

## Susan L. Ganter

Provost and Executive Vice President for Academic Affairs (Immediate Past)  
Professor of Mathematics  
The University of Texas Permian Basin  
Odessa, TX 79762

### Research Impact Areas

- Evaluation of innovations in postsecondary science and mathematics, with the overarching goal of improving student access and success at the undergraduate level and especially implementing programs designed to improve success rates in STEM for underrepresented student populations
- Interdisciplinary faculty partnerships resulting in the creation of seamless student experiences across the undergraduate STEM curriculum, especially as impacted by introductory mathematics courses that utilize alternative and problem-based learning environments
- Effective use of technology in the teaching and learning of STEM disciplines, especially as relates to the growth and evolution of online education

### Professional Guiding Principles

- Analyzing and promoting an interdisciplinary mindset
- Supporting students and faculty where they are, recognizing the talents each person brings and how the collective work of the university can help them to maximize their potential
- Promoting access, diversity, equity, and inclusion via research, outreach, and state/national policies

### UNIVERSITY LEADERSHIP EXPERIENCE

#### **The University of Texas Permian Basin**

#### **Provost and Executive Vice President for Academic Affairs (2022-Fall 2023 resigned)**

#### **Professor of Mathematics (2022- )**

As a member of the 14-institution University of Texas System, UT Permian Basin serves over 7,000 students and has been designated as an Hispanic Serving Institution (HSI), with first-generation college students comprising almost 50% of the population. As the Chief Academic Officer for the university, I led UTPB's five colleges, with 25 academic departments, 250 FTE faculty, and an operating budget over \$70M. The Executive VP responsibilities include community outreach and fundraising for UTPB's rapidly increasing research enterprise and vital impact on the region's economic development.

*I resigned from my position as UTPB Provost because my vision and values as a university leader could not be realized, primarily because:*

*\*The university has been on state financial watch for many years, with no viable plan to correct the issues. As a long-time budget manager, I understand the importance of strategic and responsible spending to promote positive momentum for the institution.*

*\* Recent legislation passed in Texas has severely limited engagement in important work around diversity, equity, inclusion, and belonging, conflicting with my basic beliefs about the mission of higher education. I need to be part of a culture that actively embraces and participates in these efforts, and knew I could not lead at an institution not aligned with my values.*

### **Embry-Riddle Aeronautical University (2017-22)**

#### **Dean and Professor of Mathematics, College of Arts & Sciences**

Known as the world's leader in aviation and aerospace education, Embry-Riddle offers related degree programs in the College of Arts & Sciences (COAS). Driven by industry trends and facilitating a diverse student population of 23,000, these degrees are offered via online and face-to-face modalities through a network of 130 education facilities in the U.S. and abroad. ERAU Worldwide earned the 2023 #2 ranking for both Best Online Bachelor's Programs and Best Online Bachelor's Programs for Veterans from *U.S. News & World Report*, and has maintained a Top 5 ranking in these categories during the past nine years. COAS includes four academic departments and three research centers, led in collaboration with the COAS leadership team, 108 FTE faculty, and 369 adjunct instructors, and is supported by an operating budget of \$10.5M. In addition to degree programs, COAS provides over 2,000 sections of general education courses annually.

### **Virginia Polytechnic Institute and State University (2015-17)**

#### **Professor and Director, School of Education**

#### **Professor of Mathematics, College of Science**

As a leading research institution, Virginia Tech offers about 280 undergraduate and graduate degree programs to more than 37,000 students and fulfills its role as a land-grant institution by fostering a collaborative environment that integrates technology into all disciplines. The School of Education (SOE) includes 16 graduate academic program areas (most with both master's and doctoral degrees) offered across seven campuses statewide, with three Associate Directors, 82 FTE faculty, and 31 professional staff. SOE has a state operating budget just over \$7M, supplemented by annual expenditures from external grants and contracts totaling \$26M and an endowment approaching \$10M in support of student scholarships, academic programs, and named faculty appointments. SOE supports about 780 graduate students annually, three research centers, and Virginia's state center for K-8 career exploration.

### **East Carolina University (2010-15)**

#### **Professor and Chair, Dept. of Mathematics, Science, & Instructional Technology Education**

#### **Professor of Mathematics, College of Arts & Sciences**

As a member of the 16-institution University of North Carolina system, ECU serves almost 29,000 students, and has long-standing recognition for its innovative online programs and as a top supporter of student veterans. Almost 50% of students are enrolled in STEM-related majors, with similar enrollment levels for veterans and online programs. The MSITE Department houses 12 degree programs at the undergraduate and graduate levels, enrolling approximately 350 student majors led by 32 FTE faculty. Also part of the department, the state-designated Center for STEM Education manages an online resource library and leads numerous research projects and outreach programs, including since 1984 the Summer Ventures in Science and Mathematics program, a residential research and education experience for high school students seeking to pursue STEM careers.

### **SELECT ACCOMPLISHMENTS AT PROVOST AND DECANAL LEVELS (2015-present)**

#### **Strategic Leadership and Diverse Hiring**

- \* Organized University/College strategic planning activities, including faculty/staff retreats to set vision and strategic directions; one outcome in all roles was the development of Promotion & Tenure Guidelines
- \* Implemented University-wide (UTPB) and College-wide (ERAU) initiatives in socially impactful interdisciplinary areas such as Energy and Sustainability, Behavioral Health, Regional Culture and Human Development, and Human Security, including interdisciplinary faculty cluster hires
- \* Provided vision and resources for COAS Virtual Communication Center; virtual lab that provides support for students and faculty in all forms of communication; facilitates interdisciplinary faculty-student research group focused on communication issues

\* Formed and funded within COAS a National Center for Humanistic STEM, an innovative new area promoting understanding of the humanities through the lens of STEM disciplines that exist largely because of societal progress in literature, history, philosophy, art, religion, and ethics; supported by a \$291K National Science Foundation grant (2021-24), for which I serve as co-PI

\* Secured support for, recruited, and hired 40 new COAS faculty over five years, with 17 individuals (42%) from underrepresented populations

### **Faculty Inclusive Decision-making**

\* Organized university-wide Academic Transformation process with wide variety of discussions among faculty, staff, students, alumni, and community; outcomes include three new university institutes for research and outreach, reorganization of five Colleges, new tenure and promotion criteria, and strategic budget reorganization

\* Established advisory councils, as Provost and Dean, consisting of broad faculty and staff representation to provide input on University-level decisions

\* In collaboration with faculty, as Provost and Dean, created new interdisciplinary departmental structures and implemented more streamlined administrative teams

\* As Provost and Dean, conceptualized, negotiated, and implemented new categories, ranks, and contract durations for non-tenure-track faculty to allow for more promotion opportunities and better financial compensation

\* Implemented new COAS faculty awards structure that utilizes faculty review committees and incorporates financial rewards through the faculty merit pay system

\* Initiated COAS Research Colloquium series, to stimulate conversations about interdisciplinary research and related college funding allocations

