

Patti Frazer Lock

Curriculum Vitae

October 2008

Cummings Professor of Mathematics, and Chair,
Department of Mathematics, Computer Science, and Statistics
St. Lawrence University
Canton, NY 13617
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Canton, NY 13617
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Education:

- Ph.D. in Mathematics May 1981
University of Massachusetts, Amherst, MA
Thesis Advisor: David J. Foulis
- M.A. in Mathematics May 1978
University of Massachusetts, Amherst, MA
- B.A. in Mathematics May 1975
Colgate University, Hamilton, NY

Positions held:

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| Sept. 2002 – present | Cummings Professor of Mathematics,
Chair, Department of Mathematics, Computer Science, and Statistics |
| Sept. 1994 – present | Professor of Mathematics |
| Sept. 1987 - August 1994 | Associate Professor of Mathematics |
| Sept. 1981 - Aug. 1987 | Assistant Professor of Mathematics
St. Lawrence University, Canton, New York |
| Jan. 1981 - May 1981 | Instructor of Mathematics
United States Naval Academy, Annapolis, Maryland |
| Sept. 1975 - Dec. 1980 | Teaching Assistant/Associate, Dept. of Mathematics and Statistics
University of Massachusetts, Amherst, Massachusetts |

Major Areas of Interest:

MATHEMATICS EDUCATION (encompassing all levels of mathematics education, but with particular emphasis on calculus reform)

GRAPH THEORY (hamiltonian-connectedness properties of graphs and social network theory)

Professional Organizations:

American Mathematical Society
Mathematical Association of America
Association for Women in Mathematics
Phi Beta Kappa
Pi Mu Epsilon
Omicron Delta Kappa

Professional Development

Books Published:

Applied Calculus, Third Edition, Hughes-Hallett, Gleason, Lock, et.al., John Wiley & Sons, 2006.
Applied Calculus, Second Edition, Hughes-Hallett, Gleason, Lock, et.al., John Wiley & Sons, 2003.
Applied Calculus, First Edition, Hughes-Hallett, Gleason, Lock, et.al., John Wiley & Sons, 1999.
Brief Calculus, Preliminary Edition, Hughes-Hallett, Gleason, Lock, et.al., John Wiley & Sons, 1997.
Applied Calculus, Preliminary Edition, Hughes-Hallett, Gleason, Lock, et.al., John Wiley & Sons, 1996.
I am the Project Director, with Hughes-Hallett, for these texts.

Calculus, Single Variable, Fifth Edition, Hughes-Hallett, Gleason, Flath, Lock, et.al., John Wiley & Sons, 2009.
Calculus, Single Variable, Fourth Edition, Hughes-Hallett, Gleason, Flath, Lock, et.al., John Wiley & Sons, 2005.
Calculus, Single Variable, Third Edition, Hughes-Hallett, Gleason, Flath, Lock, et.al., John Wiley & Sons, 2002.
Calculus, Single Variable, Alt. Edition, Hughes-Hallett, Gleason, Flath, Lock, et.al., John Wiley & Sons, 2000.
Calculus, Single Variable, Second Edition, Hughes-Hallett, Gleason, Flath, Lock, et.al., John Wiley & Sons, 1998.

Multivariable Calculus, Fifth Edition, McCallum, Hughes-Hallett, et.al., John Wiley and Sons, 2009.
Multivariable Calculus, Fourth Edition, McCallum, Hughes-Hallett, et.al., John Wiley and Sons, 2005.
Multivariable Calculus, Third Edition, McCallum, Hughes-Hallett, et.al., John Wiley and Sons, 2002.
Calculus, Single and Multivariable, Third Edition, McCallum, Hughes-Hallett, et.al., John Wiley and Sons, 2002.

Functions Modeling Change, Third Edition, Connally, Hughes-Hallett, et.al., John Wiley and Sons, 2007.
Functions Modeling Change, Second Edition, Connally, Hughes-Hallett, et.al., John Wiley and Sons, 2004.

Algebra, Preliminary Edition, McCallum, Hughes-Hallett, et.al., John Wiley & Sons, 2009.
Algebra, Draft Version, McCallum, Hughes-Hallett, et.al., John Wiley & Sons, 2007.

