LARA K. PUDWELL

Department of Mathematics and Statistics ◇ 1900 Chapel Drive ◇ Valparaiso, Indiana 46383
(219) · 464 · 5414 ◇ Lara.Pudwell@valpo.edu
http://faculty.valpo.edu/lpudwell

EDUCATION

Ph.D. in Mathematics, Rutgers University May 2008
Thesis Title: Enumeration Schemes for Pattern-Avoiding Words and Permutations
Advisor: Dr. Doron Zeilberger

B.S. in Mathematics, Valparaiso University May 2003
summa cum laude

B.A. in Computer Science, Valparaiso University May 2003
Minor in Humanities
summa cum laude

WORK EXPERIENCE

Full Professor, Valparaiso University (Valparaiso, IN) 2021 –
Associate Professor, Valparaiso University (Valparaiso, IN) 2014 – 2021
Assistant Professor, Valparaiso University (Valparaiso, IN) 2008 – 2014

- 2024-2028 Dixon W. and Herta E. Benz Professorship
- 2013-2014 University Research Professor
- 2011-2019 Valparaiso Experience in Research by Undergraduate Mathematicians program director

Executive Director,
MathPath 2021 – present

Graduate Assistant, TA Project,
Rutgers University (New Brunswick, NJ) 2007 – 2008

Teaching Assistant, Department of Mathematics,
Rutgers University (Piscataway, NJ) 2005 – 2008

Research Experience for Undergraduates Coordinator, DIMACS,
Rutgers University (Piscataway, NJ) 2005 – 2007

AWARDS AND HONORS

External

- Indiana Section Award for Distinguished College or University Teaching of Mathematics, 2024
- Trevor Evans Award (for authoring an exceptional article that is accessible to undergraduates in *Math Horizons*), 2023
- Woman of Distinction recognition from Alpha Epsilon (Indiana) State of Delta Kappa Gamma (International Honor Society for Key Women Educators), 2017
- Henry L. Alder Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member, 2014
- Council on Undergraduate Research Math Faculty Mentor Award, 2013
- Delta Kappa Gamma (Honor Society for Women Educators), inducted April 2013
- Project NExT Fellow, 2008–2009
- National PEO (Philanthropic Educational Organization) Scholar Award Recipient, 2006–2007
- National Science Foundation Graduate Research Fellowship Honorable Mention, 2004

Internal

- Dixon W. and Herta E. Benz Professorship, 2024–2028
- Pi Mu Epsilon national honorary mathematics society, inducted as a charter member into Valparaiso's Indiana Theta chapter, April 2023
- Valparaiso University Excellence in Research and Creative Work Award, 2022–2023
- Valparaiso University Excellence in Teaching Award, 2021–2022
- Phi Beta Kappa, inducted as an alumna member into Valparaiso's Eta of Indiana chapter, May 2019
- Award for Significant Impact on a Fraternity Member, (from Sigma Phi Epsilon 2018)
- Order of Omega honor society, inducted honoris causa into Valparaiso's Gamma Mu chapter, November 2016
- Mark R. Schwehn Outstanding Faculty Advisor Award, 2014–2015
- Award for Outstanding Support of Fraternity and Sorority Life, (from Phi Delta Theta 2014, 2015)
- Valparaiso University Research Professorship, 2013–2014
- Rutgers School of Arts and Sciences Award for Distinguished Contributions to Undergraduate Education as a Teaching Assistant, 2007
- Rutgers Carnegie Academy for the Scholarship of Teaching and Learning Fellow, 2007–2008
- TA Teaching Excellence Award, Rutgers University, Spring 2006
- Torrey Graduate Fellowship, Rutgers University, 2003–2005

GRANTS

- Permutation Patterns 2021 Conference Grant (NSA) $10,140
- NSF-AWM Travel Grant, 2019 $3,290
- Permutation Patterns 2019–2021 Conference Grant (NSF) $30,000

- Permutation Patterns 2018 Conference Grant (NSA) $9,996
- Permutation Patterns 2018 Conference Grant (NSF) $15,000
- CELT Travel grant (internal grant for teaching-related travel), 2017 $1,000
- Permutation Patterns 2017 Conference Grant (NSF) $17,000
- Valparaiso Experience in Research by Undergraduate Mathematicians (with co-PI Alex Capaldi, 2017–2019) $324,999
- NSF-AWM Travel Grant, 2015 $2,268
- Permutation Patterns 2013 Conference Grant (NSA) $22,625
- Permutation Patterns 2013 Conference Grant (NSF) $22,625
- Valparaiso Experience in Research by Undergraduate Mathematicians (with co-PI Zsuzsanna Szaniszlo, 2013–2015) $279,586
- Valparaiso University Research Professorship, 2013–2014 $4,000
- NSF-AWM Travel Grant, 2012 $2,000
- Valparaiso Experience in Research by Undergraduate Mathematicians (co-PI with Rick Gillman, 2010–2012) $240,688
- CELT Travel grant (internal grant for teaching-related travel), 2011 $500
- NSF-AWM Travel Grant, 2009 $1,440

BOOK

1. *A Mathematician's Practical Guide to Mentoring Undergraduate Research* by Michael Dorff, Allison Henrich, and Lara Pudwell, published September 2019 by *MAA Press: an imprint of the American Mathematical Society* and the Council on Undergraduate Research.

