

Born July 30, 1964 in Seattle, Washington

Citizenship: United States

Education

1986 A.B. Mathematics University of California, Berkeley

1988 M.S. Mathematics Yale University

1989 M.Phil Mathematics Yale University

1990 Ph.D. Mathematics Yale University

Thesis Advisor: George B. Seligman

Thesis: Projective Modules over Lie Algebras of Cartan Type

Employment

1990–91 Visiting Assistant Professor Auburn University

1991–95 Visiting Assistant Professor Northwestern University

1992–95 NSF Postdoctoral Fellow Northwestern University

1994–98 Assistant Professor Utah State University

1998–02 Associate Professor Utah State University

2001–03 Associate Professor University of Georgia

2003–10 Professor University of Georgia

2010– Distinguished Research Professor University of Georgia

Research Interests

Representation Theory of Algebraic Groups, Quantum Groups, and Lie Superalgebras

Homological Methods in Representation Theory

Cohomology and Support Varieties for Algebraic and Finite Groups

Algebraic and Geometric Methods in Lie Theory

Visiting Research Positions (with funding)

April 1993 University of Virginia

April 1995 University of Virginia

July 1998 Aarhus University, Denmark

June–July 2002 Visiting Professor, Osaka City University, Japan

Jan–June 2003 EPSRC Research Fellow, Oxford University, England

May 2004 Institute for Mathematical Sciences, University of Virginia

June 2005 Ecole Polytechnique Federale, Lausanne, Switzerland

Jan–June 2006 Visiting Professor, University of Virginia

March 2008 General Member, Mathematical Sciences Research Institute, Berkeley, CA

July 2009	East China Normal University, Shanghai, China
July 2009	Peking University, Beijing, China
Jan–June 2010	Visiting Professor, University of Sydney, Australia
March–June 2010	University of New South Wales, Sydney, Australia
April 2010	University of Melbourne, Australia
July 2013	Morningside Institute, Beijing, China
May–June 2014	Centre de Recherches Mathématiques (CRM), Montreal, Canada
Feb–March 2015	Mittag-Leffler Institute, Stockholm, Sweden

Individual Research Grants: Principal Investigator

1. National Science Foundation Grant DMS–9206284, Mathematical Sciences Postdoctoral Research Fellowship, 1992-95, \$75,000
2. National Science Foundation Grant DMS–9500715, *Cohomology and Representation Theory of Algebraic Groups and Lie Algebras*, 1995-98, \$59,050
3. Utah State University: Faculty Research Grant, *Representation Theory of Algebraic Groups and Lie Algebras*, 1996-97, \$12,088
4. National Science Foundation Grant DMS–9800960, *Cohomology and Representation Theory: Algebraic Groups, Finite Groups and Lie Algebras*, 1998-2001, \$72,900
5. National Science Foundation Grant DMS–0136082, *Cohomology and Representation Theory: Reductive Algebraic Groups and Related Structures*, 2001-04, \$100,995
6. National Science Foundation Grant DMS–0400548, *Cohomology and Representation Theory*, 2004-07, \$118,359
7. National Science Foundation Grant DMS–0654169, *Cohomological Methods in the Representation Theory of Algebraic Groups, Quantum Groups and Superalgebras*, 2007-10, \$159,744
8. National Science Foundation Grant DMS–1002135, *Cohomology, Geometry and Representation Theory: Algebraic Groups, Quantum Groups and Lie Superalgebras*, 2010-13, \$169,976
9. National Science Foundation Grant DMS–1402271, *Representation Theory, Geometry and Cohomology in Tensor Triangulated Categories*, 2014-17, \$158,301

Other Grants:

1. Co-Principal Investigator on National Science Foundation VIGRE Grant DMS–0089927, *Vertical Integration of Research and Educational Activities in Mathematics at the University of Georgia*, 2001-07, \$2,451,334
2. Principal Investigator on National Science Foundation VIGRE Grant DMS–0738586, *Vertical Integration of Research and Education in Mathematics at the University of Georgia*, 2008-15, \$3,819,865

3. Co-Principal Investigator on National Science Foundation Grant DMS-0852373, *Southeastern Lie Theory Workshop Series*, 2009-11, \$60,000
4. Co-Principal Investigator on National Science Foundation Grant DMS-1206255, *Southeastern Lie Theory Workshop Series*, 2012-13, \$38,750

Academic Honors/Awards/Recognition

- 1986 Percy Lionel Davis Award (departmental prize), U.C. Berkeley
- 1986 Graduated with Highest Honors in Mathematics, U.C. Berkeley
- 1986-89 Annual Departmental Stipend Prize, Yale University
- 1999-00 Researcher of the Year, Department of Mathematics and Statistics, Utah St. University
- 2007 Creative Research Medal, University of Georgia
- 2007 American Mathematical Society Invited One-Hour Address
- 2008 McCay Award (for distinguished research, teaching and service), Department of Mathematics, University of Georgia
- 2013- Fellow of the American Mathematical Society (Class of 2013, Inaugural Class)

Fellowships/Assistantships

- 1986-90 Teaching Fellowship, Yale University
- 1987-90 Research Assistantship, Yale University
- 1992-95 National Science Foundation Postdoctoral Fellowship, Northwestern University

Administrative Experience

- 2000-01 Chair of the Colloquium/Visitor Committee
- 2000-01 MSRI Representative for Utah St. University
- 2003-04 Chair of the Facilities Committee
- 2004 Co-Director of the University of Georgia VIGRE Program, January-April
- 2005-07 Chair of the VIGRE Grant Writing Committee
- 2008-15 Director of the University of Georgia VIGRE Program
- 2012-13 Chair of the American Mathematical Society Southeastern Section Program Committee
- 2014-15 Faculty Senate President-Elect, University of Georgia
- 2015-16 Faculty Senate President, University of Georgia

Membership on Editorial Boards

- 2005-10 Editor for *Communications in Algebra*
- 2010- Editor for the *Journal of Pure and Applied Algebra*
- 2005-06 Editor for the Proceedings of the 2004 AMS Summer Research Institute Conference: Representations of Algebraic Groups, Quantum Groups and Lie Algebras
- 2011-12 Editor for the Proceedings of the Southeastern Lie Theory Workshop Series I (2009-11)
- 2014-15 Editor for the Proceedings of the Southeastern Lie Theory Workshop Series II (2012-14)