### **Student Access, Diversity, Equity, and Inclusion**

\* As Provost, worked with the Student Affairs and Academic Affairs teams at UTPB to welcome the largest and most representative freshman class in university history

\* As Dean, commissioned industry leaders in collaboration with faculty to develop and create twelve brief videos focused on the motivation behind select general education topics, incorporating the videos as part of the course material with the goal of fostering greater student affinity in these introductory-level courses; this project received the ERAU Latitude Award for Outstanding Student Program (2018)

\* In collaboration with Student Affairs and Campus Operations, led the creation, funding, and implementation of ERAU Pathways to Success initiative, targeting minoritized students with the goal of successful and timely degree completion; program includes communities of learning, faculty mentoring, scholarships, professional industry days, preferred course registration, and seminars on timely topics

\* Worked with Dean of Students to design, fund, and provide faculty professional development for a new COAS Learning Glass studio; this innovative technology fosters a more inclusive student learning experience, especially in online courses

\* Led strategic graduate student recruitment at Virginia Tech through HBCU partnerships, resulting in School of Education (SOE) enrollment growth for the first time in a decade (up by 40 full-time students, mostly from underrepresented populations)

### **External Grants and Fundraising**

\* As Provost, developed proposal to support growth in academic programs for behavioral health, resulting in \$10M award from Permian Strategic Partnership and the Scharbauer Foundation

\* 30 years of continuous external funding for my scholarly work, totaling over \$12M (1994-2024)

\* Established Research Fellow positions at College/School level, providing grant-active faculty with reassigned time to work collaboratively with less experienced faculty on the development and submission of proposals for external funding while strengthening their own research agendas

\* Utilized salary savings and overhead dollars to support faculty reassigned time, directly resulting in \$10.6M (COAS) plus \$2.4M (SOE) in additional external funding expenditures annually

\* Grew COAS and SOE external funding portfolios by \$20.2M and \$11.9M, respectively, while also

increasing the grant-active faculty by 17 and 9, respectively; 63% federal funding rate for COAS in FY20

\* Serving as Principal Investigator for 15-institution consortium that is utilizing 20 years of national research to implement interdisciplinary partnerships within institutions for the purpose of maximizing student success across the disciplines; supported by a \$2.9M National Science Foundation grant (2016-22), with additional \$3M NSF proposal pending (2022-26)

\* Secured funding for and served as Director of the Virginia Tech-Qualcomm Thinkabit Partnership (2015-18), a \$2.55M enterprise with Engineering and Student Affairs that replicated and expanded the Qualcomm lab/makerspace experience in Northern Virginia for students from at-risk schools in the Washington, DC region; the development of related curricular and research activities facilitates long-term engagement of Virginia Tech faculty and regional teachers with creative STEM activities

\* Increased annual giving to SOE from individual donors by \$3.2M in FY17

\* Initiated SOE Scholarship Awards Dinner, to honor students and provide opportunity for interactions between benefactors and scholarship recipients

\* Initiated SOE Annual Donor Reception, to honor donors and solicit their input

### ADDITIONAL PROFESSIONAL EXPERIENCE

#### **Clemson University (1998-2010) Associate Professor/Professor of Mathematical Sciences**

##### Select major achievements

\*Continuous external research funding (1998-2010); recognized for each of 4 years as PI for over 10% of Department of Mathematical Sciences extramural funds (92 FTE faculty)

\*College of Engineering and Science Award for Distinguished Teaching (2003)

\*Chair, Clemson Committee for Vision and Renewal in Mathematics (2007-10; Presidential appointee)

\*Centers for Ocean Sciences Education Excellence: National Network Director (2005-07; Washington, DC)

\*Association for Women in Science: Interim Executive Director (2004-05; Washington, DC); Executive Board of Directors (elected Secretary, 2002-04); Editor, *AWIS Magazine* (1998-2001)

\*National Numeracy Network: Founding Director (2000-04); non-profit (403C) organization whose purpose is to promote quantitative literacy for all citizens

\*Chair, Committee on Curriculum Renewal Across the First Two Years, Mathematical Association of America (2001-04)

\*American Association for Higher Education: Director, Program for the Promotion of Institutional Change (1998-99)

#### **Worcester Polytechnic Institute (1993-98) Assistant Professor of Mathematical Sciences**

##### Select major achievements

\*Continuous external research funding (1994-98)

\*National Science Foundation: Senior Research Fellow of the American Educational Research Association (1996-98 in residence at NSF; Arlington, VA)

\* Director, WPI Annual Mathematics Meet for High School Students (1993-97)

\* Board of Trustees Faculty Representative (1993-96)

#### **California State University, San Bernardino (1991-93) Assistant Professor of Mathematics**

##### Select major achievements

\*Director, CSUSB K16 Partnership Program

-Rim of the World High School (1992-93) Mathematics Teacher (part-time exchange)

-Pacific High School (1991-92) Mathematics Teacher (part-time exchange)

\*College of Arts & Sciences Outstanding Public Outreach Award (1993)

#### **Western Washington University (1990-91) Visiting Assistant Professor of Mathematics**

#### **Santa Barbara City College (1988-90) Mathematics Instructor**

#### **University of California, Santa Barbara (1986-88) Mathematics Teaching Assistant**

\* Teaching Assistant of the Year Finalist, University of California, Santa Barbara (1987, 1988)

## EDUCATION

- Ph.D. 1990 University of California, Santa Barbara  
Educational Policy and Organization (Mathematics)  
Dissertation: *Improving the Achievement of Minorities in Mathematics*  
*A formative evaluation of community college programs*  
\* University of California Community College Research Grant (1989)
- M.A. 1988 University of California, Santa Barbara  
Applied Mathematics
- B.S. 1986 Southern Methodist University  
Mathematical Sciences (cum laude)
- B.M. 1986 Southern Methodist University  
Music Education (cum laude)

## PUBLICATIONS

### **Refereed Books, Monographs, and Special Issues**

Ganter, S.L., D.T. Bourdeau, V. Piercey, and A.V. Filippas (Eds.), *Engaging Students in Introductory Mathematics Courses through Interdisciplinary Partnerships: The SUMMIT-P Model*, MAA Notes, Mathematical Association of America, Washington, DC (2022).

Haver, W.E. and S.L. Ganter (Eds.), *Building and Sustaining Interdisciplinary Partnerships in the STEM Disciplines*, Special Issue: *Journal of Mathematics and Science: Collaborative Explorations*, Virginia Mathematics and Science Coalition, Richmond, VA (2022).

Ganter, S.L., C.D. Eaton, S. Hofrenning, and V. Piercey (Eds.), *Interdisciplinary Partnerships to Improve the Mathematics Curriculum II*, Special Issue: *Problems, Resources, and Issues in Mathematics Undergraduate Studies (PRIMUS)*, 29(9), Taylor & Francis (2019).

Ganter, S.L., C.D. Eaton, S. Hofrenning, and V. Piercey (Eds.), *Interdisciplinary Partnerships to Improve the Mathematics Curriculum I*, Special Issue: *Problems, Resources, and Issues in Mathematics Undergraduate Studies (PRIMUS)*, 29(8), Taylor & Francis (2019).

