

GEORGE L. ASHLINE

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**CURRENT POSITION**

Saint Michael's College: Professor of Mathematics

**EDUCATION**

Ph.D. in Complex Analysis, August 1994, University of Notre Dame, Notre Dame, IN.

- Ph.D. dissertation entitled *The Defect Relation of Meromorphic Maps on Parabolic Manifolds* and directed by Prof. Wilhelm Stoll.

M.S. in Mathematics, Spring 1991, University of Notre Dame.

B.S. in Mathematics, Spring 1989, Saint Lawrence University, Canton, New York.

- Graduated Summa Cum Laude.

**PROFESSIONAL EXPERIENCE**

SAINT MICHAEL'S COLLEGE Colchester, VT

- Professor of Mathematics, 2007-present; Mathematics Department chair, 2009-2015.
- Associate Professor of Mathematics, 2000-2007.
- Assistant Professor of Mathematics, 1995-2000.

NORTHEAST MISSOURI STATE UNIVERSITY (now Truman State University) Kirksville, MO

- Assistant Professor of Mathematics, 1994-1995.

UNIVERSITY OF NOTRE DAME Notre Dame, IN

- Teaching Assistant, 1990-1994.
- Worked with First-year Calculus (MATH 119 and MATH 120) and Undergraduate Real Analysis (MATH 335 and MATH 336) classes.

**AWARDS AND HONORS**

- 2016 NES/MAA Award for Distinguished College or University Teaching.
- Saint Michael's College Class of 2013 Rev. Gerald E. Dupont Award.
- Norbert A. Kuntz Service Award, Fall 2010.
- Joanne Rathgeb Teaching Award, Fall 2004.
- Member of Phi Beta Kappa Society, since 1988; President of SMC Gamma chapter, 2004-2005.
- Member of Saint Michael's chapter of Delta Epsilon Sigma, since 2000; President 2002-2003.
- Dedication of Saint Michael's Yearbook, 2001.
- Saint Michael's College Class of 2000 Rev. Gerald E. Dupont Award.
- Charter member of Saint Michael's College Chapter of Pi Mu Epsilon, since 2003.  
President of Saint Lawrence University Chapter of Pi Mu Epsilon, 1987-1989.

**PROFESSIONAL AFFILIATIONS**

- Mathematical Association of America
- Project NExT, New Experiences in Teaching

## COURSES TAUGHT

- Saint Michael's College: Finite Mathematics (MA101), Elementary Statistics (MA102), Calculus I-II-III (MA109-111-211), Number Theory (MA214), Probability and Statistics (MA251), History of Mathematics (MA304), Complex Analysis (MA315), Mathematics Education Seminar (MA381), Real Analysis I (MA401), Real Analysis II (MA 403), Seminar in Mathematics (MA410), Readings and Research in Mathematics (MA490).
- Northeast Missouri State University: Trigonometry (MATH 157), Calculus I (MATH 198), Calculus III (MATH 264), Advanced Calculus (MATH 461), Advanced Calculus II (MATH 462).
- University of Notre Dame: Elements of Calculus (MATH 105).

