

CURRICULUM VITA

James A. Sellers, Ph.D.
Professor and Director, Undergraduate Mathematics
Department of Mathematics
The Pennsylvania State University
104 McAllister Building
University Park, PA 16802

Phone (814) 865-7528
Fax (814) 863-9667
E-mail sellersj@psu.edu
URL <http://www.personal.psu.edu/jxs23/>

PERSONAL INFORMATION

Date of Birth September 1, 1965
Place of Birth San Antonio, TX

EDUCATION

Bachelor of Science Mathematics, University of Texas at San Antonio,
San Antonio, TX, May 1987

Doctor of Philosophy Mathematics, The Pennsylvania State University,
University Park, PA, August 1992
Thesis: A Generalization of the Partition Function
Research Advisor: Dr. David M. Bressoud

PROFESSIONAL EXPERIENCE

2001-present	Director, Undergraduate Mathematics, The Pennsylvania State University, University Park, PA
1998-2001	Associate Professor, Mathematics, Science and Mathematics Department, Cedarville University, Cedarville, OH
1992-1998	Assistant Professor, Mathematics, Science and Mathematics Department, Cedarville University, Cedarville, OH
1999 (Summer)	Editor/Writer, Saxon Publishers, Norman, OK
1997 (Summer)	Researcher, Institute for Defense Analysis, La Jolla, CA
1994, 1995, 2001	Mathematics Instructor, San Antonio Prefreshman Engineering Program (PREP), The University of Texas at San Antonio, San Antonio, TX

1987–1992 Graduate Student and Teaching Assistant, The Pennsylvania State University, University Park, PA

1987 Actuary (Automobile), United Services Automobile Association (USAA), San Antonio, TX

PROFESSIONAL SOCIETIES–MEMBERSHIPS

Mathematical Association of America

NOTABLE EVENTS (AWARDS, ETC.)

- Tenured at Cedarville University, 1998
- Cedarville Faculty Scholar of the Year Award, April 1999
- Mary Lister McCammon Award for Distinguished Undergraduate Teaching from the Penn State Department of Mathematics, February 2005
- MAA Allegheny Mountain Section Award for Distinguished Teaching, April 2006
- Began Penn State’s Center for Undergraduate Research in Mathematics (CURM), 2007
- Teresa Cohen Mathematics Service Award from the Penn State Department of Mathematics, April 2007
- Visiting Fellow at the Isaac Newton Institute’s Combinatorics and Statistical Mechanics Workshops, January – June, 2008
- Elected Governor of the MAA Allegheny Mountain Section, 2008 (term served 2008–2011)
- MAA Allegheny Mountain Section Mentoring Award, April 2009
- Donald C. Rung Distinguished Undergraduate Teaching Award from the Penn State Department of Mathematics, April 2011
- Member, College Board Advanced Placement Calculus Development Committee, 2011–2016 (serve as committee Co-Chair beginning July 2016)
- Fulbright Scholar (teaching and research), Johannes Kepler University, Linz, Austria and Research Institute for Symbolic Computation (RISC), Hagenberg, Austria, Summer Semester 2012
- MAA Allegheny Mountain Section Service Award, April 2013
- Elected Chair of the MAA Allegheny Mountain Section, 2014 (serve as Chair-Elect for the term 2014–2015 followed by term as Chair for 2015–2017)

UNIVERSITY TEACHING ACTIVITIES

THE PENNSYLVANIA STATE UNIVERSITY (1987–1992)

MATH 017	Finite Mathematics
MATH 035	General View of Mathematics
MATH 110	Techniques of Calculus I
MATH 140	Calculus with Analytic Geometry I
MATH 140A	Calculus, Analytic Geometry, Algebra, and Trigonometry

MATH 141	Calculus with Analytic Geometry II
MATH 200	Number Systems
MATH 220	Matrices

CEDARVILLE UNIVERSITY (1992–2001)

GMTH 180	Introduction to Mathematics
GMTH 185	Precalculus
HON 312	A Philosophical View of Mathematics
MATH 281	Analytic Geometry and Calculus I
MATH 282	Analytic Geometry and Calculus II
MATH 283	Analytic Geometry and Calculus III
MATH 303	Logic and Methods of Proof
MATH 355	Discrete Mathematics: Graph Theory
MATH 356	Discrete Mathematics: Combinatorics
MATH 360	Number Theory
MATH 387	Differential Equations
MATH 394	Linear Algebra
MATH 480	Special Topics–Theory of Prime Numbers

THE PENNSYLVANIA STATE UNIVERSITY (2001–PRESENT)

MATH 035	General View of Mathematics
MATH 036	Insights into Mathematics
MATH 110	Techniques of Calculus I (informally called Business Calculus)
MATH 140	Calculus with Analytic Geometry I
MATH 220	Matrices
MATH 220H	Honors Matrices
MATH 310	Elementary Combinatorics
MATH 311W	Concepts of Discrete Mathematics
MATH 465	Number Theory I
MATH 470	Algebra for Teachers
PSU 016	First Year Seminar–Mathematics

JOURNAL ARTICLES

(Undergraduate co-authors highlighted in ***bold italic*** font)

1. Sellers, J. A., Congruences Involving Generalized Frobenius Partitions, *International Journal of Mathematics and Mathematical Sciences*, **16**, no. 2 (1993), 413–415
2. Sellers, J. A., Congruences Involving F-Partition Functions, *International Journal of Mathematics and Mathematical Sciences*, **17**, no. 1 (1994), 187–188
3. Sellers, J. A., Egyptian Fractions and Perfect Numbers, *The Mathematics Teacher*, **87**, no. 1 (January 1994), 60

4. Sellers, J. A., New Congruences for Generalized Frobenius Partitions with 2 or 3 Colors, *Discrete Mathematics*, **131** (1994), 367–374
5. Hirschhorn, M. D. and Sellers, J. A., Two Congruences Involving 4-cores, *Electronic Journal of Combinatorics*, **3**, no. 2 (1996), Article R10
6. Sellers, J. A., Recurrences For 2-Colored and 3-Colored F-Partitions, *Discrete Mathematics*, **156** (1996), 303–310
7. Hirschhorn, M. D. and Sellers, J. A., Some Amazing Facts About 4-cores, *Journal of Number Theory*, **60**, no. 1 (1996), 51–69
8. Hirschhorn, M. D. and Sellers, J. A., On Representations of a Number As A Sum of Three Triangles, *Acta Arithmetica*, **77** (1996), 289–301
9. Sellers, J. A., Generating Interest in Generating Functions, *PRIMUS (Problems, Resources, and Issues in Mathematics Undergraduate Studies)*, **VII**, no. 2 (1997), 175–182
10. Sellers, J. A., On Infinitely Many Odd Nonunitary Abundant Numbers, *Mathematics and Computer Education*, **31**, no. 3 (1997), 241–243
11. Sellers, J. A., Solution to Problem 336: A Trigonometric Characterization of Equilateral Triangles, *Mathematics and Computer Education*, **32**, no. 1 (1998), 84–85
12. Hirschhorn, M. D. and Sellers, J. A., On Representations of a Number as a Sum of Three Squares, *Discrete Mathematics*, **199** (1999), 85–101
13. Kolitsch, L. W. and Sellers, J. A., Elementary Proofs of Infinitely Many Congruences for 8-Cores, *Ramanujan Journal*, **3**, no. 2 (1999), 221–226
14. Braithwaite, E. and Sellers, J. A., Geometric Right Triangles, *Mathematics and Computer Education*, **33**, no. 2 (1999), 154–160
15. Hirschhorn, M. D. and Sellers, J. A., Some Parity Results for 16-Cores, *Ramanujan Journal*, **3**, no. 3 (1999), 281–296
16. *Dolph, L., Reynolds, A.* and Sellers, J. A., Congruences for Restricted m -ary Partition Functions, *Discrete Mathematics*, **219**, no. 1–3 (2000), 265–269
17. Frey, D. and Sellers, J. A., Jacobsthal Numbers and Parity of Alternating Sign Matrices, *Journal of Integer Sequences*, **3**, no. 2 (2000), Article 00.2.3
18. Hirschhorn, M. D. and Sellers, J. A., Some Relations for Partitions into Four Squares, in the *Proceedings of the International Workshop on Special Functions*,

Asymptotics, Harmonic Analysis, and Mathematical Physics, City University of Hong Kong, June 21–25, 1999, published November 2000 by World Scientific, 118–124