ESSAYS

6. David Clark, Matt DeLong, Codi Gauger, Lara Pudwell, Julie Vega, and April Verser, MathPath: building community with middle schoolers who love math, *MAA FOCUS* Vol. 44, No. 1 (February/March 2024), p. 16–17.
5. Lara Pudwell, The Hidden and Surprising Structure of Ordered Lists, *Math Horizons* Vol. 29, No. 3 (February 2022), p. 5–7.
4. Lara Pudwell, Book Review: An Introduction to Undergraduate Research in Computational and Mathematical Biology Edited by Hannah Callender Highlander, Alex Capaldi, and Carrie Diaz Eaton; and A Project-Based Guide to Undergraduate Research in Mathematics. Edited by Pamela Harris, Erik Insko, and Aaron Wootton, *The American Mathematical Monthly*, **127.10**, 953–957.
3. Lara Pudwell, Writing a Section Officers' Handbook, *MAA FOCUS* Vol. 39, No. 2 (April/May 2019), p. 28.
2. Lara Pudwell, What is an Experimental Math Course and Why Should We Care?, American Mathematical Society: On Teaching and Learning Mathematics blog (`http://blogs.ams.org/matheducation`), 23 January 2017.
1. Lara Pudwell, Adding Up the Riches of Community, *The Cresset: A review of literature, the arts, and public affairs* Advent-Christmas 2016 (Vol LXXX, No. 2, p. 53).

REFEREED PUBLICATIONS

(* denotes undergraduate student)

42. Lara Pudwell and Rebecca Smith, Sorting via shuffles with a cut after the longest increasing prefix, *Theoretical Computer Science* **1008** (2024), Article 114679.

41. Lara Pudwell, Catalan Numbers and Permutations, *Mathematics Magazine* **97.3** (2024), 279–283.

40. Ayomikun Adeniran and Lara Pudwell, Pattern avoidance in parking functions, *Enumerative Combinatorics and Applications* **3:3** (2023), Article S2R17.

39. Manda Riehl, Reed Phillips*, Lara Pudwell, and Nate Chenette, Occurrences of reciprocal sign epistasis in single- and multi-peaked theoretical fitness landscapes, *Journal of Physics A: Mathematical and Theoretical* **55** (2022), 434002.

38. Julia Krull*, Lara Pudwell, Eric Redmon*, and Andrew Reimer-Berg*, Packing patterns in symmetric words, *Australasian Journal of Combinatorics* **84.2** (2022), 238–257.

37. Jonathan Beagley and Lara Pudwell, Colorful tilings and permutations, *Journal of Integer Sequences* **24** (2021) 21.10.4.

36. Lara Pudwell, From permutation patterns to the periodic table, *Notices of the American Mathematical Society* **67.7** (2020), 994–1001.

35. Lara Pudwell and Rebecca Smith, Two-stack-sorting with pop stacks, *Australasian Journal of Combinatorics* **74.1** (2019), 179–195.

34. Michael Bukata*, Ryan Kulwicki*, Nicholas Lewandowski*, Lara Pudwell, Jacob Roth*, and Teresa Wheeland*, Distributions of Statistics over Pattern-Avoiding Permutations, *Journal of Integer Sequences* **22** (2019) 19.2.6.

33. Monica Anderson*, Marika Diepenbroek*, Lara Pudwell, and Alex Stoll*, Pattern avoidance in reverse double lists, *Discrete Mathematics and Theoretical Computer Science* **19.2** (2018), #13.

32. Lara Pudwell and Eric Rowland, Avoiding fractional powers over the natural numbers, *Electronic Journal of Combinatorics* **25.2** (2018), P2.27.

31. Michael Dorff, Allison Henrich, and Lara Pudwell, Successfully Mentoring Undergraduates in Research: A How To Guide for Mathematicians, *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies*, **27.3** (2017), 320–336.

30. Charles Cratty*, Samuel Erickson*, Frehiwet Negassi*, and Lara Pudwell, Pattern avoidance in double lists, *Involve, a Journal of Mathematics* **10.3** (2017), 379–398.

29. Lara Pudwell, Teaching the inquiry process through experimental mathematics, *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies* **27.2** (2017), 281–292.

28. David Bevan, Derek Levin*, Peter Nugent*, Jay Pantone, Lara Pudwell, Manda Riehl, and ML Tlachac*, Pattern avoidance in forests of binary shrubs, *Discrete Mathematics and Theoretical Computer Science* **18.2** (2016), #8.

27. Derek Levin*, Lara Pudwell, Manda Riehl, and Andrew Sandberg*, Pattern avoidance in k-ary heaps, *Australasian Journal of Combinatorics* **64.1** (2016), 120–139.

26. Adam Goyt and Lara Pudwell, On packing densities of set partitions, *Australasian Journal of Combinatorics* **64.1** (2016), 64–76.

25. Lara Pudwell, Ascent sequences and the binomial convolution of Catalan numbers, *Australasian Journal of Combinatorics* **64.1** (2016), 21–43.

24. Lara Pudwell and Eric Rowland, What's in YOUR wallet?, *The Mathematical Intelligencer* **37.4** (2015), 54–60.

23. Dennis E. Davenport, Lara K. Pudwell, Louis W. Shapiro, and Leon C. Woodson, The boundary of ordered trees, *Journal of Integer Sequences* **18** (2015) 15.5.8.

22. Andrew Baxter and Lara Pudwell, Ascent sequences avoiding pairs of patterns, *Electronic Journal of Combinatorics* **22.1** (2015), P1.58.

21. Dan Daly and Lara Pudwell, Pattern avoidance in the rook monoid, *Journal of Combinatorics* **5.4** (2014), 471–497.

20. Anant Godbole, Adam Goyt, Jennifer Herdan*, and Lara Pudwell, Pattern avoidance in ordered set partitions, *Annals of Combinatorics* **18.3** (2014), 429–445.

19. Michael Karls, David McCune, Lara Pudwell, and Azadeh Rafizadeh, The Role of Graduate Students in Research Experience for Undergraduates Programs, *Involve, a Journal of Mathematics* **7.3** (2014), 369–372.

18. Lara Pudwell, Connor Scholten*, Tyler Schrock*, and Alexa Serrato*, Non-contiguous pattern containment in binary trees, *ISRN Combinatorics* vol. 2014, Article ID 316535, 8 pages, 2014.