All of these books also appear in other variations and in many different languages.

Books In Preparation:

Applied Calculus, Fourth Edition, McCallum, Connally, Lock, et.al., John Wiley & Sons, copyright date to be 2010.

Mathematics for Biology Students, Preliminary Edition, Hughes-Hallett, et.al., John Wiley & Sons.
 Title and order of authors is tentative. Copyright date to be determined.

Refereed Publications:

“Using Clickers to Enhance Learning in Upper-Level Mathematics Courses”, invited chapter in an MAA Notes volume on Using Personal Response Systems in Teaching Mathematics, to appear.

“An Integrated Course in Mathematics and Statistics for Biology Students”, with D. Flath, J. Tecosky-Feldman, M. Caplan, R. Lock, invited chapter in an MAA Notes volume on Mathematics and Biology, to appear.

“Introducing Statistical Inference to Biology Students through Bootstrapping and Randomization”, with R. Lock, invited paper, PRIMUS, Special Issue: Integrating Mathematics and Biology, Vol. XVIII, Number 1, January-February 2008.

“Another Hundred Days: Social Contacts in a Senior Class”, with A. Portnova, B. Ladd, and C. Zimmerman, Connections, accepted.

"Forbidden Subgraphs of Graphs Uniquely Hamiltonian-Connected from a Vertex", with G. Hendry, C.J. Knickerbocker, and A.M. Sheard, Discrete Mathematics, 187 (1998), pp. 281-290.

"Reflections on the Harvard Calculus Approach", Primus (Problems, Resources, and Issues in Mathematics Undergraduate Studies), Volume IV, Number 3 (1994), pp. 229-234.

"On the Structure of Graphs Uniquely Hamiltonian-Connected from a Vertex", with C.J. Knickerbocker and A.M. Sheard, Discrete Mathematics, 88 (1991), pp. 33-48.

"A Survey of Graphs Hamiltonian-Connected from a Vertex", with A. Dean, C.J. Knickerbocker and A.M. Sheard, Graph Theory, Combinatorics, and Applications, Proceedings of the Sixth International Conference on the Theory and Applications of Graphs, G. Chartrand et.al., eds., John Wiley and Sons, 1991, pp. 297 - 313.

"The Minimum Size of Graphs Hamiltonian-Connected from a Vertex", with C.J. Knickerbocker and A.M. Sheard, Discrete Mathematics, 76 (1989), pp. 277-278.

"In-Class Data Collection Experiments to Use in Teaching Statistics", with R. Lock, Proceedings of the Second Conference on the Teaching of Statistics, April, 1987, pp. 83-86.

"Investigating Connections among Quantum Logics, Part II: Quantum Event Logics", with G. Hardegree, International Journal of Theoretical Physics, Vol.24, No.1,(1985), pp. 55-61.

"Investigating Connections among Quantum Logics, Part I: Quantum Propositional Logics", with G. Hardegree, International Journal of Theoretical Physics, Vol.24, No.1,(1985), pp. 43-54.

"Tensor Product of Generalized Sample Spaces", with R.Lock, International Journal of Theoretical Physics, Vol.23, No.7,(1984), pp. 629-641.

"Charting the Labyrinth of Quantum Logics: A Progress Report", with G. Hardegree, a chapter in Current Issues in Quantum Logic, Beltrametti and van Fraassen (eds.), Plenum Press, (1981), pp. 53-76.

"Weight Functions on Extensions of the Compound Manual", with D.J. Foulis and C.H. Randall, Glasgow Mathematical Journal, 21 (1980), pp. 97-101.

Additional Publications:

“Best Teaching Practices”, with R. Lock, St. Lawrence Magazine, Spring 2003.

Additional Publications: (continued)

"Formulating a Plan for Your Professional Future", Focus, Vol. 21, No. 5, May/June 2001, pp. 7-9.
(Transcript of a panel discussion held at the national meetings.. I was one of four panelists.)

"Notes on Balancing Career and Family", Focus, Vol. 21, No. 5, May/June 2001, pp. 10-11.
(Transcript of a panel discussion held at the national meetings. I was one of four panelists.)

Letter to the Editor on calculus reform, published in the Chronicle of Higher Education, March 14, 1997.