## PUBLICATIONS AND PREPRINTS

- "[Career Arcs and Advice: Voices from the Field](#)," *Math Horizons*, 23: 4, (Apr. 2016) 28-30.
- "[Vermont Middle Level Mathematics Initiative: Courses and Materials for Mathematics Educators](#)," (with Marny Frantz), In C. Beaver, L. Burton, M. Fung, and K. Kruczek (Eds.), *Resources for Preparing Middle School Mathematics Teachers*, MAA Notes, Volume 80, MAA: Washington, DC (2013) 169-179.
- "Closing the Achievement Gap: Systemic Collaboration for Equity in Mathematics," (with Marny Frantz, Kendra Gorton, Sandy Hepp, and Stephanie Ratmeyer), In J. Bay-Williams and W. Speer (Eds.), *Professional Collaborations in Mathematics Teaching and Learning: Seeking Success for All*, NCTM 74<sup>th</sup> Yearbook, NCTM: Reston, VA (2012) 31-45.
- "[Multiple Ways to Solve Proportional Reasoning Problems](#)" (with Leslie Ercole and Marny Frantz), *Mathematics Teaching in the Middle School*, 16:8, (April 2011), 482-490.
- "[Math and Bio 2010](#)" (with Joanna Ellis-Monaghan, Zsuzsanna Kadas, and Declan McCabe). *MAA FOCUS* centerfold poster and accompanying article, 30: 3, (Jun.-Jul. 2010), 15-17.
- "Modeling Seashell Morphology" (with J. Ellis-Monaghan, Zsuzsanna Kadas, and Declan McCabe). In *UMAP/ILAP Modules 2009: Tools for Teaching* (UMAP Modules in Undergraduate Mathematics and Its Applications, Bedford, MA: COMAP), Module 801, (2009) 101-139.
- "Proportional Reasoning and Probability: A Professional Development Context for Mathematics Educators" (with Marny Frantz), *Connect: Innovations in K-8 Science, Math, and Technology*, 23: 2, (Nov.-Dec. 2009), 8-10.
- "[Using Checklists in Project Assessment](#)," *MAA FOCUS*, "Teaching Time Savers," 29: 5, (Oct.-Nov. 2009), 13.
- "Using Mathematically-Rich Tasks to Deepen the Pedagogical Content Knowledge of Primary Teachers," (with Regina Quinn), In B. Clarke, B. Grevholm and R. Millman (Eds.), *Tasks in Primary Mathematics Teacher Education: Purpose, Use and Exemplars*, Mathematics Teacher Education, Springer Science+Business Media LLC, 4 (2009) 197-214.
- "[What We Learned...By Organizing and Hosting an MAA Sectional Meeting](#)," (with Karl-Dieter Crisman, Jo Ellis-Monaghan, Zsu Kadas, Greta Pangborn, and Lloyd Simons) *MAA FOCUS*, 29: 3, (Apr/May 2009) 16-18.
- "[Alumni Profiles of Saint Michael's College](#)," *Math Horizons*, XV: 4, (Apr. 2008) 28-29.
- "How High? How Long? How Fast? Modeling with Water Rockets and Calculus" (with J. Ellis-Monaghan), *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*, XVI: 2, (Jun. 2006) 121 - 137.
- "Integrating Exit Questions into Instruction," *NCTM News Bulletin*, 42, 3 (Oct. 2005) 6.
- "A House of Your Own: The Mathematics of the American Dream (Part 2)" (with J. Ellis-Monaghan), *The New Jersey Mathematics Teacher*, 63: 2, (May 2005) 20-26.
- "Credit Cards and Cars: The Mathematics of the American Dream (Part 1)" (with J. Ellis-Monaghan), *The New Jersey Mathematics Teacher*, 63: 1, (Jan. 2005) 16-23.
- "The Lottery: A Dream Come True or a Tax on People Who are Bad at Math" (with J. Ellis-Monaghan), *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*, XIV: 4, (Dec. 2004) 303-314.
- *Number Theory: A Course for Elementary Teachers* (with E. Marsden), modules used in the [Vermont Mathematics Initiative \(VMI\)](#) and the Massachusetts Mathematics Initiative (MMI), Copyright 2003.
- "[Water Rockets in Flight: Calculus in Action](#)" (with J. Ellis-Monaghan and A. Brizard), *UMAP/ILAP Modules 2002-2003: Tools for Teaching*, UMAP Modules in Undergraduate Mathematics and Its Applications, Bedford, MA: COMAP, (2003) 151-188.
- "Home Sweet Home: A Financial Incentive for the Lower Level Mathematics Course" (with J. Ellis-Monaghan), *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*, XI: 1, (Mar. 2001) 16-26.

- “[Microcosm to Macrocosm: Population Models in Biology and Demography](#)” (with J. Ellis-Monaghan), *UMAP Modules: Tools for Teaching 1999* (Modules in Undergraduate Mathematics and its Applications, Bedford, MA: COMAP), UMAP Unit Module 777, (2000) 39-80.
- “[How Many People are in Your Future? Elementary Models of Population Growth](#)” (with J. Ellis-Monaghan) in *Making Meaning: Integrating Science Through the Case Study Approach to Teaching and Learning*, written by several SMC professors and published by McGraw-Hill (1999) 42-80. A revised version of this case study was published in *Ecology Case Studies* to accompany Manuel Molles' *Ecology: Concepts and Applications*, 1<sup>st</sup> ed, McGraw-Hill (Oct. 1999).
- “[The Defect Relation for Meromorphic Maps on Parabolic Manifolds](#)”, *Memoirs of the American Mathematical Society* 139: 665 (May 1999).
- “Interdisciplinary Projects in a First Semester Calculus Course” (with J. Ellis-Monaghan), [PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies](#), IX: 1, (Mar. 1999) 39-55.
- Compendium of “The Defect Relation for Meromorphic Maps on Parabolic Manifolds,” *Dissertation Summaries in Mathematics* 1 (1-2), 75-82 (Fall 1996) 75-82.