17. Lara Pudwell and Rachel Rockey*, de Bruijn arrays for L-fillings, *Mathematics Magazine* **87.1** (2014), 57–60.

16. Adam Goyt, and Lara Pudwell. A Stirling Permutation Problem. (Solution II), *American Mathematical Monthly* **120.4** (2013), 369–371.

15. Michael Dairyko*, Lara Pudwell, Samantha Tyner*, and Casey Wynn*, Non-contiguous pattern avoidance in binary trees, *Electronic Journal of Combinatorics* **19.3** (2012), P22.

14. Adam Goyt and Lara Pudwell, Avoiding colored partitions of two elements in the pattern sense, *Journal of Integer Sequences* **15** (2012) 12.6.2.

13. Andrew Baxter and Lara Pudwell, Enumeration schemes for vincular patterns, *Discrete Mathematics* **312** (2012), 1699–1712.

12. Nathan Gabriel*, Katie Peske*, Lara Pudwell, and Sam Tay*, Pattern avoidance in ternary trees, *Journal of Integer Sequences* **15** (2012) 12.1.5.

11. Adam Goyt and Lara Pudwell, Avoiding colored partitions of lengths two and three, *Pure Mathematics and Applications* **22.2** (2011), 107–128.

10. Lara Pudwell, Stacking blocks and counting permutations, *Mathematics Magazine* **83** (2010), 297–302.

9. Lara Pudwell, Enumeration schemes for words avoiding permutations. In Permutation Patterns (2010), S. Linton, N. Ruskuc, and V. Vatter, Eds., vol. 376 of London Mathematical Society Lecture Note Series, Cambridge University Press, pp. 193–211. Cambridge: Cambridge University Press.

8. Lara Pudwell, Enumeration schemes for permutations avoiding barred patterns, *Electronic Journal of Combinatorics* **17.1** (2010), R29.

7. Lara Pudwell and Eric Rowland, Counting interesting elections, *American Mathematical Monthly* **117.2** (2010), 167–174.

6. Lara Pudwell, Enumeration schemes for words avoiding patterns with repeated letters, *INTEGERS: The Electronic Journal of Combinatorial Number Theory* **8** (2008), A40.

5. Lara Pudwell, Digit reversal without apology, *Mathematics Magazine* **80** (2007), 129–132.

4. Betsy Crull*, Tammy Cundiff*, Paul Feltman*, Glenn Hurlbert, Lara Pudwell*, Zsuzsanna Szaniszlo, Zsolt Tuza, The cover pebbling number of graphs, *Discrete Mathematics* **296** (2005), 15–23.

3. Steven Klee*, Lara Pudwell*, and Rick Gillman. On the edge set of graphs of lattice paths, *International Journal of Mathematics and Mathematical Sciences* **61** (2004), 3291–3299.

2. Paul Baginski*, Scott T. Chapman, Kathryn McDonald*, and Lara Pudwell*. On cross numbers of minimal zero sequences in certain cyclic groups, *Ars Combinatoria* **70** (2004), 47–60.

1. Marjorie Brewer*, Adam Hughes*, Lara Pudwell*. Graphs of essentially equivalent lattice paths, *Geombinatorics* **13** (2003), 5–9.

KEYNOTE PRESENTATIONS

- "Puzzling Patterns"; Sonia Kovalevsky Math Day; Washington University (St. Louis, Missouri); April 12, 2025.
- "Gamifying permutation patterns"; Twenty-second International Conference on Permutation Patterns; University of Idaho (Moscow, Idaho); June 13, 2024.
- "Patterns in permutations"; Eighteenth Annual Texas Undergraduate Mathematics Conference; Stephen F. Austin State University (Nacogdoches, Texas); October 28, 2023.
- "Finding Your Direction in Undergraduate Research", Texas Section NExT presentation; Stephen F. Austin State University (Nacogdoches, Texas); October 28, 2023.
- "Patterns in Permutations"; Chan Stanek Lecture for Students, Mathfest 2023 (Tampa, Florida); August 2023.
- "Packing patterns in restricted permutations"; Southeastern International Conference on Combinatorics, Graph Theory & Computing; Florida Atlantic University (Boca Raton, Florida); March 10, 2023.
- "Patterns in Parking Functions"; Southeastern International Conference on Combinatorics, Graph Theory & Computing; Florida Atlantic University (Boca Raton, Florida); March 10, 2023.
- "Engaging students in combinatorics research", 44th Australasian Combinatorics Conference; University of Otago, New Zealand (virtual); December 13, 2022.
- "Patterns in permutations", UW Math Hour; University of Washington (virtual); March 20, 2022.
- "Cultivating Opportunities for Discovery"; 2021 Tennessee Mathematics Teachers Association Annual Conference; Memphis University School (Memphis, Tennessee); October 23, 2021.
- "Finding Your Direction in Undergraduate Research", Wisconsin Section NExT Fall Conference (virtual); October 23, 2021.
- "Patterns in Permutations: the hidden and surprising structures that emerge from ordered lists", Math Encounters presentation, National Museum of Mathemtics (virtual); June 2, 2021.
- "Patterns in permutations", Moravian Student Mathematics Conference; Moravian College (virtual); February 13, 2021.
- "Discovery, Inside and Out"; Valparaiso Symposium on Undergraduate Research and Creative Expression; Valparaiso University (Valparaiso, Indiana); May 14, 2020.
- "What's in your wallet!? "; Math for Everyone Seminar Series; University of Notre Dame (Notre Dame, Indiana); November 17, 2016.

PROFESSORIAL LECTURE

- "What really counts: the joy of enumeration"; Professorial Lecture (in celebration of promotion to the rank of Full Professor); Valparaiso University (Valparaiso, Indiana); April 14, 2022.