Ganter, S.L. and W.E. Haver (Eds.), *Partner Discipline Recommendations for Introductory College Mathematics and the Implications for College Algebra*, MAA Reports, Mathematical Association of America, Washington, DC (2011).

Ganter, S.L. (Ed.), *The Centers for Ocean Sciences Education Excellence (COSEE): Celebrating five years*, *Current: The Journal of the National Marine Educators Association* (Special Issue), 23(1), NMEA, Ocean Springs, MS (2007).

Committee for the Undergraduate Program in Mathematics (Ganter served on writing team), *Undergraduate Programs and Courses in the Mathematical Sciences: A CUPM curriculum guide*, MAA Reports, Mathematical Association of America, Washington, DC (2004).

Ganter, S.L. and W. Barker (Eds.), *Curriculum Foundations Project: Voices of the partner disciplines*, MAA Reports, Mathematical Association of America, Washington, DC (2004).

Ganter, S.L., *Changing Calculus: A report on evaluation efforts and national impact from 1988 to 1998*, MAA Notes #56, Mathematical Association of America, Washington, DC (2001).

### **Solicited Books and Monographs**

Ganter, S.L. (Ed.), *Calculus Renewal: Issues for undergraduate mathematics education in the next decade*, Kluwer Academic/Plenum Publishers, New York, NY (2000).

### **Refereed Articles and Chapters in Journals, Volumes, and Scholarly Series**

Phillips, J. and S.L. Ganter, "Learning to Be a Learning Community: A University and STEM High School Partnership to Foster Educational Innovation for At-risk Students," *School Science and Mathematics*, SSMA, Stillwater, OK (under revision).

Ganter, S.L. and J. Bookman, "Reflecting on the Quantitative Literacy Movement: Progress, Issues, and Future Directions," *Numeracy*, NNN, Seattle, WA (under revision).

Ganter, S.L. and D. Bourdeau, "Leveraging Interdisciplinary Partnerships to Create an Impactful STEM Curriculum," In Ganter, S.L., D.T. Bourdeau, V. Piercey, and A.V. Filippas (Eds.), *Engaging Students in Introductory Mathematics Courses through Interdisciplinary Partnerships: The SUMMIT-P Model*, MAA Notes, Mathematical Association of America, Washington, DC (2022).

Bowers, J., S.L. Ganter, M. Anderson, and D. Bourdeau, "Gaining Cross-Disciplinary Insights via a new Collaborative Tool," *Journal of Mathematics and Science: Collaborative Explorations*, Virginia Mathematics and Science Coalition, Richmond, VA (2022).

Ganter, S.L., "Energizing Mathematics Courses with Problems from the Partner Disciplines," *Focus*, 41(6), Mathematical Association of America, Washington, DC (2021).

Ganter, S.L. and W.E. Haver, "Interdisciplinary Collaboration to Develop Meaningful Mathematical Experiences," *Journal of Mathematics and Science: Collaborative Explorations*, Virginia Mathematics and Science Coalition, Richmond, VA (2020).

Ganter, S.L., "Considering Quantitative Literacy in the Context of Dewey, Data, and the Ever-shifting Landscape of a Democratic Society," In L. Tunstall, V. Piercey, and G. Karaali (Eds.), *Shifting Contexts, Stable Core: Advancing Quantitative Literacy in Higher Education*, MAA Notes, Mathematical Association of America, Washington, DC (2019).

Ganter, S.L., "The First Two Years: Moving the conversation forward," *Focus*, 36(3), Mathematical Association of America, Washington, DC (2016).

Ganter, S.L. and W.E. Haver, "New MAA/CRAFTY Publication Provides Tools for Revitalizing College Algebra," *Focus*, 32(4), Mathematical Association of America, Washington, DC (2012).

Ganter, S.L. and W.E. Haver, "Responding to the Recommendations of the Curriculum Foundations Project," In S.L. Ganter and W.E. Haver (Eds.), *Partner Discipline*

*Recommendations for Introductory College Mathematics and the Implications for College Algebra*, MAA Reports, Mathematical Association of America, Washington, DC (2011).

Ganter, S.L., “The Curriculum Foundations Project: Phase II,” *Focus*, 29(2), Mathematical Association of America, Washington, DC (2009).

Bookman, J, S.L. Ganter, and R. Morgan, “Developing Assessment Methodologies for Quantitative Literacy: A formative study,” *American Mathematical Monthly*, 115(10), Mathematical Association of America, Washington, DC (2008).

Spitzer, W. and S.L. Ganter, “COSEE: The evolution of a national network and its strategic goals,” In S.L. Ganter (Ed.), *The Centers for Ocean Sciences Education Excellence (COSEE): Celebrating five years, Current: The Journal of the National Marine Educators Association*, NMEA (2007).

Ganter, S.L., “Issues, Policies, and Activities in the Movement for Quantitative Literacy,” In R. Gillman (Ed.), *Current Practices in Quantitative Literacy*, MAA Notes, Mathematical Association of America, Washington, DC (2006).

Madison, B.L. and S.L. Ganter, “Quality Undergraduate Education (QUE) and Mathematics: Oil and Water?,” In R.J. Henry (Ed.), *Faculty Development for Student Achievement*, Anker Publishing Company, Inc., Bolton, MA (2006).

Ganter, S.L., “Calculus and Introductory College Mathematics: Current trends and future directions,” In N. Baxter Hastings, S. Gordon, F. Gordon, and J. Narayan (Eds.), *A Fresh Start for Collegiate Mathematics: Rethinking the Courses below Calculus*, MAA Notes, Mathematical Association of America, Washington, DC (2006).

Barker, W. and Ganter, S.L., “Fundamental Mathematics: Voices of the partner disciplines,” In N. Baxter Hastings, S. Gordon, F. Gordon, and J. Narayan (Eds.), *A Fresh Start for Collegiate Mathematics: Rethinking the Courses below Calculus*, MAA Notes, Mathematical Association of America, Washington, DC (2006).

Ganter, S.L. and Barker, W., “A Collective Vision,” In S.L. Ganter and W. Barker (Eds.), *Curriculum Foundations Project: Voices of the partner disciplines*, MAA Reports, Mathematical Association of America, Washington, DC (2004).

Ganter, S.L., “The National Numeracy Network: Promoting quantitative literacy for college graduates,” *The AMATYC Review*, 25(1), American Mathematical Association for Two-Year Colleges, Chattanooga, TN (2003).

Ganter, S.L., “Creating Networks as a Vehicle for Change,” In B.L. Madison and L.A. Steen (Eds.), *Quantitative Literacy: Why Numeracy Matters for Schools and Colleges*, National Council on Education and the Disciplines, Princeton, NJ (2003).

Bigio, D. and Ganter, S.L., “The Curriculum Foundations Workshop on Engineering,” *Focus*, 22(9), Mathematical Association of America, Washington, DC (2002).

Graham, M.D., and Ganter, S.L., “The Interface Between Chemical Engineering and Mathematics: What do students really need?” *Chemical Engineering Education*, American Society for Engineering Education, 152-56 (2001).