Service on Departmental Committees: Utah State

- 1995–96 Colloquium Committee, Search Committee
- 1996–97 Colloquium Committee, Search Committee, Graduate Committee
- 1997–98 Colloquium Committee, Graduate Committee
- 1998–99 Colloquium Committee, Graduate Committee
- 1999–00 Undergraduate Committee, Colloquium/Visitor Committee, Honors Committee
- 2000–01 Colloquium/Visitor Committee, Honors Committee

Service on Departmental Committees: Georgia

- 2002–04 Facilities Committee
- 2004–06 Executive Committee
- 2006–07 Personnel Committee
- 2007–08 Graduate Committee
- 2008–14 VIGRE Management Committee
- 2009 McCay Award Selection Committee
- 2009–10 Cantrell Lecture Series Committee
- 2009–11 Executive Committee
- 2015–16 Cantrell Lecture Series Committee

University Service: Georgia

- 2011–15 Office for the Vice President for Research (OVPR) Advisory Council
- 2012–13 Franklin College of Arts and Sciences Special Professorship Selection Committee
- 2013–14 Franklin College of Arts and Sciences Special Professorship Selection Committee (Chair)
- 2012–15 Member of the Franklin College of Arts and Sciences Faculty Senate (first term)
- 2012–14 Member of the Franklin College Faculty Affairs Committee
- 2015–18 Member of the Franklin College of Arts and Sciences Faculty Senate (second term)

Service as a Conference Organizer

- 1994 Organizer for the Special Session on Lie Theory at the 900th AMS Meeting in Chicago, IL
- 1997 Organizer for the Minisymposium on Lie Theory, Matrix Theory and Combinatorics at the MAA meeting in Logan, UT
- 1998 Organizer for the Special Session on Representation Theory of Algebraic Groups, Quantum Groups, and Lie Algebras at the 932nd AMS Meeting in Manhattan, KS
- 2001 Organizer for the Special Session on Representation Theory of Finite and Algebraic Groups at the National AMS Meeting in New Orleans, LA
- 2002 Organizer for a Workshop on Modular Representation Theory, Korea Institute for Advanced Study, Seoul, Korea
- 2004 Organizer for the AMS Summer Research Conference: Representations of Algebraic Groups, Quantum Groups, and Lie Algebras, Snowbird, UT
- 2005 Organizer for the Special Session on Representation Theory of Lie Algebras at the National AMS Meeting in Atlanta, GA
- 2007 Organizer for the Special Session on Cohomology and Representation Theory at the National AMS Meeting in New Orleans, LA
- 2007 Organizer for the Special Session on Lie and Representation Theory at the 1030th AMS Meeting in Murfreesboro, TN
- 2008 Chair of the Organizing Committee for a Workshop on Homological Methods in Representation Theory, Mathematical Sciences Research Institute, Berkeley, CA
- 2009 Organizer for the Special Session on Representation Theory of Lie Algebras and Algebraic Groups at the National AMS Meeting in Washington D.C.
- 2010 Organizer for the VIGRE Summer School on Lie and Representation Theory (two weeks) University of Georgia, Athens, GA
- 2010 Chair of the Organizing Committee for the Workshop on Lie Theory, Homological Methods and Applications, University of Georgia, Athens, GA
- 2011 Organizer for the Special Session on Lie Algebras, Algebraic Groups and Related Topics at the National AMS Meeting in New Orleans, LA
- 2012 Organizer for the Conference on Categorification of Quantum Groups and Representation Theory, North Carolina State University, Raleigh, NC
- 2012 Organizer for the Summer School on Cohomology and Supports in Representation Theory University of Washington, Seattle, WA
- 2014 Organizer for the Conference on Representations of Lie Algebras and Superalgebras, University of Georgia, Athens, GA

Professional Activities

- Member American Mathematical Society
- Member Phi Beta Kappa (elected 1986)
- 1991– Refereeing duties for numerous journals
- 1992–06 Reviewer for Mathematical Reviews
- 1996– Reviewer for NSA grant proposals (including service on NSA Panels)
- 1997– Reviewer for NSF grant proposals (including service on 8 NSF Proposal Review Panels)
- 2000– Reviewer for NSERC grant proposals
- 2011 Reviewer for Simons Collaboration Grants in Mathematics
- 2011 Consultant for the American Association for the Advancement of Science (AAAS)
- 2009–14 Scientific Committee, Southeastern Lie Theory Network
- 2011–13 American Mathematical Society Southeastern Section Program Committee
- 2011–13 American Mathematical Society Committee on Committees
- 2014 Chair of an Invited Address Session (Algebra) at the International Congress of Mathematicians

Service as a Ph.D Advisor

- 1991–93 Joseph P. Gottman, Northwestern University, Secondary Ph.D Thesis Advisor
Thesis: Characters on Restricted Lie Algebras
- 1993–95 Christopher P. Bendel, Northwestern University, Secondary Ph.D Thesis Advisor
Thesis: Support Varieties for Infinitesimal Algebraic Groups
- 2004–08 Bobbe J. Cooper, University of Georgia, Ph.D Thesis Advisor
Thesis: Support Varieties of Tilting Modules
- 2005–08 Caroline B. Wright, University of Georgia, Ph.D Thesis Advisor
Thesis: Second Cohomology Groups of Frobenius Kernels
- 2005–09 Irfan Bagci, University of Georgia, Ph.D Thesis Advisor
Thesis: Cohomology and Support Varieties for Lie Superalgebras
- 2009–12 Nham V. Ngo, University of Georgia, Ph.D Thesis Advisor
Thesis: Cohomology and Geometry for Frobenius Kernels of Algebraic Groups
- 2010–13 Tiago Macedo, Universidade Estadual de Campinas, Co-Ph.D Thesis Advisor
Thesis: Characters and Cohomology of Modules for Kac-Moody Algebras
and Generalizations
- 2012–14 Andrew Talian, University of Georgia, Ph.D Thesis Advisor
Thesis: Endotrivial Modules for Classical Lie Superalgebras
- 2012–15 Theresa Brons, University of Georgia, Ph.D Thesis Advisor
Thesis: Rational and Line Bundle Cohomology for Reductive Algebraic Groups
- 2012– William Hardesty, University of Georgia, Ph.D Thesis Advisor

