

VITA

Darryl J. McCullough

Born: December 20, 1951 in Columbus, Ohio

Education: B. A. Ohio State University, 1972
M. A. University of Michigan, 1974
Ph. D. University of Michigan, 1978

Graduate Advisor: Frank A. Raymond

Employment: 1978–1984 Assistant Professor of Mathematics
University of Oklahoma
1984–1988 Associate Professor of Mathematics
University of Oklahoma
1988–2007 Professor of Mathematics
University of Oklahoma
2007–2011 Presidential Professor of Mathematics
University of Oklahoma
2012– Professor Emeritus of Mathematics
University of Oklahoma

Research Interests: Low-dimensional topology and related subjects

Refereed Research Publications:

1. Finite aspherical complexes with infinitely-generated groups of self-homotopy-equivalences, *Proc. Amer. Math. Soc.* 80 (1980), 337–340.
2. Connected sums of aspherical manifolds, *Indiana Univ. Math. J.* 30 (1981), 17–28.
3. The group of homotopy equivalences for a connected sum of closed aspherical manifolds, *Indiana Univ. Math. J.* 30 (1981), 249–260.
4. Homotopy groups of the space of self-homotopy-equivalences, *Trans. Amer. Math. Soc.* 264 (1981), 151–163.
5. A theorem on symmetry of primitives, *Arch. Math.* 39 (1982), 492–495.
6. Homotopy equivalences of punctured manifolds, *Mich. Math. J.* 29 (1982), 357–365.
7. Intersections of separators and essential submanifolds of I^N (with Leonard R. Rubin), *Fund. Math.* 116 (1983), 163–174.
8. Compact 3-manifolds with infinitely generated groups of self-homotopy-equivalences, *Proc. Amer. Math. Soc.* 91 (1984), 625–629.
9. Twist groups of compact 3-manifolds, *Topology* 24 (1985), 461–474.
10. Uniqueness of cores of non-compact 3-manifolds (with Andy Miller and G. A. Swarup), *J. London Math. Soc.* (2) 32 (1985), 548–556.
11. π_1 -injective mappings of compact 3-manifolds (with John Kalliongis), *Proc. London Math. Soc.* (3) 52 (1986), 173–192.

12. The genus 2 Torelli group is not finitely generated (with Andy Miller), *Topology Appl.* 22 (1986), 43–49.
13. *Homeomorphisms of 3-Manifolds with Compressible Boundary* (with Andy Miller), Mem. Amer. Math. Soc. 61 (1986) no. 344, 1–100.
14. Compact submanifolds of 3-manifolds with boundary, *Quarterly J. Math. Oxford* (2) 37 (1986), 299–307.
15. Automorphisms of punctured surface bundles, in *Geometry and Topology: Manifolds, Varieties, and Knots*, ed. C. McCrory and T. Shifrin, Marcel-Dekker, New York (1987), 179–209.
16. Maps inducing isomorphisms on fundamental groups of compact 3-manifolds (with John Kalliongis), *J. London Math. Soc.* (2) 35 (1987), 177–192.
17. On the diffeomorphism group of a reducible 3-manifold (with Harrie Hendriks), *Top. Appl.* 26 (1987), 25–31.
18. Finiteness conditions for 3-manifolds with boundary (with Mark Feighn), *Amer. J. Math.* 109 (1987), 1155–1169.
19. Virtual cohomological dimension of mapping class groups of 3-manifolds (research announcement), *Bull. Amer. Math. Soc.* 18 (1988), 27–30.
20. Some m -dimensional compacta admitting a dense set of imbeddings into R^{2m} (with Leonard R. Rubin), *Fund. Math.* 133 (1989), 235–243.
21. Manifold covers of 3-orbifolds with geometric pieces (with Andy Miller), *Top. Appl.* 31 (1989), 169–185.
22. Group actions on handlebodies (with Andy Miller and Bruno Zimmermann), *Proc. London Math. Soc.* (3) 59 (1989), 373–416.
23. Sequentially equidistant points in metric spaces (with Leonard R. Rubin), *Israel J. Math.* 69 (1990), 75–93.
24. Group actions on nonclosed 2-manifolds (with Andy Miller and Bruno Zimmermann), *J. Pure Appl. Algebra* 64 (1990), 269–292.
25. Finite presentation of 3-manifold mapping class groups (with Allen Hatcher), *Groups of Self-Equivalences and Related Topics*, ed. R. Piccinini, Springer-Verlag Lecture Notes in Mathematics Vol. 1425 (1990), 48–57.
26. Topological and algebraic automorphisms of 3-manifolds, *Groups of Self-Equivalences and Related Topics*, ed. R. Piccinini, Springer-Verlag Lecture Notes in Mathematics Vol. 1425 (1990), 102–113.
27. Minimal genus of abelian actions on Klein surfaces with boundary, *Math. Z.* 205 (1990), 421–436.
28. Virtually geometrically finite mapping class groups of 3-manifolds, *J. Diff. Geom.* 33 (1991), 1–65.
29. The stable genus increment for group actions on closed 2-manifolds (with Andy Miller), *Topology* 31 (1992), 367–397.
30. Homeotopy groups of irreducible 3-manifolds which may contain two-sided projective planes (with John Kalliongis), *Pacific J. Math.* 153 (1) (1992), 85–117.
31. Weak concentration points for Möbius groups, *Illinois J. Math.* 38 (1994), 624–635.
32. Recurrent geodesics and controlled concentration points (with Beat Aebischer and Sungbok Hong), *Duke Math. J.* 75 (1994), 759–774.