AWARD PRESENTATION

- "The Joy of Discovery"; Alder Award Presentation; Mathfest 2014 (Portland, Oregon); August 8, 2014.

INVITED PRESENTATIONS

- "Undergraduate Research via Experimental Mathematics"; Special Session on Bringing Research into the Math Classroom via Course-Based Undergraduate Research Experiences; 2026 Joint Mathematics Meetings (Washington, DC); January 5, 2026.
- "Sorting by right-to-left minima"; Special Session on Permutation Patterns; 2026 Joint Mathematics Meetings (Washington, DC); January 4, 2026.
- "Pattern avoidance in cyclic parking functions"; Special Session on Combinatorics and Graph Theory: The Audience Counts; AMS Fall Eastern Sectional Meeting (virtual); October 25, 2025.
- "Pattern avoidance in cyclic parking functions"; Special Session on Parking Functions; AMS Fall Central Sectional Meeting; St. Louis University (St. Louis, Missouri); October 18, 2025.
- "Patterns in Permutations"; Majors' Seminar; Trinity University, San Antonio, Texas (virtual); September 30, 2025.
- "A Permutation Game"; MathPath Plenary talk; Mount Holyoke College (South Hadley, Massachusetts); July 22, 2025.
- "An Erdos-Szekeres Permutation Game"; Washington University Combinatorics Seminar; Washington University (St. Louis, Missouri); April 14, 2025.
- "An Erdos-Szekeres Permutation Game"; Special Session on Permutation Patterns; AMS Fall Eastern Sectional Meeting; University at Albany (Albany, New York); October 20, 2024.
- "Patterns in permutations"; MathPath Plenary talk; Rockhurst University (Kansas City, Missouri); July 6, 2024.
- "Patterns in permutations", MSCS Colloquium; St. Olaf College (Northfield, Minnesota); March 11, 2024.
- "What's in your wallet!?"; MathPath Plenary talk; University of Portland (Portland, Oregon); June 28, 2023.
- "Pattern-avoiding parking functions"; MSU Combinatorics and Graph Theory Seminar; Michigan State University (virtual); September 8, 2022.
- "Patterns in permutations"; MathPath Plenary talk; Mount Holyoke College (South Hadley, Massachusetts); July 22, 2022.
- "Pattern-avoiding parking functions"; UW Combinatorics Seminar; University of Washington (Seattle, Washington); May 18, 2022.
- "Patterns in permutations", Mathematics Colloquium; Colby College (Waterville, Maine); March 11, 2022.
- "Pattern avoidance in parking functions"; Experimental Math Seminar; Rutgers University (virtual); February 10, 2022.
- "Sorting permutations via shuffles"; Special Session on Experimental Mathematics in Number Theory and Combinatorics; AMS Fall Southeastern Sectional Meeting (virtual); November 20, 2021.
- "Patterns in trees"; Invited Paper Session on Open and Accessible Problems for Undergraduate Research; Mathfest 2021 (virtual); August 5, 2021.

- "Patterns in generalized permutations"; Invited Paper Session on Open and Accessible Areas in Computational Mathematics; Mathfest 2021 (virtual); August 4, 2021.
- "Packing patterns in restricted permutations", New York Combinatorics Seminar; Brooklyn College (virtual); December 11, 2020.
- "Packing patterns in restricted permutations"; Experimental Math Seminar; Rutgers University (Piscataway, New Jersey); March 5, 2020.
- "What's in your wallet!?"; Mathematics Seminar; Hofstra University (Hempstead, New York); March 4, 2020.
- "Statistics on hypercube orientations"; Special Session on Experimental and Computer Assisted Mathematics; 2020 Joint Mathematics Meetings (Denver, Colorado); January 18, 2020.
- "Packing patterns in restricted permutations"; Special Session on Patterns in Permutations; AMS Fall Southeastern Sectional Meeting; University of Florida (Gainesville, Florida); November 3, 2019.
- "What's in your wallet!?"; Mathematics Colloquium; Butler University (Indianapolis, Indiana); October 11, 2019.
- "What's in your wallet!?"; MathPath Plenary talk; Grand Valley State University (Allendale, Michigan); July 19, 2019.
- "Patterns in Trees"; Special Session on Open and Accessible Problems for Undergraduate Research; 2018 Joint Mathematics Meetings (San Diego, California); January 11, 2018.
- "What's in your wallet!? "; Mathematics Colloquium; Grand Valley State University (Allendale, Michigan); October 12, 2017.
- "Sorting with Pop Stacks"; Special Session on Algebraic and Enumerative Combinatorics with Applications; AMS Spring Central Sectional Meeting; Indiana University (Bloomington, Indiana); April 2, 2017.
- "Pattern avoidance in reverse double lists"; Special Session on Enumerative Combinatorics; AMS Fall Central Sectional Meeting; University of St. Thomas (Minneapolis, Minnesota); October 29, 2016.
- "Pattern-avoiding forests"; Special Session on Patterns in Permutations and Words; AMS Spring Eastern Sectional Meeting; Georgetown University (Washington, DC); March 8, 2015.
- "Teaching Inquiry through Experimental Mathematics"; MAA Session on Teaching Inquiry; 2015 Joint Mathematics Meeetings (San Antonio, Texas); January 13, 2015.
- "Pattern-avoiding ascent sequences"; AMS Special Session on Enumerative Combinatorics; 2015 Joint Mathematics Meetings (San Antonio, Texas); January 10–11, 2015.
- "Ascent sequences avoiding 0021"; Special Session on Experimental Mathematics in Number Theory, Analysis, and Combinatorics; AMS Fall Eastern Sectional Meeting; Dalhousie University (Halifax, Nova Scotia); October 18, 2014.
- "OEIS meets UGR"; DIMACS Conference on Challenges of Identifying Integer Sequences; Rutgers University (Piscataway, New Jersey); October 9, 2014.
- "Pattern avoidance in double lists"; Special Session on Patterns in Permutations and Words, and Applications; AMS Central Fall Section Meeting; University of Wisconsin - Eau Claire (Eau Claire, Wisconsin); September 21, 2014.
- "How to Count like a Mathematician"; Math Club Talk; University of Wisconsin - Eau Claire (Eau Claire, Wisconsin); October 22, 2013.