Service as a Postdoctoral Advisor

- 2001–03 David Hemmer, University of Georgia, Senior Sponsoring Scientist for NSF Postdoctoral Fellow
- 2003–06 Nadia Mazza, University of Georgia, Postdoctoral Research Advisor
- 2004–07 Jonathan Kujawa, University of Georgia, Senior Sponsoring Scientist for NSF Postdoctoral Fellow
- 2004–05 Su-ion Ih, University of Georgia, Postdoctoral Teaching Advisor
- 2008–10 Benjamin Jones, University of Georgia, Postdoctoral Research Advisor
- 2009–12 Christopher Drupieski, University of Georgia, Postdoctoral Research Advisor
- 2014–17 Abbey Bourdon, University of Georgia, Postdoctoral Teaching Advisor
- 2015–18 Paul Sobaje, University of Georgia, Postdoctoral Research Advisor

Other Advising

- 1995–96 Amanda Brown, Utah St. University, Senior Honors Thesis Advisor
- 1999–00 Kady Schneider, Utah St. University, Masters Thesis Advisor

Service on Thesis Committees

- 2001 Cora Neal, Utah State University, Ph.D Committee
- 2001 Russel Carlson, Utah State University, Ph.D Committee
- 2007 G. Michael Guy, University of Georgia, Ph.D Committee
- 2007 Emille K. Davie, University of Georgia, Ph.D Committee
- 2007 Philip Bergonio, University of Georgia, M.A. Committee
- 2008 Kenyon Platt, University of Georgia, Ph.D Committee
- 2009 Jeremiah Hower, University of Georgia, Ph.D Committee
- 2012 Benjamin Wyser, University of Georgia, Ph.D Committee
- 2012 Wenjing Li, University of Georgia, Ph.D Committee

Lectures

- 1989 Algebra Seminar, Yale University, May
- 1990 Algebra Seminar, Yale University, April
Algebra Seminar, Auburn University, October
Algebra Seminar, University of Washington, December
- 1991 Algebra Seminar, North Carolina St. University, March
Algebra Seminar, Auburn University, April
Algebra Seminar, University of Washington, August
- 1992 Algebra Seminar, Northwestern University, February
Algebra Seminar, Yale University, April
Lie Theory Seminar, University of Wisconsin, Madison, April
Conference on the Structure and Representation Theory of Lie Algebras, Yale University, April
Conference on Connections between Topology and Representation Theory, Northwestern University, May
Algebra Seminar, University of Washington, August
- 1993 Midwest Group Theory Seminar, University of Chicago, March
Colloquium, Auburn University, March
Colloquium, University of Georgia, March
Algebra Seminar, University of Virginia, March, April
Colloquium, Johns Hopkins University, April
Algebra Seminar, Yale University, April
III International Conference on Non-associative Algebra and its Applications, University of Oviedo, Spain, July
- 1994 Algebra Seminar, University of Washington, January
Colloquium, Kansas St. University, January
Algebra Seminar, Kansas St. University, January
Colloquium, Michigan St. University, February
Series of four lectures on Representations of Algebraic Groups and Lie Algebras, Queens University, Kingston Ontario, Canada, February
Colloquium, Utah St. University, March
890th AMS Meeting at Kansas St. University, Special Session on Representations of Algebraic and Quantum Groups, March
Algebra Seminar, Northwestern University, April

- 1994 Algebra Seminar, University of Florida, April
Contributed Talk, Canadian Mathematical Society Conference on Representations of Groups and Algebras, Banff, Canada, June
895th AMS Meeting at Oklahoma St. University, Special Session on Representations of Algebraic Groups, October
Lie Theory Seminar, University of Wisconsin, Madison, December
- 1995 897th AMS Meeting at San Francisco, CA, Special Session on Cohomology of Finite Groups, January
Symposium on Lie Algebras and their Representation Theory, Invited Lectures (2), Seoul National University, Korea, January
Algebra Seminar, Northwestern University, February
Topology Seminar, Northwestern University, March
Colloquium, University of Windsor, April
Algebra Seminar, University of Virginia, April
- 1996 908th AMS Meeting in Orlando, FL, Special Session on Algebra, Cohomology and Polynomial Identities, January
Colloquium, Kansas St. University, March
Algebra Seminar, Northwestern University, April
911th AMS Meeting in Baton Rouge, LA, Special Session on Representations of Finite Groups, Algebraic Groups and Lie Algebras, April
Monster/Lie Algebra Conference at the Ohio St. University, Invited Talk, May
Conference on Combinatorial Matrix Theory at Utah St. University, May
AMS Summer Research Institute at Seattle, WA, Plenary Talk, July
- 1997 Colloquium, University of Wyoming (sponsored by the Rocky Mountain Consortium), March
Representation Theory Seminar, University of Utah, March
MAA Special Session on Lie Theory, Matrix Theory and Combinatorics, Utah St. University, April
Algebra Seminar, Oxford University, June
Representation Theory Seminar, Oxford University, June
AMS Summer Research Conference at Seattle, WA, July