19. Rødseth, Ø. and Sellers, J. A., On m -ary Partition Function Congruences: A Fresh Look at a Past Problem, *Journal of Number Theory*, **87**, no. 2 (2001), 270–281
20. Frey, D. and Sellers, J. A., Generalizing Bailey’s Generalization of the Catalan Numbers, *Fibonacci Quarterly*, **39**, no. 2 (May 2001), 142–148
21. Frey, D. and Sellers, J. A., On Powers of 2 Dividing the Values of Certain Plane Partition Functions, *Journal of Integer Sequences*, **4**, no. 1 (2001), Article 01.1.8
22. Eichhorn, D. and Sellers, J. A., Computational Proofs of Congruences for 2-Colored Frobenius Partitions, *International Journal of Mathematics and Mathematical Sciences*, **29**, no. 6 (2002), 333–340
23. Rødseth, Ø. and Sellers, J. A., Binary Partitions Revisited, *Journal of Combinatorial Theory, Series A*, **98** (2002), 33–45
24. Sellers, J. A., Domino Tilings and Products of Fibonacci and Pell Numbers, *Journal of Integer Sequences*, **5**, no. 1 (2002), Article 02.1.2
25. Sellers, J. A., Beyond Mere Convergence, *PRIMUS (Problems, Resources, and Issues in Mathematics Undergraduate Studies)*, **XII**, no. 2 (2002), 157–164
26. Sellers, J.A. and Williams, H. C., On the Infinitude of Composite NSW Numbers, *Fibonacci Quarterly*, **40**, no. 3 (2002), 253–254
27. *Frank, D.*, Savage, C. D. and Sellers, J. A., On the Number of Graphical Forest Partitions, *Ars Combinatoria*, **65** (2002), 33–37
28. Sellers, J. A., Extending a Recent Result of Santos on Partitions into Odd Parts, *INTEGERS*, **3** (2003), Article A4
29. Sellers, J. A., Parity Results for p -Regular Partitions with Distinct Parts, *Ars Combinatoria*, **69** (2003), 143–146
30. Benjamin, A., *Neer, J.*, Otero, D. and Sellers, J. A., A Probabilistic View of Certain Weighted Fibonacci Sums, *Fibonacci Quarterly*, **41**, no. 4 (2003), 360–364
31. Frey, D. and Sellers, J. A., Prime Power Divisors of the Number of $n \times n$ Alternating Sign Matrices, *Ars Combinatoria*, **71** (2004), 139–147
32. Sellers, J. A., Infinitely Many Composite NSW Numbers: An Inductive Proof, *Missouri Journal of Mathematical Sciences*, **16**, no. 1 (2004), 4 pages

33. *Courtright, K. M.* and Sellers, J. A., Arithmetic Properties for Hyper m -ary Partitions, *INTEGERS*, **4** (2004), Article A6
34. Sellers, J. A., Partitions Excluding Specific Polygonal Numbers as Parts, *Journal of Integer Sequences*, **7**, no. 2 (2004), Article 04.2.4
35. Sellers, J. A., Sills, D. V., and Mullen, G. L., Bijections and Congruences for Generalizations of Partition Identities of Euler and Guy, *Electronic Journal of Combinatorics*, **11**, no. 1 (2004), Article R43
36. Hirschhorn, M. D. and Sellers, J. A., A Different View of m -ary Partitions, *Australasian Journal of Combinatorics*, **30** (2004), 193–196
37. Hirschhorn, M. D. and Sellers, J. A., Partitions into Three Triangular Numbers, *Australasian Journal of Combinatorics*, **30** (2004), 307–318
38. Hirschhorn, M. D. and Sellers, J. A., On a Problem of Lehmer on Partitions into Squares, *Ramanujan Journal*, **8**, no. 3 (2004), 279–288
39. Rødseth, Ø., Sellers, J. A., and *Courtright, K. M.*, Arithmetic Properties of Non-Squashing Partitions into Distinct Parts, *Annals of Combinatorics*, **8**, no. 3 (2004), 347–353
40. Sloane, N. J. A. and Sellers, J. A., On Non-Squashing Partitions, *Discrete Mathematics*, **294** (2005), 259–274
41. Hirschhorn, M. D. and Sellers, J. A., Arithmetic Relations for Overpartitions, *Journal of Combinatorial Mathematics and Combinatorial Computing (JCMCC)*, **53** (2005), 65–73
42. Hirschhorn, M. D. and Sellers, J. A., Further Results for Partitions into Four Squares of Equal Parity, *Ars Combinatoria*, **76** (2005), 33–45
43. Rødseth, Ø. and Sellers, J. A., On m -ary Overpartitions, *Annals of Combinatorics*, **9** (2005), 345–353
44. Hirschhorn, M. D. and Sellers, J. A., An Infinite Family of Overpartition Congruences Modulo 12, *INTEGERS*, **5** (2005), Article A20
45. Cooper, S., Hirschhorn, M. D., and Sellers, J. A., Partitions into Four Squares, *Proceedings of the Jangjeon Mathematical Society*, **8** (2005), no. 1, 73–94
46. Rødseth, Ø. and Sellers, J. A., On a Restricted m -Non-Squashing Partition Function, *Journal of Integer Sequences*, **8**, no. 5 (2005), Article 05.5.4

47. Frey, D. and Sellers, J. A., Arithmetic Properties for a Certain Family of Knot Diagrams, *Ars Combinatoria*, **77** (2005), 65–73
48. Rødseth, Ø. and Sellers, J. A., Improving Calculations of the Number of Distinct Alignments of Two Strings, *Journal of Quantitative Linguistics*, **13**, no. 1 (2006), 45–55
49. Rødseth, Ø. and Sellers, J. A., Partitions with Parts in a Finite Set, *International Journal of Number Theory*, **2**, no. 3 (2006), 455–468
50. Hirschhorn, M. D. and Sellers, J. A., Arithmetic Properties of Overpartitions into Odd Parts, *Annals of Combinatorics* **10**, no. 3 (2006), 353–367
51. Andrews, G. E. and Sellers, J. A., On Sloane's Generalization of Non-Squashing Stacks of Boxes, *Discrete Mathematics* **307**, no. 9–10 (2007), 1185–1190
52. Hirschhorn, M. D. and Sellers, J. A., On Recent Congruence Results of Andrews and Paule for Broken k -Diamonds, *Bulletin of the Australian Mathematical Society* **75** (2007), 121–126
53. Sellers, J. A., Observations on the Parity of the Total Number of Parts in Odd-Part Partitions, *INTEGERS* **7** (2007), Article A35
54. Hopkins, B. and Sellers, J. A., Exact Enumeration of Garden of Eden Partitions, *INTEGERS* **7**, no. 2 (2007), Article A19
55. Benjamin, A. T., Quinn, J. J., Sellers, J. A., and Shattuck, M. A., Paint it Black – A Combinatorial Yawp, *Mathematics Magazine* **81**, no. 1 (2008), 45–50
56. Downey, L., Ong, B. W., and Sellers, J. A., Beyond the Basel Problem: Sums of Reciprocals of Figurate Numbers, *College Mathematics Journal* **39**, no. 5 (2008), 390–394
57. Benjamin, A. T., *Plott*, S., and Sellers, J. A., Tiling Proofs of Recent Sum Identities Involving Pell Numbers, *Annals of Combinatorics* **12** (2008), 271–278
58. Hirschhorn, M. D. and Sellers, J. A., Enumerating Unigraphical Partitions, *Journal of Integer Sequences* **11**, no. 4 (2008), Article 08.4.6
59. Little, D. P. and Sellers, J. A., New Proofs of Identities of Lebesgue and Göllnitz via Tilings, *Journal of Combinatorial Theory, Series A* **116** (2009), 223–231
60. Sellers, J. A., A Different Look at Albrecht and White's Path Counting in Grids, *Australian Mathematical Society Gazette* **36**, no. 1 (2009), 47–49

61. Rødseth, Ø., Sellers, J. A., and Tverberg, H., Enumeration of the Degree Sequences of Non-Separable Graphs and Connected Graphs, *European Journal of Combinatorics* **30** (2009), 1301–1317
62. **Keister, D.**, Sellers, J. A., and **Vary, R.**, Some Arithmetic Properties of Overpartition k -tuples, *INTEGERS* **9** (2009), Article A17
63. Hirschhorn, M. D. and Sellers, J. A., Elementary Proofs of Various Facts about 3-cores, *Bulletin of the Australian Mathematical Society* **79** (2009), 507–512
64. Rødseth, Ø. and Sellers, J. A., Congruences Modulo High Powers of 2 for Sloane’s Box Stacking Function, *Australasian Journal of Combinatorics* **44** (2009), 255–263
65. Hirschhorn, M. D., Rødseth, Ø., and Sellers, J. A., Infinite Families of Divisibility Properties Modulo 4 for Non-Squashing Partitions into Distinct Parts, *INTEGERS* **9** (2009), Article A33
66. Hou, X., Mullen, G. L., Sellers, J. A., and Yucas, J. L., Reversed Dickson Polynomials Over Finite Fields, *Finite Fields and Their Applications* **15**, no. 6 (2009), 748–773
67. Hirschhorn, M. D. and Sellers, J. A., Elementary Proofs of Parity Results for 5-Regular Partitions, *Bulletin of the Australian Mathematical Society* **81**, no. 1 (2010), 58–63
68. Little, D. P. and Sellers, J. A., A Tiling Approach to Eight Identities of Rogers, *European Journal of Combinatorics* **31** (2010), 694–709
69. Hirschhorn, M. D. and Sellers, J. A., Arithmetic Properties of Partitions with Odd Parts Distinct, *Ramanujan Journal* **22**, no. 3 (2010), 273–284
70. Andrews, G. E., Hirschhorn, M. D., and Sellers, J. A., Arithmetic Properties of Partitions with Even Parts Distinct, *Ramanujan Journal* **23** (2010), 169–181
71. Radu, S. and Sellers, J. A., Parity Results for Broken k -Diamond Partitions and $(2k+1)$ -Cores, *Acta Arithmetica* **146** (2011), 43–52
72. Briggs, K. S., Little, D. P., and Sellers, J. A., Combinatorial Proofs of Various q -Pell Identities via Tilings, *Annals of Combinatorics* **14**, no. 4 (2011), 407–418
73. Radu, S. and Sellers, J. A., Congruence Properties Modulo 5 and 7 for the *pod* Function, *International Journal of Number Theory* **7**, no. 8 (2011), 2249–2259
74. Fu, S. and Sellers, J. A., Enumeration Results for Line-Hamiltonian Degree Sequences for Multigraphs, *INTEGERS* **12** (2012), Article A24

