laurent Pujo-Menjouet, Journal of Theoretical Biology vol. 242, pp. 598-606 (2006)

Plague or Prediction? Meredith L. Greer, FOCUS vol. 26, no. 2, pp. 4-5 (2006)

Determining If Two Solid Ellipsoids Intersect. Salvatore Alfano and Meredith L. Greer, Journal of Guidance, Control, and Dynamics, vol. 26, no. 1, pp. 106-110 (2003)

Determining If Two Ellipsoids Share the Same Volume. Salvatore Alfano and Meredith L. Greer,
Advances of the Astronautical Sciences, vol. 109, pp. 771-783 (2002)

INVITED TALKS

Joint Mathematics Meetings, January 4-7, 2012, Boston, Massachusetts
Project NExT Panel on Successful Capstone Projects

University of New Brunswick, October 14, 2010, Fredericton, Canada
Toward understanding the role of Gloeotrichia echinulata in eutrophication of lakes: early modeling results

Canadian Mathematical Society Summer Meeting, June 6, 2010, Fredericton, Canada
Can cyanobacterial blooms in nutrient-poor lakes accelerate eutrophication? Perspectives from modeling

Connecticut College, February 19, 2008, New London, Connecticut
Building Math Models in Biology

Colby College, September 17, 2007, Waterville, Maine
Building Math Models in Biology

University of Alberta, April 25, 2006, Edmonton, Canada
Prion Disease Modeling: Interaction of Infectious and Noninfectious Proteins

Harvey Mudd and Pomona Colleges, March 29, 2006, Claremont, California
Prion Disease Modeling: Interaction of Infectious and Noninfectious Proteins

University of British Columbia, February 8, 2006, Vancouver, Canada
Protein Population Interactions in Prion Diseases

Canadian Mathematical Society Annual Meeting, December 11, 2005, Victoria, Canada
Interaction of Infectious and Noninfectious Proteins in Prion Disease: Models, Simulations, and Steady State Study

United States Military Academy, October 6, 2005, West Point, New York
Roller Coaster Mathematics

International Society for Analysis, its Applications and Computation, July 25-30, 2005, Catania, Italy
Threshold Conditions in a Model of Prion Disease

Hobart and William Smith Colleges, April 15, 2005, Geneva, New York
Saving Satellites

CBB (Colby, Bates, Bowdoin) Mathematics Seminar, November 12, 2004, Bowdoin College
Prion Proliferation: Modeling, Analysis, and Impact

American Mathematical Society Southeast Region Fall Meeting, October 15-17, 2004, Nashville, Tennessee
A Mathematical Analysis of Prion Proliferation

Connecticut College Majors Seminar, February 17, 2004, New London, Connecticut
From Periodic Locusts to Mad Cow Disease: Translating Nature Into Mathematics

Bates Mathematics Department Seminar, November 6, 2002, Lewiston, Maine
Satellites, Ellipsoids, and Eigenvalues

Vanderbilt University Mathematics Seminar for Undergraduates, March 28, 2001, Nashville, Tennessee
Mad Cows and Hungry Locusts

Vanderbilt University Mathematics Department, February 8, 2001, Nashville, Tennessee
HTML for Beginners

CONTRIBUTED TALKS

MathFest, August 2-4, 2012, Madison, Wisconsin
Combining Forces: Math and Bio Students Join to Study H1N1

Society for Mathematical Biology Annual Meeting, July 25-28, 2012, Knoxville, Tennessee
*Life Cycle Dynamics of *Gloeotrichia echinulata* and connections to nutrient cycling*

Joint Mathematics Meetings, January 4-7, 2012, Boston, Massachusetts
Senior Seminar, Across a Department and Across the Years (with Chip Ross)

MathFest, August 10-12, 2006, Knoxville, Tennessee
Roller Coasters and the Mathematics Behind Them.