"Brief Calculus for Business, Social Sciences, and Life Sciences", Focus on Calculus, Winter 1997, pp.5-6.

"Applied Calculus for Business, Life, and Social Sciences, Focus on Calculus, Spring 1995, pp 7-8.

"The Computer: Teaching Tool of the '90s and Beyond", St. Lawrence University Magazine, Spring 1994, p. 64.

"Student Feedback on the CCH Approach", with S. Egeland, Focus on Calculus, Fall 1993, p. 4.

"Constructing Graphs Uniquely Hamiltonian-Connected from a Vertex", with Debbie Kirchdorfer, C.J. Knickerbocker and A.M. Sheard, Technical Report, 1987.

"Categories of Manuals", Ph.D. dissertation, University of Massachusetts, Amherst, 1981.

Miscellaneous:

Member of the Calculus Consortium based at Harvard University, a group of 14 people working in mathematics education reform and developing new textbook materials. Funded by several grants from the National Science Foundation, PI: Deb Hughes-Hallett, Harvard. 1994 – 1999.

Senior Member, CCHE (Calculus Consortium for Higher Education). Founding member. Service organization to use royalties to promote mathematics education reform, 1999 – 2007.

Senior Member, MCWG (Mathematics Consortium Working Group). Since it was incorporated in 1999.
Board of Directors (6 members), since 2004.

Member, Committee on the Undergraduate Program in Mathematics, Mathematics Association of America, since August 2008.

Editorial Board, PRIMUS Journal (Problems, Resources, Issues in Mathematics Undergraduate Studies), since May 2006.

Consultant to Project NExT, a national professional development program of the MAA for new or recent Ph.D.s in the mathematical sciences, since June 1999.

Awarded \$4500 NSF grant to host the Hudson River Undergraduate Mathematics Conference. Award was made in June 2007 for conference in April 2008. Principle Investigator.

Hudson River Undergraduate Mathematics Conference Steering Committee, since 2006. Chair, 2007 – 2008.
Hudson River Undergraduate Mathematics Conference Host Committee Chair, 2007-2008

Advisory Board, Math Horizons, an undergraduate math journal published by the MAA, 1999 – 2003.

External Program Review Committee, Department of Mathematics and Computer Science, University of the South, Sewanee, TN, Fall 2008.

Miscellaneous: (continued)

External Consultant, SUNY-Geneseo Mathematics Department, October 2006.

Received Technology for Teaching Grant, St. Lawrence University, July 2005, to investigate the use of a Personal Response System in the Classroom. My work with the Personal Response System has been included in Best Practices with Technology in Liberal Arts Education on the St. Lawrence University website, 2006.

Consultant on a Howard Hughes grant proposal to revise the way mathematics is taught to biology students at Cornell University. The math courses there are to be revised to use the materials currently under development by me and my co-authors, and the biologists there will collaborate with us on the project. David Shalloway, Professor of Biochemistry, Cornell University is the PI. Grant was submitted August 2005 and denied, but the collaborative work with Cornell continues.

Served on two subcommittees (“Mathematical Ideas, Themes, Topics: The Content of the Mathematics Major” and “Recruitment and Retention of Mathematics Majors”) of the national Committee on the Undergraduate Program in Mathematics, of the Mathematics Association of America, resulting in the publication of *CUPM Curriculum Guide 2004*.

Selected as the keynote speaker to present the annual Randolph Lecture on Mathematics Education, Fall meeting of the Seaway Section of the Mathematics Association of America, Rochester, NY, November 2003.

Selected to present the annual Student Workshop, national MAA Mathematics Meetings, Burlington, VT, August 2002.

Departmental Reviewer (with Michael Gage of University of Rochester) for the SUNY-Geneseo Department of Mathematics. Conducted a comprehensive review of the department, Spring, 2004.

Outside advisor for a National Science Foundation Proposal entitled “Integrating Historical Studies of Calculus with the Teaching and Learning of Calculus”. Principal Investigator Ronald S. Calinger, multiple schools involved, 2001.

Outside consultant on a proposal by Haverford College to the Keck Foundation, on the teaching of calculus, 2002.

An article about my use of Minesweeper to teach mathematical proofs appeared in American Scientist: “Addicted to Logic”, by Dana MacKenzie, American Scientist, Vol. 87, May/June 1999, pp. 217-218.