33. Orientation-reversing involutions of handlebodies (with John Kalliongis), *Trans. Amer. Math. Soc.* 348 (1996), 1739–1755.
34. *Symmetric Automorphisms of Free Products* (with Andy Miller), Mem. Amer. Math. Soc. 122 (1996) no. 582, 1–97.
35. Isotopies of 3-manifolds (with John Kalliongis), *Top. Appl.* 71 (1996), 227–263.
36. Finiteness of classifying spaces of relative diffeomorphism groups of 3-manifolds (with Allen Hatcher), *Geom. Topol.* 1 (1997), 91–109.
37. Ubiquity of geometric finiteness in mapping class groups of Haken 3-manifolds (with Sungbok Hong), *Pacific J. Math.* 188 (1999), 275–301.
38. Concentration points for Fuchsian groups (with Sungbok Hong), *Top. Appl.* 105 (2000), 285–303.
39. The topology of deformation spaces of Kleinian groups (with James W. Anderson and Richard D. Canary), *Ann. of Math.* 152 (2000), 693–741.
40. Isometries of elliptic 3-manifolds, *J. London Math. Soc.* (2) 65 (2002), 167–182.
41. Imbeddings of free actions on handlebodies, *Proc. Amer. Math. Soc.* 131 (2003), 2247–2253.
42. Free actions on handlebodies (with Marcus Wanderley), *J. Pure Appl. Algebra* 181 (2003), 85–104.
43. *Homotopy Equivalences of 3-Manifolds and Deformation Theory of Kleinian Groups* (with Richard D. Canary), Mem. Amer. Math. Soc. 172 (2004) no. 812, 1–218.
44. Orientation-reversing free actions on handlebodies (with Antonio Costa), *J. Pure Appl. Algebra* 204 (2006) 155–169.
45. Homeomorphisms which are Dehn twists on the boundary, *Alg. Geom. Topology* 6 (2006), 1331–1340.
46. The tree of knot tunnels (with Sangbum Cho), *Geom. Topol.* 13 (2009), 769–815.
47. Cabling sequences of tunnels of torus knots (with Sangbum Cho), *Algebr. Geom. Top.* 9 (2009) 1–20.
48. Arc distance equals level number (with Sangbum Cho and Arim Seo), *Proc. Amer. Math. Soc.* 137 (2009), 2801–2807.
49. Constructing knot tunnels using giant steps (with Sangbum Cho), *Proc. Amer. Math. Soc.* 138 (2010), 375–384.
50. Tunnel leveling, depth, and bridge numbers (with Sangbum Cho), *Trans. Amer. Math. Soc.* 353 (2011), 259–280.
51. Writing elements of $\mathrm{PSL}(2, q)$ as commutators (with Marcus Wanderley), *Comm. Algebra* 39 (2011), 1234–1241.
52. Roots of Dehn twists (with Kashyap Rajeevsarathy), *Geom. Dedicata* 151 (2011), 397–409.
53. *Diffeomorphisms of Elliptic 3-Manifolds* (with Sungbok Hong, John Kalliongis, and J. H. Rubinstein), Springer Verlag Lecture Notes in Mathematics Vol. 2055 (2012), 1–155.
54. Semisimple tunnels (with Sangbum Cho), *Pacific J. Math.* 258 (2012), 51–89.
55. Middle tunnels by splitting (with Sangbum Cho), *Tohoku Math. J.* 64 (2012), 469–488.
56. The Smale conjecture for Seifert fibered spaces with hyperbolic base orbifold (with Teruhiko Soma), *J. Diff. Geom.* 93 (2013), 327–353.