Rashid, M.M., Chen, M.-H., and Ganter, S.L., “Nonparametric Analysis of a Multi-Group Incompletely Ranked Item Response Data,” *Nonparametric Statistics*, 12, 245-64 (2000).

Ganter, S.L., and Jiroutek, M.R., “The Need for Evaluation in the Calculus Reform Movement: A comparison of two calculus teaching methods,” In E. Dubinsky, A. Schoenfeld, and J. Kaput (Eds.), *Research in Collegiate Mathematics Education IV*, American Mathematical Society, Providence, RI, 42-62 (2000).

Ganter, S.L., and Kinder, J.S. (Eds.), “Targeting Institutional Change: Quality Undergraduate Science Education for All Students,” *Targeting Curricular Change: Reform in Undergraduate Education in Science, Math, Engineering, and Technology*. American Association for Higher Education, Washington, DC, 1-27 (2000).

Hurley, J.F., Koehn, U., and Ganter, S.L., “Effects of Calculus Reform: Local and national,” *American Mathematical Monthly*, 106(9), Mathematical Association of America, Washington, DC, 800-11 (1999).

Ganter, S.L., “An Evaluation of Calculus Reform: A preliminary report of a national study,” In B. Gold, S. Keith, and W. Marion (Eds.), *Assessment Practices in Undergraduate Mathematics*, MAA Notes, Mathematical Association of America, Washington, DC, 233-36 (1999).

Ganter, S.L., “Impact of Calculus Reform on Student Learning and Attitudes,” *AWIS Magazine*, 26(6), Association for Women in Science, Washington, DC, 10-15 (1997).

Ganter, S.L., “The Importance of Empirical Evaluations of Mathematics Programs: A case from the calculus reform movement,” *Focus on Learning Problems in Mathematics*, 16(2), 1-19 (1994).

Ganter, S.L., “The Use of Student Presentations as a Learning Tool in Calculus,” *Problems, Resources, and Issues in Mathematics Undergraduate Studies*, 3(3), 277-83 (1993).

Ganter, S.L., “Women in Mathematics: Where are we now?” *Mathematics in College*, Fall-Winter, 81-83 (1993).

### **Refereed Conference Proceedings**

Banks-Hunt, J.M., S.A. Adams, and S.L. Ganter, “K-12 STEM Education: Bringing the engineering maker space, student-centered learning, curriculum, and teacher training to middle schools,” IEEE Frontiers in Education Conference, Erie, PA (October 2016).



Ganter, S.L., Doyle, J., and Radzicki, M., “Assessing System Dynamics Curricula: Past, present, and future,” *System Dynamics '95, Vol. II*. System Dynamics Society, Tokyo, Japan (July 1995).

Ganter, S.L., and Eby, D.W., “The Use of Three-Dimensional Models in the Teaching of Calculus,” *Proceedings from the 1992 International Congress on Mathematics Education*, National Council of Teachers of Mathematics, Quebec City, Canada (August 1992).

### **Other Scholarly Publications**

Mackenzie, D., “Math Whizzes Spurn Reformed Calc,” Research interview in *Science*, 1137, American Association for the Advancement of Science, Washington, DC, 41 (02/20/98).

Ganter, S.L., “A Report on Evaluation in Calculus Reform,” Invited article for *Mathematicians and Education Reform Newsletter*, IX(2), 9-10 (1997).

Ganter, S.L., and Farr, W.W., “Some Thoughts on Successfully Incorporating Projects into Calculus,” Invited article for *Calculus Currents*, V(2), 1-2 (1994).

Ganter, S.L., “My Diary of ICME-7,” Invited article for *American Perspectives on the Seventh International Congress on Mathematical Education*, National Council of Teachers of Mathematics, 69-70 (1993).

### EXTRAMURAL FUNDING

**Combined funding from foundation, federal, state, and non-profit sources = \$12M+  
Scholarship continuously funded as PI/co-PI: 1994-2024 (30 years)**

“Collaborative Research: Researching Institutional Transformation in the Context of Interdisciplinary STEM Partnerships to Support Student Transfer of Mathematical Knowledge,” National Science Foundation, PI, \$2,000,000 (re-submission: 2024-28).

“NASA Subject Matter Expert Engagement in SciAct Initiatives,” National Institute of Aerospace, co-PI, \$438,870 (pending: 2024-26).

“Humanistic STEM: Blending Humanities and STEM to Increase Undergraduate Student Engagement, Knowledge, and Skills,” National Science Foundation, co-PI, \$291,873 (2021-24).

“Increasing the Impact of SUMMIT-P: Sustainability, Dissemination, and Long-term Partnerships,” National Science Foundation, PI, \$255,057 (2021-24).

“Expanding the Impact of the SUMMIT-P Consortium: Supplemental Funds in Support of Additional Institutions for a Pilot Study,” National Science Foundation, PI, \$50,000 (2019-21).

“Collaborative Research: A National Consortium for Synergistic Undergraduate Mathematics via Multi-institutional Interdisciplinary Teaching Partnerships (SUMMIT-P),” National Science Foundation, PI, \$2,648,636 (2016-21; extension w/supplement 2021-24).

“Thinkabit: A Motivator for Engineering in U.S. Public Schools (Qualcomm-Virginia Tech Partnership),” Qualcomm Corporation, PI (with S. Adams, B. Watford), \$2,550,000 (2015-20).

“An Investigation and Intervention of Learning and Attitudes toward the STEM Disciplines for Middle School Girls,” Burroughs Wellcome Fund, co-PI, \$185,000 (2014-15).

“Lenoir County Public Schools STEM Learning Community,” North Carolina Mathematics Science Partnerships (ECU subcontract from Lenoir County Public Schools), co-PI, \$482,518 (2014-17).

“Mathematics and Science Education NOYCE Scholars Program,” National Science Foundation, co-PI, \$899,524 (2010-15).

“Learning Laboratory Initiative: Wayne School of Engineering and East Carolina University,” Bill and Melinda Gates Foundation, co-PI, \$73,145 (2012-13 extension).

“Mathematics Achievement of Girls in College (MAGIC),” Tensor Foundation (MAA), PI, \$6,000 (2011-12).

“Learning Laboratory Initiative: Wayne School of Engineering and East Carolina University,” Bill and Melinda Gates Foundation, co-PI, \$147,262 (2010-12).

“Voices of the Partner Disciplines: Phase II,” Calculus Consortium for Higher Education, PI, \$50,000 (award to Mathematical Association of America; 2007-09).

“COSEE Central Coordinating Office,” National Science Foundation, co-PI, \$1,039,243 (award to Consortium for Oceanographic Research and Education; 2005-10).

“Coordination of the COSEE National Network,” National Science Foundation (via subcontract to Clemson University from Consortium for Oceanographic Research and Education), PI, \$117,034 (2006-07).

“COSEE Central Coordinating Office: Expanding the Impact of the Centers for Ocean Sciences Education Excellence (COSEE),” National Science Foundation, co-PI, \$46,722 (award to Consortium for Oceanographic Research and Education; 2005-06).