Featured on the National Public Radio show “The Best of Our Knowledge” in a show on math education reform, May 1997.

Reviewer for the National Science Foundation, Course and Curriculum Development Proposals, Washington, DC, July 1997.

Consultant to Hamilton College, 1996-97.

Outside reviewer for miscellaneous tenure and promotion cases.

Winner of the J. Calvin Keene faculty award, St. Lawrence University, September 1994.

Organized and hosted (with C. Knickerbocker and M. Sheard) the Eighth Northeast Symposium on Graph Theory and Combinatorics, held at St. Lawrence University, October 8-9, 1993.

Featured (with some SLU students) on two nationally disseminated videotapes on calculus reform, both produced in 1992 by John Wiley and Sons, Inc.

Selected Talks, Presentations, Workshops, Conferences:

Assessing Quantitative Reasoning Skills, PKAL QuIRK workshop conference, Northfield, MN, October 2008.

Canaras, Board of Trustees, June 20 – 22, 2008.

Canaras, First Year Program, June 2 – 4, 2008.

Semi-annual meeting, Part 2, Mathematics Consortium Working Group, Boston, MA, May 29 – June 1, 2008. Worked on Calculus text.

Semi-annual meeting, Part 1, Mathematics Consortium Working Group, Boston, MA, May 19 – 22, 2008. Worked on Algebra text.

Hudson River Undergraduate Mathematics Conference, St. Lawrence University, Canton, NY, April 19, 2008. I chaired the Steering Committee and the Host Committee for this conference.

Semi-annual meeting, Mathematics Consortium Working Group, San Diego, CA, January 10 – 13, 2008.

“Using Clickers to Enhance Learning in Mathematics Courses”, Annual AMS-MAA Mathematics Meetings, San Diego, CA, January 6 – 9, 2008.

“Supporting Vibrant, Active Math Clubs”, invited speaker, Annual AMS-MAA Mathematics Meetings, San Diego, CA, January 6 – 9, 2008.

Semi-annual meeting, Mathematics Consortium Working Group, Tucson, AZ, May 15 – 19, 2007.

Hudson River Undergraduate Mathematics Conference, Siena College, Loudonville, NY, April 21, 2007. My students Ellen Galo and Matt Way spoke at the conference.

“An Integrated Mathematics Course for Biology Students”, Annual AMS-MAA Mathematics Meetings, New Orleans, LA, January 5 – 8, 2007.

“Report on Salary Compression Intervention”, report to the Academic and Faculty Affairs Committee of the Board of Trustees, St. Lawrence University, October 13, 2006.

“Marijuana Use, Goldfish, and Knee Surgery”, Invited Undergraduate Colloquium, SUNY-Geneseo, Geneseo, NY, October 4, 2006.

“Assessment at St. Lawrence and Demonstration of a Personal Response System”, Canaras, Meeting with the St. Lawrence University Board of Trustees, June 23 – 25, 2006.

Semi-annual meeting, Mathematics Consortium Working Group, Cambridge, MA, May 25 – 29, 2006.

“What are They Thinking and Learning: A Strategy for Immediate Classroom Feedback”, May Faculty College: Assessment for Innovation and Transformation, St. Lawrence University, May 23 – 25, 2006.

Hudson River Undergraduate Mathematics Conference, Westfield State College, Westfield, MA, April 8, 2006. My students Kristen MacMurray and Jeff Cluckey spoke at the conference.

“The Pedagogy of a Personal Response System in a Liberal Arts Setting”, TechFest’06, Faculty Technology Festival, January 17, 2006.

Semi-annual meeting, Mathematics Consortium Working Group, San Antonio, TX, January 14 – 17, 2006.

“Poll the Audience: Using ConcepTests in Teaching Mathematics”, Annual AMS-MAA Mathematics Meetings, San Antonio, TX, January 12 – 15, 2006.

Graph Theory Day, St. Lawrence University, November 12, 2005.

Selected Talks, Presentations, Workshops: (continued)

Meeting with Biologists at Cornell University to discuss our Mathematics for Biology Project, June 30, 2005.

Semi-annual meeting, Calculus Consortium for Higher Education, Cambridge, MA, May 23 – 28, 2005.