57. Iterated splitting and the classification of knot tunnels (with Sangbum Cho), *J. Math. Soc. Japan.* 65 (2013), 671–686.
58. Nielsen equivalence of generating pairs of $SL(2, q)$ (with Marcus Wanderley), *Glasgow Math. J.* 55 (2013), 481–509.
59. The space of Heegaard splittings (with Jesse Johnson), *J. Reine Angew. Math.* 679 (2013), 155–179.
60. Generating pairs and group actions, *J. Pure Appl. Algebra* 218 (2014), 777–783.

Refereed Research Publications (elementary topics):

61. Recursive enumeration of Pythagorean triples (with Elizabeth Wade), *College Math. J.* 34 (2003), 107–111.
62. Height and excess of Pythagorean triples, *Math. Mag.* 78 (2005), 26–44.

Expository Publications:

63. Mappings of reducible 3-manifolds, in *Proceedings of the Semester on Topology of the Stefan Banach International Mathematical Center*, ed. H. Toruńczyk, Banach Center Publications, Warsaw (1986), 61–76.
64. *3-Manifolds and Their Mappings*, Global Analysis Research Center Lecture Notes Series Vol. 26, Seoul National University, 1995, ii + 83 pp.
65. Mapping class groups of 3-manifolds, then and now (with Sungbok Hong), in *Geometry and Topology Down Under*, Contemporary Mathematics 597 (2013), 53–63.

Doctoral Dissertations Supervised:

1. Patricia Grasse, *Results on Finite Presentation of Mapping Class Groups of Certain 3-Manifolds*, 1986.
2. Sungbok Hong, *Myrberg-Agard Density Points and Groups of Divergence Type*, 1992.
3. Kavita Bhatia, *Pleating Coordinates For a Slice of the Deformation Space of a Hyperbolic 3-Manifold With Compressible Boundary*, 1997.
4. Arim Seo, *Torus Leveling of $(1, 1)$ -Knots*, 2008.
5. Sangbum Cho, *Finite Presentation of the Goeritz Group*, 2008.
6. Kashyap Rajeevsarathy, *Fractional Powers of Dehn Twists*, 2011.

External Research Funding:

1. National Science Foundation Research Grant (1981–83)
2. National Science Foundation Research Grant (1985–87)
3. National Science Foundation Research Grant (1987–89)
4. National Science Foundation Research Grant (2001–03)
5. National Science Foundation Research Grant (2008–10)

Invited Research Lectures:

1. Homotopy groups of the space of self-equivalences, Fourteenth Michigan Topology Conference, Michigan State University, March 18, 1978.
2. Homotopy groups of the space of self-homotopy-equivalences, Georgia Topology Conference, University of Georgia, July 31, 1978.
3. Homeomorphisms of 3-manifolds with compressible boundary, Colloquium at Oklahoma State University, October 28, 1982.
4. Homeomorphisms of 3-manifolds, Colloquium at Southwest Texas State University, December 2, 1982.
5. A rewriting process for some subgroups of mapping class groups, Special Session on Topological Methods in Combinatorial Group Theory, AMS Summer Meeting, Albany, New York, August 9, 1983.
6. The genus 2 Torelli group, Colloquium at Ruhr Universität Bochum, Bochum, West Germany, May 11, 1984.
7. Homotopy equivalences and homeomorphisms of compact 3-manifolds, Stefan Banach International Mathematical Center, Warsaw, Poland, May 17, 1984.
8. Mappings of 3-manifolds with compressible boundary, Colloquium at Johann Wolfgang Goethe Universität, Frankfurt, West Germany, May 25, 1984.
9. Twist groups of compact 3-manifolds, Colloquium at Katholieke Universiteit, Nijmegen, the Netherlands, May 29, 1984.
10. Geometric structures on low-dimensional manifolds, Colloquium at San Jose State University, November 15, 1984.
11. Group actions on handlebodies, Special Session on Transformation Groups, AMS Regional Meeting, Charlotte, North Carolina, October 17, 1986.
12. Cohomological properties of 3-manifold mapping class groups, Special Session on Geometric Methods in Group Theory, AMS Summer Meeting, Salt Lake City, Utah, August 10, 1987.
13. Geometric structures on low-dimensional manifolds, Colloquium at Kansas State University, October 20, 1987.
14. Homeomorphisms of 2-manifolds and 3-manifolds, Colloquium at Oklahoma State University, November 5, 1987.
15. Virtual cohomological dimension of 3-manifold mapping class groups, Special Session on Geometric Topology, AMS Regional Meeting, Los Angeles, California, November 14, 1987.
16. Imbeddings of compact metric spaces, Colloquium at St. Louis University, March 7, 1988.
17. The stable Hurwitz problem for group actions on 2-manifolds, Workshop in Geometry and Topology, University of Melbourne, Australia, June 26, 1988.
18. Automorphisms of groups and automorphisms of spaces, Workshop on Self-homotopy Equivalences, Centre de Recherches Mathématiques, Montreal, Quebec, August 9, 1988.
19. The generalized Smale Conjecture for some non-Haken 3-manifolds, Special Session on 3-manifolds, AMS Regional Meeting, Lawrence, Kansas, October 28, 1988.

20. Group actions on nonclosed 2-manifolds, Special Session on Low-dimensional Geometry, AMS Regional Meeting, Claremont, California, November 13, 1988.
21. A problem in metric continua, Spring Topology Conference, University of Tennessee, March 17, 1989.
22. Automorphisms of free products, Workshop on Arithmetic Groups, Related Groups, and Buildings, Mathematical Sciences Research Institute, Berkeley, California, May 10, 1989.
23. Symmetries of nonclosed surfaces, Joint Summer Research Conference on the Geometry of Riemann Surfaces and Discrete Groups, Humboldt State University, Arcata, California, July 20, 1989.
24. A conjectural picture of 3-manifold mapping class groups, Ohio State University Mathematics Research Institute, March 14, 1990.
25. Concentration points for Fuchsian groups, Colloquium at Oklahoma State University, September 27, 1990.
26. Concentration points for Fuchsian groups, Special Session on Discrete Groups and Geometric Structures in Dimensions 2, 3, and 4, AMS Regional Meeting, Amherst, Massachusetts, October 21, 1990.
27. Geodesic separation points for Fuchsian groups and laminations in surfaces, Special Session on Low-dimensional Topology, AMS Regional Meeting, Denton, Texas, November 2, 1990.
28. Weak concentration points for Kleinian groups, Special Session on Low-dimensional Topology and Negatively Curved Groups, AMS Regional Meeting, Santa Barbara, California, November 10, 1991.
29. Realizability of automorphisms of 3-manifold groups and deformation spaces of Kleinian groups, Special Session on Hyperbolic Manifolds, AMS Regional Meeting, Dayton, Ohio, October 31, 1992.
30. Computer estimation of Hausdorff dimension for limit sets of Schottky groups, Workshop on Computational Problems in the Theory of Riemann Surfaces and Related Topics, Tenerife, Spain, December 9, 1992.
31. Compression bodies in topology, 3-Manifolds Week, Tokyo Institute of Technology, Tokyo, Japan, December 19, 1994.
32. Compression bodies in geometry, 3-Manifolds Week, Tokyo Institute of Technology, Tokyo, Japan, December 20, 1994.
33. Limit sets of Kleinian groups, Colloquium at Okayama University of Science, Okayama, Japan, December 22, 1994.
34. Compression bodies in 3-dimensional topology (lecture series), Seoul National University, Seoul, Korea, December 26-29, 1994.
35. Isotopies of 3-manifolds, Special Session on Low-dimensional Topology, AMS-SMM Second Joint Meeting, Guanajuato, Mexico, December 1, 1995.
36. Fiber-preserving diffeomorphisms, Topology Seminar at University of Michigan, Ann Arbor, Michigan, October 17, 1996.
37. Conjectures on 3-manifold mapping class groups, Low Dimensional Topology Seminar, Mathematical Sciences Research Institute, Berkeley, California, November 21, 1996.
38. Diffeomorphisms of 3-manifolds, Texas Geometry and Topology Conference, Texas Christian University, Ft. Worth, Texas, February 8, 1997.