- 1998 932nd AMS Meeting in Manhattan, KS, Special Session on Cohomology of Finite Groups, March
 Algebra Seminar, Northwestern University, April
 Group Theory Seminar, University of Chicago, April
 Lie Theory Seminar, University of Wisconsin, Madison, April
 Representation Theory Seminar, Princeton University, May
 Symposium on Modular Representations of Finite Groups, University of Virginia, May
 Algebra Seminar, University of Washington, May
 Colloquium, University of Oregon, May
 International Conference on Representation Theory, East China Normal University, Shanghai, China, June
 Algebra Seminar, Aarhus University, Denmark, July
 Group Theory Seminar, University of Georgia, October
 Colloquium, University of South Alabama, (sponsored by NSF EPSCoR program), October
 Colloquium, Auburn University, (sponsored by NSF EPSCoR program), October
 Algebra Seminar, University of Virginia, December
- 1999 Algebra Seminar, Yale University, March
 U. C. Lie Theory Conference, Invited Talk, University of California, Santa Cruz, April
 943rd AMS Meeting in Buffalo, NY, Special Session on Representation Theory of Lie Algebras, April
 Colloquium, Kansas St. University, June
 945th AMS Meeting in Melbourne, Australia (joint with Australian Math. Soc.) Special Session on Algebraic Groups and Related Topics, July
- 2000 Colloquium, University of California, Riverside, March
 Group Theory Seminar, University of Chicago, April
 953rd AMS Meeting in South Bend, IN, Special Session on Representation Theory of Groups and Related Objects, April
 Conference on Representation Theory and Computational Algebra, University of Georgia, May
 Conference on Group Cohomology, Oberwolfach, Germany, July
 Special Topics Seminar (2 lectures), Utah St. University, October
 Colloquium, University of Georgia, December
- 2001 962nd AMS Meeting in New Orleans, LA, Special Session on Group Cohomology with Applications to Homotopy Theory and Representation Theory, January
 Special Topics Seminar, Utah St. University, February
 Colloquium, University of Oregon, May
 Algebra Seminar, University of Washington, May
 International Conference on Representations of Algebraic and Quantum Groups, Kunming, China, July
 Group Cohomology and Representation Theory Seminar, University of Georgia, September
 Colloquium, University of South Alabama, October
 Conference on Geometric and Combinatorial Representation Theory, Seoul National University, Seoul Korea, October

- 2002 Lie Theory Seminar (5 lectures), University of Georgia, January-February, October
 Group Cohomology and Representation Theory Seminar, University of Georgia, March
 Algebra Seminar, University of Virginia, March
 Conference on Lie and Jordan Algebras: their Representations and Applications, Plenary
 Talk, Guarujá, Brazil, May
 AMS Summer Research Conference: Groups, Representations and Cohomology, Plenary
 Talk, South Hadley, MA, June
 Symposium on Algebraic Groups, Invited Lectures (3), Osaka City University, Osaka, Japan,
 June
 980th AMS Meeting in Madison, WI, Special Session on Lie Theory, October
 Workshop on Modular Representation Theory, Korea Institute for Advanced Study, Seoul,
 Korea, October
 VIGRE Seminar, University of Georgia, November
- 2003 Algebra Seminar, Oxford University, January
 Algebra Seminar, University of Warwick, February
 Lie Theory Seminar, University of Warwick, February
 Representation Theory Seminar, Oxford University, February
 Pure Maths Seminar, University of Bristol, February
 Pure Maths Seminar, University of Leicester, March
 Workshop of Geometric Representation and Invariant Theory, Plenary Talk, University of
 Manchester, March
 Conference on the Representation Theory of Finite Groups, Oberwolfach Germany, March
 Algebra Seminar, University of Leeds, April
 Bristol-Leicester-Oxford Colloquium, University of Leicester, April
 Mini-Workshop on Representations of Algebraic Groups and Lie Algebras, University of
 Birmingham, May
 Infinite Dimensional Lie Theory Workshop, Invited Talk, Fields Institute, Toronto, Canada,
 July
 VIGRE Algebra Seminar, University of Georgia, September, October, November
 Lie Theory Seminar, University of Georgia, September
 VIGRE Seminar, University of Georgia, October
 991th AMS Meeting in Chapel Hill, NC, Special Session on Group Cohomology in Algebra
 and Geometry, October
 Conference on Groups, Representations and Galois Theory, in honor of Walter Feit, Invited
 Talk, Yale University, October
 Group Cohomology and Representation Theory Seminar (3), University of Georgia,
 November

- 2004 VIGRE Algebra Seminar, University of Georgia, January, February, March
 Algebra Seminar, University of Georgia, February, April
 Conference on Geometric Representation Theory, Invited Talk, University of Warwick, England, March
 Conference on Lie and Jordan Algebras: their Representations and Applications II, Plenary Talk, Guaruja, Brazil, May
 Algebra Seminar, University of Virginia, May
 Algebra Seminar, University of Washington, July
 Conference on Algebraic Cycles, K-theory, and Modular Representation Theory, Plenary Talk, Northwestern University, September
 Conference on Interaction of Finite Dimensional Algebras with Other Areas of Mathematics, Banff International Research Station, Banff, Canada, September
 Groups-Representations-Cohomology Seminar, Ohio State University, October
- 2005 1003rd AMS Meeting in Atlanta, GA, Special Session on Modular Representation Theory of Finite and Algebraic Groups, January
 VIGRE Algebra Seminar, University of Georgia, January, February, September, October
 Algebra Seminar (4 lectures), University of Georgia, February, October
 International AsiaLink Conference on Algebras and Representations, Plenary Talk, Beijing Normal University, P.R. China, May
 Series of Invited Lectures (2), Programme on Group Representation Theory, Bernoulli Centre, Ecole Polytechnique Federale de Lausanne, Switzerland, June
 VIGRE Seminar, University of Georgia, August
 Conference on Cohomology of Finite Groups: Interactions and Applications, Oberwolfach, Germany, September
 1012th AMS Meeting in Eugene, OR, Special Session on Representations of Groups and Algebras, November
 Algebra Seminar, University of Washington, November
 1013th AMS Meeting in Taichung, Taiwan, Special Session on Lie Algebra and Representation Theory, December
- 2006 Conference on Representation Theory of Finite Groups, Oberwolfach, Germany, March
 Algebra Seminar, University of Virginia, April
 Geometric Methods in Representation Theory Seminar, University of North Carolina, April
 Colloquium, Virginia Tech, April
 1018th AMS Meeting in San Francisco, CA, Special Session on Lie Algebras and Applications, April
 VIGRE Algebra Seminar, University of Georgia, August, September, November
 Algebra Seminar, University of Georgia, November
 Algebra Seminar, University of Rochester, November
 Topology Seminar, University of Rochester, November

