Lisa Traynor

Mathematics Department, Bryn Mawr College

Education

SUNY Stony Brook, New York, Ph.D. in Mathematics, 1992.
 Advisor: Professor Dusa McDuff

Beloit College, Wisconsin, B.S. in Mathematics, Summa Cum Laude, 1987.

Professional Appointments

- Bryn Mawr College,
 - Professor of Mathematics, Fall 2006 present;
 - Department Chair, 2006 2009, 2017 2021.
 - o Class of 1897 Professor of Science, 2020 present.
 - Associate Professor of Mathematics, 1999 2006.
 - Assistant Professor of Mathematics, 1993 1999.
- Mathematical Sciences Research Institute Research Professor, Floer Homotopy Theory Program, Fall 2022.
- Institute for Advanced Study Member, Princeton, NJ, Spring 2016.
- University of Pennsylvania Visitor, 2005-2006.
- Institute for Advanced Study, Visitor for Program on Holomorphic Curves, Princeton, NJ, Fall 2001-Spring 2002.
- Institute for Advanced Study Member, Princeton, NJ, Spring 2001.
- American Institute of Mathematics, Member of the Contact Geometry Program, Palo Alto, CA, Fall 2000.
- Mathematical Sciences Research Institute Member of the Low-Dimensional Topology Program, Berkeley, 1996-1997.
- Isaac Newton Institute of Mathematical Sciences Member of the Program on Symplectic Geometry, Cambridge, England, Fall 1994.
- Centre Emile Borel, Institut Henri Poincaré Fellow during the Symplectic Topology Semester, Paris, France, February - July 1994.
- NSF Postdoctoral Fellow at Stanford University, September 1993 February 1994.
- Mathematical Sciences Research Institute Postdoctoral Fellow, Berkeley, CA, 1992 -1993.

Research Funding Awards

- American Institute of Mathematics SQuaRE (Structured Quartet Research Ensemble), "Lagrangian Cobordisms and Norms on the Contactomorphism Group", 2019-present.
- Mellon Tri-College Fellow, "PACT Seminar", 2014-2015, 2015-2016, 2016-2017, 2017-2022.
- American Institute of Mathematics SQuaRE, "Augmentations, Rulings, and Generating Families", 2009 2013.
- ❖ National Science Foundation Research Grant, Division of Mathematical Sciences, Geometric Analysis (Joint with Joshua Sabloff, Haverford College), 2009-2013.
- ❖ Mellon Tri-College Fellow, "Faculty-Student Seminar in Topology", 2005-06.
- ❖ Mellon Tri-College Fellow, "Faculty Seminar in Contact Topology", 2004-05.
- ❖ National Science Foundation Research Grant, Division of Mathematical Sciences, Geometric Analysis, 1999-2003.
- National Science Foundation Mathematical Sciences Postdoctoral Research Fellowship, 1993-1997.
- ❖ Fellowship through Ministère des Affaires Etrangères, France, to attend Symplectic Topology Program at Institut Henri Poincaré, Spring 1994.
- Funded Participant for the Séminaire de Mathematiques Superieures NATO Advanced Study Institute on Gauge Theory and Symplectic Geometry, Montréal, Canada, July 1995.
- Funded Participant for the NSF Regional Geometry Institute on Algebraic Geometry, Park City, Utah, June - July 1993.
- ❖ Alfred P. Sloan Doctoral Dissertation Fellowship, 1991-1992.

Other Awards

- Bryn Mawr Faculty Mentorship Award, GSAS Students and Council, 2018.
- McPherson Award for Excellence, Bryn Mawr College, 2017.
- Mathematics Department Teaching Award, Stony Brook University, 1992.
- ♦ Beloit College
 - Presidential Scholarship, 1983-1987.
 - Conwell P. Huffer Prize in Mathematics, 1987.
 - Phi Beta Kappa Membership, 1986.