39. Fiber-preserving diffeomorphisms, Colloquium at Texas Christian University, Ft. Worth, Texas, February 11, 1997.
40. The topology of deformation spaces of hyperbolic 3-manifolds, Special Session on Low-dimensional Topology, AMS-SMM Fourth Joint Meeting, Denton, Texas, May 22, 1999.
41. Free actions on handlebodies, Spring Topology and Dynamical Systems Conference, Morelia, Michoacán, Mexico, March 15, 2001.
42. Imbedding free actions on handlebodies in free actions on 3-manifolds, Special Session on Hyperbolic Manifolds and Discrete Groups, AMS Regional Meeting, Ann Arbor, Michigan, March 3, 2002.
43. Group actions on handlebodies, Conference on Conformal Geometry, Discrete Groups and Surfaces, Bedlewo, Poland, June 30, 2003.
44. Free actions of finite groups on handlebodies (two lecture series), Anam Lectureship, Korea University, Seoul, Korea, August 5-6, 2003.
45. Free actions on handlebodies, Colloquium at Sogang University, Seoul, Korea, August 8, 2003.
46. Diffeomorphisms of low-dimensional manifolds, Colloquium at Oklahoma State University, November 7, 2003.
47. Diffeomorphisms of low-dimensional manifolds, Colloquium at Universidade Federal de Pernambuco, Recife, Brazil, February 5, 2004.
48. The Smale Conjecture for elliptic 3-manifolds, Special Session on Results in 3-manifolds and Related Topics, AMS Regional Meeting, Tallahassee, Florida, March 12, 2004.
49. The Smale Conjecture for lens spaces, Spring Topology and Dynamics Conference, University of Alabama at Birmingham, Birmingham, Alabama, March 25, 2004.
50. Nielsen equivalence, group actions, and $\mathrm{PSL}(2, q)$, First Arkansas-Oklahoma Workshop in Topology and Geometry, Fayetteville, Arkansas, May 19, 2005.
51. Nielsen equivalence and $\mathrm{PSL}(2, q)$, Colloquium at Texas Christian University, Ft. Worth, Texas, February 14, 2006.
52. Nielsen equivalence and $\mathrm{PSL}(2, q)$, Colloquium at Oklahoma State University, Stillwater, Oklahoma, March 24, 2006.
53. The tree of knot tunnels, Colloquium at University of Arkansas, Fayetteville, Arkansas, November 20, 2006.
54. Applications of the disk complex of the genus-2 handlebody to knot theory, AMS Special Session on Mapping Class Groups and Handlebodies, Joint Mathematics Meetings, New Orleans, Louisiana, January 8, 2007.
55. Parameterizing the set of knot tunnels, Special Session on Geometric Topology and Geometric Group Theory, Forty-First Spring Topology and Dynamics Conference, University of Missouri at Rolla, Rolla, Missouri, March 30, 2007.
56. All tunnels of all tunnel number 1 knots, Geometric Topology Conference, Beijing University, Beijing, China, June 22, 2007.
57. Constructing knot tunnels using giant steps, Special Session on Heegaard Splittings, Bridge Number, and Low-dimensional Topology, Joint Mathematics Meetings, San Diego, California, January 9, 2008.
58. Heegaard splittings of knot complements, Colloquium at Rice University, Houston, Texas, February 14, 2008.
59. Disk complexes, arc complexes, and knots, 4th William Rowan Hamilton Geometry and Topology Workshop, Trinity College, Dublin, Ireland, August 28, 2008.