75. Olsson, J. B. and Sellers, J. A., Combinatorial Remarks on a “Remarkable Identity”, *Mathematics Magazine* **85**, no. 4 (2012), 283–288
76. Marques, D., Sellers, J. A., and Trojovsky, P., On Divisibility Properties of Certain Fibonomial Coefficients by a Prime p , *Fibonacci Quarterly* **51**, no. 1 (2013), 78–83
77. Hou, X., Lecuona, A. G., Mullen, G. L., and Sellers, J. A., On the Dimension of the Space of Magic Squares Over a Field, *Linear Algebra and its Applications* **438**, no. 8 (2013), 3463–3475
78. Radu, S. and Sellers, J. A., Congruences Modulo Squares of Primes for Fu's k Dots Bracelet Partitions, *International Journal of Number Theory* **9**, no. 4 (2013), 939–943
79. Radu, S. and Sellers, J. A., Infinitely Many Congruences for Broken 2-Diamond Partitions Modulo 3, *Journal of Combinatorics and Number Theory* **4**, no. 3 (2013), 195–200
80. Radu, S. and Sellers, J. A., An Extensive Analysis of the Parity of Broken 3-Diamond Partitions, *Journal of Number Theory* **133**, no. 11 (2013), 3703–3716
81. Bessenrodt, C., Olsson, J. B., and Sellers, J. A., Unique Path Partitions: Characterization and Congruences, *Annals of Combinatorics* **17** (2013), 591–602
82. Sellers, J. A., An Unexpected Congruence Modulo 5 for 4-Colored Generalized Frobenius Partitions, *Journal of Indian Mathematical Society, Special Volume to Commemorate the 125th Birth Anniversary of Srinivasa Ramanujan* (2013), 97–103
83. Garvan, F. G. and Sellers, J. A., Congruences for Generalized Frobenius Partitions with an Arbitrarily Large Number of Colors, *INTEGERS* **14** (2014), Article A7
84. Kursungoz, K. and Sellers, J. A., Variations on a Result of Bressoud, *Annals of Combinatorics* **18**, no. 1 (2014), 117–126
85. Hirschhorn, M. D. and Sellers, J. A., Arithmetic Properties of 1-shell Totally Symmetric Plane Partitions, *Bulletin of the Australian Mathematical Society* **89** (2014), 473–478
86. Fu, S. and Sellers, J. A., Bijective Proofs of Partition Identities of MacMahon, Andrews, and Subbarao, *Electronic Journal of Combinatorics* **21**, no. 2 (2014), Article P2.41
87. Sellers, J. A., Elementary Proofs of Congruences for the Cubic and Overcubic Partition Functions, *Australasian Journal of Combinatorics* **60**, no. 2 (2014), 191–197

88. Hirschhorn, M. D. and Sellers, J. A., A Congruence Modulo 3 for Partitions into Distinct Non-Multiples of Four, *Journal of Integer Sequences* **17** (2014), Article 14.9.6
89. Munagi, A. O. and Sellers, J. A., Refining Overlined Parts in Overpartitions via Residue Class: Bijections, Generating Functions, and Congruences, *Utilitas Mathematica* **95** (2014), 33–49
90. **Lan, B.** and Sellers, J. A., Properties of a Restricted Binary Partition Function a la Andrews and Lewis, *INTEGERS* **15** (2015), Article A23
91. Helou, C. and Sellers, J. A., Evaluation of a Family of Binomial Determinants, *Electronic Journal of Linear Algebra* **30** (2015), 312–321
92. Chen, S.-C., Hirschhorn, M. D., and Sellers, J. A., Arithmetic Properties of Andrews' Singular Overpartitions, *International Journal of Number Theory* **11**, no. 5 (2015), 1463–1476
93. Munagi, A. O. and Sellers, J. A., Some Inplace Identities for Integer Compositions, *Quaestiones Mathematicae* **38**, no. 4 (2015), 535–540
94. Andrews, G. E., Fraenkel, A. S., and Sellers, J. A., Characterizing the Number of m -ary Partitions Modulo m , *American Mathematical Monthly* **122**, no. 9 (2015), 880–885
95. Andrews, G. E., Fraenkel, A. S., and Sellers, J. A., m -ary Partitions With No Gaps: A Characterization Modulo m , *Discrete Mathematics* **339**, no. 1 (2016), 283–287
96. Andrews, G. E. and Sellers, J. A., Congruences for the Fishburn Numbers, *Journal of Number Theory* **161** (2016), 298–310
97. Nath, R. and Sellers, J. A., A Combinatorial Proof of the Relationship Between Maximal $(2k-1, 2k+1)$ -cores and $(2k-1, 2k, 2k+1)$ -cores, *Electronic Journal of Combinatorics* **23**, no. 1 (2016), Article P1.13
98. Mizuhara, M., Sellers, J. A., and Swisher, H., A Periodic Approach to Plane Partition Congruences, *INTEGERS* **16** (2016), Article A16
99. Hirschhorn, M. D. and Sellers, J. A., Infinitely Many Congruences Modulo 5 for 4-Colored Frobenius Partitions, *Ramanujan Journal* **40** (2016), 193–200
100. Alanazi, A. M., Munagi, A. O. and Sellers, J. A., An Infinite Family of Congruences for l -regular Overpartitions, *INTEGERS* **16** (2016), Article A37

101. Nath, R. and Sellers, J. A., Congruences for the Number of Spin Characters of the Double Covers of the Symmetric and Alternating Groups, *Advances in Applied Mathematics* **80** (2016), 114–130
102. Andrews, G. E., Brietzke, E., Rødseth, Ø. and Sellers, J. A., Arithmetic Properties of m -ary Partitions Without Gaps, to appear in *Annals of Combinatorics*
103. Andrews, G. E., Passary, D., Sellers, J. A., and Yee, A. J., Congruences Related to the Ramanujan/Watson Mock Theta Functions $\omega(q)$ and $v(q)$, to appear in *Ramanujan Journal*
104. Nath, R. and Sellers, J. A., Observations on the Arithmetic Properties of Simultaneous (s, t) cores, in progress
105. Munagi, A. O. and Sellers, J. A., Generalizing Identities for Inplace Integer Compositions, in progress
106. Liu, E. H., Sellers, J. A., and Xia, E. X. W., Congruences Modulo 11 for Broken 5-Diamond Partitions, in progress

BOOKS

1. Mullen, G. L. and Sellers, J. A., *Abstract Algebra: A Gentle Introduction*, CRC Press, in progress

PRESENTATIONS

1. Congruences for Generalized Frobenius Partitions, Rademacher Centenary Conference, The Pennsylvania State University, July 21–25, 1992
2. Congruences Relating the Frobenius Partition Functions ϕ_m and $c\phi_m$, Joint Mathematics Meetings of the American Mathematical Society and the Mathematical Association of America, Cincinnati, OH, January 12–15, 1994
3. Properties of Generalized Frobenius Partition Functions, The Center for Communications Research, The Institute for Defense Analysis, La Jolla, CA, March 15, 1994
4. Recurrences for 2-Colored and 3-Colored F -Partitions, Minneapolis Mathfest, August 15, 1994
5. Generating Interest in Generating Functions, Joint Spring Meeting of the Ohio Section of the Mathematical Association of America and the American Mathematical Association of Two-Year Colleges, The Ohio State University, April 22, 1995