Society for Mathematical Biology Annual Meeting, July 18-22, 2005, Dresden, Germany
Threshold Conditions in an ODE Model of Prion Disease (poster)

AWM Workshop as part of SIAM Annual Meeting, July 11-16, 2004, Portland, Oregon
A Mathematical Analysis of Prion Proliferation

Joint Conference of MPD 7 and DESTOBIO 3, June 21-25, 2004, Trento, Italy
Steady State Analysis of Prion Proliferation

Joint Mathematics Meetings, January 6-10, 2004, Phoenix, Arizona
Math Camp: A Language Immersion Class

Society for Mathematical Biology Annual Meeting, August 5-9, 2003, Dundee, Scotland
Prion Dynamics Modelled, Displayed, and Analyzed

Joint Mathematics Meetings, January 15-18, 2003, Baltimore, Maryland
A Population Model of Prion Dynamics

Regional Meeting of the Mathematical Association of America, November 22-23, 2002, Framingham,

Massachusetts
Saving Satellites

The Society for Mathematical Biology Annual Meeting, July 15-19, 2001, Hilo, Hawaii

A Population Model of Prion Dynamics (poster)

AWM Workshop as part of SIAM Annual Meeting, July 9-11, 2001, San Diego, California

A Population Model of Prion Dynamics (poster)

GRANTS

Mellon Innovation Fund

“Mathematical Modeling of *Gloeotrichia echinulata*”

2010-2011; used mainly in Summer 2011: \$11,554

CBB Mellon Grant for Math/Bio Seminar Series

2007-2008 academic year: \$8500

Ladd Gift

2004-2005 academic year: \$3000

AWM Workshop as part of SIAM Annual Meeting

July 11-16, 2004, Portland, Oregon. Conference attendance and travel funded by AWM for accepted participants

Howard Hughes Medical Institute IV

curriculum development grant awarded December 2004: \$12000

Howard Hughes Medical Institute IV

curriculum development grant awarded May 2003: \$7756

The Society for Mathematical Biology Travel Grant

annual meeting, July 15-19, 2001, Hilo, Hawaii

AWM Workshop as part of SIAM Annual Meeting

July 9-11, 2001, San Diego, California. Conference attendance and travel funded by AWM for accepted participants

OTHER ACTIVITIES

The Society for Mathematical Biology Annual Meeting, July 27-30, 2009, Vancouver, Canada

Mathematical Association of America, Northeast Section, Fall Meeting, November 17, 2007,

Framingham, Massachusetts

Accompanied a presenting undergraduate

The Society for Mathematical Biology Annual Meeting, July 31-August 3, 2007, San Jose, California

MathFest 2007, August 3-5, 2007, San Jose, California

Bioinformatics in the Undergraduate Curriculum Workshop, July 19, 2007, Lewiston, Maine

The Society for Mathematical Biology Annual Meeting, July 31-August 4, 2006, Raleigh, North Carolina

Bioinformatics Mini-Workshop, August 22, 2005, Lewiston, Maine

Mathematical Association of America, Northeast Section, Spring Meeting, June 17-18, 2005, Lewiston, Maine

Hudson River Undergraduate Mathematics Conference, April 30, 2005, Williamstown, Massachusetts

Accompanied six Bates students

Joint Mathematics Meeting, January 5-8, 2005, Atlanta, Georgia

MathFest 2004, August 12-14, 2004, Providence, Rhode Island

Co-organized a special session and served as panel chair

Legacy of R. L. Moore Conference, March 12-14, 2004, Austin, Texas

Joint Mathematics Meetings, January 6-10, 2004, Phoenix, Arizona

MathFest 2003, July 31-August 2, 2003, Boulder, Colorado

Bioinformatics Conference at Dickinson College, March 21-22, 2003, Carlisle, Pennsylvania

MathFest 2002, August 1-3, 2002, Burlington, Vermont

Joint Mathematics Meetings, January 6-9, 2002, San Diego, California

Horizons in Combinatorics, May 21-24, 2001, Nashville, Tennessee

DESTOBIO, August 23-27, 2000, West Lafayette, Indiana.

HONORS AND PROFESSIONAL ACTIVITIES

American Mathematical Society, member since 1997

The Society for Mathematical Biology, member since 2000

Member of the Scientific Committee and Webmaster for the 2007 Annual Meeting

Travel and Meeting Funding Grants Committee chair since Summer 2006

Mathematical Association of America, member since 2002

Appointed to Committee on George Polya Awards, to serve 2013-2016

PRIMUS (Problems, Resources, and Issues in Mathematics Undergraduate Studies), editorial board member since 2006

Association for Women in Mathematics, member since 1997

Company Invention Award, for new technique developed at The Aerospace Corporation

Phi Beta Kappa, member since 1995; President of Bates College chapter, 2008-2010