## REFEREEING and REVIEWS

- Refereed manuscript for the journal [PRIMUS — Problems, Resources, and Issues in Mathematics Undergraduate Studies](#); Feb. 2010.
- MAA Online book review of *Teaching and Learning Middle Grades Mathematics* by R. Rubenstein, C. Beckmann, and D. Thompson; published at <http://www.maa.org/reviews/reviews.html>; Aug. 2004.
- Invited participant in a Teacher Advisory Panel (TAP) for the NCTM *Mathematics Teacher* journal; offered comments and suggestions for several issues of the journal; Fall, 2003 and Spring, 2004.
- Refereed manuscript for the journal [PRIMUS — Problems, Resources, and Issues in Mathematics Undergraduate Studies](#); Sep. 2003.
- MAA Online book review of *Fractals, Graphics, and Mathematics Education* by M. Frame and B. Mandelbrot; published at <http://www.maa.org/reviews/fractalsmathed.html>; Dec. 2002.
- MAA Online book review of *Learning to Teach and Teaching to Learn: Resources for Professional Development* by M. DeLong and D. Winter; published at <http://www.maa.org/reviews/lttl.html>; Apr. 2002.
- MAA Online book review of *Starting Our Careers: A Collection of Essays and Advice on Professional Development* from the Young Mathematicians' Network, edited by C. Bennett and A. Crannell; published at <http://www.maa.org/reviews/careers.html>; Jan. 2000.
- Reviewed CD-ROM for a calculus text published by Saunders College Publishing; May 1999.
- MAA Online book review of *Jacques Hadamard, A Universal Mathematician*, by Vladimir Maz'ya and Tatyana Shaposhnikova; published at <http://www.maa.org/reviews/hadamard.html>; Feb. 1999.
- Reviewed Table of Contents for Saunders College Publishing multivariable calculus text; Sep. 1997.

## GRANTS AND OTHER EXTERNAL FUNDING

- US-DOE NPD grant application; *Program for Academic Language in Mathematics and Science (PALMS)* (with co-PIs Elizabeth O'Dowd, James Nagle); \$1.3 million proposal submitted in March, 2011, but unfunded.
- SMC Faculty development grant; *Redesigning a Course on the History of Mathematics*; Summer 1997.
- NSF Vermont EPSCoR Small College Development Program, research grant entitled *The Defect Relation for Meromorphic Maps on Parabolic Manifolds*, Summer 1996.
- Project NExT (New Experiences in Teaching) Fellowship: room, board, conference fees partially funded by the Exxon Education Foundation; participated in three national mathematics conferences (the summer Mathfests in Seattle [1996] & Atlanta [1997] and the Joint Meetings of the American Mathematical Society and Mathematical Association of America in San Diego [Jan. 1997]).

## INVITED AND CONTRIBUTED ADDRESSES

- Governor's Math Institute in Vermont invited talk on *Investigating the Great Problems from Antiquity: Trisection, Duplication, and Quadrature* at the University of Vermont, Jun. 2016.

- Three Expanding Horizons Program invited math class visits with talks *Exponential Functions in Snowflakes, Carpets, and Paper Folding* at Hartford High School; *Number Pattern Challenges, Correlation Properties and Applications*, and *An Introduction to Bias and Margin of Error* at Vermont Academy; *Estimating the Circumference of the Earth – Following the Shadow of Eratosthenes* at Whitcomb High School; May 2016.
- Hudson River Undergraduate Mathematics Conference, Saint Michael’s College; contributed talk; *The Pythagorean Theorem: Some History, Derivations, and Extensions*; Colchester, VT; Apr. 2016.
- Expanding Horizons Program invited talks *Framing the Proof of the Pythagorean Theorem and Investigating Some Interesting Pythagorean Triple Properties, Exponential Functions in Snowflakes, Carpets, and Paper Folding, Number Pattern Challenges*, and *Encountering the Great Problems from Antiquity* for math classes at U-32 High School; Feb. 2016.
- Vermont Alpha Chapter of Pi Mu Epsilon invited annual lecture on *Exploring the Famous Problems from Antiquity: Angle Trisection, Cube Duplication, and Squaring the Circle* at Saint Michael’s College, Nov. 2015.
- Governor’s Math Institute in Vermont invited talk on *Framing the Proof of the Pythagorean Theorem and Investigating Pythagorean Triple Properties* at the University of Vermont, Jun. 2015.
- Expanding Horizons Program invited talks *Correlation Properties and Applications* and *Bias and Margin of Error* for math classes at Brattleboro High School; May 2015.
- LEAP retreat; invited talk on *Vocation*; St. Anne’s Shrine, Isla La Motte; Mar. 2015.
- Expanding Horizons Program invited talk *Bias and Margin of Error* for secondary and middle level math classes at Canaan High School; Mar. 2015.
- Information Technology workshop with Anne Crowley, *CANVAS and Analytics: Measuring Student Success*; Saint Michael’s College, Feb. 2015.
- Fall 2014 Vermont Council of Mathematics Teachers (VCTM) annual conference presentation *Encountering the Great Problems from Antiquity: Hands-On Trisection, Duplication, and Quadrature*; Oct. 2014.
- Governor’s Math Institute in Vermont invited talk on *Estimating the Circumference of the Earth: Following in the Shadow of Eratosthenes* at the University of Vermont, Jun. 2014.
- Expanding Horizons Program invited talks *Exponential Functions in Snowflakes, Carpets, and Paper Folding* and *Correlation Properties and Applications* for math classes at Brattleboro High School; Jun. 2014.
- Expanding Horizons Program invited talks *Bias and Margin of Error* for two statistics classes and *Exponential Functions in Snowflakes, Carpets, and Paper Folding* for mathematics classes at Milton High School; Mar. 2014.
- Expanding Horizons Program invited talk *Exponential Functions in Snowflakes, Carpets, and Paper Folding* for math classes at Canaan High School; Mar. 2014.
- Expanding Horizons Program invited talks *Exponential Functions in Snowflakes, Carpets, and Paper Folding*, a lesson on Compound Interest, and *Correlation Properties and Applications* for math classes at Danville High School; Nov. 2013.
- Governor’s Math Institute in Vermont invited talk on *Number Pattern Challenges* at the University of Vermont, Jun. 2013.
- Expanding Horizons Program invited talks *Exponential Functions in Snowflakes, Carpets, and Paper Folding* and *Bias and Margin of Error* for math and statistics classes at Brattleboro High School; May and Jun. 2013.
- Expanding Horizons Program invited talk *Correlation Properties and Applications* for math classes at BFA-Fairfax; May 2012.
- LEAP retreat; invited joint talk with my wife on *Marriage*; Bishop Booth Center, Burlington; Mar. 2012.
- Expanding Horizons Program invited talk *Exponential Functions in Snowflakes, Carpets, and Paper Folding* for math classes at Craftsbury Academy; Oct. 2011.
- Expanding Horizons Program invited talk *Correlation Properties and Applications* for 6<sup>th</sup> graders from Franklin Elementary School; May 2011.
- Winter Teaching With Technology invited talk *Integrating Clickers, the Smart Board, and Tegrity into the Classroom: Some Background, Surprising Results, and Suggestions*; SMC; Jan. 2011.
- Expanding Horizons Program invited talk *Exponential Functions in Snowflakes, Carpets, and Paper Folding* for math classes at Enosburg Falls and South Burlington High Schools; Dec. 2010.
- Expanding Horizons Program invited talk *Correlation Properties and Applications* for students from Swanton, Highgate, and Franklin Elementary Schools; Mar. 2010.
- Expanding Horizons Program invited talks *Bias and Margin of Error in Statistical Analysis* and *Correlation Properties and Applications* for Canaan High School math classes; Mar. 2010.

