

# DAVID GOLDBERG

## EDUCATION

B.A.	Reed College, Portland, OR	1984
Ph.D.	University of Maryland, College Park Dissertation: “Reducibility of Induced Representations for Classical $p$ -adic Groups”	1991

## VITA:

**Birthdate:** November 7, 1961

**Birthplace:** Stoneham, Massachusetts, USA

**Citizenship:** USA

## PROFESSIONAL EXPERIENCE

**March 2016-present: Executive Director, National Alliance for Doctoral Studies in the Mathematical Sciences (Math Alliance);** Responsible for all aspects of day-to-day operation of this national faculty based mentoring community, carrying out policy as determined by the Executive Council (current Council Chair, Prof. Leslie McClure, Drexel University). Responsible for managing all financial aspects of running the organization, fundraising, activity planning, recruiting new faculty mentors, presenting reports and giving talks about the Math Alliance and its activities to a wide range of audiences including faculty, students, university administrators, potential partners, professional societies, math science institutes, and corporate interests. The organization has grown in size and scope under my leadership, and has been recognized for its contributions to diversity, equity, and inclusion in the mathematical and statistical sciences, including the 2017 American Mathematical Society Programs that Make a Difference Award.

**March 2017- present: Executive Director, Center for the National Math Sciences Alliance;** In order to provide an administrative structure and a sustainable funding model for the Math Alliance, we created a center in the College of Science at Purdue University to support its work, and allow various entities to participate in the administrative and programmatic processes. This Center is supported by partnerships with universities, as well as the American Statistical Association, and carries out all administrative aspects of the Math Alliance. The Center reports to the Dean of the College of Science at Purdue University (currently Dr. Patrick Wolfe).

**January 2013-June 2019: Associate Head for Graduate Studies, Department of Mathematics, Purdue University;** Within a highly ranked R1 department, assumed responsibility for all aspects of the graduate program. Set goals for transforming the program from one that was majority international students into one which was majority domestic students. Was successful in these endeavors without changing the admissions standards or academic expectations. Succeeded in becoming a Math Alliance Doctoral Program Group and saw significant impact on recruitment, retention and graduation of women and underrepresented minority students. Reported to Head of the Math Department (Prof. Laszlo Lempert until June 2013, then Prof. Greg Buzzard).

**August 1991-present: Faculty member, Purdue University Department of Mathematics;** Entered as a postdoctoral Research Assistant Professor, was appointed Assistant Professor in 1994, Associate Professor in 1997, and Professor in 2005. Awarded an NSF Postdoctoral Fellowship, and an NSF CAREER Grant, and full publication and funding record are described below. Reports to Department Head (currently Prof. Irena Swanson).

### Visiting Positions:

Member	Mathematical Sciences Research Institute	1994-95
Visiting Associate Professor	University of Iowa	1998-99
Visiting Professor	University of East Anglia, UK	June-August 2005
Visiting Professor	Boston College	January-August 2006
Visiting Professor	Univ. Blaise Pascal Clermont-Ferrand, France	June 2009

### Other Professional Experience:

Actuarial Administrator	Fred. S. James & Co., Portland, OR	1984-86
Teaching Assistant	University of Maryland	1986-89
Research Assistant	University of Maryland	1989-91

### PROFESSIONAL MEMBERSHIPS and SERVICE

American Mathematical Society  
 American Statistical Association  
 Association for Women in Mathematics  
 Mathematics Association of America  
 SACNAS  
 Reviewer Mathematical Reviews  
 Referee for several research journals

### AWARDS

National Science Foundation Postdoctoral Fellow, June 1992-May 1995  
 National Science Foundation CAREER Award, June 1995-May 1998  
 Top Ten Teacher in the School of Science, Spring 2000  
 2017 AMS Programs That Make a Difference Award (Math Alliance Executive Director)

### RESEARCH INTERESTS

Representations of  $p$ -adic groups, especially questions of reducibility of induced representations and their connections with number theory and automorphic forms.