Publications

- Immersed Lagrangian Fillings of Legendrian Sumanifolds via Generating Families, Pezzimenti, S. and Traynor, L., (in preparation).
- Obstructions to Reversing Lagrangian Surgery in Lagrangian Fillings, Capovilla-Searle, O., Legout, N., Limouzineau, M., Murphy, E., Pan, Y., and Traynor, L., to appear: Journal of Symplectic Geometry, https://arxiv.org/abs/2207.13205
- Legendrian Torus and Cable Links, Dalton, J., Etnyre, J., and Traynor, L., to appear: Journal of Symplectic Geometry, https://arxiv.org/abs/2107.12323ArXiv
- Constructions of Lagrangian Cobordisms, Blackwell, S., Legout N. Leverson, C., Limouzineau, M., Myer, Z., Pan, Y., Pezzimenti, S., Suárez, L.S., and Traynor, L. in Research Directions in in Symplectic and Contact Geometry and Topology (Association for Women in Mathematics Series 27), Springer 2021; https://arxiv.org/abs/2101.00031.
- ➤ Research Directions in Symplectic and Contact Geometry and Topology (Association for Women in Mathematics Series 27), Co-Editors: B. Acu, C. Cannizzo, D. McDuff, Z. Myer, Y. Pan, L. Traynor, Springer, 2021.
- An Introduction to the World of Legendrian and Transverse Knots, Traynor, L., in A Concise Encyclopedia of Knot Theory, CRC Press, 2021.
- The Relative Gromow Width of Lagrangian Cobordisms between Legendrians, Sabloff, J. and Traynor, L., Journal of Symplectic Geometry, Vol 18, No 1, 217-250, 2020.
- The Minimal Length of a Lagrangian Cobordism between Legendrians, Sabloff, J. and Traynor, L., Selecta Mathematica New Series, 23: 1419-1448, 2017.
- Non-Orientable Lagrangian Cobordisms between Legendrian Knots, Capovilla-Searle, O. and Traynor, L., Pacific Journal of Mathematics, Vol 285, No. 2, 319--334. 2016; DOI 10.2140/pjm.2016.285.319.
- Lagrangian Cobordisms via Generating Families: Construction and Geography, Bourgeois, F., Sabloff, J. and Traynor, L., Algebraic and Geometric Topology, Vol 15, 2439-2477, 2015.
- ➤ Obstructions to Lagrangian Cobordisms between Legendrians via Generating Families, Sabloff, J. and Traynor, L., Algebraic and Geometric Topology, Vol 13, issue 5, 2733-2798, 2013.
- The surgery unknotting number of Legendrian links, B. Boranda, L. Traynor, S. Yan, Involve, Vol 6, No. 3, 273-299, 2013.
- Obstructions to the Existence and Squeezing of Lagrangian Cobordisms, Sabloff, J. and Traynor, L., Journal of Topology and Analysis, Vol 2, No. 2, 203 - 232, 2010.

- ➤ A Partial Ordering on Slices of Planar Lagrangians, Eisman, P., Lima, J., Sabloff, J., and Traynor, L., Journal of Fixed Point Theory and Applications, Volume 3, Number 2, 431-447, September 2008.
- ➤ Generating family invariants for Legendrian links of unknots, Jordan, J. and Traynor, L., Algebraic and Geometric Topology, Volume 6, 763-807, 2006.
- ➤ Legendrian Solid-Torus Links, Ng, L. and Traynor, L., Journal of Symplectic Geometry, Volume 2, Number 3, 411-443, 2004.
- Generating Function Polynomials for Legendrian Links, Traynor, L., Geometry and Topology, Vol. 5 (2001) Paper no. 23, pages 719--760.
- > Symplectic Packings of Cotangent Bundles of Tori, Maley, F. M., Mastrangeli, J. and Traynor, L., Experimental Mathematics, Vol 9, No. 3, 2000, 435-455.
- > Symplectic Geometry and Topology, IAS/ Park City Mathematics Series, Vol 7, Eliashberg, Y. and Traynor, L., eds., 1999.
- > A Legendrian Stratification of Rational Tangles, Traynor, L., Journal of Knot Theory and its Ramifications, Vol 7, No. 5, 1998, 659-700.
- ➤ Legendrian Circular Helix Links, Traynor, L., Mathematical Proceedings of the Cambridge Philosophical Society, Vol 122, 1997, pp. 301 314.
- Symplectic Packing Constructions, Traynor, L., Journal of Differential Geometry, Vol 42, No. 2, 1995, 411 429.
- > Symplectic Homology via Generating Functions, Traynor, L., Geometric and Functional Analysis, Vol. 4, No. 6, 1994, pp. 718 748.
- Symplectic Embedding Trees for Generalized Camel Spaces, Traynor, L., Duke Mathematics Journal, Vol. 72, No. 3, December 1993, pp. 573 - 594.
- ➤ The 4-dimensional Symplectic Camel and Related Results, McDuff, D. and Traynor, L., in Symplectic Geometry, D. Salamon (ed.), London Mathematical Society Lecture Note Series, Cambridge Univ. Press, 1993, pp. 169 182.
- > Symplectic Embeddings of Balls and the Mapping Problem, Traynor, L., Ph.D. Dissertation, State University of New York at Stony Brook, August 1992.