- Winter Teaching With Technology invited joint talk with Prof. Melinda Micheletto, *Keeping Students on Track (Clickers)*; SMC; Jan. 2010.
- Expanding Horizons Program invited workshop *Bias and Margin of Error in Statistical Analysis* for advanced Swanton elementary students; Dec. 2009.
- Invited panel discussion with Prof. Melinda Micheletto, *Clicker 101*; SMC; Oct. 2009.
- Expanding Horizons Program invited talk *Bias and Margin of Error in Statistical Analysis* for Canaan High School math classes; Apr. 2009.
- Expanding Horizons Program invited talk *Bias and Margin of Error in Statistical Analysis* for Vermont Commons High School math classes; Oct. 2008.
- LEAP retreat; invited joint talk with my wife on *Marriage*; Round Hearth Retreat House, Stowe; Sept. 2008.
- Expanding Horizons Program invited talk *Exponential Functions in Snowflakes, Carpets, and Paper Folding* for Canaan High School math classes; Mar. 2008.
- Burlington Diocesan Youth Congress; invited joint marriage vocation talk with my wife; SMC; Aug. 2007.
- Expanding Horizons Program invited talk *An Introduction to Bias and Margin of Error* for Green Mountain High School math classes; Nov. 2006.
- Association of Teachers of Mathematics in New England Conference; invited mini-course; *Correlation Properties and Applications: Important Statistical Concepts for the Middle School Mathematics Classroom*; Killington, VT; Oct. 2006.
- NSF Math and Science Partnership Learning Network Conference; invited address; *From Teacher Content Knowledge to Student Learning: How VMP Mathematicians and Educators are Making a Difference in Vermont* (with Regina Quinn, the Project Director of the Vermont Mathematics Partnership); Washington, DC; Jan. 2006.
- American Mathematical Society/Mathematical Association of America, Joint Mathematics Meetings; contributed talk in “Professional Development Programs for K-12 Teachers” session; *Experiences with an In-Service Professional Development Program: The Vermont Mathematics Partnership and Its Impact on School Systems in Vermont*; San Antonio; Jan. 2006.
- LEAP retreat; invited joint talk with my wife on *Marriage*; Phillipsburg, Quebec Retreat House; Jan. 2006.
- New Student Convocation; invited address; *Exploring the WONDERS of Saint Michael’s College!*; Saint Michael’s College; Aug. 2005.
- Mathematical Association of America, Summer Mathfest; contributed talk; *A Mathematics Education Seminar for K-12 Teachers*; Providence, RI; Aug. 2004.
- Editing and Design: Online & Newspaper Management I: Online classes (JO 411B & 433B); invited talks; *Statistical Studies: An Introduction and Some Precautions*, Saint Michael’s College; Nov. 2003, Feb. 2004.
- Committee on Spirituality and the Intellectual Life panel discussion on *Many Ways of Coming to Truth*; invited panelist presentation; Saint Michael’s College; Mar. 2003.
- Mathematics Seminar class (MA 410 A); invited talk; *An Analysis of Lotteries: How Much Can You Really Expect to Win?*; Saint Michael’s College; Feb. 2003.
- Norwich University Mathematics Colloquium Series; invited talk; *The Fundamental Theorem of Algebra: Some History and a Proof*; Northfield, VT; Oct. 2002.
- Mathematical Association of America, Summer Mathfest; contributed talk; *Secondary Education Seminar in Mathematics: A Capstone Experience*; Burlington, VT; Aug. 2002.
- American Mathematical Society/Mathematical Association of America, Joint Mathematics Meetings; Project NExT Mathematics Education Swap Session presentation ; *An Overview of a Capstone Course for Secondary Education Mathematics Majors*; San Diego; Jan. 2002.
- American Mathematical Society/Mathematical Association of America Joint Mathematics Meetings; contributed talk; *Buying Your Dream Home: A Project in Financial Mathematics*; New Orleans; Jan. 2001.
- Project CLUME (Cooperative Learning in Undergraduate Mathematics Education) National Conference; contributed talk; *Win, Lose, or Draw? Using Lottery Cooperative Learning Projects in a Liberal Arts Mathematics Course*; South Bend, IN; Jun. 2000.
- LEAP retreat; invited talk on *Vocation*; Rock Point Retreat House; January 30, 2000.
- Adolescent Development class (ED 271 A); invited talk; *What is Mathematics? An Example and Brief Overview*; Saint Michael’s College; Nov. 1999.