6. Several Arithmetic Identities Involving the Number of Ways to Write an Integer as the Sum of 3 Triangular Numbers, Fall Meeting of the Ohio Section of the Mathematical Association of America, Central State University, October 21, 1995
7. 4-Cores: A Hunt for Congruences, Pi Mu Epsilon Group, The University of Dayton, March 19, 1996
8. Undergraduate Research in Partition Theory?, Cedarville College, April 9, 1996
9. Congruences for Partitions into Powers of 2 or 3, Fall Meeting of the Ohio Section of the Mathematical Association of America, Denison University, October 25, 1996
10. Simultaneously Odd and Perfect Numbers, Pi Mu Epsilon Group, The University of Dayton, March 13, 1997
11. CMJ Problem 584 or Why I Love the MAA Ohio Section Meetings, Spring Meeting of the Ohio Section of the Mathematical Association of America, Youngstown State University, April 12, 1997
12. On Infinitely Many Odd Nonunitary Abundant Numbers, Fall Meeting of the Ohio Section of the Mathematical Association of America, Shawnee State University, October 25, 1997
13. Triangles: Geometric and Square, Pi Mu Epsilon Group, The University of Dayton, March 26, 1998
14. Centers of Mass: Hands-On Observations, Spring Meeting of the Ohio Section of the Mathematical Association of America, John Carroll University, April 18, 1998
15. Advising Mathematics Students Academically and Professionally, National Project Next Meeting, Ryerson Polytechnic University (Toronto), July 15, 1998
16. New Results on Sums of Three Squares, Fall Meeting of the Ohio Section of the Mathematical Association of America, Columbus State Community College, October 9, 1998
17. Congruences for m -ary partition Functions: Revisiting the Work of Andrews and Others, Special Session on Partitions and q -series, Fall Meeting of the Eastern Section of the American Mathematical Society, The Pennsylvania State University, October 25, 1998
18. So What Can I Do With a Math Degree, Cedarville College Mathematics Club, Cedarville College, January 12, 1999
19. Alternating Sign Matrices and Divisibility Properties, Pi Mu Epsilon Group, The University of Dayton, February 12, 1999

20. Generalizing Bailey's Generalization of the Catalan Numbers, Spring Meeting of the Ohio Section of the Mathematical Association of America, University of Dayton, March 27, 1999
21. Jacobsthal Numbers and Alternating Sign Matrices, Spring Meeting of the Ohio Section of the Mathematical Association of America, Marshall University, April 8, 2000
22. Arithmetic Properties of Basis Partitions with Specified Durfee Square Size, Pi Mu Epsilon Group, The University of Dayton, April 13, 2000
23. Arithmetic Properties of Various Families of Plane Partitions, Mathematics/Computer Science Colloquium, Xavier University, September 29, 2000
24. A Special Family of Graphical Partitions, Fall Meeting of the Ohio Section of the Mathematical Association of America, Wittenberg University, October 27, 2000
25. Congruences for Binary Partition Functions Old and New, Graduate Student Colloquium, Miami University (OH), January 30, 2001
26. TSSCPPs and CSTCPPs, Spring Meeting of the Ohio Section of the Mathematical Association of America, Bowling Green State University, March 24, 2001
27. How Many Odd Nonunitary Abundant Numbers Are There?, Penn State Math Club, September 26, 2001
28. Congruences and Recurrences for 2-Colored Frobenius Partitions, Partitions Seminar, Penn State University, September 27, 2001
29. An Overview of m -ary Partition Functions, Partitions Seminar, Penn State University, October 25, 2001
30. Advising Mathematics Students Academically and Professionally, Ohio Project NexT Meeting, Marietta College, October 26, 2001
31. On Infinitely Many Composite NSW Numbers: An Inductive Proof, Fall Meeting of the Ohio Section of the Mathematical Association of America, Marietta College, October 26, 2001
32. Fibonacci Fun: Exploration, Discovery, and Proof, WISE (Women in the Sciences and Engineering) MathFest, November 10, 2001
33. Results on Graphical Partitions, Partitions Seminar, Penn State University, December 6, 2001

34. Various Partition Identities, Partitions Seminar, Penn State University, January 31, 2002
35. Triangles: Geometric and Square, Penn State Math Club, February 4, 2002
36. Various Partition Identities, II, Partitions Seminar, Penn State University, February 7, 2002
37. Enumerating Graphical Forest Partitions, Spring Meeting of the Allegheny Mountain Section of the Mathematical Association of America, West Liberty State College (WV), April 5, 2002
38. Fibonacci Numbers: History, Facts and Conjectures, State College High School Math Club, April 22, 2002
39. Advising Mathematics Students Academically and Professionally, National Project NexT Meeting, University of Vermont, July 31, 2002
40. Graphical Forest Partitions: Research With a Cedarville Alum, Cedarville University, September 9, 2002
41. A Search For Odd Nonunitary Abundant Numbers, Juniata College, September 19, 2002
42. Combining Number Theory and Graph Theory: Graphical Forest Partitions, Penn State Math Club, September 23, 2002
43. Combining Number Theory and Graph Theory: Graphical Forest Partitions, Annual Non–University Park Mathematics Faculty Meeting, October 14, 2002
44. Combining Number Theory and Graph Theory: Graphical Forest Partitions, Penn State Algebra and Number Theory Seminar, October 17, 2002
45. Congruences and Recurrences for Certain F–Partition Functions, I, Partitions Seminar, Penn State University, October 24, 2002
46. New Results on Graphical Forest Partitions, Fall Meeting of the Ohio Section of the Mathematical Association of America, Kent State University Trumbull Campus, October 25, 2002
47. Congruences and Recurrences for Certain F–Partition Functions, II, Partitions Seminar, Penn State University, October 31, 2002
48. A Search For Odd Nonunitary Abundant Numbers, Bucknell University, December 3, 2002

49. TSSCPPs and CSTCPPs, Spring Meeting of the Allegheny Mountain Section of the Mathematical Association of America, Penn State University Dubois, April 5, 2003
50. A Search For Odd Nonunitary Abundant Numbers, Millersville University Mathematics Department Colloquium, April 11, 2003
51. Miscellaneous Results for Overpartitions, Partitions Seminar, Penn State University, April 17, 2003
52. Beyond Mere Convergence, Juniata College, September 25, 2003
53. A Search For Odd Nonunitary Abundant Numbers, Gettysburg College Mathematics Department Colloquium, October 2, 2003
54. TSSCPPs and CSTCPPs: Relating Two Families of Plane Partitions, Penn State CWC Mathematics Faculty Meeting, October 25, 2003
55. A Generalization of Overpartitions: Preliminary Results, INTEGERS Conference 2003, State University of West Georgia, October 31, 2003
56. Arithmetic Properties of Hyper m -ary Partitions, Partitions Seminar, Penn State University, November 5, 2003
57. Arithmetic Properties of Hyper m -ary Partitions, II, Partitions Seminar, Penn State University, November 12, 2003
58. Beyond Mere Convergence, Penn State Math Club, December 1, 2003
59. Characterizing Overpartitions Modulo Small Powers of Two, Partitions Seminar, Penn State University, December 10, 2003
60. New Views of Binary Partition Functions, Penn State Algebra and Number Theory Seminar, February 12, 2004
61. Beyond Mere Convergence, Millersville University Mathematics Department Colloquium, March 4, 2004
62. Mathematics Research With Undergraduates: Stories of Personal Success, West Virginia Wesleyan College Mathematics Department Colloquium, March 25, 2004
63. New Results for Hyperbinary Partitions, Spring Meeting of the Allegheny Mountain Section of the Mathematical Association of America, West Virginia Wesleyan College, March 27, 2004
64. Extending a Recent Result of Santos on Partitions into Odd Parts, Partitions Seminar, Penn State University, April 13, 2004

65. Networking in Mathematics, College of Wooster (OH) Department Colloquium, April 29, 2004
66. Math Night!, Special Session on Extracurricular Mathematics, MAA Mathfest, Providence, RI, August 12, 2004
67. Integer Partitions: Alive and Well, Juniata College, September 16, 2004
68. Mathematics Research With Undergraduates: Stories of Personal Success, Ohio Project NexT Meeting, John Carroll University, October 22, 2004
69. Integer Partitions: Alive and Well, Fall Meeting of the Ohio Section of the Mathematical Association of America, John Carroll University, October 22, 2004
70. Beyond Mere Convergence, Fall Meeting of the Ohio Section of the Mathematical Association of America, John Carroll University, October 22, 2004
71. A Connection Between Binary Partitions and Non-Squashing Partitions, Conference on Additive Number Theory, University of Florida, November 17–20, 2004
72. Integer Partitions: Alive and Well, Millersville University Mathematics Department Colloquium, December 2, 2004
73. New Results for Overpartitions, Penn State Algebra and Number Theory Seminar, March 17, 2005
74. Beyond Mere Convergence, Spring Meeting of the Allegheny Mountain Section of the Mathematical Association of America, Slippery Rock University, April 2, 2005
75. Cool Results Involving Compositions, Juniata College, September 22, 2005
76. Cool Results Involving Compositions, Penn State Math Club, September 26, 2005
77. On Sloane's Generalization of Non-Squashing Stacks of Boxes, Partitions Seminar, Penn State University, October 11, 2005
78. An Infinite Family of Overpartition Congruences Modulo 12, INTEGERS Conference 2005, State University of West Georgia, October 27–30, 2005
79. A Search For Odd Nonunitary Abundant Numbers, Lock Haven University Mathematics Department Colloquium, November 29, 2005
80. Arithmetic Properties of Hyper m -ary Partitions, Penn State Math Club, January 23, 2006