Invited Research Talks

- PATCH, March 2023
- UC Davis, Topology Seminar, October 2022.
- ICERM, Braids in Low-Dimensional Topology, April 2022.
- JMM AWM Special Session, Women and Gender Minorities in Symplectic and Contact Geometry and Topology, Seattle/Virtual, April 2022.
- JMM AWM Special Session, Women in Geometry, Seattle/Virtual, April 2022.
- PU/IAS Symplectic Seminar, Princeton, November 2021.
- Colloquium, Universidad de Colima, Mexico, October 2021.
- IHP Advances in Symplectic Topology Workshop, Paris, April 2021.
- AMS Special Session, Spring Central Section Meeting, April 2021.
- University of Alabama Colloquium, March 2021.
- IAS/Princeton University Symplectic Zoominar, April 2020.
- Dartmouth University, Colloquium and Topology Seminar, March 2020.
- CAST 2020: 14th Workshop on Symplectic Geometry, Contact Geometry, and Interactions, University of Antwerpen, Belgium, February 2020.
- Triangle Topology Seminar, Duke University, March 2019.
- Rutgers Geometric Analysis Seminar, September 2019.
- Yashafest, Asilomar, CA, August 2018.
- Topology Students Workshop, Georgia Tech, June 2018.
- Fields Institute Workshop on Immersed Lagrangian Cobordisms, Ottawa, April 2018.
- Cornell PSU Joint Symplectic Seminar, Cornell, March 2018.
- Symplectic Geometry in Lyon, France, November 2017
- Cospin Meeting in Lyon, France, October 2017.
- Low Dimensional Symplectic and Contact Topology, Mathfest, Chicago, July 2017.
- Quantitative Symplectic Geometry, Simons Center, Stony Brook, NY, May 2017.
- Tech Topology Conference, Georgia Tech, December 2016.
- Hamilton Workshop on Low-Dimensional and Symplectic Topology, Dublin, Ireland, August 2016.
- Unknots III, Denison College, July 2016.
- Georgia Topology Conference, May 2016.
- ANR Workshop on Symplectic Topology, UQAM, Montreal, Canada, June 2016.

- Math Conversation, IAS, February 2016.
- Augmentations and Legendrians at IAS Conference, Princeton, February 2016.
- University of Georgia, Geometry Seminar, January 2016.
- Association for Women in Mathematics Research Symposium, Special Session on Symplectic Topology, University of Maryland, April 2015.
- Penn Geometry Seminar, April 2015.
- Stratified Spaces in Geometric and Computational Topology and Physics, University of Wisconsin, March 2015.
- Tetrahedral Geometry/Topology Seminar, February 2015.
- Banff Conference on Parameterized Morse Theory in Low-Dimensional and Symplectic Topology, March 2014.
- Math for Everyone, Notre Dame, December 2013.
- Geometry Seminar, Notre Dame, December 2013.
- Pacific Northwest Geometry Seminar, Portland State University, May 2013.
- Redbud Topology Conference, University of Arkansas, March 2013.
- AIM Workshop on Higher-Dimensional Contact Structures, June 2012.
- Mini-series during workshop on Generating Families, Nantes, France, 2011.
- Lehigh University Mathematics Colloquium, February 2010.
- University of Buffalo Geometry Seminar, March 2010.
- MSRI Summer Graduate Workshop, August 2009.
- Penn Geometry Seminar, February 2009.
- AMS Special Session on Low Dimensional Topology, Wesleyan University, 2008.
- Columbia University Topology Seminar, December 2006.
- Dartmouth Colloquium, November 2006.
- Dartmouth Geometry Seminar, November 2006.
- Penn State Geometry and Dynamics Seminar, October 2006.
- MASS Colloquium, Penn State, October 2006.
- AMS Special Session on Symplectic and Contact Geometry, New Hampshire, 2006.
- Penn Geometry Seminar, March and October 2005.
- American Institute of Mathematics, Special Program on Holomorphic Curves in Contact Geometry, Palo Alto, August 2003.