- Mathematical Association of America, Summer Mathfest; contributed talk; *The Powerball Lottery Game: How Much of a Chance Do You Really Have to Win?*; Providence, RI; Aug. 1999.
- National Council of Teachers of Mathematics, Eastern Regional Conference; invited presentation; *Biological and Demographic Modeling: An Application of Calculus*; Hartford, CT; October, 1998.
- Wellesley College Mathematics Colloquium; invited talk; *An Historical Overview and Proof of the Fundamental Theorem of Algebra*; Wellesley, MA; Oct. 1998.
- Mathematical Association of America, Summer Mathfest; contributed talk; *How Many People are in Your Future? Developing Models in Biology and Demography to Motivate Concepts in a First Semester Calculus Course* (with J. Ellis-Monaghan); Toronto; Jul. 1998.
- Invited presentation/workshop, State University of New York at Potsdam; *Applications of Maple in Calculus and Beyond*; Potsdam, NY; Mar. 1998.
- University of Vermont Mathematics Colloquium; invited talk; *Value Distribution Theory of Meromorphic Functions*; Burlington, VT; Nov. 1997.
- Mathematical Association of America, Summer Mathfest; contributed talk; *Calculus Laboratories at Saint Michael's College: Achievements and Challenges*; Atlanta; Aug. 1997.
- Hudson River Undergraduate Mathematics Conference, Williams College; contributed talk; *The Fundamental Theorem of Algebra: A Bit of its History and a Proof*; Williamstown, MA; Apr. 1997.
- Mathematical Association of America, Northeast Regional Meeting, University of Massachusetts at Boston, contributed talk; *Aspects of Reform: Calculus Laboratories at Saint Michael's College*, (with Z. Kadas); Boston; Nov. 1996.
- American Mathematical Society/Mathematical Association of America, Summer Mathfest, University of Vermont; contributed talk; *The Defect Relation for Meromorphic Maps on Parabolic Manifolds*; Burlington, VT; Aug. 1995.
- Mathematical Association of America, Missouri Section Meeting, Central Missouri State University; contributed talk; *The Defect Relation in Value Distribution Theory*; Warrensburg, MO; Apr. 1995.
- Student Chapter of the Mathematical Association of America, Northeast Missouri State University; invited talk; *The Fundamental Theorem of Algebra*; Kirksville, MO; Jan. 1995.

## SHORT COURSES AND WORKSHOPS ATTENDED

- Providence Mathfest Project NExT short course; *Introductory Statistics*; Aug. 2004.
- Woodbury College; AVIC Master Teacher Symposium; Oct. 2003.
- Burlington Mathfest Project NExT short course; *Teaching an Introductory Statistics Course*; Aug. 2002.
- Toronto Mathfest Project NExT short course; *A New Approach to Math for Elementary Teachers*; Jul. 1998.
- Atlanta Mathfest Project NexT special session; *Undergraduate Student Research in Mathematics – How to Make it Work*; Atlanta, GA; Aug. 1997.
- Foundation for Excellent Schools Planning and training workshop; *Green Mountain Excellent Schools Program*; Essex Junction, VT; Feb. 1997.
- San Diego Joint AMS/MAA Meetings Mini-course; *Teaching a History of Mathematics Course*; Jan. 1997.
- Seattle Mathfest Project NexT special session; *Teachers Enhancing the Mathematical Preparation of Elementary School Teachers*; Aug. 1996.
- San Francisco Joint AMS/MAA Meetings Mini-course; *Calculus in Context*; Jan. 1995.