- "Pattern Avoidance in Trees"; Rutgers Experimental Math Seminar; Rutgers University (Piscataway, New Jersey); September 26, 2013.
- "Pattern Avoidance in Permutations"; LaCIM Seminar; Université du Québec à Montréal (Montréal, Québec); March 15, 2013.
- "Pattern Avoidance in Rook Monoids"; AMS Special Session on Patterns in Permutations and Words; 2013 Joint Mathematics Meetings (San Diego, California); January 12, 2013.
- "Pattern Avoidance in Trees"; Notre Dame Discrete Math Seminar; University of Notre Dame (Notre Dame, Indiana); November 27, 2012.
- "Non-contiguous Pattern Avoidance in Binary Trees"; AMS Special Session on Permutation Patterns, Algorithms, and Enumerative Combinatorics; AMS Fall 2013 Eastern Section Meeting; Rochester Institute of Technology (Rochester, New York); September 23, 2012.
- "Beautiful Bijections for Permutation Patterns"; MAA Invited Paper Session on Clever Counting or Beautiful Bijection?; 2012 Joint Mathematics Meetings (Boston, Massachusetts); January 5, 2012.
- "Automated Enumeration of Pattern Avoiding Permutations"; Pacific Workshop on Permutation Patterns; Simon Fraser University (Burnaby, British Columbia); March 31, 2011.
- "Pattern-Avoiding Colored Partitions"; AMS Special Session on Enumerative Combinatorics; 2010 Joint Mathematics Meetings (San Francisco, California); January 15, 2010.
- "Counting Pattern-Avoiding Permutations"; Trinity University Mathematics Majors' Seminar; Trinity University (San Antonio, Texas); November 19, 2009.
- "An Introduction to Enumeration Schemes"; Trinity University Mathematics Colloquium; Trinity University (San Antonio, Texas); November 18, 2009.
- "Counting Pattern-Avoiding Permutations"; Wabash College Math & Computer Science Colloquium; Wabash College (Crawfordsville, Indiana); October 20, 2009.
- "An Introduction to Enumeration Schemes"; AWM Workshop for Women Graduate Students and Recent PhDs; 2009 Joint Mathematics Meetings (Washington, DC); January 8, 2009.
- "Enumeration Schemes for Permutations Avoiding Barred Patterns"; AMS Special Session on Experimental Mathematics; 2009 Joint Mathematics Meetings (Washington, DC); January 5, 2009.
- "Counting Pattern-Avoiding Permutations"; Trinity Research Experience for Undergraduates; Trinity University (San Antonio, Texas); June 11, 2008.
- "How to Cleverly Count Pattern-Avoiding Words"; AMS Special Session on Applications of Computer Algebra in Enumerative and Algebraic Combinatorics; 2008 Joint Mathematics Meetings (San Diego, California); January 8, 2008.
- "All About 1089"; Princeton Graduate Lunch Seminar; Princeton University (Princeton, New Jersey); October 3, 2006.
- "Pebbling and Cover Pebbling"; DIMACS REU; Rutgers University (Piscataway, New Jersey); June 22, 2004.

CONTRIBUTED CONFERENCE PRESENTATIONS

- "Packing patterns in restricted permutations"; Seventeenth International Conference on Permutation Patterns; University of Zurich (Zurich, Switzerland); June 20, 2019.
- "On the distribution of peaks (and other statistics)"; Sixteenth International Conference on Permutation Patterns; Dartmouth College (Hanover, New Hampshire); July 12, 2018.

- "Sorting with Pop Stacks"; Fifteenth International Conference on Permutation Patterns; Reykjavik University (Reykjavik, Iceland); June 29, 2017.
- "Pattern avoidance in reverse double lists"; Fourteenth International Conference on Permutation Patterns; Howard University (Washington, DC); June 27, 2016.
- "Pattern avoidance in double lists"; Thirteenth International Conference on Permutation Patterns; DeMorgan House (London, UK); June 15, 2015.
- "Ascent sequences avoiding pairs of patterns"; Twelfth International Conference on Permutation Patterns; East Tennessee State University (Johnson City, Tennessee); July 7, 2014.
- "Avoiding an Ordered Partition of Length 3"; Eleventh International Conference on Permutation Patterns; University of Paris Diderot (Paris, France); July 1, 2013.
- "Non-contiguous Pattern Avoidance in Binary Trees"; Tenth International Conference on Permutation Patterns; University of Strathclyde (Glasgow, Scotland, UK); June 15, 2012.
- "Enumeration Schemes for Dashed Permutation Patterns"; Ninth International Conference on Permutation Patterns; California Polytechnic State University (San Luis Obispo, California); June 21, 2011.
- "Pattern Avoiding Colored Partitions"; Eighth International Conference on Permutation Patterns; Dartmouth College (Hanover, New Hampshire); August 9, 2010.
- "Avoiding the Pattern (bar 3)(bar 1)542"; Seventh International Conference on Permutation Patterns; University of Firenze (Florence, Italy); July 16, 2009.
- "Enumeration Schemes for Permutations Avoiding Barred Patterns"; Sixth International Conference on Permutation Patterns; University of Otago (Dunedin, New Zealand); June 17, 2008.
- "Barred Permutation Patterns"; Graduate Student Combinatorics Conference 2008; University of California (Davis, California); April 12, 2008.
- "Schemes for Pattern-avoiding Words"; Prague Midsummer Combinatorial Workshop XIII; Charles University (Prague, Czech Republic); August 1, 2007.
- "Schemes for Pattern-Avoiding Words"; Fifth International Conference on Permutation Patterns; University of St. Andrews (St. Andrews, Scotland, UK); June 11, 2007.
- "How to Count Words Cleverly"; Graduate Student Combinatorics Conference 2007; University of Washington (Seattle, Washington); April 21, 2007.
- "A Bijection on {123-132}-Avoiding Multiset Permutations"; Fourth International Conference on Permutation Patterns; Reykjavik University (Reykjavik, Iceland); June 12, 2006.
- "Graph Cover Pebblings"; Indiana Section MAA meeting; Butler University (Indianapolis, Indiana); March 28, 2003.
- "Graphs of Essentially Equivalent Lattice Paths"; Nebraska Conference for Undergraduate Women in Mathematics; University of Nebraska (Lincoln, Nebraska); February 8, 2003.
- "Constructing Planar Regions with Maximal Distance d(P,Q)"; Indiana Section MAA Meeting; Earlham College (Richmond, Indiana); April 8, 2000.