- AMS Special Session on Symplectic and Contact Geometry, New York, April 2003.
- Swarthmore Colloquium, November 2002.
- UC-Berkeley Mathematics Colloquium, September 2000.
- Rice University Mathematics Colloquium and Geometry Seminar, September 2000.
- UC-Santa Cruz Mathematics Colloquium, September 2000.
- Stanford University Mathematics Colloquium, November 2000.
- Canadian Mathematical Society Joint Meeting, Symplectic Geometry Session, McMaster University, June 2000.
- Cornell Mathematics Colloquium, March 2000.
- Lehigh University Mathematics Colloquium, September 1999.
- AMS Special Session on Integrable Systems, Buffalo, April 1999.
- AMS special session on Symplectic Geometry and Topology, Urbana, March 1999.
- Texas Geometry and Topology Conference, February 1999.
- Rutgers University Geometry and Topology Seminar, NJ, September 1998.
- University of Pennsylvania Geometry Seminar, April 1998.
- University of Arkansas Mathematics Colloquium and Geometry Seminar, Fayetteville, March 1998.
- American Mathematical Society Special Session on Symplectic Topology and Quantum Cohomology, Milwaukee, Wisconsin, October 1997.
- American Mathematical Society Special Session on Symplectic Geometry and Mechanics, Western Division Meeting, Corvallis, Oregon, April 1997.
- UC-Davis Geometry Seminar, April 1997.
- Seventh Midwest Geometry Conference, Lawrence, Kansas, April 1997.
- Berkeley-Davis-Santa Cruz-Stanford Joint Symplectic Geometry Seminar, 1997.
- Low-Dimensional Topology Seminar, Mathematical Sciences Research Institute, Berkeley, October 1996.
- Conference on Symplectic Topology and Four- and Three-Dimensional Manifolds, Monte Verita, Ascona, Switzerland, July 1996.
- Symplectic Geometry Seminar, University of Nice, France, July 1996.
- Symplectic Geometry Workshop, Penn State University, February 1996.
- American Mathematical Society Special Session on Geometry, Topology, and Analysis of Noncompact Manifolds, Joint Mathematics Meeting, Orlando, 1996.

- NATO Advanced Study Institute on Gauge Theory and Symplectic Geometry, Séminaire de Mathématiques Supérieures, Université de Montréal, July 1995.
- Workshop on Geometry, Topology, and Dynamics, Centre de Recherches Mathématiques, Université de Montréal, June 1995.
- MIT Symplectic Geometry Conference, May 1995.
- University of Pennsylvania Geometry Seminar, February 1995.
- École Polytechnique Geometry Seminar, Paris, France, October 1994.
- Workshop on Floer Homology, (2 lectures), Newton Institute, England, September 1994.
- Seminare Sud Rhodanien de Geometry, Aussois, France, June 1994.
- Symplectic Topology Seminar, Centre Emile Borel, Institut Henri Poincaré, Paris, February and June 1994.
- Department Seminar, École Normale Superieure-Lyon, France, April 1994.
- American Mathematical Society Special Session on Symplectic Geometry, Joint Mathematics Meeting, Vancouver, August 1993.
- Regional Geometry Institute on Higher Dimensional Algebraic Geometry, (3 lectures), Utah, July 1993.
- UC-Berkeley and Mills College Summer Program Colloquium, July 1993.
- Midwest Several Complex Variables Conference, University of Michigan, 1993.
- Berkeley-Davis-Santa Cruz-Stanford Joint Symplectic Geometry Seminar, 1993.
- University of California at Berkeley Colloquium, February 1993.
- Mathematical Sciences Research Institute Seminar, November 1992.
- University of California at Berkeley Symplectic Geometry Seminar, October 1992.
- SUNY at Stony Brook Geometry and Topology Seminar, April 1992.
- MIT conference on Symplectic and Poisson Geometry, April 1992.
- University of Arkansas Lecture Series in Mathematics on Symplectic Topology, 1992.
- American Mathematical Society Special Session on Symplectic Topology, Joint Mathematics Meeting, Baltimore, January 1992.
- Association for Women in Mathematics Poster Session, January 1992.