- 2007 1024th AMS Meeting in Davidson, NC, Special Session on Geometric and Combinatorial Methods in Representation Theory, March
 Algebra Seminar, University of Virginia, March
 Shoemaker Distinguished Lecture Series (3 lectures), University of Toledo, April
 Conference on Lie Theory, Banff International Research Station, Banff, Canada, May
 Algebra and Algebraic Geometry Seminar, University of Washington, June
 Algebraic and Geometric Representation Theory Conference, Plenary Talk, Aarhus University, Denmark, June
 Conference on Algebras, Representations and Applications Lie and Jordan Algebras, their Representations and Applications - III, Plenary Talk, Brazil, August
 Conference on Group Embeddings, Banff International Research Station, Banff, Canada, September
 Invited One-Hour Address, American Mathematical Society Fall Sectional Meeting, Murfreesboro, TN, November
- 2008 Algebra Seminar, University of Georgia, January
 Conference on Representation Theory of Finite Dimensional Algebras, Oberwolfach, Germany, February
 Homological Methods in Representation Theory Seminar, MSRI, Berkeley, CA, March
 Colloquium, University of British Columbia, April
 Algebra/Topology Seminar, University of British Columbia, April
 Algebra Seminar, Emory University, April
 1040th AMS-SBM Meeting in Rio de Janeiro, Brazil, Special Session on Lie Algebras and their Applications, June
 1043rd AMS Meeting in Kalamazoo, MI, Special Session on Computation in Modular Representation Theory and Cohomology, October
 1045th AMS-SMS Meeting in Shanghai, China, Special Session on Representations of Groups and Algebras, December
- 2009 Mini-Workshop on Support Varieties, (3 invited lectures), Oberwolfach, Germany, February
 1048th AMS Meeting in Raleigh, NC, Special Session on Kac-Moody Algebras, Vertex Algebras, Quantum Groups, and Applications, April
 Algebra Seminar, University of Virginia, May
 Conference on Representation Theory and Lie Theory, Plenary Talk, Isaac Newton Institute for Mathematical Sciences, Cambridge, England, June
 Second Summer School on Lie Theory and Representation Theory, Invited Lecture Series (6 lectures), East China Normal University, Shanghai, China, July
 Workshop on Lie Theory and Representation Theory, Plenary Talk, East China Normal University, Shanghai, China, July
 International Workshop on Algebraic Groups, Quantum Groups and Related Topics, Plenary Talk, Peking University, Beijing, China, July
 International Workshop on Quantized Algebras and Physics, Invited Talk, Chern Institute of Mathematics, Nankai University, Tianjin, China, July

- National Mathematics Summer School, Peking University, Beijing, China, July
 International Workshop on Lie Algebras and Related Topics, Plenary Talk, National Institute for Mathematical Sciences, Daejeon, Korea, October
 Algebra Seminar, University of Georgia, October
 Algebra and Algebraic Geometry Seminar, University of Washington, December
- 2010 Algebra Seminar (2), University of Sydney, March
 Algebra Seminar, University of Melbourne, April
 Colloquium, University of New South Wales, June
 Fifth International Conference on Representation Theory, Plenary Talk, Xian, China, August
 VIGRE Algebra Seminar (2), University of Georgia, August-September
 1062nd AMS Meeting in Syracuse, NY, Special Session on Lie Algebras and Representation Theory, October
 Algebra Seminar, University of Georgia, November
 Taipei Conference on Representation Theory, Plenary Talk, Academia Sinica, Taipei, Taiwan
 December
- 2011 U.C. Lie Theory Workshop, Louisiana State University, February
 Colloquium, University of Virginia, March
 Mini-workshop on Modular Representations of Symmetric Groups and Related Objects, Oberwolfach, Germany, April
 1074th AMS Meeting in Lincoln, NE, Special Session on Quantum Groups and Representation Theory, October
 Colloquium, Baylor University, October
 Colloquium, University of Texas, Arlington, October
 1075th AMS Meeting in Salt Lake City, UT, Special Session on Noncommutative Geometry and Algebra, October
 Southwest Group Theory Day 2011, University of Arizona, November
- 2012 1077th AMS Meeting in Boston, MA, Special Session on Linear Algebraic Groups: their Arithmetic, Geometry and Representations, January
 Colloquium, University of Southern California, February
 1079th AMS Meeting in Tampa, FL, Special Session on Representations of Algebraic Groups and Related Structures, March
 Conference on the Representation Theory of Finite Groups, Oberwolfach Germany, March
 Workshop on Cohomology Bounds and Growth Rates, American Institute for Mathematics, Palo Alto, CA, Extemporaneous Talks, June
 Conference on Cohomology and Supports in Representation Theory, University of Washington, Plenary Talk, July
 Conference on Lie Algebras and Applications, Plenary Talk, Uppsala University, Sweden, September
 1085th AMS Meeting in Tucson, AZ, Special Session on Representations of Groups and Algebras, October
 Algebra Seminar, University of Georgia, November

- 2013 Algebra Seminar, University of Texas at Arlington, February
 Colloquium, College of Charleston, March
 Colloquium, University of Oregon, April
 III International Symposium on Groups, Algebras and Related Topics, Peking University,
 Invited Talk, June
 International Conference on Representation Theory VI, Zhangjiajie, China, Plenary
 Talk, June
 Algebra Seminar (2), Morningside Institute, Beijing, China, July
 Colloquium, Chinese Academy of Sciences, Beijing, China, July
 Congress of the Americas, Special Session on Lie Representation Theory, Guanajuato,
 Mexico, August
 Algebra Seminar, University of Georgia, August
- 2014 Algebra Seminar (2), University of Georgia, January, February
 Joint Mathematics Meetings for the AMS and MAA, MAA Invited Paper Session, The
 Unreasonable Effectiveness of Modern Mathematics, January
 Algebra and Algebraic Geometry Pre-Seminar, University of Washington, February
 Algebra and Algebraic Geometry Seminar, University of Washington, February
 1097th AMS Meeting in Knoxville, TN, Special Session on Geometric and Combinatorial
 Methods in Lie Theory, March
 Geometric Methods in Representation Theory Seminar, University of North Carolina, March
 Conference on Representations of Algebraic Groups, Invited Talk, University of Lyon,
 France, July
 ICM 2014 Satellite Conference on Representation Theory and Related Topics, Invited
 Talk, Daegu, South Korea, August
 Conference on Representations of Algebraic Groups and Related Objects, Plenary Talk,
 Friedrich-Schiller Universitat, Jena, Germany, September
 Algebra Seminar, University of Georgia, September
 Algebra, Geometry, Combinatorics Day (ALGECOM11), Plenary Talk, DePaul University,
 Chicago, IL, October
 1105th AMS Meeting in Greensboro, NC, Special Session on Exceptional Groups in Physics,
 Algebra and Geometry, November