## PUBLICATIONS

REFEREED

1. *Reducibility of generalized principal series representations of  $U(2,2)$  Via Base Change*, Compositio Mathematica, **86**; 245-264, 1993.
2. *Some results on reducibility for unitary groups and local Asai L-functions*, J. reine angew. Math., **448**; 65-95, 1994.
3. *R-groups and elliptic representations for  $SL_n$* , Pacific Journal of Mathematics, **165**; 77-92, 1994.
4. *Reducibility of induced representations for  $Sp(2n)$  and  $SO(n)$* , American Journal of Mathematics, **116**; 1101-1151, 1994.
5. *R-groups and elliptic representations for unitary groups*, Proceedings of the AMS, **123**; 1267-1276, 1995.
6. *Reducibility for non-connected  $p$ -adic Groups with  $G^0$  of prime index*, Canadian Journal of Mathematics, **47**; 344-363, 1995.
7. (with R.A. Herb) *Some results on the admissible representations of non-connected reductive  $p$ -adic groups*, Annales Scientifique, ENS, **30**; 97-146, 1997,
8. *R-groups and elliptic representations for similitude groups*, Math. Annalen, **307**; 569-588, 1997.
9. (with F. Shahidi) *On the tempered spectrum of quasi-split classical groups*, Duke J. Math., **92(2)**; 255-294, 1998.
10. (with S. Friedberg) *On local coefficients for nongeneric representations of some classical groups*, Compositio Mathematica, **116**; 133-166, 1999.
11. (with F. Shahidi) *On the tempered spectrum of quasi-split classical Groups II*, Canad. J. Math., **53 (2)**; 244-277, 2001.
12. (with A. Roche) *Types for  $SL_n$* , Proc. of London Math. Soc., **85 (3)**; 119-138, 2002.
13. (with A. Roche) *Hecke algebras for  $SL_n$* , Proc. of London Math. Soc. **90(3)**, 87-131, 2005.

## PUBLICATIONS (CONT.)

14. (with P. Kutzko and S. Stevens) *Covers for self-dual supercuspidal representations of the Siegel Levi subgroup of classical  $p$ -adic groups*, Int. math. Res. Notices, 2007, no. 22 (31 pages).
15. *On dual  $R$ -groups for classical groups*, in “On Certain  $L$ -functions; Conference Proceedings on the occasion of Freydoon Shahidi’s 60<sup>th</sup> Birthday, J. Arthur, J. Cogdell, S. Gelbart, D. Goldberg, D. Ramakrishnan, J.K. Yu (eds), Clay Mathematics Proceedings, **Vol. 13**, (2011) Amer. Math. Soc. pp. 159-186.
16. (co-Editor) *On Certain  $L$ -functions; Conference Proceedings on the occasion of Freydoon Shahidi’s 60<sup>th</sup> Birthday*, (J. Arthur, J. Cogdell, S. Gelbart, D. Goldberg, D. Ramakrishnan, J.K. Yu eds.) Clay Mathematics Proceedings, **Vol. 13**, Amer. Math. Soc. 2011.
17. (With D. Ban)  *$R$ -groups and parameters*, Pac. J. Math **255**; 281-304, 2012.
18. (with F. Shahidi) *On the tempered spectrum of classical groups, III: The odd orthogonal groups*, Forum Mathematicum **26**; 1029-1069, 2014.
19. (with K. Choiy) *Transfer of  $R$ -groups between  $p$ -adic inner forms of  $SL_n$* , Manuscripta Mathematica, **146**; 125-152, 2015.
20. (with D. Ban)  *$R$ -groups, elliptic representations and parameters for  $GSpin$  groups*, Forum Mathematicum **27**, 3301-3334, 2015.
21. (with K. Choiy) *Invariance of  $R$ -groups between  $p$ -adic inner forms of quasi-split classical groups*, Transactions of AMS, **368**; 1387-1410, 2016.
22. (with D. Szpruch) *Plancherel measures for covers of  $p$ -adic  $SL_2$  and  $SO_3$* , Inter. J. Number Theory, **12**, 1907-1926, 2016.
23. (with K. Choiy) *Behavior of  $R$ -groups for  $p$ -adic inner forms of quasi-split special unitary groups*, Bull. Iranian Math. Soc., **43**, (Volume in honor of F. Shahidi), 117-141, 2017.
25. *Local aspects of the Langlands-Shahidi Method, and the theory of  $R$ -groups*, in “Prime Numbers and Representation Theory”, (Y. Tian and Y. Ye, eds.) Lect. Series of Mod. Num. Thy, **2**, Science Press, Beijing, China, 2017

**PUBLICATIONS (CONT.)**

26. (with D. Ban and K. Choiy) *R-groups and multiplicity in restriction for unitary principal series of  $GSpin$  and  $Spin$* , in “Geometry, Algebra, Number Theory, and their Information technology Applications”, Springer Proceedings in Mathematics and Statistics, Vol. 251, pp. 59-69, (2018), Springer Nature Switzerland, Cham, Switzerland
27. (with D. Ban and K. Choiy) *R-groups for unitary principal series of  $Spin$  groups*, J. Number Theory, Vol. 225, pp. 125-150, 2021
28. (with P. Seshaiyer) *Mentoring the missing millions*, SIAM News, September 2022