81. Bulgarian Solitaire and Garden of Eden Partitions, Partitions Seminar, Penn State University, January 31, 2006
82. Cool Results Involving Fibonacci Numbers and Compositions, Slippery Rock University Fibonacci Day, March 8, 2006
83. TSSCPPs and CSTCPPs: Relating Two Families of Plane Partitions, Partitions Seminar, Penn State University, March 21, 2006
84. Bulgarian Solitaire and Garden of Eden Partitions, Millersville University Mathematics Department Colloquium, March 23, 2006
85. Mathematics Research With Undergraduates: Stories of Personal Success, Allegheny Mountain Section Project Next Meeting, Juniata College, April 7, 2006
86. On Sloane's Generalization of Non-Squashing Stacks of Boxes, Special Session on Partitions and q -series, Spring Meeting of the Western Section of the American Mathematical Society, San Francisco State University, April 29-30, 2006
87. Advising Mathematics Students Academically and Professionally, National Project NExT Meeting, Knoxville, TN, August 9, 2006
88. Bulgarian Solitaire and Garden of Eden Partitions, Juniata College, September 14, 2006
89. Academic Integrity Issues in Penn State's Eberly College of Science, The Fifth Annual Professional Development Conference on Academic Advising, Penn State University, September 27-28, 2006
90. Bulgarian Solitaire and Garden of Eden Partitions, Penn State Math Club, October 9, 2006
91. Parity Results for Broken k -Diamonds, Partitions Seminar, Penn State University, October 31, 2006
92. Tiling Proofs of Recent Sum Identities Involving Pell Numbers, Partitions Seminar, Penn State University, December 12, 2006
93. Tiling Proofs of Recent Sum Identities Involving Pell Numbers, Penn State Math Club, March 19, 2007
94. Research in Integer Partitions: Alive and Well, Spring Meeting of the Allegheny Mountain Section of the Mathematical Association of America, Mercyhurst College, April 13, 2007
95. Cool Results Involving Fibonacci Numbers and Compositions, Lock Haven

University, April 26, 2007

96. Parity Results for Broken k -Diamonds, Illinois Number Theory Fest, University of Illinois at Urbana-Champaign, May 17, 2007
97. Tiling Proofs of Recent Sum Identities Involving Pell Numbers, British Combinatorial Conference, University of Reading (UK), July 2007
98. Advising Mathematics Students Academically and Professionally, National Project NExT Meeting, San Jose State University, San Jose, CA, August 2007
99. Advice on Writing Recommendation Letters (panelist), National Project NExT Meeting, San Jose State University, San Jose, CA, August 2007
100. Attracting More Mathematics Majors (panelist), National Project NExT Meeting, San Jose State University, San Jose, CA, August 2007
101. On Euler's Partition Theorem Relating Odd-Part Partitions and Distinct-Part Partitions, MAA MathFest, San Jose State University, San Jose, CA, August 2007
102. Cool Results Involving Fibonacci Numbers and Compositions, Penn State University, Harrisburg, September 6, 2007
103. Observations on the Parity of the Total Number of Parts in Odd-Part Partitions, Partitions and Combinatorics Seminar, Penn State University, September 18, 2007
104. Tiling Proofs of Recent Sum Identities Involving Pell Numbers, Juniata College, September 20, 2007
105. Observations on the Parity of the Total Number of Parts in Odd-Part Partitions, INTEGERS 2007, State University of West Georgia, October 2007
106. Cool Results Involving Fibonacci Numbers and Compositions, Shepherd University (WV), November 27, 2007
107. On Euler's Partition Theorem Relating Odd-Part Partitions and Distinct-Part Partitions, Penn State Math Club, December 3, 2007
108. Arithmetic Properties of Partitions with Non-Repeating Odd Parts, Partitions and Combinatorics Seminar, Penn State University, December 4, 2007
109. Cool Results Involving Fibonacci Numbers and Compositions, Millersville University Mathematics Department Colloquium, December 6, 2007
110. Graphical Partitions, Isaac Newton Institute Combinatorics and Statistical Mechanics Programme, University of Cambridge, February 25, 2008

111. Arithmetic Properties For Partitions Where Odd Parts Must Be Distinct, University of Exeter (UK), February 28, 2008
112. On m -ary Partitions and Non-Squashing Stacks of Boxes, University of Bergen (Norway), March 5, 2008
113. Enumeration of the Degree Sequences of Non-separable Graphs and Connected Graphs, Isaac Newton Institute Combinatorics and Statistical Mechanics Programme, University of Cambridge, April 2, 2008
114. Enumeration of the Degree Sequences of Non-Separable Graphs and Connected Graphs, Partitions and Combinatorics Seminar, Penn State University, September 2, 2008
115. On Euler's Partition Theorem Relating Odd-Part Partitions and Distinct-Part Partitions, Juniata College, September 11, 2008
116. On Euler's Partition Theorem Relating Odd-Part Partitions and Distinct-Part Partitions, Penn State University, Harrisburg, September 18, 2008
117. Congruences Modulo High Powers of 2 for Sloane's Box Stacking Function, Partitions and Combinatorics Seminar, Penn State University, October 14, 2008
118. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Penn State Math Club, November 10, 2008
119. Enumeration of the Degree Sequences of Non-Separable Graphs and Connected Graphs, Combinatory Analysis 2008: Partitions, q -series, and Applications, Penn State University, December 5, 2008
120. Math Clubs and Co-Curricular Math Activities (panelist), National Project NExT Meeting, Washington, DC, January 6, 2009
121. On m -ary Partitions and Non-Squashing Stacks of Boxes, Penn State University Graduate Student Seminar, January 15, 2009
122. Generalizing a Binomial Coefficient Identity of Beckwith, Partitions and Combinatorics Seminar, Penn State University, January 27, 2009
123. Recent Arithmetic Results Related to m -ary Partition Functions, Penn State Algebra and Number Theory Seminar, January 29, 2009
124. Euler and His Polyhedral Formula, State College High School, February 6, 2009
125. Beyond Mere Convergence, Penn State Mathematics Department Teaching

Seminar, February 26, 2009

126. Elementary Proofs of Various Facts about 3-cores, Partitions and Combinatorics Seminar, Penn State University, March 3, 2009
127. Elementary Proofs of Parity Results for 5-Regular Partitions, Conference on Quadratic Forms, Sums of Squares, Theta Functions and Integral Lattices, University of Florida, March 11-15, 2009
128. A Different Look at Albrecht and White's Path Counting in Grids, Spring Meeting of the Allegheny Mountain Section of the Mathematical Association of America, Wheeling Jesuit University, April 4, 2009
129. Arithmetic Properties of Partitions with Even Parts Distinct, Partitions and Combinatorics Seminar, Penn State University, April 7, 2009
130. Cool Patterns in Pascal's Triangle, State College High School, April 20, 2009
131. Graphical Partitions, Penn State Math Club, April 20, 2009
132. Enumeration of the Degree Sequences of Non-Separable Graphs and Connected Graphs, Departmental Colloquium, West Virginia University, April 22, 2009
133. Beyond Mere Convergence, Pi Mu Epsilon Address, West Virginia University, April 22, 2009
134. A Gentle Introduction to Generating Functions, State College High School, May 18-19, 2009
135. Mathematics Research With Undergraduates: Stories of Personal Success, Association of Christians in the Mathematical Sciences (ACMS) Biennial Conference, Wheaton College, May 2009
136. Beyond Mere Convergence, Association of Christians in the Mathematical Sciences (ACMS) Biennial Conference, Wheaton College, May 2009
137. Generalizing a Binomial Coefficient Identity of Beckwith, Juniata College, September 10, 2009
138. Generalizing a Binomial Coefficient Identity of Beckwith, Penn State Math Club, September 14, 2009
139. Cool Results Involving Fibonacci Numbers and Compositions, Clarion University, September 23, 2009
140. Cool Results Involving Fibonacci Numbers and Compositions, State College High