Hudson River Undergraduate Mathematics Conference, Williams College, Williamstown, MA, April 30, 2005.
My students Ben Carr and Raluca Dragusanu spoke at the conference.

“Calculus Instruction: Where We’ve Been, Where We’re Going”, Half-day workshop for all colleges and universities in the area, Denver, Colorado, March 11, 2005.

Semi-annual meeting, Calculus Consortium for Higher Education, Atlanta, GA, January 8 – 10, 2005.

“Using Fathom in the Teaching of Calculus”, Annual AMS-MAA Mathematics Meetings, Atlanta, GA, January 5 – 8, 2005.

Semi-annual meeting, Calculus Consortium for Higher Education, Tucson, AZ, May 18 – 21, 2004.

“Understanding Algebra”, Annual Meetings of New York State Mathematics Association of Two Year Colleges, Kingston, NY, April 23, 2004.

“Kevin Bacon, A Physician in Cambridge, and a Senior Class”, Mathematics Undergraduate Colloquium Series, SUNY-Potsdam, April 21, 2004.

Academic Leadership workshop for Department Chairs, January 16, 2004.

“Mathematics for Biology Students”, Annual AMS-MAA Mathematics Meetings, Phoenix, AZ, January 7 – 10, 2004.

Semi-annual meeting, Calculus Consortium for Higher Education, Tucson, AZ, January 10 – 13, 2004.

“Making Mathematics Meaningful”, Invited Randolph Lecture on Mathematics Education, Seaway Section meeting of the MAA, Rochester, NY, November 7 – 8, 2003.

“Social Networks at St. Lawrence University”, presentation to Alumni Council, Canaras, June 12, 2003.

Semi-annual meeting of the Calculus Consortium for Higher Education, Tucson, AZ, May 27 – June 1, 2003.

Hudson River Undergraduate Mathematics Conference, Union College, Schenectady, NY, April 12, 2003.
My student Jesse Hoffman spoke at the conference.

Presentation to Student Life staff, St. Lawrence University, on social networks and St. Lawrence students, April 9, 2003.

Mathematics and Biology meeting, Haverford College, March 28 – 30, 2003.

Presentation to high school science and math teachers, on science and math opportunities at St. Lawrence, March 20, 2003.

“Kevin Bacon and a Senior Class”, Faculty Forum, St. Lawrence University, March 4, 2003.

Semi-annual meeting, Calculus Consortium for Higher Education, Baltimore, MD, January 18-20, 2003.

“Kevin Bacon and a Senior Class”, Annual AMS-MAA Mathematics Meetings, Baltimore, MD, January 15-18, 2003.

“What can we Learn from the Third International Mathematics and Science Study”, Teaching Scholar Partnership Program, St. Lawrence University, December 3, 2002.

“Assessing Our Campus Climate: A Report on a Multi-phased Cultural Audit Conducted by the Hewlett Project on Pluralism and Unity at St. Lawrence University”, with Sue Cypert and Christine Zimmerman, AAC&U Diversity and Learning Conference, St. Louis, MO, October 24-27, 2002.

Selected Talks, Presentations, Workshops: (continued)

“Topics in Graph Theory”, invited keynote speaker giving the annual Student Workshop, MAA Summer Math Meetings, Burlington, VT, July 31-August 3, 2002.

“Teaching Students to Write Proofs”, invited panelist, MAA Summer Math Meetings, Burlington, VT, July 31- August 3, 2002.

Invited speaker, gave two presentations on teaching calculus, Project NExT, MAA Summer Math Meetings, Burlington, VT, July 31 – August 3, 2002.

Semi-annual meeting of the Calculus Consortium for Higher Education, Tucson, AZ, May 19 – 23, 2002.

Hudson River Undergraduate Mathematics Conference, Hamilton College, Clinton, NY, April 27, 2002.
My student Aleksandra Portnova spoke at the conference.

Panelist on a session on bridging the gap between high school and college mathematics courses, Second Annual High School Mathematics Teachers Conference, St. Lawrence University, March 15, 2002.

Semi-annual meeting, Calculus Consortium for Higher Education, San Diego, CA, January 3 – 6, 2002.