Teaching Experience, Courses Taught

Berkeley: 1984–86 Calculus of One Variable (tutor/reader)

Yale: 1986–87 115a Calculus of One Variable (problem session)
 1987–88 222b Linear Algebra (discussion section)
 1988–89 115b Calculus of One Variable
 1989–90 115a Calculus of One Variable
 115b Calculus of One Variable

Auburn: 1990–91 161 Analytic Geometry and Calculus
 266 (2) Introduction to Linear Algebra
 264 Analytic Geometry and Calculus
 265 Linear Differential Equations
 331 Introduction to Abstract Algebra

Northwestern: 1991–92 B14–2 Calculus
 C37 Introduction to Modern Algebra
 B15 Multiple Integration and Vector Calculus
 B17 Sequences and Series, Linear Algebra
 C34 Linear Algebra and its Applications
 1992–93 D84 Lie Algebras
 E11–2 Seminar: Representation Theory of Algebraic Groups
 and Lie Algebras
 1993–94: C37 Introduction to Modern Algebra
 1994–95: B14–2 Calculus
 B14–1 Calculus

Utah State: 1995–96 531 Introduction to Group Theory
 532 Introduction to Ring Theory
 533 Galois Theory
 731 Lie Algebras
 732 Representations of Finite Groups
 1996–97 220 Calculus
 221 Calculus
 631 Graduate Algebra
 632 Graduate Algebra
 633 Graduate Algebra

	1997–98	531	Introduction to Group Theory
		532	Introduction to Ring Theory
		731	Representation Theory of Groups
		732	Representation Theory of Lie Algebras
	1998–99	6310	Graduate Algebra
		6320	Graduate Algebra
		1220H	Honors Calculus
	1999–00	1100	Calculus
		4310	Modern Algebra
		5320	Modern Algebra
		7320	Representation Theory
	2000–01	6310	Graduate Algebra
		2270	Linear Algebra
		6320	Graduate Algebra
		1100	Calculus
Georgia:	2001–02	2200 (2)	Calculus
		2210	Calculus
		2700	Differential Equations
	2002–03	2200	Calculus
		8000	Graduate Algebra
	2003–04	2200	Calculus
		4000/6000	Modern Algebra and Geometry I
		4010/6010	Modern Algebra and Geometry II
		8010	Graduate Algebra
	2004–05	3200	Introduction to Higher Mathematics
		8190	Representation Theory of Algebraic Groups
	2005–06	2210	Calculus
		2310H	Honors Calculus
	2006–07	2200 (2)	Calculus
		2210	Calculus
		8030	Representation Theory
	2007–08	2200	Calculus
		2700	Differential Equations
		8030	Homological Algebra/Commutative Rings
	2008–09	2250 (2)	Calculus (for Scientists and Engineers)
	2009–10	2200	Calculus
		8190	Representation Theory of Algebraic Groups
	2010–11	4000/6000	Modern Algebra and Geometry I
		4010/6010	Modern Algebra and Geometry II

2011-12	8000	Graduate Algebra
2012-13	2200	Calculus
	8190	Representation Theory of Algebraic Groups
2013-14	2250	Calculus (for Scientists and Engineers)
	3000	Linear Algebra
2014-15	3000	Linear Algebra
	8190	Representation Theory of Algebraic Groups

1. Brauer-type reciprocity over a class of graded associative algebras (with R. Holmes), *J. Algebra* **144** (1991), 117–126.
2. Projective modules over Lie algebras of Cartan type, *Memoirs Amer. Math. Soc.* **98** no. 470 (1992).
3. Filtrations for periodic modules over restricted Lie algebras, *Indag. Math.* **3** no. 1 (1992), 59–68.
4. Block degeneracy and Cartan invariants for Lie algebras of Cartan type (with R. Holmes), *J. Algebra* **161** (1993), 155–170.
5. Homomorphisms inducing isomorphisms in Lie algebra cohomology, *J. Pure Appl. Algebra* **90** (1993), 49–54.
6. On the cohomology of the Witt algebra: $W(1,1)$, Proc. III International Conference on Non-associative algebra and its applications (ed. S. Gonzales), Kluwer (1994).
7. A bound for the complexity of G_rT -modules, *Proc. Amer. Math. Soc.* **123** (2) (1995), 335–341.
8. On the vanishing of extensions of modules over reduced enveloping algebras (with J. Carlson and K. Peters), *Math. Annalen* **302** (1995), 541–560.
9. Algebraic group techniques in the representation and cohomology theory of Lie algebras of Cartan type (with Z. Lin), *J. Algebra* **179** (1996), 852–888.
10. Infinitesimal Schur algebras (with S. Doty and K. Peters), *Proc. London Math. Soc.* **72** (3) (1996), 588–612.
11. On the construction of indecomposable modules over restricted enveloping algebras (with R. D. Pollack), *J. Pure Appl. Algebra* **90** (1996), 61–73.
12. Complexity and support varieties for finite-dimensional algebras, *Cont. Math.* **194** (1996), 201–218.
13. Polynomial representations of Frobenius kernels of GL_2 , (with S. Doty and K. Peters), *Cont. Math.* **194** (1996), 57–67.
14. Hopf algebras arising from the representation theory of Lie algebras of Cartan type (with Z. Lin), *J. Algebra* **189** (1997), 529–567.
15. Infinitesimal Schur algebras of finite representation type (with S. Doty and K. Peters), *Quart. J. Math. Oxford* (2) **48** (1997), 323–345.
16. Varieties for G_rT -modules, *Proc. of Symposia in Pure Mathematics* **63** (1998), 441–451.
17. Representation theory of the Witt algebra (with J. Feldvoss), *J. Algebra* **203** (1998), 447–469.