School, October 7, 2009

141. Elementary Proofs of Parity Results for 5-Regular Partitions, INTEGERS 2009, State University of West Georgia, October 14-17, 2009
142. An Overview of Generalized Frobenius Partitions, Partitions and Combinatorics Seminar, Penn State University, October 20, 2009
143. Infinite Families of Divisibility Properties Modulo 4 for Non-Squashing Partitions into Distinct Parts, Special Session on q -Series and Related Areas in Enumerative Combinatorics and Number Theory, Fall Meeting of the Eastern Section of the American Mathematical Society, Penn State University, October 24-25, 2009
144. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Penn State University, Harrisburg, December 3, 2009
145. Cool Results Involving Fibonacci Numbers and Compositions, Westmont College (CA), January 11, 2010
146. On m -ary Partitions and Non-Squashing Stacks of Boxes, Penn State University Graduate Student Seminar, January 21, 2010
147. Utilizing Partition Analysis To Extend a Result of Santos on Partitions into Odd Parts, Partitions and Combinatorics Seminar, Penn State University, February 2, 2010
148. An Unexpected Connection Between Binomial Coefficients and Consecutive-Leg Pythagorean Triples, Penn State Math Club, February 22, 2010
149. On Euler's Partition Theorem Relating Odd-Part Partitions and Distinct-Part Partitions, Lock Haven University Mathematics Department Colloquium, February 23, 2010
150. Pascal's Triangle, Combinations, and Algebra, Mount Nittany Middle School, February 24, 2010
151. On Euler's Partition Theorem Relating Odd-Part Partitions and Distinct-Part Partitions, Taylor University, March 8, 2010
152. On Euler's Partition Theorem Relating Odd-Part Partitions and Distinct-Part Partitions, Macalester College, March 9, 2010
153. On m -ary Partitions and Non-Squashing Stacks of Boxes, University of Northern Iowa Department Colloquium, March 10, 2010
154. Partition Analysis and Non-Squashing Stacks of Boxes, Partitions and

Combinatorics Seminar, Penn State University, March 23, 2010

155. Infinite Families of Divisibility Properties Modulo 4 for Non-Squashing Partitions into Distinct Parts, Spring Meeting of the Allegheny Mountain Section of the Mathematical Association of America, University of Pittsburgh at Johnstown, April 10, 2010
156. Parity Results for Broken k -Diamond Partitions and $(2k+1)$ -Cores, Penn State Algebra and Number Theory Seminar, April 22, 2010
157. On m -ary Partitions and Non-Squashing Stacks of Boxes, Algorithmic Combinatorics Seminar, Research Institute for Symbolic Computation (Austria), May 12, 2010
158. Tiling a $l \times n$ Strip and Recurrent Sequences, State College High School, June 7, 2010
159. Advising Mathematics Students Academically and Professionally, National Project NExT Meeting, Pittsburgh, PA, August 3, 2010
160. Issues for Early Career Mathematicians in Academia (panelist), MAA MathFest, Pittsburgh, PA, August 6, 2010
161. Balancing Numerous Goals in a Mathematics FYS – My Penn State Experience, MAA MathFest, Pittsburgh, PA, August 7, 2010
162. Graphical Partitions, Juniata College, September 9, 2010
163. Composite NSW Numbers, Penn State Math Club, September 13, 2010
164. Enumeration of Multigraphic Line-Hamiltonian Degree Sequences, Partitions and Combinatorics Seminar, Penn State University, September 28, 2010
165. Graphical Partitions, Clarion University, October 6, 2010
166. Graphical Partitions, Penn State University, Harrisburg, October 12, 2010
167. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Pi Mu Epsilon Lecture, University of Nebraska, November 1, 2010
168. Enumeration of the Degree Sequences of Non-Separable Graphs and Connected Graphs, University of Nebraska, November 2, 2010
169. Enumeration of Line-Hamiltonian Multigraphic Degree Sequences, West Virginia University, November 11, 2010

170. Enumeration of Line-Hamiltonian Multigraphic Degree Sequences, Penn State Math Club, January 31, 2011
171. Computational Aspects in the Search for (Rational) Generating Functions, Combinatorics and Partitions Seminar, Penn State University, February 15, 2011
172. Perfect Numbers, Mersenne Primes, and the Abundancy Index of a Number, State College High School, February 15, 2011
173. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Spring 2011 Meeting of the Associated Colleges of the Chicago Area, Trinity Christian College, February 23, 2011
174. Tiling Proofs of Recent Sum Identities Involving Pell Numbers, Spring 2011 Meeting of the Associated Colleges of the Chicago Area, Trinity Christian College, February 23, 2011
175. Enumeration of Line-Hamiltonian Multigraphic Degree Sequences, Spring Meeting of the Allegheny Mountain Section of the Mathematical Association of America, Clarion University, April 9, 2011
176. On m -ary Partitions and Non-Squashing Stacks of Boxes, Department of Mathematics, UNICAMP-Universidade Estadual de Campinas (Brazil), May 11, 2011
177. Unique Path Partitions, Combinatorics and Partitions Seminar, Penn State University, August 23, 2011
178. Unique Path Partitions, II, Combinatorics and Partitions Seminar, Penn State University, August 30, 2011
179. Arithmetic Properties for t -Core Partitions, New York Workshop on the Symmetric Group, City University of New York, September 8, 2011
180. Cool Results Involving Fibonacci Numbers and Compositions, Houghton College, September 12, 2011
181. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Houghton College, September 13, 2011
182. Bulgarian Solitaire and Garden of Eden Partitions, Penn State Math Club, September 19, 2011
183. Enumeration of Line-Hamiltonian Multigraphic Degree Sequences, Juniata College, September 22, 2011

184. The Impact of Low Math Performance and Placement on the Future of STEM Education (plenary speaker), 3rd Annual Michigan State University STEM Day, October 18, 2011
185. Enumeration of Line-Hamiltonian Multigraphic Degree Sequences, INTEGERS 2011, University of West Georgia, October 26, 2011
186. Generalizing a Binomial Coefficient Identity of Beckwith, Clarion University, November 15, 2011
187. Connecting Algebra and Combinatorics via the Fibonacci Numbers, State College High School, November 29, 2011
188. Bulgarian Solitaire and Garden of Eden Partitions, Penn State University Harrisburg, December 1, 2011
189. Getting the “Feel” for Centers of Mass, Joint Mathematics Meetings, Boston, MA, January 5, 2012
190. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Pi Mu Epsilon Talk, University of Illinois at Urbana-Champaign, January 30, 2012
191. On m -ary Partitions and Non-Squashing Stacks of Boxes, Number Theory Seminar, University of Illinois at Urbana-Champaign, January 31, 2012
192. Unique Path Partitions: Characterization and Congruences, Department of Mathematics, University of Illinois at Urbana-Champaign, January 31, 2012
193. Computing Exact Values of Infinite Series Involving Weighted Fibonacci Numbers, Penn State Math Club, February 6, 2012
194. On Euler's Theorem Relating Odd-Part and Distinct-Part Partitions, Shippensburg University, February 9, 2012
195. Cool Results Involving Fibonacci Numbers and Compositions, Department of Mathematics, CUNY York College, February 16, 2012
196. Unique Path Partitions: Characterization and Congruences, New York Algebra Colloquium, CUNY Graduate Center, February 17, 2012
197. Unique Path Partitions: Characterization and Congruences, Algebra Seminar, Department of Mathematics, University of Bergen (Norway), May 3, 2012
198. Cool Results Involving Fibonacci Numbers and Compositions, Undergraduate Math Forum, University of Bergen (Norway), May 4, 2012

199. Unique Path Partitions: Characterization and Congruences, Algebra, Geometry and Number Theory Seminar, Mathematical Institute, University of Leiden (Netherlands), May 14, 2012
200. Combinatorial Proofs of (Some of) Aek's Identities, Algorithmic Combinatorics Seminar, Research Institute for Symbolic Computation (Austria), May 30, 2012
201. Partition Function Congruences: From Ramanujan to the Present, Department of Mathematical Sciences, University of Copenhagen (Denmark), June 7, 2012
202. Connections Between Path Partitions and Restricted m -ary Partitions, Algorithmic Combinatorics Seminar, Research Institute for Symbolic Computation (Austria), June 13, 2012
203. Unique Path Partitions: Characterization and Congruences, Technical University, Graz (Austria), June 14, 2012
204. Infinitely Many Congruence for Broken 2-Diamond Partitions Modulo 3, Combinatorics and Partitions Seminar, Penn State University, September 4, 2012
205. Combinatorial Remarks about a “Remarkable Identity”, Juniata College, September 12, 2012
206. Combinatorial Remarks about a “Remarkable Identity”, Penn State Math Club, September 17, 2012
207. On Euler's Theorem Relating Odd-Part and Distinct-Part Partitions, Fall Meeting of the EPaDel Section of the Mathematical Association of America, Millersville University, October 27, 2012
208. Infinitely Many Congruences for Broken 2-Diamond Partitions Modulo 3, Ramanujan 125: A Conference to Commemorate the 125th Anniversary of Ramanujan's Birth, University of Florida, Gainesville, November 2012
209. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Penn State Erie Math Club, November 12, 2012
210. Combinatorial Remarks about a “Remarkable Identity”, Penn State University Harrisburg, November 28, 2012
211. Pascal's Triangle, Combinations, and Algebra, Mount Nittany Middle School, December 3, 2012
212. Congruences Modulo Squares of Primes for Fu's k Dots Bracelet Partitions, AMS Special Session on The Influence of Ramanujan on His 125th Birthday, San Diego Joint Mathematics Meetings, January 11, 2013

