

KATHARINE F. GURSKI

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RESEARCH INTERESTS

Modeling physical and biological problems using analytical and computational techniques.
Concentration in fluid dynamics using tools from differential equations and numerical analysis.

EDUCATION

Ph.D. in Applied Mathematics, University of Maryland, College Park, August 1999

Thesis Title: Decay Rates of Internal Waves in Viscous Near-Critical Fluids

Advisor: Professor Robert Pego

M.S. in Applied Mathematics, University of Illinois at Urbana-Champaign, 1991

M.S. in Physics, University of Illinois at Urbana-Champaign, 1989

B.S. in Physics, Emory University, Atlanta, Georgia 1987, Summa Cum Laude

EXPERIENCE

Associate Professor

August 2013 –

Howard University, D.C.
Graduate School Faculty

Co-Director of Graduate Studies

October 2012 - July 2015, August 2018 - September 2019

Howard University, D.C.

Assistant Professor

August 2008 – August 2013

Howard University, D.C.
Graduate School Faculty

Assistant Professor (Contract)

June 2003 – August 2008

George Washington University, D.C.

Guest Researcher

January 2003 – 2010

National Institute for Standards and
Technology, Gaithersburg, MD

National Research Council Research Associate

January 2001 - January 2003

Adjunct Faculty, Instructor of Mathematics

January 2003 - May 2003

Marymount University, Arlington, VA

Postdoctoral Fellow

August 1999-December 2000

NASA Goddard Space Flight Center
Greenbelt, MD

Fellowship funding contracted through:

Universities Space Research Association, Caelum Research Corporation, University of Maryland,
Baltimore County

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PUBLICATIONS

Articles in Refereed Journals

1. Z. Feng, K. Gurski, O. Prosper, M. Teboh-Ewungkem, M. Grogan, *A vector-borne disease model with non-exponentially distributed infection and treatment stages*, submitted.
2. K.F. Gurski, *Super-Time-Step Calculations for Non-Symmetric and Skew-Symmetric Dominated Systems: STS-RKC, STS-RKL*, submitted.
3. V. Florinski, D.S. Balsara, S. Garain, K.F. Gurski, *Technologies for supporting high-order geodesic mesh frameworks for computational astrophysics and space sciences*, submitted.
4. K.F. Gurski, *A Sexually Transmitted Infection Model with Long-term Partnerships in Homogeneous and Heterogenous Populations*, Infectious Disease Modelling, Volume 4, 2019, Pages 142-160. <https://doi.org/10.1016/j.idm.2019.05.002>
5. D.S. Balsara, V. Florinski, S. Garain, S. Subramanian, K.F. Gurski, *Efficient, Divergence-Free, High Order MHD on 3D Spherical Meshes with Optimal Geodesic Meshing*, Monthly Notices of the Royal Astronomical Society, to appear, Advance Access publication 2019 May 9, doi: 10.1093/mnras/stz1263
6. C.A. Manore, M.I. Teboh-Ewungkem, O. Prosper, A.L. Peace, K. Gurski, Z. Feng, *Intermittent Preventive Treatment (IPT): Its role in averting disease-induced mortalities in children and in promoting the spread of antimalarial drug resistance*, Bulletin of Mathematical Biology, 2019 Jan;81(1):193-234. doi: 10.1007/s11538-018-0524-1. Epub 2018 Oct 31.
7. Beckman, N. G., C. E. Aslan, H. R. Rogers, O. Kogan, J. L. Bronstein, J. M. Bullock, F. Hartig, J. HilleRisLambers, Y. Zhou, D. Zurell, J. F. Brodie, E. M. Bruna, R. S. Cantrell, R. Decker, E. O. Effiom, E. C. Fricke, K. Gurski, A. Hastings, J. Johnson, B. A. Loiselle, M. N. Miriti, M. G. Neubert, L. Pejchar, J. R. Poulsen, G. Pufal, O. H. Razafindratsima, M. Sandor, K. Shea, S. J. Schreiber, E. W. Schupp, R. S. Snell, C. Strickland, and J. Zambrano, *Advancing an interdisciplinary framework to study seed dispersal ecology*. AoB Plants to appear.
8. Clare Aslan, Noelle G Beckman, Haldre S Rogers, Judie Bronstein, Damaris Zurell, Florian Hartig, Katriona Shea, Liba Pejchar, Mike Neubert, John Poulsen, Janneke HilleRisLambers, Maria Miriti, Bette Loiselle, Edu Effiom, Jenny Zambrano, Geno Schupp, Gesine Pufal, Jeremy Johnson, James M Bullock, Jedediah Brodie, Emilio Bruna, Robert Stephen Cantrell, Robin Decker, Evan Fricke, Katie Gurski, Alan Hastings, Oleg Kogan, Onja Razafindratsima, Manette Sandor, Sebastian Schreiber, Rebecca Snell, Christopher Strickland, Ying Zhou, *Employing plant functional groups to advance seed dispersal ecology and conservation*, AoB PLANTS, Volume 11, Issue 2, April 2019, plz006, <https://doi.org/10.1093/aobpla/plz006>
9. K.F. Gurski and K.A. Hoffman, *Influence of Concurrency, Partner Choice, and Viral Suppression on Racial Disparity in the Prevalence of HIV Infected Women*, Mathematical Biosciences, 282 (2016) 91–108. doi: 10.1016/j.mbs.2016.09.009
10. D. S. Balsara, J. Vides, K.F. Gurski, S. Garain, B. Nkonga, and E. Audit, *A Two-Dimensional Riemann Solver with Self-Similar Sub-Structure – Alternative Formulation Based on Least Squares Projection*, Journal of Computational Physics, 304 (2016) 138–161.
11. K.F. Gurski, E.K. Thomas, and K.A. Hoffman, *Modeling HIV: Determining the Factors Affecting the Racial Disparity of the Prevalence of Infected Women*, Dynamical Systems, Differential Equations and Applications, AIMS Proceedings (2015) pp.569–578. DOI: 10.3934/proc.2015.0569