“The Development of Assessment Instruments for the Study of Quantitative Literacy: Supporting the Importance of Baseline Data and Evaluation Capacity Building,” National Science Foundation, PI, \$99,922 (2003-04).

“Changing Calculus: Dissemination project,” National Science Foundation, PI, \$47,070 (2004).

“Voices of the Partner Disciplines,” Calculus Consortium for Higher Education, PI, \$10,000 (award to Mathematical Association of America; 2003-04).

“A National Agenda for Advancing the Undergraduate Mathematics Curriculum,” National Science Foundation, co-PI, \$91,256 (award to Mathematical Association of America; 2002-04).

“The Impact of Calculus Reform on Long-term Student Performance,” National Science Foundation, PI, \$360,153 (2000-04).

“The Development of a National Project in Quantitative Literacy,” Woodrow Wilson Educational Foundation and Pew Educational Foundation, co-PI, \$1,500,000 (PI, \$130,000 subaward to Clemson; 2000-03).

“Carolinas Mathematics Initiative,” Shodor Education Foundation, co-PI, \$36,000 (2000-03).

“Organizing and Assessing Learning through Institutional Change,” National Science Foundation, PI, \$427,101 (1998-99).

“Building Bridges in the First Two Years: Making connections among introductory math, science, and engineering courses,” National Science Foundation, PI, \$200,000 (1997-99).

“The Development of a General Evaluation Model for Undergraduate Mathematics Reform,” American Educational Research Association and National Science Foundation, PI, \$225,000 (1996-98).

“Improving the Quality of Instruction in Large Calculus Classes Using Maple and Cooperative Projects,” Davis Educational Foundation, PI, \$47,631 (1995-96).

“Sonia Kovalevsky High School Mathematics Meet,” Association for Women in Mathematics, PI, \$1,800 (1995-96).

“A Project-Based Modular Linear Algebra Curriculum,” National Science Foundation, co-PI, \$100,006 (1994-96).

“Cooperative Learning with Projects in Linear Algebra,” Davis Educational Foundation, co-PI, \$30,234 (1994-95).

“Sonia Kovalevsky High School Mathematics Meet,” Association for Women in Mathematics, PI, \$5,000 (1994-95).

“WPI Mathematics Meet Industrial Grants,” Numerous grants from local industry, PI, \$29,000 (from combined grants; 1993-96).

“The Use of Three-dimensional Models in the Teaching of Calculus,” CSU Instructional Development Grant, PI, \$2,556 (1992).

“Improving Minority Achievement in Mathematics,” California Community College Faculty Enrichment Grant, PI, \$3,750 (1990).

“A Formative Evaluation of a Community College Program in Mathematics,” UC Community College Research Grant, PI, \$6,000 (1989).

#### OTHER SPONSORED ACTIVITY

“Carolinas Mathematics Initiative for Pre-Service Teachers,” Clemson Provost’s Office, PI, \$50,000 (2000-01).

“Curriculum Foundations for the First Two Years of Collegiate Mathematics: A disciplinary workshop with engineering,” Clemson University Innovation Fund, College of Engineering and Science, and Department of Mathematical Sciences, PI, \$23,900 (2000).

Travel Grant, WPI Educational Development Council, \$750 (1996).

“Cooperative Learning Activities for Calculus,” WPI Educational Development Council, PI, \$6,855 (1994-95).

Travel Grant, National Council of Teachers of Mathematics, \$1,000 (1992).

#### PROFESSIONAL PRESENTATIONS (since 2000)

Ganter, S.L. “Quantitative Literacy and the Importance of an Interdisciplinary Mindset for Informed Citizenship,” Keynote Speaker, National Numeracy Network Annual Meeting, Tampa, FL (March 2022).

Ganter, S.L. “Interdisciplinary Thinking in STEM, Humanities, and Social Sciences: Challenges and Opportunities,” Invited speaker, Texas Tech University, Lubbock, TX (October 2021).

Beisiegel, M, J. Bowers, T. Chen, S.L. Ganter, and C. Maher-Boulis, “Mathematicians Collaborating Across the Disciplines,” Organizers: MAA Themed Contributed Paper Session, Joint Mathematics Meetings, Denver, CO (January 2020).

Ganter, S.L., S. Dorée, S. Hofrenning, V. Piercey, “Developing Interdisciplinary Partnerships using the SUMMIT-P Model,” Workshop, Joint Mathematics Meetings, Denver, CO (January 2020).

Ganter, S.L., A. Filippas, J. Bookman, R. Hargraves, V. Piercey, “SUMMIT-P: Current Impact and Future Plans,” Invited presentation at the National Science Foundation, Arlington, VA (September 2019).

Ganter, S.L., “Supporting Women Mathematicians in Academic Leadership Roles,” Invited panelist, Joint Mathematics Meetings, Baltimore, MD (January 2019).

Beisiegel, M, J. Bowers, T. Chen, S.L. Ganter, and C. Maher-Boulis, “Implementing Recommendations from the Curriculum Foundations Project,” Organizers: MAA Themed Contributed Paper Session, Joint Mathematics Meetings, San Diego, CA, (January 2018).

Dorée, S., S.L. Ganter, R. Hobson, and S. Hoffrening, “In the Fishbowl: Strategies for Conversations on Mathematics with the Partner Discipline,” Workshop, Association of American College and Universities (AAC&U), San Francisco, CA (November 2017).

Banks-Hunt, J. and Ganter, S.L., “K-12 STEM Education: Real world, hands-on engineering community outreach sites for student-centered learning and teacher training,” Special session, IEEE Frontiers in Education Conference, Indianapolis, IN (October 2017).

Banks-Hunt, J., Adams, S, and Ganter, S.L., “K-12 STEM Education: Bringing the engineering maker space, student-centered learning, curriculum, and teacher training to middle schools,” Special session, IEEE Frontiers in Education Conference, Erie, PA (October 2016).

Ganter, S.L., et al, “Collaborating across the Disciplines to Support Improved Curriculum Development,” Invited Panelist, Mathfest, Washington, DC (August 2015).

Ganter, S.L. and Haver, W.E., “Next Steps in the Introductory College Mathematics Curriculum,” Special session, Joint Mathematics Meetings, San Diego, CA (January 2013).

Ganter, S.L. and Bookman, J., “Twenty-five Years of Calculus Reform: Assessing national impact,” Special session on preparing students for calculus, Joint Mathematics Meetings, Boston, MA (January 2012).

Ganter, S.L. “Strategic Planning for Interdisciplinary Programs in the STEM Disciplines,” Invited speaker, East Carolina University, Greenville, NC (April 2010).

Ganter, S.L., “More Voices from the Partner Disciplines: The second round of curriculum foundations workshops,” Invited panelist, Joint Mathematics Meetings, San Francisco, CA (January 2010).

Ganter, S.L., “Mathematical Collaborations with Other Disciplines: Research partnerships and interdisciplinary programs,” Invited panelist, Joint Mathematics Meetings, San Francisco, CA (January 2010).