IN PROGRESS

29. (With P. Kutzko) “The Math Alliance and Building of a National Mentoring Community”,
30. (with K. Choiy) *R-groups for general metaplectic Groups*,
31. (with D. Ban and K. Choiy) *R-groups for spin groups*

NON-REFEREED

32. (Harriet Pollatsek) “Interview with David Goldberg”, Notices of the American Mathematical Society, **63**, 964-966, 2016
33. (With P. Kutzko) “The Math Alliance and Its Roots in the African American Community”, Notices of the American Mathematical Society, **65**, 127-131, 2018
34. (With J. Brown, R. Bañuelos) Johnny L. Houston Lecture Series at Purdue University, to appear in National Association of Mathematicians (NAM) quarterly newsletter

**INVITED ADDRESSES**

1. University of Chicago Representation Theory Seminar, October 30, 1991. (1 hour)
2. Second annual  $p$ -adic Field of Dreams Conference, University of Iowa, April 3-5, 1992. (1 hour)
3. Colloque: Progrès récents en L-indiscernabilité, CIRM, Marseille, France, May 25-29, 1992.
4. Teoria de Representaciones de Grupos Algebraicos Sobre Cuerpos Locales y Aplicaciones, Universidad Católica de Valparaiso, Chile, July 26-30, and Universidad de Chile a Santiago, Chile August 2-6, 1993. (four 1 hour lectures)

**INVITED ADDRESSES (CONT.)**

5. Universidad Nacional de Córdoba, Argentina, August 10, 11, and 12, 1993. (90 minutes each)
6. University of Maryland Lie Groups and Representation Theory Seminar, November 18, 1993. (1 hour)
7. Colloque: Représentations des groupes réductifs  $p$ -adiques, CIRM, Marseille, France, July 25- 29, 1994. (1 hour)
8. California State University, Bakersfield, Department of Mathematics Colloquium,, February 14, 1995. (1 hour)
9. Reed College, Department of Mathematics Colloquium, March 2, 1995. (1 hour)
10. University of California, Conference on Lie Groups and Lie Algebras, UC Santa Cruz, April 8-9, 1995. (1 hour)
11. University of California, Berkeley, Lie Groups and Representation Theory Seminar, May 3, 1995 (1 hour)
12. American Mathematical Society Eastern Sectional Meeting (903), Northeastern University, October 7-8, 1995. (20 minutes)
13. Calvin College Department of Mathematics Colloquium, February 8, 1996. (1 hour)
14. University of Toronto Lie Groups Seminar, March 15, 1996. (1 hour)
15. Universidad Nacional de Córdoba, Argentina, December 19, 1996. (1 hour)
16. Segundo Taller Representaciones Latinoamericano de grupos, Universidad Católica de Valparaiso, Chile, January 6-10, 1997 (5 one hour lectures)
17. Boston College Department of Mathematics Colloquium, March 13, 1997. (1 hour)
18. Tercera Taller Latinoamericano de representaciones de grupos, Valparaíso, Chile, January 5-9, 1998. (2 one-hour lectures)
19. American Mathematical Society Central Sectional Meeting, (932), Kansas State University, Manhattan KS, March 27-28, 1998. (30 minutes)

## INVITED ADDRESSES (CONT.)

20. Analyse harmonique sur le groupe  $Sp(4)$ , CIRM, Marseilles, France, June 15-19, 1998. (1 hour)
21. Cuatera Taller de representaciones de grupos, Universidad Católica de Valparaíso, Chile and Universidad de Valparaíso, January 4-8, 1999. (3 one-hour lectures)
22. Workshop on representations of reductive  $p$ -adic groups, Centre de Recherches mathematiques, Université de Montreal, Montreal Canada, May 9-13, 1999. (1 hour)
23. Chicago State University, Jan. 31, 2000. (1 hour)
24. Northeastern Illinois University, Mathematics Colloquium, Feb. 2, 2000. (1 hour)
25. University of Chicago, Representation Theory Seminar, Feb. 3, 2000. (1 hour)
26. Roosevelt University, Chicago, IL, Feb. 4, 2000. (1 hour)
27. Howard University, Undergraduate Mathematics Colloquium, Feb. 22, 2000. (1 hour)
28. University of Maryland, Representation Theory Seminary, Feb. 23, 2000. (1 hour)
29. University of Maryland, Pi Mu Epsilon Society, Feb. 23, 2000. (1 hour)
30. Morgan State University, Department of Mathematics Colloquium, Feb. 24, 2000. (1 hour)
31. Howard University, Department of Mathematics Colloquium, Feb. 25, 2000. (1 hour)
32. Sexto Taller de representaciones de grupos, Valparaiso, Chile, January 8-12, 2001. (4 one-hour lectures)
33. Florida State University, Undergraduate Mathematics Society, February 22, 2001. (1 hour)
34. Florida A&M University, Dept. of Mathematics Colloquium February 23, 2001. (1 hour)
35. Representations of Reductive  $p$ -adic groups, Pacific Inst. of Math. Sci., Feb. 20-24, 2002. (1 hour)
36. University of Michigan, Lie Groups Seminar, March 18, 2002. (1 hour)
37. University of Michigan, Undergraduate Seminar, March 19, 2002. (1 hour)