18. Good filtrations for Hopf algebras arising from Lie algebras of Cartan type (with Z. Lin), *J. Pure and Appl. Algebra* 127 (1998), 231–256.
19. Semisimplicity of Schur algebras, (with S. Doty), *Math. Proc. Cambridge Phil. Soc.* 124 no. 1 (1998), 15–20.
20. Support varieties for the Steenrod algebra (with J. Palmieri), *Math. Zeit.* 227 no. 4 (1998), 663–684.
21. Representation theory of Lie algebras of Cartan type, *The Monster and Lie Algebras: Proceedings of a Special Research Quarter at The Ohio St. University*, (ed. J. Ferrar, K. Harada), de Gruyter (1998), 235–252.
22. Complexes and vanishing of cohomology for group schemes (with C. Bendel), *J. Algebra* 214 (1999), 668–713.
23. Complexity for modules over finite Chevalley groups and classical Lie algebras (with Z. Lin), *Inventiones Math.* 138 (1999), 85–101.
24. Representation type for Schur algebras (with S. Doty, K. Erdmann, and S. Martin), *Math. Zeit.* 232 (1999), 137–182.
25. Extensions of modules over Hopf algebras arising from Lie algebras of Cartan type (with Z. Lin), *Algebras and Representation Theory* 3 (2000), 43–80.
26. Blocks of finite representation type in reduced enveloping algebras of classical Lie algebras (with R. D. Pollack), *J. London Math. Soc.* 61 (2000), 374–394.
27. Some recent developments in the representation theory of general linear and symmetric groups, *Representations and Quantizations*, Proceedings of the International Conference on Representation Theory (Shanghai, China), Springer-Verlag, 2000, 357–374.
28. Relating the cohomology of the general linear group and the symmetric group (with S. Doty), *Modular Representation Theory of Finite Groups*, Proceedings of a Symposium at the University of Virginia, Walter de Gruyter, 2001, 175–187.
29. On comparing the cohomology of algebraic groups, finite Chevalley groups and Frobenius kernels (with C. Bendel and C. Pillen), *J. Pure and Appl. Algebra* 163 (2001), 119–146.
30. Representation type for the blocks of Category \mathcal{O} (with V. Futorny and R. D. Pollack), *Quart. J. Math. Oxford* 52 (2001), 285–305.
31. On comparing the cohomology of general linear groups and symmetric groups (with A. S. Kleshchev), *Pacific J. Math.* 201 (2001), 339–355.
32. Representation type of quantum Schur algebras (with K. Erdmann), *Transactions of AMS* 353 (2001), 4729–4756.
33. Representation type of Hecke algebras (with K. Erdmann), *Transactions of AMS* 354 (2002), 275–285.

34. Support varieties for algebraic groups (with B. Parshall and D. Vella), *J. Reine Angew. Math.* 547 (2002), 15–49.
35. Extensions for finite Chevalley groups II (with C. Bendel and C. Pillen), *Transactions of AMS* 354 (2002), 4421–4454.
36. Support varieties of modules for symmetric groups (with D. Hemmer), *J. Algebra* 254 (2002), 422–440.
37. The restricted nullcone (with J. Carlson, Z. Lin and B. Parshall), *Cont. Math.* 325 (2003), 51–75.
38. The nucleus for restricted Lie algebras (with D. Benson), *Proc. Amer. Math. Soc.* 131 (2003), 3395–3405.
39. Extensions for Frobenius kernels (with C. Bendel and C. Pillen), *J. Algebra* 272 (2004), 476–511.
40. Extensions of modules over Schur algebras, symmetric groups, and Hecke algebras (with S. Doty and K. Erdmann), *Algebras and Representation Theory* 7 (2004), 67–100.
41. Extensions for finite Chevalley groups I (with C. Bendel and C. Pillen), *Advances in Math.* 183 (2004), 380–408.
42. Specht filtrations for Hecke algebras of type A (with D. Hemmer), *J. London Math. Soc.* 69 (2004), 623–638.
43. Varieties of nilpotent elements for simple Lie algebras I: Good Primes, (with the UGA VIGRE Algebra Group), *J. Algebra* 280 (2004), 719–737.
44. Nilpotent elements and support varieties for simple Lie algebras, *Resenhas* 6 no. 2/3 (2004), 281–290.
45. Extensions for finite groups of Lie type: Twisted Groups (with C. Bendel and C. Pillen), *Finite Groups 2003* (held at the University of Florida), de Gruyter, New York, 2004, 29–46.
46. Representation type of the blocks of Category \mathcal{O}_S (with B. Boe), *Advances in Math.* 196 (2005), 193–256.
47. Varieties of nilpotent elements for simple Lie algebras II: Bad Primes, (with the UGA VIGRE Algebra Group), *J. Algebra* 292 (2005), 65–99.
48. On the realization of orbit closures as support varieties (with T. Tanisaki), *J. Pure and Applied Algebra* 206 (2006), 66–82.
49. Representation type for Schur superalgebras (with D. Hemmer and J. Kujawa), *J. of Group Theory* 9 (2006), 283–306.
50. Endotrivial groups for finite Chevalley groups (with J. Carlson and N. Mazza), *J. Reine Angew. Math.* 595 (2006), 93–120.