Ph.D. Dissertation Advising

- ➤ Alfredo Vargas, Jr., 2020, Conformal Symplectic Geometry: in progress.
- Samantha Pezzimenti, PhD 2018, Immersed Lagrangian Fillings of Legendrian Submanifolds via Generating Families.
- Ziva Myer, PhD 2017, A product structure on Legendrian submanifolds from Generating Families.
- Christopher Micklewright, PhD 2012, Circle-Valued Generating Family Invariants.
- Jennifer Dalton, PhD 2008, Legendrian Torus Links.
- > Jill Jordan, PhD 2006, Generating Family Invariants for Legendrian Links of Unknots.
- Jean Mastrangeli, PhD 1997, Symplectic Packings in Cotangent Bundles of Tori.

Master's Thesis Advising

- Dee Ann Reisinger, 2023 (in progress), Applications of Algebraic Geometry to Problems in Contact Topology.
- Alfredo Vargas, Jr., 2020, The Rectangular Peg Problem.
- Seppo Niemi-Colvin, 2016, Normal Rulings of Legendrian Satellites:

 Uses and Construction (AB Honors, MA).
- Samantha Pezzimenti, 2015, Lagrangian Caps of Legendrian Knots.
- Laura Mansfield, 2010, Generating Family Constructions of Capacities and Applications towards Partial Orderings.
- Devasish Majumdar, 2005, Arnold's 4-Cusp Conjecture; (Swarthmore AB).
- Emi Arima, 2005, The Arnold Invariants of Plane Curves (AB Honors, MA).
- Kim Urso, 2004, Morse Theory.
- Jane Holsapple, 2002, Chekanov's Decomposition Invariant for Legendrian Knots.

Undergraduate Research and Thesis Advising

- Olga Shevchuk, 2022, Application of Dual Quaternions to Skinning of Characters (AB Honors)
- Peiran Xu, 2021, Calculus of Variations and Optimal Control in Economics (AB Honors).
- ♦ Blossom Jeong, 2020, *Unknotting Numbers of Transverse Knots* (AB Honors).
- Rose Kaplan-Kelley, 2017, Multi-Crossing Projections of Legendrian Knots (AB Honors).
- Samantha Kacir, 2017, Randomly Generated Legendrian Knots.
- ♦ Orsola Capovilla-Searle, 2013- 2015, Non-orientable Lagrangian Cobordisms (Mellon-Mays, AB Honors).
- Lipika Ramaswamy, 2015, Fixed Point Theorems in Economics (AB Honors).
- Swetha Narasimhan, 2015, Analyzing Music through Geometry (AB Honors).
- ♦ Zhuoman Zhao, 2014, *Dynamics of Location, Education, and Production* (AB Honors).
- ♦ Qian Wu, 2013, Cooperative Games (AB Honors).
- ♦ Bianca Boranda, 2013, Multistage Stochastic Games (AB Honors).
- Alex Lee, 2011, Configuration Spaces of Graphs (AB Honors).
- Alison Panosian, 2011, Using Phylogenetic Trees to Understand the Evolution of Genes (AB Honors).
- Kyla Quillen, 2008, Unknotting Number of Legendrian Knots.
- ♦ Cora Marty, 2004, Double Soap Bubbles in the Plane.
- Sarah Crown, 2001-2002, Symplectic Packing Constructions
 (Marshall Fellow, AB Honors).
- ♦ Rachael Thomas, 2000, Chirality of Knots (AB Honors).
- ♦ Elaina Khenina, 1999, Invariants for Legendrian Knots.