## INVITED ADDRESSES (CONT.)

38. University of Minnesota, Automorphic Forms Seminar, April 11, 2002. (1 hour)
39. Recent progress in Langlands functoriality, CIRM, Luminy, France, June 17-28, 2002. (30 minutes)
40. IAS/Park City, Mathematics Institute, Park City, UT, June 30-July 20, 2002. (40 minutes)
41. International Workshop on K-types for  $p$ -adic reductive groups, Muenster, Germany, June 9-14, 2003. (1 hour)
42. University of Akron Department of Pure and Applied Mathematics Colloquium, March 9, 2004.
43. American Mathematical Society Central Sectional Meeting (1001), Northwestern University, Evanston, IL, October 22-23, 2004. (20 minutes)
44. University of East Anglia, School of Mathematics, Colloquium, July 14, 2005. (1 hour)
45. Recent Trends in Endoscopy and Representation Theory, Humboldt Universität zu Berlin, Oct. 17-22, 2005. (1 hour)
46. Boston University Algebra Seminar, January 30, 2006. (1 hour)
47. Representation theory of  $p$ -adic groups, Kings College, London June 6-8, 2007. (1 hour)
48. On Certain  $L$ -functions, West Lafayette, IN July 30-August 3, 2007. (1 hour)
49. Generalizing Theta Correspondences, American Institute of Mathematics, Palo Alto, CA, July 28-August 1, 2008. (2 hours)
50. American Mathematical Society Central Sectional Meeting (1043), Western Michigan University, Kalamazoo, MI, Oct. 17-19, 2008. (20 minutes)
51. University of Chicago Representation Theory Seminar, Chicago, IL Oct. 28, 2008. (1 hour)
52. Université Blaise Pascal, Clermont-Ferrand, France, Department of Mathematics Colloquium, June 9, 2009. (1 hour)
53. Université Blaise Pascal, Clermont-Ferrand, France, Number Theory Seminar, June 18, 2009. (1 hour)



## INVITED ADDRESSES (CONT.)

54. Midwest Conference on Automorphic Forms, Representation Theory, and Number Theory, University of Iowa, Iowa City, IA, Oct. 24-24, 2009. (1 hour)
55. University of Oklahoma-Oklahoma State University Joint Automorphic Forms Seminar, Stillwater, OK, December 8, 2010. (2 hours)
56. Karcher Colloquium, University of Oklahoma, Norman OK, December 9, 2010. (1 hour)
57. University of Oklahoma Mathematics Club, Norman, OK, December 10, 2010. (1 hour)
58. Southern Illinois University Department of Mathematics Colloquium, Carbondale, IL, April 14, 2011. (1 hour)
59. Southern Illinois University Automorphic Forms Seminar, Carbondale IL, April 14, 2011. (1 hour)
60. Collaborative Number Theory Seminar at the CUNY Graduate Center, New York, NY, October 19, 2012. (1½ hours)
61. Department of Mathematics Colloquium, Wabash College Crawfordsville, IN, January 15, 2013. (1 hour)
62. Arizona State University, Tempe, Undergraduate Mathematics Club, November 1, 2013. (1 hour)
63. Joint Mathematical Meetings, Baltimore, MD, Jan 15-18, 2014. (20 minutes)
64. Southern Illinois University, Carbondale, IL, Department Colloquium, March 27, 2014. (1 hour)
65. Arizona State University, Tempe, Undergraduate Mathematics Club, November 6, 2014. (1 hour)
66. Institute of Mathematical Sciences, Chinese University of Hong Kong, Hong Kong, March 11-19, 2015. (4 lectures, 5 ½ hours total)
67. Southern University of New Orleans, Undergraduate Mathematics Majors, April 29, 2015. (1 hour)
68. 2015 Workshop in Number Theory, Morningside Center of Mathematics, Chinese Academy of Sciences, July 18-25, 2015. (2 lectures, 1 hour each)