51. Extensions for finite groups of Lie type II: Filtering the truncated induction functor (with C. Bendel and C. Pillen), *Cont. Math.* **413** (2006), 1–23.
52. On the cohomology of Specht modules (with D. Hemmer), *J. Algebra* **306** (2006), 191–200.
53. Second cohomology for Frobenius kernels and related structures (with C. Bendel and C. Pillen), *Advances in Math.* **209** (2007), 162–197.
54. Support varieties for Weyl modules over bad primes (with the UGA VIGRE Algebra Group), *J. Algebra* **312** (2007), 602–633.
55. Projective modules for Chevalley groups and Frobenius kernels (with Z. Lin), *Bulletin of the London Math. Soc.* **39** (2007), 1019–1028.
56. Category \mathcal{O} for the Virasoro algebra: Cohomology and Koszulity (with B. Boe and E. Wiesner), *Pacific J. Math.* **234** (2008), 1–21.
57. Support varieties for modules over Chevalley groups and classical Lie algebras (with J. Carlson and Z. Lin), *Transactions of AMS* **360** (2008), 1879–1906.
58. Endotrivial modules for the symmetric group (with J. Carlson and N. Mazza), *Proceedings of the Edinburgh Math. Soc.* **51** (2008), 1–22.
59. Cohomology and support varieties for the Lie superalgebra $W(n)$ (with I. Bagci and J. Kujawa), *International Math. Research Notices*, doi:10.1093/imrn/rnn115, (2008).
60. Cohomology and support varieties for Lie superalgebras II (with B. Boe and J. Kujawa), *Proceedings of the London Math. Soc.*, **98** (2009), 19–44.
61. On Kostant’s theorem for Lie algebra cohomology (with the UGA VIGRE Algebra Group), *Cont. Math.*, **478** (2009), 39–60.
62. Ext^1 -quivers for the Witt algebra $W(1,1)$ (with B. Boe and E. Wiesner), *J. Algebra*, **322** (2009), 1548–1564.
63. An analog of Kostant’s theorem for the cohomology of quantum groups (with the UGA VIGRE Algebra Group), *Proceedings of the AMS*, **138** (2010), 85–99.
64. On the cohomology of Young modules for the symmetric group (with F. Cohen and D. Hemmer), *Advances in Math.*, **224** (2010), 1419–1461.
65. Cohomology and support varieties for Lie superalgebras (with B. Boe and J. Kujawa), *Transactions of the AMS*, **362** (2010), 6551–6590.
66. Complexity and module varieties for classical Lie superalgebras (with B. Boe and J. Kujawa), *International Math. Research Notices*, (2011), No. 3, 696–724.
67. Endotrivial modules for finite group schemes (with J. Carlson), *J. Reine Angew. Math.*, **653** (2011), 149–178.

68. Detecting cohomology for Lie superalgebras (with G. Lehrer, R. Zhang), *Advances in Math.*, 228 (2011), 2098-2115.
69. On the vanishing ranges for the cohomology of finite groups of Lie type (with C. Bendel and C. Pillen), *International Math. Research Notices*, doi:10.1093/imrn/rnr30, (2011).
70. Support varieties for Demazure modules (with B. Jones), *J. Australian Math. Soc.*, 91 (2011), 343-363.
71. Endotrivial modules for finite group schemes II (with J. Carlson), *Bulletin of the Institute of Mathematics Academia Sinica*, 7 (2012), 271-289.
72. Differentiating Weyl's generic dimension formula with applications to support varieties, (with C. Drupieski and B. Parshall), *Advances in Math.*, 229 (2012), 2656-2668 .
73. Second cohomology for finite groups of Lie type (with UGA VIGRE Algebra Group), *J. Algebra*, 360 (2012), 21-52.
74. Cohomology for infinitesimal unipotent algebraic and quantum groups (with C. Drupieski and N. Ngo), *Transformation Groups*, 17 (2012), 393-416.
75. Cohomology of algebraic groups, finite groups, and Lie algebras: Interactions and Connections, *Lie Theory and Representation Theory*, Survey of Modern Mathematics Volume II (edited by N. Hu, B. Shu, J.P. Wang), International Press, 2012, pp. 151-176.
76. On the vanishing ranges for the cohomology of finite groups of Lie type II (with C. Bendel and C. Pillen), *Proc. of the Symposia of Pure Mathematics*, 86 (2012), 25-73.
77. Complexity for modules over the classical Lie superalgebra $\mathfrak{gl}(m|n)$ (with B. Boe and J. Kujawa), *Compositio Math.*, 148 (2012), 1561-1592.
78. First cohomology of finite groups of Lie type: simple modules with small dominant weights (with the UGA VIGRE Algebra Group), *Transactions of the AMS*, 365 (2013), 1025-1050.
79. Cohomology for quantum groups via the geometry of the nullcone (with C. Bendel, B. Parshall and C. Pillen), *Memoirs of the AMS*, 229, no. 1077, (2014).
80. Extensions for finite Chevalley groups III: Rational and Generic Cohomology (with C. Bendel and C. Pillen), *Advances in Math.*, 262 (2014), 484-519.
81. On the structure of cohomology rings of p -nilpotent Lie algebras (with J. Carlson), *Transformation Groups*, 19 (2014), 721-734.
82. Bounding the dimension of rational cohomology groups (with C. Bendel, B. Boe, C. Drupieski, B. Parshall, C. Pillen, and C. Wright), *Current Developments and Retrospectives in Lie Theory: Algebraic Methods*, Developments in Mathematics (edited by G. Mason, I. Penkov, J.A. Wolf), Springer-Verlag, 2014, 51-69.
83. Endotrivial modules for the general linear group in a non-defining characteristic (with J. Carlson and N. Mazza), *Math. Zeitschrift*, 278 (2014), 901-925.

-
84. On good (p, r) filtrations for rational G -modules (with T. Kildetoft), *J. Algebra*, **423** (2015), 702-725.
 85. Bounding extensions for finite Chevalley groups and Frobenius kernels (with C. Bendel, B. Parshall, C. Pillen, L. Scott, and D. Stewart), to appear in *Algebras and Representation Theory*.
 86. Tensor triangular geometry for Lie superalgebras (with B. Boe and J. Kujawa), submitted.
 87. Third cohomology for Frobenius kernels and related structures (with C. Bendel, C. Pillen), submitted.
 88. Bilinear and quadratic forms for rational modules of split reductive groups (with S. Garabaldi), submitted.
 89. Endotrivial modules for finite groups of Lie type A in the non-defining characteristic (with J. Carlson, N. Mazza), preprint.
 90. The complexity for the Lie module (with F. Cohen and D. Hemmer), preprint.
 91. Realizing rings of regular functions through quantum group cohomology (with Z. Lin), preprint.