LOCAL COLLOQUIUM/SEMINAR PRESENTATIONS

- "Patterns in Permutations"; Undergraduate Colloquium; Valparaiso University (Valparaiso, Indiana); March 19, 2021.

- "Mathematics as Play"; Mortar Board Last Lecture series; Valparaiso University (Valparaiso, Indiana); February 12, 2018.
- "Sorting with Pop Stacks"; Math and Statistics Faculty Research Seminar; Valparaiso University (Valparaiso, Indiana); March 21, 2017.
- "What's in Your Wallet!?"; Undergraduate Colloquium; Valparaiso University (Valparaiso, Indiana); January 27, 2017.
- "How to Count like a Mathematician"; Valparaiso Experience in Research by Undergraduate Mathematicians (VERUM) Seminar; Valparaiso University (Valparaiso, Indiana); June 7, 2013.
- "How to Count like a Mathematician"; Christopher Center Faculty Seminar; Valparaiso University (Valparaiso, Indiana); March 27, 2013.
- "Experimenting with Barred Patterns"; Rutgers Experimental Math Seminar; Rutgers University (Piscataway, New Jersey); March 13, 2008.
- "Counting Trees"; Rutgers Pizza Seminar; Rutgers University (Piscataway, New Jersey); February 1, 2008.
- "An Introduction to Enumeration Schemes (or How I Taught My Computer to Count)"; Rutgers Graduate Combinatorics Seminar; Rutgers University (Piscataway, New Jersey); December 10, 2007.
- "How to Count Permutations Cleverly"; Rutgers Pizza Seminar; Rutgers University (Piscataway, New Jersey); September 13, 2006.
- "The Bergman Complex of a Matroid"; Rutgers Tropical Math Seminar; Rutgers University (Piscataway, New Jersey); November 16, 2005.
- "All About 1089"; Rutgers Pizza Seminar; Rutgers University (Piscataway, New Jersey); October 14, 2005.
- "Pebbling, Cover Pebbling, and Chocolate"; Rutgers Pizza Seminar; Rutgers University (Piscataway, New Jersey); March 26, 2004.
- "An Introduction to Hypergraphs"; Undergraduate Colloquium; Valparaiso University (Valparaiso, Indiana); March 18, 2003.
- "Cross Numbers of Minimal Zero Sequences"; Undergraduate Colloquium; Valparaiso University (Valparaiso, Indiana); February 5, 2002.
- "Circumellipses"; Undergraduate Colloquium; Valparaiso University (Valparaiso, Indiana); April 17, 2001.
- "Curves of Constant Width"; Undergraduate Colloquium; Valparaiso University (Valparaiso, Indiana); October 17, 2000.

NON-RESEARCH PRESENTATIONS

- "MathPath and Its Indiana Connections" (joint with Matt DeLong, Marian University); MAA Indiana Section Meeting; Indiana Wesleyan University (Marion, Indiana); April 9, 2022.
- "What is a Mathematician?"; 6th, 7th, and 8th grade guest speaker; Immanuel Lutheran School (Memphis, Tennessee); December 18, 2012.
- "What is a Mathematician?"; Discoveries Unlimited Speaker's Bureau presentation; Valparaiso University (Valparaiso, Indiana); October 18, 2012

- "The Valpo Path to Success"; Valparaiso Scholarship Day 2011 Mathematical Sciences presentation; Valparaiso University (Valparaiso, Indiana); February 18, 2011.
- "The Valpo Path to Success"; Valparaiso Scholarship Day 2010 Mathematical Sciences presentation; Valparaiso University (Valparaiso, Indiana); February 6, 2010.
- "Dealing with Different Levels of Academic Preparation"; Rutgers TA Project Workshop; Rutgers University (Piscataway, New Jersey); February 13, 2008.
- "What is a Mathematician?"; 8th grade guest speaker; Immanuel Lutheran School (Memphis, Tennessee); January 11, 2008.
- "Assessment and Feedback"; Introduction to College Teaching 2 lecture (joint with Esther Leibovich, Rutgers Ecology & Evolution Department); Rutgers University (Piscataway, NJ); November 14, 2007.
- "Designing Creative Assignments"; Introduction to College Teaching 2 lecture (joint with Colleen Kennedy, Rutgers French Department); Rutgers University (Piscataway, NJ); October 31, 2007.
- "Dealing with Different Levels of Academic Preparation"; Rutgers TA Project Workshop; Rutgers University (Piscataway, New Jersey); February 21, 2007.