**INVITED ADDRESSES (CONT.)**

69. Xavier University of New Orleans, Undergraduate Mathematics Club, November 5, 2015. (1 hour)
70. Southern Illinois Mathematics Conference, Carbondale, IL, May 6, 2016. (30 minutes)
71. Conference on Geometry, Algebra, Number Theory, and their Information technology Applications (GANITA), Fields Institute, University of Toronto, Toronto, ON, Canada, June 13-16, 2016. (20 minutes).
72. The Ohio State University Special Colloquium, “Broadening Participation in STEM Through Mentoring: The National Alliance as a Model, April 9, 2017. (1 hour)
73. The Ohio State University Representation Theory Seminar, April 19 2017. (1 hour)
74. The Ohio State University Radical Pi Undergraduate Mathematics Club, April 19, 2017. (1 hour)
75. The Collaborative Number Theory Seminar at the CUNY Graduate Center, New York, NY, May 12, 2017. (1½ hours)
76. NYC Math Sciences Alliance, City College of New York, May 13, 2017. (20 minutes)
77. Jiangsu Normal University Department of Mathematics Colloquium, Xuzhou China, March 12, 2018. (1 hour)
78. Jiangsu Normal University Number Theory Seminar, Xuzhou, China, March 19 & 21, 2018. (2 1-hour lectures)
79. Notre Dame University Representation Theory Seminar, South Bend, IN, September 10, 2018. (1 hour)
80. NYC Math Sciences Alliance Conference, plenary speaker, September 15, 2018. (1 hour)
81. AMS Central Sectional Meeting (1143), Ann Arbor, MI October 20-21, 2018. (45 minutes)
82. Joint Mathematics Meetings Invited Session, “Building Successful Communities in Mathematics”, Baltimore, MD, January 16, 2019. (20 Minutes)

**INVITED ADDRESSES (CONT.)**

83. Sloan Indigenous Graduate Partnership Workshop, “Strategies to Attract and Support URM Graduate Students”, Purdue University, West Lafayette, IN April 5, 2019. (1 hour)
84. Joint Statistics Meetings, American Statistical Association Board Meeting, Denver, CO July 27, 2019. (30 minutes)
85. Joint Statistics Chairs Meeting, Denver, CO, July 28, 2019. (15 minutes)
86. Arizona State University, Department Colloquium, January 27, 2020. (1 hour)
87. Southern University A&M University, Baton Rouge, LA, Quality Education Program, February 14, 2020. (1 hour)
88. Panelist, PARADIGMS Fall Conference, Diversity in Graduate Mathematical Sciences, November 23, 2020. (1 hour)
89. Pomona PRIME REU Graduate School 101 Panel, July 16, 2021 (2 hours)
90. Emerging Leaders Science Scholars Discussions on Mentoring, August 30, 2021, PURDUE University, West Lafayette, IN (20-minute presentation in a 90-minute session).
91. University of Alabama, Department of Mathematics Colloquium (Virtual), October 14, 2021 (1 hour).
92. Canadian Math Society Equity, Diversity and Inclusion Session, Canadian Winter Meetings, December 5, 2021 (1 hour)
93. Equity Community of Practice, Purdue University, West Lafayette, IN, February 10, 2022, (1 hour).
94. Midwest Representation Theory Seminar, March 12, 2022, Ann Arbor, MI, (1 hour)
95. Panel Moderator: “Transforming Graduate Programs”, as part of panel, “The Math Alliance: 15 years of Building a New American Community in the Mathematical and Statistical Sciences”, (Virtual)Joint Mathematics Meetings, Seattle WA, April 7, 2022.
96. Mathematical Sciences Research Institute Panel on Diversity, Equity, and Inclusion, April 14, 2022 (1 hour)
97. Indiana University, Department of Epidemiology and Biostatistics Colloquium, June 30, 2022 (1 hour)