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12. E.K. Thomas, K.F. Gurski, and K.A. Hoffman, *Analysis of SI Models with Multiple Interacting Populations using Subpopulations*, Mathematical Biosciences and Engineering, Mathematical Biosciences and Engineering, 2015 Feb; 12(1):135-61. doi:10.3934/mbe.2015.12.135. K.F. Gurski, *A Stability and Cost Study of Explicit Super and Dyadic Time Stepping for Stiff Nonsymmetric Problems*, AIP Conference Proceedings 1368 (2011) pp. 239-242. DOI: 10.1063/1.3663503
13. K.F. Gurski and S. O'Sullivan, *A Stability Study of a New Explicit Numerical Scheme for a System of Differential Equations with a Large Skew-Symmetric Component*, SIAM J. Numerical Analysis, 49 (2011), No.1, pp. 368-386. DOI: 10.1137/090775804
14. K.F. Gurski and S. O'Sullivan, *An explicit super-time-stepping scheme for non-symmetric parabolic problems*, AIP Conference Proceedings, 1281 (2010), issue 1, pp. 761-764.
15. K.F. Gurski, *Secret Message Decryption: Group Consulting Projects Using Matrices and Linear Programming*, PRiMUS – Problems, Resources and issues in Mathematical Undergraduate Studies, Volume 19, Issue 2, March-April, pp. 194-204, 2009.
16. K.F. Gurski, *A Comparison of Two Intermediate State HLLC Solvers for Ideal Magnetohydrodynamics*, Numerical Modeling of Space Plasma Flows: Astronom 2007, ASP Conference Series vol. 385, eds N.V. Porelov, E. Audit, and G.P. Zank, San Francisco: Astronomical Society of the Pacific, pp. 253-258, 2008.
17. G.B. McFadden, S.R. Corriel, K.F. Gurski and D.L. Cottrell, *Convective Instabilities in Two Liquid Layers*, Journal of Research of the National Institute of Standards and Technology, vol. 112, pp. 271-281, 2007.
18. G.B. McFadden, S. Corriel, K.F. Gurski, and D.L. Cottrell, *Onset of Convection in Two Liquid Layers with Phase Change*, Physics of Fluids, vol. 19, 104109, 2007.
19. K.F. Gurski, G.B. McFadden, and M.J. Miksis, *The Effect of Contact Lines on the Rayleigh Instability with Anisotropic Surface Energy*, SIAM Journal of Applied Mathematics, Vol. 66, Num. 4, pp. 1163-1187, 2006.
20. K.F. Gurski, *An HLLC-type Approximate Riemann Solver for Ideal Magnetohydrodynamics*, SIAM Journal of Scientific Computing, Vol. 25, Num. 6, pp. 2165-2187, 2004.
21. K.F. Gurski, R. Kollar, and R.L. Pego, *Slow Damping of Internal Waves in Stably Stratified Fluid*, Proceedings of the Royal Society of London, Apr. 8, 2004, 460, (2044), pp. 977-994.
22. K.F. Gurski and G.B. McFadden, *The Effect of Anisotropic Surface Energy on the Rayleigh Instability*, Proceedings of the Royal Society of London, Series A, Oct. 8, 2003, 459 (2038) pp. 2575-2598.
23. K.F. Gurski and R.L. Pego, *Normal Modes for a Stratified Viscous Fluid Layer*, Royal Society of Edinburgh, 132A, pp. 1-15, 2002.
24. K.F. Gurski and R.L. Pego, *Decay Rates of Internal Waves in a Fluid Near the Liquid-Vapor Critical Point*, Physical Review E, July 1, 2000, Volume 62, Number 1, pp. 517-524.