213. An Unexpected Congruence Modulo 5 for 4-Colored Generalized Frobenius Partitions, Combinatorics and Partitions Seminar, Penn State University, January 15, 2013
214. Closed Form Formulas and Other Cool Facts Related to Recurrent Sequences, State College High School, February 1, 2013
215. Connections Between Path Partitions and Restricted m -ary Partitions, University of Vienna, March 5, 2013
216. Old and New Results for Generalized Frobenius Partition Functions, Algorithmic Combinatorics Seminar, Research Institute for Symbolic Computation (Austria), March 6, 2013
217. On the Parity of the Number of Parts in Distinct-Part Partitions, Combinatorics and Partitions Seminar, Penn State University, March 19, 2013
218. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Pi Mu Epsilon Group, University of Florida, March 26, 2013
219. Pascal's Triangle, Combinations, and Algebra, Park Forest Middle School, April 10, 2013
220. Combinatorial Remarks about a "Remarkable Identity", Penn State CWC Mathematics Faculty Meeting, April 13, 2013
221. On Euler's Theorem Relating Odd-Part and Distinct-Part Partitions, Mathematics Department Colloquium, West Virginia University, April 17, 2013
222. Cool Results Involving Fibonacci Numbers and Compositions, Pi Mu Epsilon Address, West Virginia University, April 17, 2013
223. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Honors and Awards Banquet, Millersville University, April 24, 2013
224. On Euler's Theorem Relating Odd-Part and Distinct-Part Partitions, Mathematics Department Seminar, University of the Witwatersrand, South Africa, May 16, 2013
225. A Historical Introduction to Integer Partitions, The John Knopfmacher Centre for Applicable Analysis and Number Theory, University of the Witwatersrand, South Africa, May 13, 2013
226. Arithmetic Properties of Overpartitions, The John Knopfmacher Centre for Applicable Analysis and Number Theory, University of the Witwatersrand, South Africa, May 14, 2013

227. An Introduction to t -core Partitions, The John Knopfmacher Centre for Applicable Analysis and Number Theory, University of the Witwatersrand, South Africa, May 15, 2013
228. Arithmetic Properties of Broken k -diamond Partitions, The John Knopfmacher Centre for Applicable Analysis and Number Theory, University of the Witwatersrand, South Africa, May 20, 2013
229. On m -ary Partitions and Non-Squashing Stacks of Boxes, The John Knopfmacher Centre for Applicable Analysis and Number Theory, University of the Witwatersrand, South Africa, May 21, 2013
230. Connections Between “Path Partitions” and Restricted m -ary Partitions, The John Knopfmacher Centre for Applicable Analysis and Number Theory, University of the Witwatersrand, South Africa, May 22, 2013
231. On the Parity of the Number of Parts in Distinct-Part Partitions, The John Knopfmacher Centre for Applicable Analysis and Number Theory, University of the Witwatersrand, South Africa, May 23, 2013
232. Old and New Results for Generalized Frobenius Partition Functions, The John Knopfmacher Centre for Applicable Analysis and Number Theory, University of the Witwatersrand, South Africa, May 27, 2013
233. On Euler's Theorem Relating Odd-Part and Distinct-Part Partitions, Mathematics Department Seminar, Chongqing University, China, July 30, 2013
234. Old and New Results for Generalized Frobenius Partition Functions, A Celebration of George Andrews' 75th Birthday, Center for Combinatorics, Nankai, China, August 4, 2013
235. Refinements of Overpartitions Via Restrictions on the Overlined Parts I, Combinatorics and Partitions Seminar, Penn State University, September 10, 2013
236. Using Matrices to Prove Identities for Recurrent Sequences, Juniata College, September 11, 2013
237. Using Matrices to Prove Identities for Recurrent Sequences, Penn State Math Club, September 16, 2013
238. Refinements of Overpartitions Via Restrictions on the Overlined Parts II, Combinatorics and Partitions Seminar, Penn State University, September 17, 2013
239. Arithmetic Properties of Overpartitions, Number Theory Seminar, University of Illinois at Urbana-Champaign, September 26, 2013

240. An Introduction to t -core Partitions, Student Number Theory Seminar, University of Illinois at Urbana-Champaign, September 26, 2013
241. Using Matrices to Prove Identities for Recurrent Sequences, Penn State University Harrisburg, October 1, 2013
242. Primes and Perfect Numbers, Park Forest Middle School, October 16, 2013
243. Cool Results Involving Fibonacci Numbers and Compositions, Bloomsburg University, October 22, 2013
244. Fraenkel's Conjecture on the Divisibility of the Ternary Partition Function, INTEGERS Conference, October 24, 2013
245. Fraenkel's Conjecture on the Divisibility of the Ternary Partition Function, Combinatorics and Partitions Seminar, Penn State University, October 29, 2013
246. Primes and Perfect Numbers, Park Forest Middle School, November 6, 2013
247. Cool Results Involving Fibonacci Numbers and Compositions, State College High School, November 15, 2013
248. Primes and Perfect Numbers, Mount Nittany Middle School, November 19, 2013
249. Bijective Proofs of Partition Identities of MacMahon, Andrews, and Subbarao, Combinatorics and Partitions Seminar, Penn State University, November 19, 2013
250. Elementary Proofs of Congruences for the Cubic and Overcubic Partition Functions, Combinatorics and Partitions Seminar, Penn State University, December 10, 2013
251. Generalizing a Binomial Coefficient Identity of Beckwith, Partitions and Combinatorics Seminar, Penn State University, January 27, 2014
252. Congruences for the Fishburn Numbers, Combinatorics and Partitions Seminar, Penn State University, February 4, 2014
253. Fun Facts about Fibonacci Numbers, Mount Nittany Middle School, February 18, 2014
254. Characterizing the Number of m -ary Partitions Modulo m , New York Number Theory Seminar, CUNY Graduate Center, February 20, 2014
255. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Department of Mathematics, CUNY York College, February 20, 2014

256. Novel Ideas for Engaging First-Year Calculus Students, University of Florida Teaching Seminar, March 18, 2014
257. Cool Results Involving Fibonacci Numbers and Compositions, Penn State Erie Math Club, March 25, 2014
258. Congruences for the Fishburn Numbers, Spring Meeting of the Allegheny Mountain Section of the Mathematical Association of America, Westminster College, April 5, 2014
259. On Euler's Partition Theorem Relating Odd-Part Partitions and Distinct-Part Partitions, Penn State CWC Mathematics Faculty Meeting, April 26, 2014
260. On Euler's Partition Theorem Relating Odd-Part Partitions and Distinct-Part Partitions, Penn State Math Club, September 15, 2014
261. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Juniata College, September 22, 2014
262. Arithmetic Properties of Andrews' Singular Overpartitions, Combinatorics and Partitions Seminar, Penn State University, September 23, 2014
263. Numerous Results Related to m -ary Partitions, James Madison University Department Colloquium, October 2, 2014
264. Cool Results Involving Fibonacci Numbers and Compositions, James Madison University Pi Mu Epsilon Meeting, October 2, 2014
265. Numerous Results Related to m -ary Partitions, Virginia Tech Department Colloquium, October 3, 2014
266. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Virginia Tech Math Club, October 3, 2014
267. Generalizing a Binomial Coefficient Identity of Beckwith, Penn State University, Harrisburg, October 20, 2014
268. Congruences for the Fishburn Numbers, AMS Special Session on Connections in Number Theory, Southeast AMS Sectional Meeting, University of North Carolina at Greensboro, November 8–9, 2014
269. Fun Facts with Fibonacci Numbers, Park Forest Middle School, November 12, 2014
270. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series,

Shepherd University (WV), November 13, 2014

- 271. Infinitely Many Congruences Modulo 5 for 4-Colored Frobenius Partitions, Combinatorics and Partitions Seminar, Penn State University, December 2, 2014
- 272. Using Matrices to Prove Identities for Fibonacci Numbers and Other Recurrent Sequences, State College Area High School, December 5, 2014
- 273. Arithmetic Properties of Andrews' Singular Overpartitions, AMS Special Session on Partitions, q -series, and Modular Forms, San Antonio Joint Mathematics Meetings, January 2015
- 274. An Unexpected Connection Between Binomial Coefficients and Consecutive-Leg Pythagorean Triples, Penn State Math Club, February 9, 2015
- 275. Congruences for the Fishburn Numbers, Penn State Algebra and Number Theory Seminar, February 19, 2015
- 276. Revisiting What Euler and the Bernoullis Knew About Convergent Infinite Series, Penn State University, Altoona, February 26, 2015
- 277. Properties of a Restricted Binary Partition Function a la Andrews and Lewis, Combinatorics and Partitions Seminar, Penn State University, March 3, 2015
- 278. Congruences for the Fishburn Numbers, Algorithmic Combinatorics Seminar, Research Institute for Symbolic Computation (Austria), March 11, 2015
- 279. On Euler's Theorem Relating Odd-Part and Distinct-Part Partitions, Allegheny College, April 2, 2015
- 280. Congruences for the Fishburn Numbers, Penn State CWC Mathematics Faculty Meeting, April 25, 2015
- 281. Bulgarian Solitaire and Garden of Eden Partitions, Penn State Math Club, August 31, 2015
- 282. A Combinatorial Proof of a Relationship Between Maximal $(2k-1, 2k+1)$ -cores and $(2k-1, 2k, 2k+1)$ -cores, Combinatorics and Partitions Seminar, Penn State University, September 1, 2015
- 283. Congruences for the Fishburn Numbers, MASS Colloquium, Penn State Mathematics Department, September 10, 2015
- 284. Characterizing the Number of m -ary Partitions Modulo m , Juniata College, September 23, 2015