“How to Ask a Sensitive Question: Demonstrating Randomized Response in the Classroom”, Annual AMS-MAA Mathematics Meetings, San Diego, CA, January 2002.

Invited speaker, gave two presentations on teaching calculus, Project NExT, MAA Summer Math Meetings, Madison, WI, July 31 – August 3, 2001.

Semi-annual meeting, Calculus Consortium for Higher Education, Tucson, AZ, May 22 – 27, 2001.

Invited speaker, Boston College, Chestnut Hill, MA, March 23, 2001.

Invited speaker, University of Massachusetts, Amherst, MA, March 14, 2001.

Served as panelist on two panels: “Formulating a Plan for Your Professional Future” and “Balancing Career and Family”, Annual AMS-MAA Mathematics Meetings, New Orleans, LA, January 10 – 16, 2001.

St. Lawrence University Shoptalk, “A Twelve Step Program to Higher Student Evaluations”, October 30, 2000.

Invited speaker, University of Connecticut, Storrs, CT, October 14, 2000.

Hewlett Steering Committee Cultural Audit, sixteen presentations at St. Lawrence University, August 15, 2000 – April 30, 2001.

Invited speaker, gave two presentations on teaching calculus, Project NExT, MAA Summer Math Meetings, Los Angeles, CA, July 31 – August 3, 2000.

Sole presenter of a three-day Chautaugua Short Course, “Making Calculus Meaningful”, Memphis, TN, June 11-14, 2000.

Semi-annual meeting, Calculus Consortium for Higher Education, Tucson, AZ, May 25-30, 2000.

Invited speaker, University of Vermont, Burlington, VT, May 17, 2000.

“Making Calculus Meaningful: Easy Examples so Students Never Ask ‘But What is This Good for Anyway?’”, invited address, Annual meeting of the Oregon Math Association, Lincoln City, OR, April 28-30, 2000.

Led session on careers in mathematics at the NNY CSTEP Career Exploration Symposium, Potsdam, NY, April 1, 2000.

Presented two talks: “Calculus that Matters in the Life Sciences” and “Environmental Awareness in the Calculus Classroom”, Annual AMS-MAA Mathematics Meetings, Washington, DC, January 19 – 24, 2000.

Selected Talks, Presentations, Workshops: (continued)

Invited speaker, University of Tennessee, Knoxville, TN, August 23, 1999

Invited speaker, gave two presentations on teaching calculus, Project NExT, MAA Summer Math Meetings, Providence, RI, July 28-30, 1999.

Sole presenter of a three-day Chautaugua Short Course, "Making Calculus Meaningful", Memphis, TN, June 3-5, 1999.

"Using the Game Minesweeper to Introduce Students to Proofs", Annual AMS-MAA Mathematics meetings, San Antonio, January 1999.

"Using Real World Data for Projects in an Applied Calculus Course", MAA Summer Math Meetings, Toronto, July 1998.

Presented a three-hour workshop for high school teachers: "Changing the Way We Teach Calculus", organized by Syracuse University Project Advance. Given twice: New York City, May 18, 1998 and Syracuse, May 19, 1998

"Sperm Counts, Drug Absorption, and CD Sales: Sex, Drugs, and Rock & Roll in Applied Calculus", invited address, Annual meeting of Michigan Section of the MAA, Kalamazoo, MI, May 1-2, 1998.

Presented two talks: "Teaching Applied Calculus using Real World Data" and "What Should Students be Learning in Applied Calculus?", Annual AMS-MAA Mathematics Meetings, Baltimore, January 1998.

Panelist on Mathematics Education Reform at the conference "Science, Education, and the Spirit of Invention", Chautaugua Institute, August 1997.

"Using Short Focused Projects to Get Students Working with Data", Annual AMS-MAA Mathematics Meetings, San Diego, January 1997.

"Reforming the Ways We Teach Mathematics", Fifth Annual Teaching Effectiveness conference, on "The Ways We Teach", Canton, NY, November 1996.

Presented a full-day workshop on "Reforming the Applied Calculus Course", Baltimore, June 1996.

Invited speaker, SUNY-Geneseo, Geneseo, NY, March 1996.

"Bringing Calculus Reform to the Applied Calculus Course", poster presentation, Annual AMS-MAA Mathematics Meetings, Orlando, January 1996.