Ganter, S.L. “Crushing the Box: Developing and sustaining innovative programs as part of a university center for STEM education,” Invited speaker, Florida Gulf Coast University, Fort Myers, FL (June 2009).

Ganter, S.L. “Building a University Assessment Program: Lessons learned from the quantitative literacy movement,” Invited speaker, University of North Florida, Jacksonville, FL (March 2009).

Ganter, S.L. “Quantitative Literacy: What is it and who’s got it?,” Invited speaker, California Polytechnic State University, San Luis Obispo, CA (February 2009).

Ganter, S.L., Caniglia, J., and Haver, W. “Results from a Workshop to Assess the Mathematical Needs of Arts Students,” Special session on mathematics and the arts, Joint Mathematics Meetings, Washington, DC (January 2009).

Ganter, S.L. and Bookman, J. “Developing Assessment Methodologies for Quantitative Literacy: A formative study,” Special session on the assessment of student learning in undergraduate mathematics, Joint Mathematics Meetings, San Diego, CA (January 2008).

Ganter, S.L., “Future Directions for Undergraduate Programs in STEM Education,” Invited speaker, DUE/EHR colloquium at the National Science Foundation, Arlington, VA (May 2007).

Ganter, S.L., “Forming Connections between Research, Education, and the Community,” Invited speaker, George Mason University, Fairfax, VA (Nov 2006).

Ganter, S.L., “Building and Developing the Cain Center for STEM Literacy,” Invited speaker, Louisiana State University, Baton Rouge, LA (April 2006).

Ganter, S.L., “Session for Department Chairs: Building bridges,” Invited panelist, Joint Mathematics Meetings, San Antonio, TX (January 2006).

Ganter, S.L., “A Discussion about Research, Policy, and Action,” Invited speaker, REC/EHR colloquium at the National Science Foundation, Arlington, VA (December 2005).

Ganter, S.L., “Women in Science Disciplines: Glancing back, Charging forward,” Invited keynote, Women’s History Month Celebration, Hood College, Frederick, MD (March 2005).

Ganter, S.L., “Beyond Crossroads: Curricular Standards for Two-Year Colleges,” Invited panelist, Joint Mathematics Meetings, Atlanta, GA (January 2005).

Ganter, S.L., “The Status of Women in STEM Disciplines,” Invited speaker, Hood College, Frederick, MD (November 2004).

Ganter, S.L., “The Future of Graduate Education in the Sciences: Research and Practice,” Invited speaker, DGE/REC/EHR colloquium, National Science Foundation, Arlington, VA (April 2004).

Ganter, S.L., “Undergraduate Programs and Courses in the Mathematical Sciences: A CUPM Curriculum Guide,” Invited panelist, Joint Mathematics Meetings, Phoenix, AZ (January 2004).

Ganter, S.L. and Bookman, J., “A Multi-Campus Longitudinal Study of Technology in Mathematics Courses,” Sponsored organizers for invited panel, Joint Mathematics Meetings, Phoenix, AZ (January 2004).

Ganter, S.L., “Changing Calculus: A National Study of Impact After Ten Years,” Invited keynote speaker, Kentucky Regional Meeting of the Mathematical Association of America, Louisville, KY (April 2003).

Calder, L., Ganter, S.L., Roth, J., and Uno, G., “Developing Disciplinary Statewide Standards for Undergraduate Education,” Invited panelist, Conference for Quality in Undergraduate Education, San Antonio, TX (February 2003).

Gordon, S., Ganter, S.L. et al, “Revisiting the First College Mathematics Course,” Invited panelist, Joint Mathematics Meetings, Baltimore, MD (January 2003).

Ganter, S.L., “The CUPM Curriculum Foundations Project: Looking at the first two years,” Invited panelist, followed by individual presentation, at special session on Mathematics and Education Reform, Joint Mathematics Meetings, Baltimore, MD (January 2003).

Ganter, S.L. and Bookman, J., “The Impact of Technology in Calculus Courses on Long-term Student Performance and Employment,” Sponsored organizers for invited panel, Joint Mathematics Meetings, Baltimore, MD (January 2003).

Ganter, S.L., “Evaluating the Use of Technology in Calculus Courses for Biology Majors,” Invited speaker, International Conference on Technology in Collegiate Mathematics (ICTCM), Orlando, FL (November 2002).

Gordon, S., Ganter, S.L. et al, “Revisiting the First College Mathematics Course,” Invited panelist, International Conference on Technology in Collegiate Mathematics (ICTCM), Orlando, FL (November 2002).

Ganter, S.L. and Madison, B.L., “Quantitative Literacy: A National Agenda,” Sponsored organizers for invited panel, Mathfest, Burlington, VT (August 2002).

Ganter, S.L., “Quantitative Literacy: Everyone’s Orphan,” Invited workshop leader, Project Kaleidoscope Summer Institute, Williamsburg, VA (May 2002).

Ganter, S.L., “Undergraduate Curriculum Projects of the MAA,” Invited speaker, DUE/PI meeting of the National Science Foundation, Arlington, VA (March 2002).

Ganter, S.L., “The CUPM Project on Undergraduate Curriculum Guidelines,” Invited panelist, Joint Mathematics Meetings, San Diego, CA (January 2002).

Ganter, S.L. and Decker, E., “Why Numeracy Matters: Some Next Steps,” Invited speaker, National Forum on Quantitative and Mathematical Expectations in Grades 11-14, National Academy of Sciences, Washington, DC (December 2001).

Ganter, S.L., “Quantitative Literacy: A National Agenda for Higher Education,” Invited keynote, Florida Commission on Higher Education Annual Meeting, Tampa, FL (November 2001).

Ganter, S.L., “Communicating with Other Disciplines in the Development of the CUPM Curriculum Guide,” Invited panelist, Mathfest, Madison, WI (August 2001).

Ganter, S.L., "Science for All: Quantitative literacy beyond mathematics," Invited workshop leader, Project Kaleidoscope Summer Institute, Snowbird, UT (July 2001).

Ganter, S.L., "Engineers and Mathematicians Communicating," Invited panelist, Annual Meeting of the American Society for Engineering Education (ASEE), Albuquerque, NM (June 2001).

Ganter, S.L., "Mathematics Requirements in the Chemical Engineering Curriculum," Invited panelist, Annual Meeting of the American Society for Engineering Education (ASEE), Albuquerque, NM (June 2001).

Ganter, S.L., "The Interface Between Engineering, Physics, and Mathematics," Invited luncheon speaker, Annual Meeting of the American Society for Engineering Education (ASEE), Albuquerque, NM (June 2001).

Horton, B., Lashley, E., and Ganter, S.L., "Technology in the Classroom: The new SC Mathematics Standards," Regional workshop, Math Counts Competition, Clemson University, Clemson, SC (February 2001).

Ganter, S.L., "A National Report on the Impact of Calculus Reform," Invited speaker, Joint Mathematics Meetings, New Orleans, LA (January 2001).

Ganter, S.L., "Calculus Renewal: Issues in undergraduate mathematics education in the next decade," Invited panel leader, Joint Mathematics Meetings, New Orleans, LA (January 2001).