## OTHER PROFESSIONAL ACTIVITIES

- Instructor/consultant for the Vermont Mathematics Initiative (<http://www.emba.uvm.edu/~gross/>), funded by the state of Vermont, school districts, and other programs as a comprehensive, master's level, professional development program for K-6 mathematics elementary teacher leaders statewide. Summers of 2001–03, 06, 08, 10, 13, 14, 15, 16, Fall 2015, Spring 2016: Participated in course development/instructional teams for *Introduction to Mathematics as a Second Language, Algebra and Functions, Algebra and Geometry, Number Theory, Probability-Geometry-Measurement, Calculus II*.
- Instructor/developer for the Vermont Mathematics Partnership, funded by the NSF/DoE to promote student math achievement through improved teacher quality, curricular development, school support, and leadership.

Summer of 2003: Participated in a course development/instructional team for initial *Introduction to Mathematics as a Second Language* for Milton elementary teachers and paraprofessionals.

Summers of 2004 – 07: Worked on development/instructional teams for *Algebra & Functions* and *Linear Functions & Beyond* courses for Milton and S. Burlington elementary teachers;

Participated in a development/instructional team for *Proportional Reasoning in the Middle Grades, Making Informed Decisions, Geometry in the Middle Grades* courses for Vermont teachers.

- Faculty consultant for June week-long Advanced Placement (AP) Calculus Reading at Clemson University: 1997-98; Colorado State University: 1999-2003, 2005-06; Louisville: 2007; Kansas City: 2008-09 (table leader), 2010-11, 2012 (table leader), 2013 (invited table leader, question team member), 2015 (table leader).
- Project NExT faculty consultant, serving as a resource person for an assigned new NExT Fellow and responding to any specific questions that may arise; 2015-16, 2013-14, 2010-11, 2008-09, 2007-08.
- Co-organizer of San Diego Joint AMS/MAA Meetings Project NExT panel discussions; Jan. 2002; helped coordinate *Introduction to the Hiring Process, Successful Programs that Integrate Mathematics with Other Disciplines, Time for Your First Sabbatical...Now What?*
- Organizer of New Orleans Joint AMS/MAA Meetings Project NExT panel “Formulating a Plan for Your Professional Future” ; Jan. 2001; invited panelists, moderated discussion, published descriptive article for session for the MAA newsletter *FOCUS* at [http://www.maa.org/features/professional\\_future.html](http://www.maa.org/features/professional_future.html).
- Organizer of Atlanta Mathfest Project NExT panel discussion *Publishing in Research Journals*; Aug. 1997.

## SUPERVISION OF UNDERGRADUATE INDEPENDENT AND CAPSTONE PROJECTS

### *Hudson River Undergraduate Mathematics Conference*

- Williams College, Apr. 2013: Amber Emmell: “Leonhard Euler and the Basel Problem,” Jessica George: “Search for General Solutions of the Cubic, Quartic, and Quintic Equations”
- Keene State College, Apr. 2010: Chris Carlos: “Analysis of Pseudoprimes & Carmichael numbers,” Jason DeCoteau: “Pythagorean Theorem Origins”
- Union College, Apr. 2009: Brittany Baker: “Detecting Forged Signatures Using Wavelet Decomposition,” Denis Lemanski: “Human Fractals”
- St. Lawrence University, Apr. 2008: Nick Bruno: “Some Fibonacci Sequence Congruences Modulo a Prime,” Emily Dowd: “Euler’s Line: Background Information and its Interesting Properties,” Marisa Mulligan: “Heron’s Formula: Background and a Proof,” Thomas Raymond: “Euler’s Theorem: A Property for Quadrilaterals”
- Siena College, Apr. 2007: Katie Crawford: “An Overview of a Continuous Nowhere Differentiable Function,” Carrie Leonard: “A Strategy to Win Monopoly,” Theresa Ryan: “A Historical and Mathematical Look at Solutions to the Cubic and Quartic Equations,” Tate Shippen: “An Overview of the RSA Cryptosystem”
- Westfield State College, Apr. 2006: Wayne Younghans: “Stirling Numbers”
- Williams College, Apr. 2005: Megan Tatro: “How to Win in Final Jeopardy! A Game Theoretic Approach”
- Mt. Holyoke College, Apr. 2004: Aaron Desrochers: “Math and Music,” Ben Epstein: “Cantor Set Topology”
- Union College, Apr. 2003: Heather Rubenstein: “What you Teach,” Amanda White: “Wallpaper & Frieze Patterns”
- Siena College, Apr. 1999: Selina Schumann: “Infinitely Many Primes of Certain Forms”
- Union College, Apr. 1998: Beth White: “Mathematics as a Form of Art,” Joe Kudrle: “Markov Chains Applied to Everyday Board Games,” Wendy Shepard: “Gambling and Mathematics”