Undergraduate Summer Research Supervision

- Peiran Xu, 2020, Calculus of Variations and Optimal Control in Biology and Economics.
- Orsola Capovilla-Searle, Tatiana Hammond, Emily Schroeter, 2012, The Surgery Unlinking Number for Legendrian Slice Knots.
- Bianca Boranda and Shuning Yan, 2011, The Surgery Unknotting Number for Legendrian Links.
- Elaina Khenina and Jennifer Faerber, 1999, Tangle Calculations in DNA-enzyme Mechanisms.
- Juliana Belding, 1999, Number Theory behind Symplectic Packings.

National and International Professional Service and Outreach

- ♦ Reviewer of Grant for Israel Science Foundation (ISF), Spring 2023.
- ♦ Reviewer and jury member for PhD dissertation of Cyril Falcon, Université de Paris-Saclay, January 2023.
- ♦ WAM (Women and Mathematics) Panelist during a celebration of Karen Uhlenbeck's 80th Birthday, IAS, Princeton, September 2022.
- ♦ Floer Homotopy Theory Connections Workshop Panelist and Networking Session Leader, September 2022.
- ♦ Topology Students Workshop Mentor, July 2022, July 2020, June 2018.
- Member of PhD Defense Jury of Simon Allais, École Normal Supérieure, Paris, France. June 2021.
- Member of PhD Thesis Committee of Johan Asplund, Uppsala University, Sweden. June 2021.
- ♦ Member of NSF review panel: 2021, 2016, 2012, 2010, 2006, 2003.

- Mathematical Sciences Research Institute (MSRI) Career Development Panel, November 2020.
- ♦ Virtual Career Panel, June 2020, Virtual Low-Dimensional Topology https://sites.google.com/bc.edu/virtualtopology/home?authuser=0
- ♦ Host of DiverSCI-Tea Coffee Hour, June 2020.
- Jury Member for Baptiste Chantraine's Habilitation à Diriger des Researches, Université de Nantes, France, December 2019.
- ♦ American Mathematical Society (AMS) Eastern Section Program Committee, February 2020
 January 2022.
- WisCon (Women in Symplectic and Contact Geometry and Topology) Organizer and Panelist, ICERM, Providence, RI, July 2019.
- ♦ Women In Geometry (WIG) Team Leader for Workshop 2, Oaxaca, Mexico, June 2019.
- ♦ AMIAS (Association of Members of the Institute for Advanced Study) Board of Trustees, 2017-2021.
- MSRI Human Resources liaison for Program on Hamiltonian Systems Fall 2018.
- Math Alliance: Adhoc committee to draft site selection policy for Field of Dreams Conference, Fall 2017.
- ♦ Math Alliance: F-GAP mentor, 2016-present.
- Re:boot Mentor, Duke University, June 2017.
- ♦ Member of Ad-Hoc Site Selection Process Committee of Math Alliance, Fall 201.
- Member of PhD Dissertation Committee of Maÿlis Limouzineau, Institut Mathématique de Jussieu, Paris, France, Fall 2016.
- ♦ Member of the American Mathematical Society Committee on the Profession, 2013 – 2016.
- Chair of AMS Committee to Investigate Potential Site Visit Program for the American Mathematical Society, 2015-2016.
- ♦ Chair of AMS Committee to rewrite American Mathematical Society Anti-Harassment Policy, 2014-2015.
- ♦ Co-organizer of Topological and Quantitative Aspects of Symplectic Manifolds: A Conference in Honor of Dusa McDuff's 70th Birthday, Columbia University, March 2016.