Ganter, S.L., "The MAA Curriculum Foundations Project: Responding to the client disciplines," Invited panelist, Joint Mathematics Meetings, New Orleans, LA (Jan. 2001).

Ganter, S.L., "Calculus Reform: Where do we go from here?," Invited panelist, International Conference on Technology in Collegiate Mathematics (ICTCM), Atlanta, GA (November 2000).

Ganter, S.L., "MAA Curriculum Foundations Project: A workshop in engineering," Invited keynote speaker, CLUES Colloquium on Lower-division Undergraduate Engineering and Science, Binghamton, NY (August 2000).

Ganter, S.L., "Calculus Renewal: Issues in undergraduate mathematics education in the next decade," Invited panel leader, Annual Summer Meeting of the Mathematical Association of America (Mathfest), Los Angeles, CA (August 2000).

Ganter, S.L., "Calculus Renewal: Issues for research in undergraduate mathematics education in the next decade," Invited panel leader, Research Pre-session of the National Council of Teachers of Mathematics, Chicago, IL (April 2000).

Ganter, S.L., "Compromise and Calculus Reform: Calculus reform in the long run," Invited panelist, Joint Mathematics Meetings, Washington, DC (January 2000).



Ganter, S.L., “Assessment Standards in Quantitative and Symbolic Reasoning,” Invited workshop, Virginia Polytechnic Institute and State University, Blacksburg, VA (January 2000).

### HONORS AND AWARDS

Latitude Award for Outstanding Student Program, Embry-Riddle Aeronautical University (2018)

Annual Book Award, East Carolina University Libraries (2013)

College of Engineering and Science Award for Distinguished Teaching,  
Clemson University (2003)

Association for Women in Science, Secretary (elected), Executive Board of Directors (2002-04)

Presidential Appointee MAA-NCTM Calculus Committee, Mathematical Association of  
America (2003-04)

Board of Trustees Faculty Representative, Worcester Polytechnic Institute (1993-98)

Teaching Assistant of the Year, University of California, Santa Barbara (1987, 1988)

Cum Laude Graduate, Southern Methodist University (1986)

Kappa Mu Epsilon (1985)

Kappa Delta Pi (1985)

Mu Phi Epsilon (1983)

### STUDENT ADVISING

#### **Doctoral Level**

Banks-Hunt, J. “Engaging K-12 Students in STEM Disciplines through Hands-on Experiences in an Engineering Systems Lab” (Ph.D., 2017)

Sloop, B. “Using Research to Inform the Use of Alternative Pedagogies in Introductory Undergraduate Mathematics Courses” (Ph.D., 2011)

Bernasconi, K. “The Teaching of Algebra in the Elementary Schools: Impact on retention in the mathematics pipeline,” (Ph.D., 2008)

Bonner, S. “Utilizing Technology in Mathematics to Promote Student Learning and Retention,” (Ph.D., 2007)

Harrelson, H. “A Study of Student Understanding in Introductory College Mathematics Courses as Informed by Cognitive Research,” (Ph.D., 2007)

Kosher, M. “Calculus Reform: Understanding the impact of mathematical technologies on student success and choice of major,” (Ph.D., 2004)

LaVare, J. “Evaluating Student Success in Introductory Biology as Affected by Introductory College Mathematics with Technology,” (Ph.D., 2003)

Miller, K. “State Standards in Elementary Mathematics: Impact on long-term mathematics performance,” (Ph.D., 2003)

### **Masters Level**

Steuber, T. Research Asst: “Centers for Ocean Sciences Education Excellence” (2006-07)

Harrelson, H. “Using Cognitive Research in the Teaching of College Mathematics,” (MS, 2002)

Bannister, N. “Building High School Mathematics Teachers’ Understanding through Collaborative Communities,” (MS, 2001)

Miller, K. “Mathematics Curriculum: Observations of a first grade class,” (MS, 2000)

Massoud, M. “Mathematics Reform: A report on the Connected Mathematics Program,” (MS, 2000)

Jiroutek, M. “A Statistical Comparison of Two Calculus Teaching Methods,” (MS, 1996)

Richardson, J. “The Use of Peer Learning Assistants in the Teaching of Calculus,” (MS, 1996)

TenEyck, S. “Teaching Approaches and the Use of Graphing Calculators in College Algebra: A study of the effect on mathematics anxiety,” (MS, 1995)

Stuart, B. “Calculus Reform: A study of the transition between secondary school and college,” (MS, 1994)

### **Bachelors Level (Senior Research Projects)**

Davidson, G., Hensley, A., and Warner, D., “An Assessment of the Teacher Preparation Program at the National Science Foundation,” (1998)

Brown, M., and Stevenson, B., “Carpentry: An application of the NCTM Standards,” (1996)

Fitzpatrick, A., and Jacobs, C., “Cooperative Activities in Calculus,” (1995)

Fonseca, D., “An Evaluation of the Maple Calculus Program at WPI,” (1995)

Paulauskas, K., “An Analysis of the Master of Mathematics Program at WPI” (1994)

### **SELECT CONSULTING EXPERIENCE**

Pathways with Regional Outreach and Mathematics Excellence for Student Achievement in STEM: A collaborative between CSU Channel Islands and Ventura Community Colleges District (2016-18), Advisory Board, comprehensive approach to system change focused on introductory mathematics at Hispanic-Serving Institutions

Teacher Quality Partnership (TQP, 2010-14), Advisory Board, initiative created through a partnership between East Carolina University and school districts in eastern North Carolina to improve the teacher education experience for pre-service teachers using a co-teaching model

American Mathematical Association for Two Year Colleges (AMATYC, 2007-10), “The Right Stuff” task force, NSF-funded initiative to develop and implement college algebra workshops

American Mathematical Association for Two Year Colleges (AMATYC, 2002-05), Advisory Committee, revision of the AMATYC Standards, *Crossroads in Mathematics*

Mathematical Association of America (2003-04), Joint Advisory Committee with National Council of Teachers of Mathematics, preparation of *Statement on Calculus in Secondary Schools*

Association for Women in Science (2002-04), Advisory Board, NSF-funded project “Women Faculty Career Advancement”

Brooklyn College, New York, NY (2002), Mathematics Evaluator and Consultant to the Provost

Woodrow Wilson Educational Foundation, Princeton, NJ (2000-03), Planning Team, “National Project in Quantitative Literacy, K-16”

SC Statewide Systemic Initiative in Mathematics and Science (1999-2001), Advisory Board

Virginia Tech (2000), Consultant, Development of Mathematics Emporium

The College Board, Princeton, NJ (1999-2000), National Design Team on Quantitative Literacy  
National Science Foundation (1998), Advisory Panel, Use of Computer Algebra Systems in Undergraduate Mathematics

Mercer University (1998), Undergraduate Programs Consultant, Provost’s Office

National Institute for Science Education, Madison, WI (1997), Advisor on Cooperative Learning.