### *Saint Michael’s Student Symposium Panels*

- Spring 2015, *Advanced Topics in Mathematics* with talks about final projects in MA 315 by Catherine Corrigan, Brianna Healy, and Melissa Westland and in MA 304 by Rebecca Rouleau
- Spring 2014, *Multivariable Calculus and Advanced Topics in Mathematics* with talks about MA 211 honors projects by Sarah Daly, Ezekiel Geffken, Alana Houlihan, and Samantha Tremblay, and talks about MA 410 seminar projects by Katherine Garaffa (seminar advisee), Michael Gilbert, and Ryota Ishisaka
- Spring 2013, *History of Mathematics and Advanced Topics in Mathematics* with talks about final projects in MA 304 by Amber Emmell, Jessica George, Michael Gilbert, and Stephanie Nadow, and other MA 410 talks
- Spring 2003, *From Baseball to Brain Size to Liberal Arts Colleges: Some Interesting Statistics Projects* with talks by Will Andrews, Sarah Gabriele, Joe Guarino, Caitlin Reen, and Mike Ulshoeffter
- Spring 2001, *From Number Theory to Statistics: A Taste of the History of Mathematics* with talks by Julie Brownell, Corinna Desilets, Becky Gates, and Angela Lavoie; Adrienne Riel, MA 304 student, won the English Dept. Scholarly Writing Prize for “Alexandria: The Birthplace of Problems in Modern Cartography”

### *Vermont Academy of Arts and Sciences Intercollegiate Student Symposium*

- Champlain College, Apr. 2005, Jess Scheld: “Fun with Fractals: Spirals, Snowflakes, and Sierpinski Gaskets”
- Saint Michael’s College, Apr. 1998, Cheryl Messier: “The Newcomer to the Tessellation Stage”

### Independent Study Students

- Spring-Summer 2009, Ashley Remick: “Teaching-Appling Probability & Statistics in High School Math”
- Fall 1999, Taylor Abel: “The Historical Development of Calculus”
- Fall 1996, Rob Troy: “Bertrand’s Postulate and the Sums of Distinct Primes”

## COMMITTEE AND CAMPUS SERVICE

- 2016-present Member of the Enrollment and Marketing Committee
- 2009-present Faculty advisor to the men’s basketball team
- 2008-present Married couple member of LEAP Secretariat
- 1997-present Faculty advisor for summer academic advising days
- 2010-2015 Elected Faculty Representative to the Board of Trustees
- 2012-2015 Chair of Phi Beta Kappa Gamma Chapter Auditing Committee
- 2009-2015 Coordinator of Mathematics Department Colloquium Series
- 2012-2013 Member of the Vice President for Enrollment Search Committee
- 2010-2012 Faculty Career Advisory Committee
- 2009-2015 Chair of Saint Michael’s Mathematics Department
- 2009-2012 Chair of Search Committees for tenure track math/statistics position, quantitative skills/instructor position, visiting full time replacement position
- 2009-2010 Member of Phi Beta Kappa Visiting Scholar Arrangements Committee (Dr. M. McCormick)
- 2010 Faculty participant in Senior Class graduation committee selecting student award winners
- 2008, 2014 Member of Saint Michael’s United Way Committee
- 2007-2009 Elected member of the Pontigny Society Advisory Board
- 2007-2008 Member of Phi Beta Kappa Visiting Scholar Arrangements Committee (Dr. S. Harding)
- 2006-2008 Enrollment Management Committee, chair in 2007-08
- 2006-07 Enrollment Management Committee liaison to Marketing Advisory Council
- 2004-06 Faculty Council
- 2004-06 Faculty Evaluation of Administrators Committee
- 2005-2006 Chair of Phi Beta Kappa Visiting Scholar Arrangements Committee (Dr. R. Graham)
- 2004-2005 President of local Gamma Chapter of Phi Beta Kappa
- 2004-2005 President’s Advisory Committee on Saint Anne’s Shrine
- 2003-04 Dispute Resolution Panel
- 2003-present MAA liaison coordinator for Mathematics Department and SMC
- 2002-2004 Curriculum and Educational Policy Committee
- 2003-2004 Davis Educational Foundation planning group to design seminar for new SMC faculty
- 2002-2003 President of local Alpha Nu Chapter of Delta Epsilon Sigma
- 1998-2001 Admissions Committee
- 2000-2001 Luce Scholarship Committee
- 2000 Provost Research Scholarship Committee
- 1996-1998 Financial Aid Committee
- 1997-2008 Local organizer/session chair, Hudson River Undergraduate Mathematics Conference (HRUMC); faculty sponsor/advisor for student speakers in 1997, 98, 99, 2003-2015
- 1995-97, 03 Organizer (with L. Simons), William Lowell Putnam Mathematical Competition
- 2003-2004 Davis Foundation planning group, which designed a Seminar for new SMC faculty
- 1997-2015 Interviewer for Admissions Office
- 1996-2015 Participant in Admissions Office open houses and virtual open houses
- 2000, 01, 05, 09, 10, 11, 13 Faculty visitor to First Year dormitories for New Student Programs
- 1997-2001, 04 Advisor at Registrar’s online registration sessions for students changing schedules



- 1996-1999 Independent study supervisor for 1 math education student in 2009, 1 history of math student in 1999, 2 complex analysis students in 1997, and 1 number theory student in 1996.