Ran a day-long workshop on calculus reform, MAA summer meetings, Minneapolis, August 1994.

Co-leader of MAA Minicourse on multivariable calculus, MAA summer meetings, Minneapolis, August 1994.

Invited speaker, University of Florida, Gainesville, FL, July 1994.

Invited speaker, Florida State University, Tallahassee, FL, July 1994.

Ran a two-day workshop for teachers from throughout the maritime provinces, Nova Scotia, April 1994.

Invited student colloquium speaker, "Mail Carriers and Traveling Salespeople", Middlebury College, April 1994.

Invited speaker, SUNY-Oswego, Oswego, NY, March 1994.

"Calculus Reform and the Harvard Approach", Science Colloquium Series, St. Lawrence University, February 1994.

Invited Speaker, SUNY-Potsdam, December 1993.

Invited Speaker, Clarkson University, December 1993.

Invited Speaker, Paul Smith's College, November 1993.

Selected Talks, Presentations, Workshops: (continued)

- Co-leader of a week-long National Science Foundation sponsored workshop on calculus reform, St. Louis, June 1993.
“Something for Everyone: Three 100-level Mathematics Courses that Work”, MAA Seaway Section meeting, Binghamton, NY, April 1993.
- Co-leader of an MAA minicourse, on calculus reform, Annual AMS-MAA Mathematics Meetings, San Antonio, January 1993.
- “Parallels Between Calculus Reform and Statistics Education Reform”, Annual AMS-MAA Mathematics Meetings, San Antonio, January 1993.
- Invited Speaker, Adirondack Community College, June 1992.
- “My Favorite Calculus Problems”, Conference on the Teaching of Calculus, Boston, June 1992.
- Co-leader of a two-day workshop, on calculus reform, Harvard University, June 1992.
- Chosen by St. Lawrence University to represent SLU at the Forum on Exemplary Teaching as part of the national AAHE meetings, Chicago, April 1992.
- “Forbidden Subgraphs of Graphs Uniquely Hamiltonian-Connected from a Vertex”, Annual AMS-MAA Mathematics Meetings, Baltimore, January 1992.
- "Graphs Uniquely Hamiltonian-Connected from a Vertex", St. Lawrence Science Colloquium Series, November 1991.
- Conference on Calculus Reform, with all expenses paid by the National Science Foundation, Harvard University, June 1991.
- Conference on Teaching in the Liberal Arts, a conference for liberal arts college presidents, deans, and selected faculty members, Hamilton College, June 1991.
- "The Theory of Elections", presented to area high school mathematics teachers as part of our Pi Mu Epsilon exam, April 1991.
- "Some Famous Problems in Mathematics", presented to gifted high school students from throughout Northern New York as part of the Regional High School of Excellence Program, April 1991.
- "The Chinese Mail Carrier Problem, the Traveling Salesperson Problem, and More", Keynote speaker at Pi Mu Epsilon banquet, Manhattan College, funded by Pew grant, March 1991.

Teaching

Courses Taught at St. Lawrence University:

Math 110 (Concepts of Mathematics)
 Math 112 (Finite Mathematics)
 Math 113 (Applied Statistics)
 Math 134 (Precalculus)
 Math 135 (Calculus I)
 Math 136 (Calculus II)
 Math 205 (Multivariable Calculus)
 Math 217 (Linear Algebra)
 Math 280 (A Bridge to Higher Mathematics)
 Math 315 (Group Theory)
 Math 316 (Ring Theory)
 Math 318 (Graph Theory)
 Math 370 (Topology)
 CS120 (Introduction to Computer Programming)
 Winterterm Courses:
 Business Simulation Games
 Cubik Math
 Sets, Proof, and Logic
 History of Math
 First Year Program: Having an Impact: Leadership, Teamwork, and Motivation

Student Projects Supervised (last 10 years):