Book Chapters

25. M. Teboh-Ewungkem, O. Prosper, K. Gurski, C. Manore, A. Peace, and Z. Feng, *The Role of Intermittent Preventive Treatment (IPT) and the Spread of Drug Resistant Malaria*, T. Jackson, A. Radunskaya (eds.), Applications of Dynamical Systems in Biology and Medicine, The IMA Volumes in Mathematics and its Applications 158, DOI 10.1007/978-1-4939-2782-1

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26. H. Zullo, K. Cline, M. Parker, R. Buckmire, J. George, K. Gurski, J. Larsen, B. Mellor, J. Oberweiser, D. Peterson, J. Scharf, R. Spindler, A. Stewart, and C. Storm, *Student Surveys: What Do They Think?*, in **Teaching Mathematics with Classroom Voting: With and Without Clickers**, eds. H. Zullo and K. Cline, MAA Notes Series, 2012.

Proceedings Papers (Non refereed)

27. K. Whittaker and K. Gurski, *Moment-generating functions for tenable two-label polya urns*, ASA Proceedings of the Joint Statistical Meetings 2009, pp.3436-3444.
28. K.F. Gurski, R. Kollar, and R.L. Pego, *Damping of Internal Waves in a Stably Stratified Flow of Two- and Three-Dimensions*, extended abstract, Proceedings of the Women in Mathematics: The Legacy of Ladjzhenskaya and Oleinik Workshop at the Mathematical Sciences Research Institute, May 18-20, 2006.
29. D. Ambrose, C.G. Fournelle, K.F. Gurski, D. Peng, V. Shekar, and V. Varghese, *Determining Addition Rates for the Growth of Uniform Silver Halide Crystals*, Proceedings for the Mathematical Modeling in Industry Workshop for Graduate Students, Institute for Mathematics and Its Applications, July 22-31, 1998.
30. K.F. Gurski, P. Hagerty, M. Hasson, M. Moisan, C. Perez, *Extracting Meteorological Data from a Projectile Trajectory*, Proceedings for the Industrial Mathematics Modeling Workshop for Graduate Students, Editor J. Scroggs, Center for Research in Scientific Computation, August 3-13, 1997.
31. A. Crowe, K.F. Gurski, J. Pelesko, and J. Spencer, *Improved Estimation of Heat Transfer Characteristics of a Power Condenser*, Proceedings for the Claremont Colleges Mathematics Modeling Workshop for Graduate Students, June 5-15, 1994.

Other Technical Papers

32. K.F. Gurski and G.B. McFadden, *The Effect of Anisotropic Surface Energy on the Rayleigh Instability*, National Institute of Standards and Technology, Internal Report #6892 (2002).
33. *Decay Rates of Internal Waves in Viscous Near-Critical Fluids*, Ph.D. thesis, June 1999.
34. *Percolation in Correlated Growth Clusters*, undergraduate honors thesis, May 1987.

Non Technical Articles

35. K.F. Gurski, *Hints for Finding Non-Academic Research Positions (Postdoctoral and Permanent)*, Association for Women in Mathematics Newsletter, Vol. 31, No. 5, September-October 2001, pp.17-19.
36. K.F. Gurski, *WIM Talk Series*, Association for Women in Mathematics Newsletter, Vol. 27, No. 3, May-June 1997, p. 9.

In Preparation

37. K.F. Gurski and M.O. Arienmughare, *A Path Conservative HLLC Method for Conservative and Non-conservative Hyperbolic Systems*, in preparation.