60. The tunnel leveling addendum, Geometric Topology in 3 and 4 Dimensions, University of California, Davis, California, June 23, 2009.
61. Genus-2 Heegaard splittings of knot exteriors, and The space of Heegaard splittings, Seminars at Caltech, Pasadena, California, June 11, 2010.
62. Diffeomorphisms and Heegaard splittings of 3-manifolds, Geometry & Topology Down Under, University of Melbourne, Melbourne, Australia, July 19, 2011.

Undergraduate Courses Taught:

Finite Mathematics	Numerical Analysis I
Analytic Geometry	Complex Variables
Trigonometry	Higher Algebra I
Calculus I, II, III, IV	Introduction to Analysis I
Honors Calculus I, II, III, IV	Introduction to Topology
Linear Algebra	Honors Research (3)
Introduction to ODE	Senior Capstone (12)
Introduction to PDE	Senior Mathematics Seminar
Foundations of Analysis	

Graduate Courses Taught:

Topology I, II
 Differential Topology I, II
 Algebraic Topology I, II, III
 Topology of 3-Manifolds
 Knots, Links, and 3-Manifolds I, II
 Mapping Class Groups
 Surfaces, Mapping Class Groups, and Curve Complexes
 Computation for Pure Mathematicians

Lectures on Educational and Elementary Topics

1. An interesting calculus problem, 52nd Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Siloam Springs, AR, March 30, 1990.
2. Symmetries of 3-dimensional handlebodies, 53rd Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Lawton, OK, April 5, 1991.
3. A geometric interpretation of continued fractions, 54th Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Arkadelphia, AR, April 4, 1992.
4. Euler's evaluation of $\sum_{n=0}^{\infty} (-1)^n n!$, 55th Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Tulsa, OK, March 27, 1993.
5. Points at odd integral distances, 56th Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Searcy, AR, March 25, 1994.
6. A proof that π and e are irrational, 57th Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Weatherford, OK, March 31, 1995.
7. $1^k + 2^k + \cdots + n^k$, 58th Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Ft. Smith, AR, March 22, 1996.
8. A metric for the real line with no connected open balls, 59th Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Edmond, OK, April 4, 1997.
9. Two proofs of a theorem of Erdős and Szekeres, 60th Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Little Rock, AR, March 27, 1998.
10. The largest compact metric space, 61st Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Bethany, OK, March 27, 1999.
11. Not necessarily algebraic topology, 62nd Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Russellville, AR, April 1, 2000.
12. Complex complex numbers, 63rd Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Oklahoma City, OK, March 31, 2001.
13. Recursive enumeration of Pythagorean triples, 65th Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Tulsa, OK, March 28, 2003.
14. Beyond the intermediate value theorem, Anam Foundation Lecture, Korea University, Seoul, Korea, August 7, 2003.
15. What is f' ?, 67th Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Ada, OK, April 9, 2005.
16. Gian-Carlo Rota (1932-1999), Featured Speaker at the 68th Annual Meeting of the Oklahoma-Arkansas Section of the MAA, Fayetteville, AR, April 1, 2006.
17. Learning from my students, 70th Annual Meeting of the Oklahoma-Arkansas Section of the MAA, University of Arkansas Ft. Smith, Ft. Smith, Arkansas, March 29, 2008.
18. On the matrices AB and BA , 72nd Annual Meeting of the Oklahoma-Arkansas Section of the MAA, John Brown University, Siloam Springs, Arkansas, March 27, 2010.
19. A senior mathematics capstone course, 73rd Annual Meeting of the Oklahoma-Arkansas Section of the MAA, University of Central Oklahoma, Edmond, Oklahoma, April 1, 2011.