Honors Project: Rachel Benjamin, "The Gossip Number and Connected Domination Number" (2007-2008)
 Senior Project: Brian Chamberlain, "Modeling the Environmental Impact of Harvesting" (2007-2008)
 Honors Project: Janice McLam, "The Clustering Coefficient" (2006-2007)
 Senior Project: Matthew Way, "Mathematical Modeling of the Environment" (2006-2007)
 Independent Study Project: Ellen Galo, "The Mathematics of Labyrinths" (2006-2007)
 Honors Project: Kristen MacMurray, "The Gossip Problem and the Email Gossip Problem" (2005-2006)
 Senior Project: Jeff Cluckey, "Matchings in Graph Theory" (2005-2006)
 Senior Project: Raluca Dragusanu, "Social Network Theory" (2005-2006)
 Honors Project: Benjamin Carr, "On a Conjecture of Erdos" (2004-2005)
 Honors Project: Katie Livingstone, "Modeling Disease: Mathematics in Epidemiology and
 Applications to the SARS Virus" (2003-2004)
 Honors Project: Jesse Hoffman, "Chemical Graph Theory" (2002-2003)
 Honors Project: Aleks Portnova, "Degrees of Separation and Cluster Analysis" (2001-2002)
 Senior Project: Rose Blanding, "Line Graphs" (2000-2001)
 Honors Project: Allen Zoracki, "An Overview of the Steiner Problem" (1999-2000)
 Honors Project: Amit Jain, "Strongly Connected Orientations of Graphs" (1998-1999)

Selected University Service (last 10 years)

Chair, Department of Mathematics, Computer Science, and Statistics, 2002 – present

Faculty Council (1984 – 1988, 2002-2003, 2004 – present)

Chair, 2007-2008

Vice-Chair, 2006-2007

Chair, 2005-2006

Vice-Chair, 2004-2005

Institutional Strategy and Assessment Committee (2007 – present)

Middle States Working Group, Standards 8 & 9 (2006- 2007)

Phi Beta Kappa, permanent member

President (1984 – 86, 1991 – 93, 2007 – present)

Vice-President (2006 – 07)

Science Facilities Executive Committee (2002 – present)

Professional Standards Committee (2000-2001)

Priorities and Planning Committee (1984 – 1987, 1991 – 1993, 1997-2000)

Chair: 1991 – 1993, 1998 – 2000

Faculty Delegate to the Board of Trustees (1994 – 97, 2005 – 06, 2007 – 08)

Faculty Representative to Board of Trustees Committees

University Advancement Committee, 2004-2005

Enrollment Committee, 2002-2004

University Advancement Committee, 1998-2002

Development Committee, 1990 – 1991, 1993 – 1994

Planning Committee, 1991- 1993

Honors Committee, 1988 - 1990

Center for Teaching and Learning

Advisory Board (2001 – 03)

Steering Committee (2000 – 2001)

Quantitative Resource Center Advisory Board, since 2007.

Mentor for new faculty members (every year)

Served on many panels, every year (for prospective students, new faculty orientation, alumni, trustees)

Faculty Advisor to the student Ultimate Frisbee Club, Soccer Club, and Figure Skating Club (2005 – present)

Faculty Mentor to Men's Varsity Lacrosse Team (2006 – present)

Faculty Mentor to Women's Varsity Basketball Team (2006-2007)

Ad hoc committee on the Integration of Athletics into the life of the college. (2003 – 2004)

Steering Committee for Hewlett Pluralism and Unity Grant (1998-2002)

Subcommittee to summarize the Hewlett Cultural Audit

Selected University Service (continued)

Festival of Science Committee (1998-2002)

Classroom Stewards Committee (2003 – 2004)

Admissions Committee (2002 – 2004)

Planning Committee for Department Chairs Workshop, Associated Colleges (2003 – 04)

University Faculty Mentor, Teaching Scholar Partnerships Program and NSF:GK-12 (2001-2005)

Committee to write the Survival Guide for new faculty (1999, 2001)

Faculty Development and Teaching Committee (1994-1996)

Advisor to between 40 and 70 students, every year

Served on many search committees. A sample:

Vice-President and Dean of Student Life
Vice-President for University Advancement
Vice-President for Information Technology
Director of Donor Relations
Associate Director of Major Gifts
Associate Dean of Admissions
Assistant Director of Admissions/Admissions Counselor
Women's Ice Hockey Coach
Many faculty searches in a variety of departments

Departmental Service:

Chair (2002 to present)
Search committees (almost every year, search committee chair multiple times)
Faculty advisor to Math Club