285. Infinitely Many Congruences Modulo 5 for 4-Colored Frobenius Partitions, Penn State Algebra and Number Theory Seminar, October 1, 2015
286. Cool Results Involving Fibonacci Numbers and Compositions, Indiana University of Pennsylvania, November 5, 2015
287. Cool Results Involving Fibonacci Numbers and Compositions, Berry College, January 21, 2016
288. Connections Between Path Partitions and Restricted m -ary Partitions, Penn State Algebra and Number Theory Seminar, February 11, 2016
289. Pascal's Triangle, Combinations, and Algebra, Mount Nittany Middle School, February 25, 2016
290. Infinitely Many Congruences Modulo 5 for 4-Colored Frobenius Partitions, Gainesville International Number Theory Conference (in honor of Krishna Alladi's 60th Birthday), March 17, 2016
291. On Euler's Partition Theorem Relating Odd-Part Partitions and Distinct-Part Partitions, Penn State Erie Math Club, March 31, 2016
292. Characterizing the Number of m -ary Partitions Modulo m , Spring Meeting of the Allegheny Mountain Section of the Mathematical Association of America, Gannon University, April 2, 2016
293. t -core Partitions: My Introduction and Continued Work, Spring Meeting of the North Central Section of the Mathematical Association of America, Macalester College, April 16, 2016
294. Infinitely Many Congruences Modulo 5 for 4-Colored Frobenius Partitions, Combinatorial and Additive Number Theory (CANT) Conference, May 24, 2016
295. An Infinite Family of Congruences for l -regular Overpartitions, INTEGERS Conference, October 6, 2016
296. TBD, AMS Special Session on Arithmetic Properties of Sequences from Number Theory and Combinatorics, Atlanta Joint Mathematics Meetings, January 2017
297. TBD, AMS Special Session on Partition Theory and Related Topics, Atlanta Joint Mathematics Meetings, January 2017

CONFERENCES ORGANIZED

- MAA Ohio Section Short Course, Proofs and Confirmations: the Story of the Alternating Sign Matrix Conjecture, David Bressoud, Cedarville University, Summer

2000

- Celebrating George Andrews' Election to the National Academy of Sciences and his 65th Birthday (GANAS), Penn State University, April 1, 2004 (co-organized with Dale Brownawell)
- Conference on Undergraduate Research in Mathematics, Penn State University, November 9-10, 2007 (co-organized with Diane Henderson)
- A Celebration of George Andrews' 70th Birthday, Penn State University, December 5-7, 2008 (co-organized with Krishna Alladi (University of Florida), Peter Paule (University of Linz), and Ae Ja Yee (Penn State University))
- Conference on Undergraduate Research in Mathematics, Penn State University, November 20-21, 2009 (co-organized with Diane Henderson)
- Conference on Undergraduate Research in Mathematics, Penn State University, November 4-5, 2011 (co-organized with Diane Henderson)
- A Celebration of George Andrews' 75th Birthday, Center for Combinatorics, Nankai, China, August 2013, (co-organized with Krishna Alladi (University of Florida), Peter Paule (University of Linz), and Ae Ja Yee (Penn State University))

PANELS/SPECIAL SESSIONS ORGANIZED

- Organizer of Invited Paper Session entitled Ramanujan's Impact on Number Theory – Then and Now, MathFest 2008, Madison, WI
- Co-Organizer (with Michael Starbird) of Panel Discussion entitled First-Year Courses Designed to Attract Students to the Serious Study of Mathematics, MathFest 2008, Madison, WI
- Co-Organizer (with Robert Rogers) of Panel Discussion entitled Mathematics Outreach Programs for Pre-College Students, MathFest 2009, Portland, OR
- Co-Organizer (with David Little and Ae Ja Yee) of Special Session entitled q-Series and Related Areas in Enumerative Combinatorics and Number Theory, 2009 Fall Eastern Section Meeting of the American Mathematical Society, Penn State University
- Organizer of Invited Paper Session entitled Visualizing Combinatorics Through Tilings, MathFest 2010, Pittsburgh, PA

CONSULTING

- MAA Project NExT, 1998–2000, 2002, 2006–present
- In-service presenter for high school mathematics departments at Bald Eagle Area School District (2004–2007) and State College Area High School (2009)
- Pennsylvania Department of Education, December 2004; December 2005 – January 2006
- Lock Haven University Department of Mathematics, External Reviewer for 5-Year Review, 2007
- United States Naval Academy Department of Mathematics, External Reviewer, 2009
- Gordon College Department of Mathematics, External Reviewer, 2010
- West Liberty University Department of Mathematics, External Reviewer, 2011

- Shepherd University Department of Mathematics, External Reviewer, 2014
- Indiana University of Pennsylvania Department of Mathematics, External Reviewer, 2015

SERVICE TO THE MATHEMATICAL ASSOCIATION OF AMERICA

- Chair, CONTEAC (Committee on Teacher Certification) for the Ohio Section of the Mathematical Association of America, 1997–1998
- Member, CONSTUM (Committee on Student Members) for the Ohio Section of the Mathematical Association of America, 1998–2001
- Chair, CONSTUM (Committee on Student Members) for the Ohio Section of the Mathematical Association of America, 2000–2001
- Director of E–Communications (webmaster) for the MAA Allegheny Mountain Section, August 2002–2010
- Member, MAA Committee on Electronic Services, 2002–2004
- Member, MAA Committee on Web Policy and Procedures, 2004–present
- Member, MAA Committee on the Undergraduate Program in Mathematics, 2007–2013
- Governor of the Allegheny Mountain Section, 2008–2011
- Member, Ad Hoc AMS-MAA Steering Committee on Computer-Based Homework Systems, 2008–2010
- Member, AMS-MAA Committee on Teaching Assistants and Part-Time Instructors, 2010–2013
- Chair, MAA Committee on Invited Paper Sessions, 2010–2016
- Member, Hedrick Lecturer Selection Committee, 2012–2017
- Chair, Hedrick Lecturer Selection Committee, 2017–2018
- Chair–Elect of the MAA Allegheny Mountain Section, 2014–2015
- Chair of the Allegheny Mountain Section, 2015–2017
- Member, Editorial Board, MAA FOCUS, 2016–present

REFeree DUTIES

Referee for several journals including Acta Arithmetica, American Mathematical Monthly, Annales des Sciences Mathématiques du Québec, Annals of Combinatorics, Ars Combinatoria, Australasian Journal of Combinatorics, College Mathematics Journal, Discrete Applied Mathematics, Discrete Mathematics, Electronic Journal of Combinatorics, Fibonacci Quarterly, INTEGERS: The Electronic Journal of Combinatorial Number Theory, International Journal of Mathematics and Mathematical Sciences, International Journal of Number Theory, Journal of Combinatorial Theory Series A, Journal of Integer Sequences, Journal of Number Theory, Journal of Physics A: Mathematical and General, Mathematical Biosciences, Mathematics and Computer Education, Mathematics Magazine, Ramanujan Journal, Rocky Mountain Journal of Mathematics, Tamsui Oxford Journal of Mathematical Sciences, and Utilitas Math

OTHER ACTIVITIES

- Course developer for The Great Courses (formerly The Teaching Company)
 - High School Algebra 1, 2009
 - High School Algebra 2, 2010
 - Mastering the Fundamentals of Mathematics, 2011
- Editor, *Involve – A Journal of Mathematics*, 2010–present
- Member, Graduate Faculty, Penn State University, 2003–present
- Co-advisor for Brandt Kronholm, M.A. (2004), Penn State University (co-advised with George Andrews). Thesis title: Congruence properties of $p(n,m)$
- External Thesis Reviewer, appointed by the University of Lagos, Nigeria, for Augustine Munagi, Ph.D. (2005)
- External Thesis Reviewer, appointed by Johannes Kepler University, Linz, Austria, for Silviu Radu, Ph.D. (2010)
- Committee Member for each of the following:
 - Michael Rowell, Ph.D. (2007)
 - John Ethier, Ph.D. (2008)
 - Shishuo Fu, Ph.D. (2011)
 - Heiko Todt, Ph.D. (2011)
 - Serge Ballif, Ph.D. (2012)
 - Rebekah Gilbert, M.A. (2012)
 - Matthew Katz, Ph.D. (2013)
 - Daniel Droz, Ph.D. (2016)
 - Diego Chavez, Ph.D.
 - Donny Passary, Ph.D.

Last updated June 30, 2016