Summary of Departmental Service:

1. Departmental Service and Committees

Faculty Advisor to Pi Mu Epsilon (1979–81)

Undergraduate Committee (1980–84), Chair (1982–84)

Policy Committee for the Karcher Endowment (1983, 1986), Chair (1986)

Colloquium Committee (1983–86)

Executive Committee (1985–87)

Director of Graduate Studies (1989–97)

Computer Advisory Committee (2001–03)

Program Review Committee (2003–04)

Chair's Advisory Committee (1989–97, 2004–05)

Honors Committee (2000–02, 2005–06)

Postdoctoral Search Committee Chair (2006)

Faculty Recruitment Committee (1982–91, 1997–98, 2000–01, 2004–05, 2006–07),
Chair (1987–89, 2000–01, 2004–05, 2006–07)

Library Committee (1999–2003, 2007–08)

Awards Committee Chair (2008–2009)

Library Task Force (2010)

Physical Sciences Center Space Allocation Committee (2010)

Graduate Program Committee (1989–99, 2009–10), Chair (1989–97)

2. Mathematics doctoral committees: 35

3. Departmental seminars presented: 151

Summary of University Service:

1. University Committees

Research Council (1987–91), Chair (1990–91)

Search Committee for Vice President for Research and Dean of the Graduate College (1990–91)

Graduate Council (1992–95)

Budget Council (1995–96)

Campus Tenure Committee (1998–2001)

Irene Rothbaum Award Selection Committee (2003)

Faculty Appeals Board (1986–90, 2001–05)

Faculty Compensation Committee (2002–05)

Health Insurance RFP Evaluation Committee (2008)

Contribution Strategy and Health Insurance Options Committee (2007-09)

Employment Benefits Committee (2002–10), Chair (2005–09)

2. Doctoral committees (12): Physics– 5, Music– 2, Civil Engineering– 1, Communication– 1, Economics– 1, Electrical Engineering– 1, Finance– 1.

Summary of Professional Service:

1. Referee for journal articles (85)

Algebra Colloquium
Algebraic and Geometric Topology (4)
American Mathematical Monthly
Anais de Academia Brasileira
Annales Academiæ Scientiarum Fennicæ
Arkiv för Matematik
Boletín de la Sociedad Matemática Mexicana
Communications in Mathematical Physics (2)
Compositio Mathematica
Crelle Journal
Duke Mathematical Journal
Geometriae Dedicata (2)
Geometry and Topology
Glasgow Mathematical Journal (5)
Houston Journal of Mathematics
Inventiones Mathematicæ
Journal d'Analyse Mathématique
Journal of Algebra and Applications
Journal of Integer Sequences (2)
Journal of Lie Theory
Journal of the American Mathematical Society
Journal of the Australian Mathematical Society
Journal of the Korean Mathematical Society (2)
Journal of the London Mathematical Society
Journal of Topology
Kyungpook Mathematical Journal (2)
Mathematical Proceedings of the Cambridge Philosophical Society
Mathematical Research Letters
Memoirs of the American Mathematical Society
Michigan Mathematical Journal
Pacific Journal of Mathematics (5)
Proceedings in Mathematical Sciences of the Indian Academy of Sciences
Proceedings of the American Mathematical Society (10)
Proceedings of the Boulder Conference on Group Actions
Proceedings of the Montreal Conference on Self-homotopy Equivalences
Proceedings of the 1985 Georgia Topology Conference
Rocky Mountain Journal of Mathematics
Topology (2)
Topology and Its Applications (13)
Topology Proceedings (4)
Transactions of the American Mathematical Society (4)

2. Reviewer for journal articles (500)
 - Mathematical Reviews* (300)
 - Zentralblatt für Mathematik* (200)
3. Reviewer for research proposals
 - National Science Foundation
 - National Security Agency
 - U. S. Civilian Research and Development Foundation
 - Fondo Nacional de Investigación Científica de Chile
 - Norman Hackerman Advanced Research Program of the State of Texas Mathematics Research Proposal Review Committee, Chair (2009-10)
4. Mid-American State Universities Association Honor Lecturer (1987–88)
5. Service to Mathematical Association of America, Oklahoma-Arkansas Section
 - Governor (1996–99)
 - Court Lecturer Selection Committee (2007–10)

As of: February 1, 2014