- ♦ Faculty Mentor, IAS Women and Mathematics Program, May 2016.
- ♦ F-GAP Mentor of two underrepresented minority students for Math Alliance, Fall 2015.
- Field of Dreams Panelist, Math Alliance, Birmingham, AL, November 2015.
- Diversity Representative for Human Resource Advisor Committee of Mathematical Sciences Research Institute (MSRI) for 2018-2019 Program Proposal, Fall 2015.
- ♦ Banff Workshop Leader, Women in Geometry, Banff, CA, November 2015.
- Organizer of American Mathematical Society Special Session on Contact and Symplectic Topology, October 2013.
- Member of PhD Dissertation Committee of Georgios Dimitroglou Rizell, Uppsala University, Sweden, 2012.
- ♦ Association for Women in Mathematics (AWM) Executive Committee, 2008 2012, Chair of Fundraising 2008 – 2012, Website Redesign Taskforce, 2008-2010, Member of Humphrey's Prize Selection Committee 2009 – 2013.
- ♦ Graduate Lecturer for IAS Women in Mathematics Program on Symplectic and Contact Topology, May 2012.
- ♦ Lecturer for *Science on Saturday Series* sponsored by Princeton University's Plasma Physics Laboratory, 2012.
- ♦ Associate Editor for the *Notices of the American Mathematical Society*, 2000-2009.
- ♦ Associate Editor for Book Reviews of the *Bulletin of the American Mathematical Society*, 2006 2011.
- ♦ Co-organizer for Mathematical Sciences Research Institute (MSRI) Introductory Workshop for yearlong program in Symplectic and Contact Topology, August 2009.
- Program Committee Member of the Institute for Advanced Study Women's Program, 1996-2009.
- ♦ Co-organizer for American Institute of Mathematics (AIM) Workshop on Legendrian and Transverse Knots, September 2008.
- ♦ American Mathematical Society Nominating Committee, 2006 2008.
- Presented mathematics talk to a general audience of adults in Main Line School Night Science Series, March 2007.
- ♦ Author of article on Bryn Mawr Alumnae, *MAA Math Horizons*, September 2007.

- ♦ Author of Book Review for the *Bulletin of the AMS*, 2005.
- ♦ Workshop Leader for "Expanding Your Horizons Conference" for Girls in Math and Science, Swarthmore College, March 2006.
- Organizing Committee Member of FRG Workshop "Algebraic Geometry, Symplectic Geometry and Theoretical Physics: a conference celebrating the contribution of women researchers", University of Pennsylvania, May 2005.
- ♦ American Mathematical Society Council Member-at-Large, 2000 2003.
- American Mathematical Society Committee on Education Member, 2000-2003.
- ♦ Committee member to draft Lecture Bureau proposal for Executive committee of AWM (Association for Women in Mathematics), Fall 2003.
- Organizer of AMS Education Committee Panel "Successfully Recruiting Math Majors", Baltimore, January 2003.
- ♦ Organizer of the *Women in Science* seminar for the Institute for Advanced Study/PCMI Women's program, May 2001.
- ♦ Honors examiner, Swarthmore College, Spring 2004 and 1996.
- ♦ Panel Member for "The Academic Job Search: Hiring from the Search Committee's Perspective", University of Pennsylvania Career Services, September 1999.
- ♦ Instructor for MathCamp '99, (an international summer school for mathematically gifted high school students), University of Washington, July 1999.
- Panel Member for "Dividing the Pie: Research, Teaching, and Service Commitments at Academic Institutions", IAS/Park City Mathematics Institute Women's Program, Princeton, May 1999.
- Member of PhD Dissertation Committee of Jennifer Slimowitz, SUNY Stony Brook, May 1998.
- ♦ Introducer of the Association for Women in Mathematics Noether Lecturer, Dusa McDuff, at the Joint Mathematics Meetings in Baltimore, January 1998.
- ♦ Coorganizer with Y. Eliashberg of the Research Program for the Institute for Advanced Study/ Park City Mathematics Institute on Symplectic Geometry and Topology, 1997.
- ♦ Guest Lecturer for High School Teacher Program at the Institute for Advanced Study/Park City Mathematics Institute, July 1997.
- Graduate Program Coordinator and Lecturer for the Institute for Advanced Study/Park City Mathematics Institute Women's Program on Symplectic Geometry, May 1997.

- ♦ Panelist for "Girls and Women in Science" Conference, Beloit College, Beloit, WI, April 1997.
- Contributor of article The Compatibility of Research and a Liberal Arts College to the AWM (Association for Women in Mathematics) newsletter, November-December, 1996.
- ♦ Mentor for Women in Algebraic Geometry Workshop, Berkeley, May 1993.