**INVITED ADDRESSES (CONT.)**

98. Pomona PRIME REU Graduate School 101 Panel, July 15, 2022 (2 hours)
99. Georgia State University Math Path Workshop: Math Alliance Panel July 26, 2022 (90 minutes)
100. MAA MathFest, 2022, Panel, “The Math Alliance: Building a New American Community in the Quantitative Sciences”, Philadelphia, PA (90 minutes)
101. Joint Statistics Meetings, American Statistical Association Board Meeting, Washington, DC August 6, 2022. (30 minutes)
102. American Mathematical Mini-Conference on Education, Washington, DC, September 23, 2022 (30 minutes)
103. JMM Panel: Hidden Figures Revealed: Reflections from Research on Black Mathematicians, Joint Mathematics Meetings, Boston MA, January 7, 2023 (90 minutes)
104. Panelist: Conference on Strengthening Community in Research Mathematics, Pomona College, Pomona, CA, February 17-18, 2023 (1 hour)
105. Conference on Strengthening Community in Research Mathematics, Pomona College, Pomona, CA, February 17-18, 2023 (30 minutes)
106. Department of Mathematics Colloquium, University of Kansas, Lawrence, KS, February 27, 2023 (1 hour)
107. Department of Mathematics Colloquium, Alabama A&M University, Huntsville, AL (delivered virtually), March 21, 2023, (1 hour)
108. Department of Mathematics Colloquium, Virginia Tech University, Blacksburg, VA, March 23, 2023 (1 hour)
109. Department of Mathematics Colloquium, Colorado State University, Fort Collins, CO, March 27, 2023 (1 hour)

**GRANT SUPPORT**

1. June 1992 – May 1995; NSF Postdoctoral Fellowship, “Reducibility of induced representations for classical  $p$ -adic groups,” \$75,000.
2. June 1995 – May 1998; NSF Career Grant, “Intertwining operators,  $R$ -groups, and automorphic  $L$ -functions,” \$55,000.

**GRANT SUPPORT (CONT.)**

3. August 1, 1998 – July 31, 2001; NSF Grant, “Intertwining operators, Plancherel measures, and automorphic L-functions,” \$79,341.
4. April 1, 2002 – March 31, 2003; NSF conference grant, “Recent Progress in Langlands Functoriality,” \$15,000.
5. July 1, 2004 – June 30, 2007; NSF Grant, “Extending the Langlands-Shahidi Program to the non-generic spectrum and related topics,” \$120,000.
6. June 1, 2007 – December 31, 2007, NSF conference grant, “On Certain  $L$ -functions”, \$30,000, also supported by \$8,000 from Clay Mathematics Institute, \$4,000 from Institute for Mathematics and Applications, and \$4,000 from the Number Theory Foundation, and internal Purdue funding.
7. August 16, 2010-August 15 2012, Department of Education GAANN Grant, “Increasing U.S. Doctorates in Mathematics”, (Co- Project Director, R. Bañuelos Project Director), \$522,624
8. Simons Foundation Collaboration Grants for Mathematicians, “R-groups and L-functions for quasi-split groups and related problems”, September 1, 2013-August 31, 2018, \$35,000
9. NSF Conference Grant: “2014 Midwest Representation Theory Conference in Honor of Rebecca A. Herb’s 65<sup>th</sup> Birthday and in Memory of Paul J. Sally, Jr. “(co-PI with S. Weinberger, U. Chicago and S. DeBacker, U. Michigan) August 1, 2014-December 31, 2014, \$38,340
10. September 1, 2015- August 31, 2018, U. S. Department of Education, GAANN Grant, “Increasing U.S. Doctorates in Mathematics” (Project Director, G. Buzzard and R. Bañuelos co-PDs), \$885, 834.
11. NSF Conference Grant: “2015 Midwest Representation Theory Conference” (PI, S. Takeda, co-PI), November 1, 2016-October 31, 2017, \$36, 282.
12. NSF Conference Grant: “The 2016 Paul J. Sally, Jr. Midwest Representation Theory Conference”, (co-PI, M. Krishnamurthy PI), October 1, 2017-September 30, 2017, \$13, 880
13. NSF Conference Grant: “2016 Field of Dreams Meeting” (PI, Edray Goins co-PI), December 1, 2016-November 30, 2017, \$30,000.
14. NSF Conference Grant: “2017 Field of Dreams Meeting” (PI, Edray Goins co-PI), September 1, 2017- August 31, 2018, \$49,500