PANELIST PRESENTATIONS

- "The Role of Community in Communicating Mathematics"; AMS Committee on Education Panel Discussion; 2026 Joint Mathematics Meetings (Washington, DC); January 5, 2026.
- "Engaging Students in Mathematics & Statistics: Strategies for Inside and Outside the Classroom"; Panel of 2024 Teaching Award Winners; Trisection meeting of the Indiana, Kentucky, and Ohio Sections of the Mathematical Association of America; Northern Kentucky University (Highland Heights, Kentucky); April 5, 2025.
- "Fostering Curiosity & Self-Directed Learning via Scaffolding"; Project NExT panel; Mathfest (Indianapolis, Indiana); August 7, 2024.
- "Jumpstarting Undergraduate Research: How to find funding for your undergraduate research"; Project NExT panel; Joint Mathematics Meetings (Boston, Massachusetts); January 5, 2023.
- Opportunities Panel; Online Undergraduate Resource Fair for the Advancement and Alliance of Marginalized Mathematicians (OURFA^{2}M^2) (virtual); November 19, 2022.
- Panel on Education Programs; Three Decades of DIMACS: The Journey Continues; New Brunswick, New Jersey; November 22, 2019.
- Undergraduate Research SIGMAA panel on choosing problems for undergraduate research; Mathfest 2019 (Cincinnati, Ohio); August 3, 2019.
- "Engaging Students in Undergraduate Research: The Role of Effective Advising"; Mathfest 2018 (Denver, Colorado); August 1, 2018.
- "Implementing the 2015 CUPM Content Recommendations"; MAA Indiana Section Meeting, Manchester University, October 7, 2017.

CONFERENCES ORGANIZED

- International Conference on Permutation Patterns, Valparaiso University, June 20–24, 2022.
- 2020 Virtual Workshop on Permutation Patterns, June 30–July 1, 2020.
- Mathematical Association of America Spring 2019 Indiana Section meeting, University of Indianapolis, April 5–6, 2019.

- Mathematical Association of America Fall 2018 Indiana Section meeting, Hanover College, October 13, 2018.
- Permutation Patterns 2018, Dartmouth College, July 9–13, 2018.
- DIMACS Conference on Challenges of Identifying Integer Sequences, DIMACS, Rutgers University, October 9–10, 2014.
- From A=B to Z=60: A Conference in Honor of Doron Zeilberger's 60th Birthday, Rutgers University, May 27–28, 2010.

CONFERENCE SESSIONS ORGANIZED

- Special Session on Enumerative Combinatorics, AMS Fall Central Sectional Meeting, University of Texas San Antonio, September 14–15, 2024.
- Special Session on Enumerative Combinatorics and Graph Theoretic Applications, AMS Fall Central Sectional Meeting, Loyola University Chicago, October 3–4, 2015.

PANELS CO-ORGANIZED

- "What Did You Do? What Will You Keep? Reflections on Mentoring Undergraduate Researchers During and Post-Pandemic", Joint Mathematics Meetings (virtual), April 7, 2022.
- "Goals and Pedagogy for Remedial Mathematics", MAA Indiana Section Meeting, IPFW, May 5, 2014.
- "Publishing Undergraduate Research", MAA Indiana Section Meeting, University of Southern Indiana, October 26, 2013.
- "Incorporating History across the Mathematics Curriculum", MAA Indiana Section Meeting, Indiana University East, March 23, 2013.
- "Inquiry Based Learning", MAA Indiana Section Meeting, Butler University, October 27, 2012.
- "Establishing Interdisciplinary research collaborations", MAA Indiana Section Meeting, Indiana Wesleyan University, April 9, 2011.
- "Transitioning Students from High School to College Mathematics", MAA Indiana Section Meeting, Purdue North Central University, October 16, 2010.
- "Undergraduate Research", MAA Indiana Section Meeting, Franklin College, April 10, 2010.

INVITED WORKSHOP PARTICIPATION

- Dagstuhl Seminar on Pattern Avoidance, Statistical Mechanics and Computational Complexity, March 2023.

UNDERGRADUATE RESEARCH SUPERVISED

- Deven Harris, Jacob Roth, and Austin Schnoor, "Pattern avoidance in generalized permutations", Math 496, 2019–2020.
  - Poster presentation at Valparaiso Symposium on Undergraduate Research and Creative Expression, May 14, 2020.
- Julia Krull, Eric Redmon, and Andrew Reimer-Berg, "Pattern Packing in Words", Valparaiso Experience in Research by Undergraduate Mathematicians, 2018.
  - Poster presentation at Sixteenth International Conference on Permutation Patterns; Dartmouth College (Hanover, New Hampshire); July 9, 2018.