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38. K.F. Gurski and K.A. Hoffman, *Staged HIV Transmission and Treatment in a Dynamic Model with Concurrency*, under revision.
39. K.F. Gurski and B. Batista, *Short and Long-term Partnerships: A Comparison of Population Methods for Modeling STI*, in preparation.

HONORS AND AWARDS

Professional Honors

- National Science Foundation Research Grant, September 2018- August 2021
National Science Foundation Research Grant, July 2014- June 2018
Collaboration Grant for Mathematics, Simons Foundation, September 2012-August 2018
Summer Faculty Research Fellowship, Office of the Provost, Howard University, 2012
New Faculty Startup Fellowship, Office of the Provost, Howard University, 2009-2011
Academic Excellence grant, Office of the Provost, Howard University, 2009-2010
Project NExT Fellow sponsored by the American Mathematical Society for 2004-2005
Junior Scholar Incentive Award from Columbian College of Arts & Sciences at George Washington University, Summer 2004
National Research Council Research Associate Fellowship, January 2001 – January 2003

INVITED WORKSHOPS

- AIM SQuaRES leader, American Institute for Mathematics, Linking Pharmacokinetics to Epidemiological Models of Vector-Borne Diseases and Drug Resistance Prevention, 2019-2021.
- Identifiability Problems in Systems Biology Workshop at American Institute of Mathematics, August, 2019.
- AIM SQuaRES leader, American Institute for Mathematics, 2015-2017, Intermittent preventive treatment and the spread of drug resistant malaria.
- Neglected Infectious Diseases Workshop at American Institute of Mathematics, August 2014.
- WhAM: Women in Applied Mathematics Workshop at the Institute of Mathematics and Its Applications, September 2013.

GRADUATE AND UNDERGRADUATE STUDENT RESEARCH

1. PhD Student, Sylvia Gutowska, UMBC, Co-Advising with Dr. Kathleen Hoffman, Mathematical Epidemiology: Modeling an HIV Prophylaxis Intervention.
2. PhD Student, Berlinda Batista, Disease Modeling.
3. MS Student, Berlinda Batista, Thesis Title: A Study of Pair Formation Disease Models with a Two Phase Infection, graduation May 2019.
4. PhD Student, Martin Arienmughare, Thesis Title: Three, Four-Wave HLLC Riemann solver for single and multiphase flow, and the classical and semi-relativistic CGL-MHD, graduation May 2016.
5. PhD Student, Evelyn Thomas, Thesis advisor along with Dr. Kathleen Hoffman of University of Maryland Baltimore County, Thesis Title: The Effect of Male Bisexuality on Incurable Sexually Transmitted Diseases graduation May 2012
6. Master Students: Malick Kébé and Nyjah Grant, Research project: Numerical Quadrature with Retrievable Moments in Two Dimensions, Spring 2018.

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7. Undergraduates: Jayshawn Cooper, Tiana Lockhart, and Mateyo Waluye, Summer REU 2014, Modeling HIV/AIDS Transmission Through Heterosexual Sexual Contact Using Several HIV Stages.
8. Undergraduates: Lauren Prince and Lotanna Ikeotuonye, Classifying Placenta Shapes, Fall 2011- Fall 2012, Modeling the Flu and Vampire viruses, Spring 2013.
9. Undergraduate: Lauren Prince, Using an SIR Model to Understand the Conditions that Cause Staphylococcus Aureus to Develop Resistance to Certain Treatments, senior thesis, May 2014.
10. Undergraduate: Lotanna Ikeotuonye, Mathematical Analysis Modeling of Malaria Transmission in Nigeria, senior thesis, May 2014.
11. Undergraduate: Blanche Mahop, Sensitivity Analysis: Extended Fourier Amplitude Sensitivity Test, senior thesis, May 2014.
12. Undergraduate: Arayna Spratley, Predicting Patterns with N Frogs in a Leapfrog Game, Spring 2013.

CONFERENCE AND CONFERENCE SESSIONS ORGANIZED

- AMS Special Session on Women in Mathematical Biology, Minisymposium Organizer with Christina Edholm, Amanda Laubmeier, Heather Zinn Brooks, January 2020, Joint Mathematics Meetings
- NSF-CBMS Conference on Mathematical Biology: Modeling and Analysis at Howard University, Organizing committee. May 21-25, 2018
- Infinite Possibilities, Conference for Women of Color in Mathematics and Statistics, Local organizer. April 14-15, 2018, sponsored by MSRI.
- Howard University Math Modeling in Biology & Medicine Workshops , Organizing committee for the December 2015, April 2016, December 2016, April 2017.
- CCICADA Annual Meeting , Organizing committee. May 18 and 19, 2017.
- AMS Sectional Meeting at University of Richmond, Minisymposium Organizer with Kathryn Trapp, November 2010.