**GRANT SUPPORT (CONT.)**

15. NSA, “Field of Dreams Conference 2018 and 2019”, \$50,000, July 1, 2018- June 30, 2020
16. NSF Conference Grant: 2018 Field of Dreams Conference”, \$49,500 September 1, 2018-August 31, 2019
17. NSF Conference Grant: 2019 Field of Dreams Conference”, \$50,000 August 1, 2019-July 31, 2020
18. NSF Conference Grant 2020 and 2021 Field of Dreams Conference, \$150,000, July 1, 2020-June 30, 2022 (co-PI, Daniel Spirn, PI)
19. Alfred P. Sloan Foundation Equitable Pathways Grant, “Establishing a Math Path Program toward Graduate Education in the Quantitative Sciences”, (collaborator, Kyle Frantz PI), \$500,000, (Approximately \$150,000 to the Math Alliance at Purdue) January 1, 2022-December 31, 2024.
20. NSA “Field of Dreams, Towards a More Diverse Mathematical Community”, \$49,962, July 1, 2022-June 30, 2024 (co-PI, Dan Spirn PI)
21. NSF Conference Grant, 2022 Field of Dreams Conference, \$50,000, September 1, 2022-August 31, 2023 (co-PI Daniel Spirn PI).
22. 3M Gives General Grant STEM or Skilled Trades, “The Math Alliance”, \$25,000, December 1, 2022-November 30, 2023
23. (In progress) NSF Conference Grant, Field of Dreams Conference 2023-25, (co-PIs Kyle Frantz, Pamela Harris, Anne Marie Marshall, Shanise Walker), \$857,340, October 1, 2023-September 30, 2026 (to be filed March 2023)

**CONFERENCES ORGANIZED**

1. Recent Progress in Langlands functoriality, June 17-28, 2002, CIRM, Luminy, France
2. On Certain L-functions, in honor of Freydoon Shahidi’s 60<sup>th</sup> birthday, July 30-August 2007, Purdue University, West Lafayette, IN
3. 2014 Midwest Representation Theory Conference in honor of R.A. Herb’s 65th birthday, and in memory of P.J. Sally, Jr., September 5-7, 2014, University of Chicago, Chicago, IL
4. 2015 Paul J. Sally, Jr. Midwest Representation Theory Conference, November 11-13, 2015, University of Missouri, Columbia, MO

**CONFERENCES ORGANIZED (CONT.)**

5. 2016 Paul J. Sally, Jr. Midwest Representation Theory Conference, October 14-16, 2016, University of Iowa, Iowa City, IA
6. 2016 Field of Dreams Conference, November 4-6, 2016, St. Louis, MO
7. NYC Math Sciences Alliance, May 13, 2017, City College, New York, NY
8. 2017 Paul J. Sally, Jr. Midwest Representation Theory Conference” October 20-22, 2017, Purdue University, West Lafayette, IN
9. 2017 Field of Dreams Conference, November 3-5, 2017, St. Louis, MO
10. Special session, “If you build it, they will come: Presentations by Scholars in the National Alliance for Doctoral Studies in the Mathematical Sciences” Joint Mathematics Meetings, San Diego CA, January 12, 2018
11. 2018 Gulf States Math Alliance Conference, February 23-25, 2018, Tulane University, New Orleans, LA
12. 2018 Field of Dreams Conference, November 2-4, 2018, St. Louis, MO
13. Special session, “If you build it, they will come: Presentations by Scholars in the National Alliance for Doctoral Studies in the Mathematical Sciences” Joint Mathematics Meetings, Baltimore, MD, January 18, 2019
14. Career Paths in the Mathematical Sciences: An IMA/Math Alliance Workshop, Institute for Mathematics and its Applications, University of Minnesota, Minneapolis, MN, June 6-8, 2019
15. Session at Joint Statistical Meetings, “Becoming an Alliance Graduate Program Group”, Denver CO, July 27-August 1, 2019
16. 2019 Field of Dreams Conference, November 15-17, 2019, St. Louis, MO
17. Special session, “If you build it, they will come: Presentations by Scholars in the National Alliance for Doctoral Studies in the Mathematical Sciences”, Joint Mathematics Meetings, Denver, CO, January 15, 2020.
18. Career Paths in the Mathematical Sciences: An IMA/Math Alliance Workshop, Institute for Mathematics and its Applications, University of Minnesota, Minneapolis, MN, June 4-6, 2020 (moved to virtual format due to COVID-19)