Addison-Wesley-Longman Publishers (1995-97), Calculus Advisory Board, development of national materials for calculus reform

Education Development Center, Inc. (1995), Advisor, "Strengthening Capacity for Research in Undergraduate Mathematics Education," funded by Exxon Education Foundation.

Tokyo Public Schools, Japan (1995), assisted curriculum development for use of technology in high school mathematics classes; sponsored by local Japanese industry and Sustainable Solutions, Inc., Worcester, MA

Catalina Foothills School District, Tucson, AZ (1994), assisted curriculum development for use of technology in middle school mathematics classes

## CREDENTIALS AND REGISTRATIONS

Secondary Teaching Credentials (life)—mathematics: Texas, 1986; California, 1991

Elementary and Secondary Teaching Credentials (life)—music, Texas, 1986

Community College Teaching Credentials (life)—mathematics, California, 1988

## PROFESSIONAL MEMBERSHIPS

American Mathematical Society, AMS (1990- )

Mathematical Association of America, MAA (1990- )

National Council of Teachers of Mathematics, NCTM (1989- )

Association for Women in Mathematics, AWM (1990- )

Association for Women in Science, AWIS (1998- )

National Numeracy Network (founding member, 2000- )

## SELECT PROFESSIONAL ACTIVITIES

Mathematical Association of America (1999-present), Curriculum Foundations Project, serving as PI and lead Editor

Mathematical Association of America, Committee on Curriculum Renewal Across the First Two Years (CRAFTY) (Member, 1998-2001 and 2015-present; Chair, 2001-04)

Qualcomm, Inc (2015-18), Director of VT-Qualcomm Thinkabit Project

Educational Testing Service (ETS) College Level Examination Program (CLEP) College Mathematics Committee (2005-10)

Mathematical Association of America, Committee on Mathematics Across the Disciplines (2004-07; 2007-10)

Woodrow Wilson National Foundation (2000-04) Director, National Numeracy Network

Mathematical Association of America, Writing Team for CUPM National Guidelines for the Undergraduate Program in Mathematics (2001-04)

Association for Women in Science, Secretary (elected), Executive Board of Directors (2002-04)

Mathematical Association of America, MAA-NCTM Ad Hoc Committee on Calculus in Secondary School (MAA presidential appointee) (2003-04)

Project Kaleidoscope, Workshop Leader/Planning Team, Summer Institute (2001, 2002)

Association for Women in Science, Editor, *AWIS Magazine*, (1998-2001)

Mathematical Association of America, Member, Development Committee for International Mathematics Olympiad 2001 (1999-2001)

Education Development Center, Inc., Advisory Panel Member, Project for Collaboration between Mathematics and Mathematics Education (1997)

National Science Foundation, Advisory Panel Member, Evaluation Program of the Directorate for Education and Human Resources (1996-97)

Massachusetts Mathematics Initiative, Advisory Board Member (1994-98)

Worcester Area Mathematics Institute, Co-Founder and Chair (1994-96)

Worcester Alliance for Education, Member (1993-98)

Project Kaleidoscope, Steering Committee Member for College of the Holy Cross (1993-95)

## SELECT UNIVERSITY AND PROFESSIONAL SERVICE

### **Committees**

Department: Member, Undergraduate Affairs Committee (2008-10)

Member, Committee on Courses in Quantitative Literacy (2006-10)  
 Member, Committee for Research and Development (2000-08)  
 Member, Calculus Committee (1999-08)  
 Member, Appointed Chair's Task Force on Mathematics Education (2006-07)  
 Chair, Educational Reform Committee (1994-95)  
 Co-Chair, Calculus Committee (1994-96)  
 Member, Graduate Committee (1994-96)  
 Member, Colloquium Committee (1993-94)  
 College: Leadership Team (2010-15)  
 Dean's Advisory Council (2010-15)  
 University: Worldwide Leadership Team (2017-21)  
 Deans Executive Council (2015-17)  
 Arts Policy Board (2015-17)  
 University Research Council (2011-15)  
 Faculty Advisor, Clemson Exchange Program, Spain and Belgium (1999-2010)  
 Campus Internationalization Task Force (2008-10)  
 Clemson Faculty Senate (2002-06)  
 Chair, Committee for Vision and Renewal in Mathematics Education (2000-04)  
 Faculty Advisor, WPI Global Perspective Center, Washington, DC (1996-97)  
 Committee on Graduate Studies and Research (1995-98)  
 Chair, Subcommittee on Professional Practice Degrees (1995-96)  
 Massachusetts Academy of Mathematics and Science Academic  
 Advisory Committee (1994-96)  
 Educational Development Council—Provost Appointee (1994-97)  
 Faculty Rep., Trustee Academic Planning/Student Affairs Committee (1993)

### **Professional**

Associate Editor, *Numeracy*, National Numeracy Network (2007-present)  
 Reviewer (1996-present): *Research in Collegiate Mathematics Education*; *Investigations in Mathematics Learning* (formerly *Focus on Learning Problems in Mathematics*); *Journal for Research in Mathematics Education*; *College Mathematics Journal*; *American Mathematical Monthly*; *Problems, Resources, and Issues in Mathematics Undergraduate Studies (PRIMUS)*  
 Federal Review Panels (1994-present): National Science Foundation, U.S. Dept. of Education, National Oceanic and Atmospheric Administration (NOAA)  
 Mathematical Association of America (MAA), Committee on Curriculum Renewal Across the First Two Years (CRAFTY) (Member, 1998-2001 and 2015-21; Chair, 2001-04)  
 Board Member, Virginia Mathematics & Science Coalition (2015-18)  
 Educational Testing Service (ETS) College Level Examination Program (CLEP) College Mathematics Committee (2005-10)  
 Mathematical Association of America (MAA), Committee on Mathematics Across the Disciplines (2004-07; 2007-10)  
 Editorial Board, CUPM Illustrative Resources of the MAA (2004-06)  
 MAA, Writing Team CUPM Guide: Undergraduate Program in Mathematics (2001-04)  
 Association for Women in Science, Secretary (elected), Executive Board of Directors (2002-04)  
 MAA-NCTM Committee on Calculus (MAA presidential appointee; 2003-04)

Member, Greenville Chorale and Herring Chamber Ensemble, Greenville, SC (1999-2010)  
Association for Women in Science, Editor, *AWIS Magazine*, (1998-2001)  
Member, Washington Singers, National Choral Association, Washington, DC (1996-99)  
Conference Director, *Organizing Institutional Change in Higher Education* (1998)  
Director, WPI Annual Mathematics Meet for High School Students (1993-98)  
Director, WPI Master of Mathematics for Educators Program (1993-98)  
School Science and Mathematics Association, Chair, Membership Committee (1993-97)  
EMSEP Mathematics Coordinator, WPI Minority Student Programs (1993-98)  
Member, Tanglewood Festival Chorus, Boston Symphony Orchestra (1993-98)  
Member, Holiday Extravaganza Chorus, Boston Pops (1993-98)  
Reader, National AP Calculus exams (1993-95)  
Conference Director: *A Conference on the Calculus Reform Movement* (Feb. & June 1993)