INVITED PRESENTATIONS (Last Eight Years)

1. AWM Research Symposium, April 7, 2019, Rice University.
2. University of Maryland Baltimore County, Mathematical Biology Class/Applied Mathematics Seminar, February 11, 2019.
3. AMS Annual Meeting, January 17, 2019, Baltimore, Maryland.
4. Women's Intellectual Network Research Symposium, Department of Mathematics, University of Virginia, September 5, 2018.
5. Society of Mathematical Biology Annual Meeting, University of Sydney, Australia, July 9, 2018.
6. Biology and Medicine Through Mathematics Conference at Virginia Commonwealth University, May 30, 2018.
7. AMS Sectional Meeting at Ohio State University, March 17, 2018.
8. Howard University Math-Bio Workshop on Infectious Diseases, December 3, 2016.

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9. Society of Industrial and Applied Mathematics Conference on Mathematics of Planet Earth, September 30, 2016.
10. Biology and Medicine Through Mathematics Conference at Virginia Commonwealth University, May 20, 2016.
11. University of Maryland Baltimore County Applied Mathematics and Statistics Department Colloquium, April 29, 2016.
12. Morgan State Mathematics Department Colloquium, October 15, 2015.
13. Society of Mathematical Biology Annual Meeting, June 30-July 3, 2015.
14. Coalition for National Science Funding (CNSF) Annual Capitol Hill Exhibition, sponsored by 140 professional organizations, to be the sole exhibiting representative for the American Mathematical Society, Rayburn Office Building, April 29, 2015.
15. AMS Sectional Meeting, Georgetown University, March 7, 2015.
16. Howard University, Applied Analysis Seminar, March 23, 2015.
17. University of Maryland Baltimore County, Applied Mathematics Seminar, February 13, 2015.
18. University of Delaware, Applied Mathematics Seminar, October 28, 2014.
19. 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Madrid, Spain, July 8, 2014.
20. AMS Sectional Meeting, University of Maryland Baltimore County, March 29, 2014.
21. Mathematical Biology Institute, Workshop for Young Researchers in Mathematical Biology, The Ohio State University, August 2012.
22. Shippensburg University, Applied Mathematics Seminar, December 1, 2011.

CONTRIBUTED PRESENTATIONS (Last Eight Years)

1. SIAM Annual Meeting, San Diego, CA, July 12, 2013.
2. Mathematical Demography Meeting, Mathematical Biology Institute, June 2013.
3. AMS Annual Meeting, San Diego, CA, January 11, 2013.
4. The 9th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Orlando, Florida, USA, July 1 - 5, 2012
5. Progress on Difference Equations, PODE 2012, Virginia Commonwealth University, Richmond, VA, May 18, 2012.
6. AMS Annual Meeting, Boston, MA, January 6, 2012.
7. College of Arts and Sciences Research Seminar, Howard University, November 30, 2011.
8. Applied Mathematics, Modeling, and Computational Science, Laurier Centennial Conference: AMMCS-2011, Waterloo, Ontario, Canada, July 29, 2011.

GRANT SUPPORT

- Collaborative Research: Linking Pharmacokinetics to Epidemiological Models of Vector-Borne Diseases and Drug Resistance Prevention, National Science Foundation (\$199,999) September 2018-August 2021.
- Explicit Methods for Extended Time Stepping in Stiff Nonsymmetric Problems, Simons Foundation, Collaboration Grant for Mathematics, (\$35,000), September 2012-August 2018.