## CONFERENCES ORGANIZED (CONT.)

19. “2020 Field of Dreams Conference”, November 6-8, 2020, Institute for Mathematics and its Applications, University of Minnesota, Minneapolis, MN, (moved to series of virtual events: *Math Alliance Statistics Initiative*, October 7, 2020; *Taking our Place in Graduate School*, October 17, 2020; *Math Alliance REU/Internship and Graduate Fairs*, October 24, 2020; and *Virtual Field of Dreams Conference*, November 6-7, 2020)
20. Special session, “If you build it, they will come: Presentations by Scholars in the National Alliance for Doctoral Studies in the Mathematical Sciences”, Joint Mathematics Meetings, Washington, DC, January 6&7, 2021 (held virtually).
21. Career Paths in the Mathematical Sciences: An IMA/Math Alliance Workshop, Institute for Mathematics and its Applications, University of Minnesota, Minneapolis, MN, June 3-5, 2021 (moved to virtual format due to COVID-19)
22. “2021 Field of Dreams Conference”, November 5-6, 2021, Institute for Mathematics and its Applications, a **virtual** conference.
23. Special Session on Recent Developments in Automorphic Forms and Representation Theory of  $p$ -adic groups, AMS Central Sectional Meeting, Purdue University, West Lafayette, IN (moved to virtual) March 26-27, 2022
24. Panel: “The Math Alliance: 15 years of Building a New American Community in the Mathematical and Statistical Sciences”, (Virtual) Joint Mathematics Meetings, Seattle, WA, April 7 2022
25. Special session, “If you build it, they will come: Presentations by Scholars in the National Alliance for Doctoral Studies in the Mathematical Sciences”, (Virtual) Joint Mathematics Meetings, Seattle, WA, April 8, 2022.
26. 2022 Field of Dreams Conference, November 4-6, 2022, IMA, University of Minnesota, Minneapolis, MN
27. Special session, “If you build it, they will come: Presentations by Scholars in the National Alliance for Doctoral Studies in the Mathematical Sciences”, Joint Mathematics Meetings, Boston MA, January 5-6, 2023.
28. JMM Panel: Hidden Figures Revealed: Reflections from Research on Black Mathematicians, Joint Mathematics Meetings, Boston MA, January 7, 2023
29. Math Alliance Career Paths Workshop, June 16-17, 2023, IMSI, Chicago, IL



**CONFERENCES ORGANIZED (CONT.)**

30. Conference for African American Researchers in the Mathematical Sciences, July 6-8, 2023, Purdue University, West Lafayette, IN
31. Statistical Scientists of the Math Alliance: A Focus on Diversity & Recent Graduates, Joint Statistics Meetings, Toronto, ON Canada, August 5-10, 2023 (co-organizer, Jacqueline Hughes-Oliver session chair)
32. 2023 Field of Dreams Conference, November 3-5, 2023, Georgia State University, Atlanta, GA

**DEPARTMENTAL SERVICE**

Computer Committee, 1995-99, 2002-2014  
 Computer Instructional Committee 1995  
 Undergraduate Committee, 1997-2007  
 GAANN Proposal, 1999, 2009, 2010 and 2015  
 Head Review Committee, 2000  
 Director for Computational Instruction, 2000-2006  
 GAANN-VIGRE Committee, 2000-01  
 Elementary Service Committee, 2001-2005  
 Scholarship Committee Chair, 2004-05  
 Promotions Committee, 2005-06, 2009-10, 2016-17, 2020-21  
 Graduate Committee 2007-2008, 2013-2019 (Chair)  
 RTG Proposal Committee 2008-2010  
 Recruiting Committee (Chair) 2010-2012  
 GAANN Program Co-Director (2010-2015) and Director (2015-20)  
 Associate Head for Graduate Studies January 2013- July 2019  
 Teaching Assistant Awards Committee 2010, 2013-19  
 Department of Mathematics Diversity Committee 2018-present (Chair, 2020-21)

**College Committees:**

Minority Affairs Committee 1995-96  
 Faculty Committee on Diversity 2007- 2011, 2020-23 (Chair 2008-2011);  
 Diversity Pillar Committee 2008  
 Graduate Chairs and Professionals (GCAP) 2013-2019 (Chair 2015-16)  
 Strategic Planning Graduate and Postdoctoral Education Workgroup (2015-16)

**OTHER PROFESSIONAL SERVICE**

American Mathematical Society Joint Mathematics Meetings Travel Grants Committee, February 1, 2022-January 31, 2025

Candidate for election to American Mathematical Society Nominating Committee, 2022

External Reviewer, Southern University at New Orleans Department of Mathematics, April 29, 2019

External Reviewer, American University Department of Mathematics, January 22-24, 2023

Reviewer, Math Reviews (1992-2003)

Journal referee (referee for several research journals including Duke J. Math, Int. Math Research Notices, Compositio Mathematica, Pacific J. Math., American J, Math, and Math. Annalen)