Professional Memberships

- + American Mathematical Society
- + Association for Women in Mathematics
- + Mathematical Association of America

Bryn Mawr College Teaching

MATH B101: Calculus/Analytical Geometry I

MATH B102: Calculus/Analytical Geometry II

MATH B201: Multivariable Calculus

MATH B203: Linear Algebra

MATH B206: Transition to Higher Mathematics

MATH B221: Introduction to Geometry and Topology: Knot Theory

MATH B301: Real Analysis I

MATH B302: Real Analysis II

MATH B303: Abstract Algebra I

MATH B304: Abstract Algebra II

MATH B312: Topology

MATH B315: Riemannian Geometry

MATH B322/B522: Undergraduate/Graduate Complex Analysis

MATH B398 and Math B399: Senior Conference

MATH B525: Graduate Algebraic Topology

MATH B530: Graduate Differential Topology

Bryn Mawr College Service

- * STEMLA Mentor, 2023-2025.
- * Co-PI for NSF S-STEM Grant: Building STEM Identity and Persistence Through STEM Pathway Mentorship, 2022-2025.
- * Reunion Weekend Faculty Research Talk, 2022.
- * Director for Graduate Group in Science and Mathematics (GGSM), 2019 2022.
- * Bryn Mawr Representative to Mellon Tri-Co Committee, 2018 2022, Chair 2020-2022.
- * Board of the Academic Honor System, 2020-2023.
- * Department Chair, 2006 2009, 2017 2021.
- * Associate Grand Marshal, 2019-2020.
- * Outside Member on Computer Science Search for 2 TT and 1 CNTT positions: 2018-19, 2019-20.
- * Park Math Art Display Coordinator, 2019 present.
- * Mentor for New Faculty (Andrew Gargiulo, Psychology), 2020.
- * Organizer of Professional Development Activities for Graduate Students in Mathematics, Physics and Chemistry, 2011 2022.
- * Faculty Advisor to Incoming Freshmen, 2006-2010, 2015, 2017-2020. Freshmen Pilot Advising, 2011 2012, 2014- 2015.
- Committee on Appointments, substitute member, Fall 2018.
- * Director of Graduate Recruitment in Mathematics, 2012 2018.
- * Panelist during New Faculty Orientation, August 2018.
- * Host of International Students, 2011 2013, 2018.
- * Mathematics Department Search Committees, 2017 (Chair), 2014, 2010.
- * Faculty Representative to Board of Trustees, substitute for Spring 2017.
- * Graduate Council 2015-2017, Chair 2016-2017.
- * CA representative substitute for Cities Search, Fall 2016.

- * Outside member to Physics Opportunity Search, Fall 2015.
- * Committee on Appointments (CA), 2011 2015; Chair 2014 2015.
- * CA representative on searches in: Art History, Biology, Chemistry (TT and CNTT), Philosophy, Physics, and Russian, (2011-2015).
- * Director of Graduate Studies in Mathematics, 2003 2005, 2011 2012, Fall 2016.
- * Chair of Chemistry Dissertation Committee, 2013 2019.
- * Devised Plan and Timeline to meet Graduate Criteria, Fall 2011.
- * Admissions Committee, 2008 2011.
- * Clare Boothe Luce Scholar Mentor, 2007 2011.
- * Endowed Lectures Committee, 2007 2010.
- * HHMI (Howard Hughes Medical Institute) Post-doc in Mathematical Biology Search Committee, 2008 09.
- * Department Representative for Teaching Certification of Maeve O'Hara, 2008.
- * Haverford College Statistics Search Committee, 2006-07.
- * Chair of Psychology Dissertation Committee, 2006 2011.
- * Graduate Council, 2003-2005.
- * Chair of Art History Dissertation Committee, 2003-2008.
- * Science Librarian Search Committee, Spring 2000.
- * Library Committee, 1997 2002.
- * Quantitative Subcommittee of Curriculum Committee, 1997 2000.
- * Member of Ad-hoc Transition Committee, 1998 1999.
- * Lecturer for Mellon Summer Fellowship Program for Minorities, June 1998.
- * Haverford College Mathematics Department Search Committee, 1997 98.
- * Chair of Physics Dissertation Committee, 1997 2000.
- * Mathematics Department Graduate Video Design, 2004.
- * Redesigned Mathematics Department Webpage, 2000, 2003, 2008.

- * Mathematical Career Talks Organizer, 1997-2005.
- * Mathematics Colloquium Chair, 1995-1996, 1999-2001.