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- Focused Research Group: Collaborative Research: Developing Mathematical Algorithms for Adaptive, Geodesic Mesh MHD for use in Astrophysics and Space Physics, National Science Foundation July 2014-June 2018 (\$273,146)
- Linking Pharmacokinetics to Epidemiological Models of Vector-Borne Diseases and Drug Resistance Prevention, AIM SQuaRES, American Institute for Mathematics, 2019-2021 (Travel support for group of 6 researchers for 1 week each year for 3 years)
- Intermittent Preventive Treatment and the Spread of Drug Resistant Malaria, AIM SQuaRES, American Institute for Mathematics, 2015-2018 (Travel support for group of 6 researchers for 1 week each year for 3 years)
- REU: The Summer Program in Research and Learning, Mathematical Association of America, April 2014-March 2015 (\$27,500)
- REU: The Summer Program in Research and Learning, National Security Administration, April 2014-March 2015 (\$120,000)
- HU-ADVANCE-IT writer's workshop participant, March 2017, November 2015, February 2014.
- Graduate Assistance in Areas of National Need (GAANN) Fellowship Program, US Department of Education, August 2012-August 2015 (\$401,610)
- Summer Faculty Research Fellowship, Office of the Provost, Howard University, 2012 (\$15,000)
- Subcontract awarded by George Washington University, for Assistant Director duties for Summer Program for Women in Mathematics, Grant from National Security Agency, July 2010 – June 2012 (\$47,407)
- Fund for Academic Excellence, Office of the Provost, Howard University, July 2009- June 2010 (\$5175).
- New Faculty Start-Up program, Office of the Provost, Howard University, July 1, 2009- June 30, 2011 (\$50,000).
- Grant awarded by Columbian College of Arts and Sciences, George Washington University, with H. Mahmoud, July 2008 – June 2009 (\$5,000).
- Guest Researcher, National Institute of Standards and Technology (NIST) Mathematical and Computational Sciences Group - includes office and computer support, and computer time for mathematical research, January 2003- January 2011.
- Travel Grant for Progress on Difference Equations, Virginia Commonwealth University, Richmond, VA, May 2012.
- Travel Grant from Association for Women in Mathematics for participation in AMMCS-2011 in Waterloo, Canada, July 27- 29, 2011 (\$1,808).
- Travel Grant from Association for Women in Mathematics for participation in ASTRONUM-2007 in Paris, June 11- 15, 2007 (\$1500).
- Travel Grant from Mathematical Sciences Research Institute for participation in workshop, May 2006.
- Travel Grant for Ninth International Conference on Dynamical Systems and Differential Equations, Orlando, Florida, American Institute of Mathematics, July 2012.

SERVICE ACTIVITIES (Last Seven Years):

Professional Service to Mathematics Community:

- AMS-Simons Travel Grants Committee, February 2020 - 2023.

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- National Science Foundation grant proposal review Fall 2018
- Interview on CTV, Channel 42 by Khalil Shadeed on the program The Scholar's Chair. Program title: "Mathematics As the Language of the Universe" <https://youtu.be/DMQYZxJCET4>
- Editorial Board, *Heliyon*, Elsevier's new broad scope, open access journal, 2015-present, primary editor for 40+ manuscripts.
- Reviewed papers for Computers and Mathematics with Applications, Linear Algebra and its Applications, Journal of Computational Physics, Mathematical Biosciences, Journal of Biological Dynamics, and Springer Books (2009-2019)
- Reviewed scholarship applications for 2015-2019 ACM Richard Tapia Celebration of Diversity in Computing Conferences.
- Organized Mathematics Outreach Booth, STEM Night at Marshall Road Elementary, April 2015.
- Howard University Program: Summer Program in Research and Learning, Co-Director and led seven week REU research team, 2014.
- George Washington University Program: Summer Program for Women in Mathematics, Co-director for Summers 2003-2012
- National Science Foundation - Department of Energy external reviewer January 2012
- Mentor for Association for Women in Mathematics for graduate students and postdoctoral students at the AWM workshop held at the Joint Meetings of the AMS, January 2011, January 2012.

Services to Howard University:

- 2018- Director of Graduate Studies
- 2018-2019 Acting Chair of Curriculum Committee
- 2016-2018 Chair of Mathematics Department Hiring Committee
- 2017-2019 Mathematics Department Faculty Performance Committee
- 2016-2017 COAS Representative for Howard University – National Security Agency
- 2012-2015 Co-Director of Graduate Studies
- 2011-2012 Mathematics Department Curriculum Committee
- 2009-2015 Graduate Qualifying Committee for Partial Differential Equation Examinations, Real Analysis Examinations, and Ordinary Differential Equations Examinations
- 2011-2012 Blackwell Memorial Conference Committee
- 2011 Committee for Assessing Department Chair
- 2009-2012 Graduate Faculty Scheduling Committee
- 2008-2009 Assessment Committee