## OTHER SERVICE

- 2011-present Diocesan Review Board member, Roman Catholic Diocese of Burlington
- 2005-present Lector, Saint Francis Xavier local parish
- 2014 Participant in SOAR faculty panel for incoming Saint Michael's students
- 2007-2008 Co-chair with Jo Ellis-Monaghan of the Program Committee for the Spring 2008 Northeast Section MAA meeting held at Saint Michael's College in May, 2008.
- 2001-2009 Organized panels and presentations on careers in mathematics:  
 2016: Six SMC math alumni scheduled to participate in October career panel: *Reflections on a Mathematics Liberal Arts Education: Experiences of our Graduates*.  
 2009: Five SMC math alumni participated in the Homecoming weekend panel  
 2007: Gordon Hines ('05) and a colleague at Travelers presented "What is an Actuary?"  
 2004: Five SMC math education alumni participated in the panel *Teaching Mathematics with a Liberal Arts Education: Experiences of our Graduates*.  
 2002: Tsana Nobles of VT Life presented *Is an Actuarial Career Right for You?*  
 2001: Brian Adams presented *A Graduate Student Perspective: Application of Mathematics to HIV Treatment* and six SMC math alumni participated in the panel *Uses of a Liberal Arts Education: Experiences of Our Graduates in Mathematics*.
- 2003-2004 Invited participant in a Teacher Advisory Panel (TAP), offering comments and suggestions for several editions of the NCTM journal *Mathematics Teacher*.
- 2002-2013 Secretary/Treasurer, Pine Grove Terrace Homeowner's Association.
- 1997-2013 Treasurer, Winooski Knights of Columbus Council # 2284.
- S02, S09, S16 Supervisor on MOVE-sponsored service trips to Selma, AL and Buffalo, NY (twice)

## MATHEMATICS CONFERENCES

National Joint Meetings of the American Mathematical Society and Mathematical Association of America

- Jan. 2006 San Antonio, TX
- Jan. 2002 San Diego, CA
- Jan. 2001 New Orleans, LA
- Jan. 1997 San Diego, CA
- Jan. 1995 San Francisco, CA
- Jan. 1994 Cincinnati, OH

National MAA Summer Mathfest (sponsored by AMS/MAA before 1997)

- Aug. 2004 Providence, RI
- Aug. 2002 Burlington, VT
- Aug. 1999 Providence, RI
- Jul. 1998 Toronto, ON
- Aug. 1997 Atlanta, GA
- Aug. 1996 Seattle, WA
- Aug. 1995 Burlington, VT

Project CLUME (Cooperative Learning in Undergraduate Mathematics Education) National Conference

- Jun. 2000 South Bend, IN

Hudson River Undergraduate Mathematics Conference

- Apr. 2016 Saint Michael's College
- Apr. 2013 Williams College
- Apr. 2008 Saint Lawrence University
- Apr. 2007 Siena College

- Apr. 2006 Westfield State College
- Apr. 2005 Williams College
- Apr. 2004 Mount Holyoke College
- Apr. 2003 Union College
- Apr. 2001 Skidmore College
- Apr. 2000 Vassar College
- Apr. 1999 Siena College
- Apr. 1998 Union College
- Apr. 1997 Williams College

Association of Teachers of Mathematics in New England Fall Conference

- Oct. 2006 Killington, VT

Northeast Section MAA Meeting

- May 2008 Saint Michael's College
- Nov. 1998 Western Connecticut State University
- Nov. 1997 University of Massachusetts at Boston
- Nov. 1996 Salem State College

Northeast Section MAA Dinner Meeting

- Fall 2012 Saint Michael's College
- Spring 1999 Saint Michael's College
- Spring 1998 Norwich University
- Spring 1997 Lyndon State College
- Spring 1996 University of Vermont

**OTHER CONFERENCES AND ACTIVITIES**

- 2016 Co-organizer (with the Vermont Math Leadership Council) of Vermont Math Teacher Leader Conference held at Saint Michael's
- 1996-present, Member of The Pontigny Society, a faculty and staff focused program of Edmundite Campus Ministry whose purpose is to build up the Catholic character of Saint Michael's College.
- Summers 2004 – 06, Participant in the Gerald Dupont Catholic Intellectual Heritage Seminar, sponsored by the Graduate Theology program and the Edmundite Center for Faith & Culture.
- Fall 1999, Participant in SMC faculty and local teachers "teaching dialogues" on P. Palmer's *The Courage to Teach* (1998, Jossey-Bass) and co-sponsored by TRC and Program for Spirituality & Education.
- Feb. 1999, Participant in the Emmaus Retreat weekend sponsored by Edmundite Campus Ministry.
- Jun. 1996, Faculty Fellow at Collegium, the eight-day Summer Institute on Faith and the Intellectual Life; Fairfield University.