  - Student presentation at Indiana Undergraduate Research Conference (Indiana University), July 24, 2018.
  - Poster presentation at Valparaiso Summer Interdisciplinary Research Symposium, July 30, 2018.
  - Poster presentation at 2019 Joint Mathematics Meetings, January 18, 2019.
- Michael Bukata, Ryan Kulwicki, Nicholas Lewandowski, Jacob Roth, and Teresa Wheeland, "Statistics on Pattern-avoiding Permutations", Math 496, 2017–2018 and MSEED summer research, 2018.
  - Poster presentation at Valparaiso Symposium on Undergraduate Research and Creative Expression, May 3, 2018.
  - Poster presentation at Sixteenth International Conference on Permutation Patterns; Dartmouth College (Hanover, New Hampshire); July 9, 2018.
  - Poster presentation at Valparaiso Summer Interdisciplinary Research Symposium, July 30, 2018.
  - Poster presentation at University of Illinois Chicago Undergraduate Mathematics Symposium, November 10, 2018.
  - Resulting work published in *Journal of Integer Sequences*.
  - Student Jacob Roth was selected as a 2019–2020 National Goldwater Scholar with a research statement that grew out of this project.
- Felipe Alzate, Bill Mackelfresh, and Lily Wisniewski, "Statistics on Shuffles", Math 492, 2015–2016.
  - Poster presentation at Valparaiso Celebration of Undergraduate Scholarship, April 23, 2016.
- Marika Diepenbroek, Monica Maus, and Alex Stoll, "Pattern avoidance in reverse double lists", Valparaiso Experience in Research by Undergraduate Mathematicians, 2015.
  - Student presentation at Indiana Undergraduate Research Conference (Indiana University), July 23, 2015.
  - Outstanding poster prize at 2016 Joint Mathematics Meetings Undergraduate Poster Session, January 8, 2016.
  - Resulting work published in *Discrete Mathematics and Theoretical Computer Science (DMTCS)*.
- Charles Cratty, Samuel Erickson, and Frehiwet Negassi, "Pattern avoidance in double lists", Valparaiso Experience in Research by Undergraduate Mathematicians, 2014.
  - Student presentation at Indiana Undergraduate Research Conference (IUPUI), July 23, 2014.
  - Poster presentation at 2015 Joint Mathematics Meetings, January 12, 2015.
  - Resulting work published in *Involve: a Journal of Mathematics*.
- Rachel Rockey, "deBruijn arrays for L-fillings", MSEED summer research student, 2013.
  - Student presentation at Indiana MAA meeting, IPFW (Fort Wayne, IN), April 5, 2014.
  - Poster presentation at Valparaiso Celebration of Undergraduate Scholarship, May 3, 2014.
  - Resulting work published in *Mathematics Magazine*.
- Timothy Goodrich, Will Olson, and Ruyue Yuan, "Multi-Sorting Permutations with Finite Stacks", Math 492, 2012–2013.

  - Poster presentation at 2013 Joint Mathematics Meetings, January 11, 2013.
  - Two student presentations at Rose Hulman Undergraduate Research Conference, April 19–20, 2013.
  - Poster presentation at Valparaiso Celebration of Undergraduate Scholarship, April 24, 2013.
- Connor Scholten, Tyler Schrock, and Alexa Serrato, "Non-contiguous Pattern Containment in Trees", Valparaiso Experience in Research by Undergraduate Mathematicians, 2012.
  - Student presentation at Indiana Undergraduate Research Conference (Indiana University), July 17, 2012.
  - Poster presentation at 2013 Joint Mathematics Meetings, January 11, 2013.
  - Resulting work published in *ISRN Combinatorics*.
- Timothy Goodrich, Drew Groth, and Lauren Knop, "Sorting Permutations with Finite Stacks", Math 492, 2011–2012.
  - Student presentation at Indiana MAA meeting, Ball State University, March 24, 2012.
  - Poster presentation at Valparaiso Celebration of Undergraduate Scholarship, April 24, 2012.
- Michael Dairyko, Samantha Tyner, and Casey Wynn, "Pattern Avoidance in Trees", Valparaiso Experience in Research by Undergraduate Mathematicians, 2011.
  - Student presentation at Indiana Undergraduate Research Conference (Indiana University), July 27, 2011.
  - Poster presentation at 2012 Joint Mathematics Meetings, January 6, 2012.
  - Resulting work published in *Electronic Journal of Combinatorics*.
- Samantha Frisk, Drew Groth, and Lexi Paradine, "The Derivative of an Integer", Math 492, 2010–2011.
  - Presented poster at Valparaiso Celebration of Undergraduate Scholarship, April 20, 2011.
- Nathan Gabriel, Katie Peske, and Sam Tay, "Pattern Avoidance in Ternary Trees", Valparaiso Experience in Research by Undergraduate Mathematicians, 2010.
  - Student presentation at Indiana Undergraduate Research Conference (Indiana University), July 29, 2010.
  - Outstanding poster prize at 2011 Joint Mathematics Meetings Undergraduate Poster Session, January 8, 2011.
  - Resulting work published in *Journal of Integer Sequences*.
- Samantha Frisk, Patrick Slattery, Brittany Wagoner, and Kelsey Watson, "Medians of Permutations", Math 492, 2009–2010.
  - Student presentation at Indiana MAA meeting, Franklin College, April 10, 2010.
  - Presented poster at Valparaiso Celebration of Undergraduate Scholarship, April 21, 2010.

UNDERGRADUATE RESEARCH CONSULTING

(* denotes undergraduate student)

- Polina Kogay*, Justin Bui*, Alexander Lau*, Lara Pudwell, and Mark M. Budnik, "Capacitance Extractions for New Carbon Nanotube Capacitor Electrode Structures", 2010 Nanotechnology Symposium, Louisville, KY, September 24–25, 2010.

PH.D. THESIS COMMITTEE MEMBER

- Yoong Kuan (Andrew) Goh, "Variations of Stack Sorting and Pattern Avoidance", University of Technology, Sydney, December 2019
- Nathaniel Shar, "Experimental Methods in Permutation Patterns and Bijective Proofs", Rutgers University, March 2016.

OUTREACH ACTIVITIES

- MathPath Instructor for "Generating functions and sequences", and "Counting permutations" breakouts, July 2024.
- MathPath Instructor for "Basic Counting", "Generating functions and sequences", and "Counting permutations" breakouts, July 2023.
- MathPath Instructor for "Compositions, Partitions, and Fibonacci Numbers", "Catalan numbers", and "Counting permutations" breakouts, July 2022.
- Member, MathPath 2021 Admissions Committee.
- MathPath Instructor for "Catalan numbers", "Proof by story", "Generating functions and sequences" and "Counting permutations" breakouts, July 2020, and July 2021.
- MathPath Instructor for "Generating functions and sequences" and "Counting permutations" breakouts, July 2019.

SERVICE: PROFESSIONAL

- Associate Editor, Bulletin of the AMS Editorial Board for Book Reviews, 2023–2028.
- Member, MAA Committee on the James R. C. Leitzel Lecture, 2022–2025.
- Member, Indiana MAA ad hoc Bylaws Committee, 2021–2022.
- Member, Enumerative Combinatorics and Applications editorial board, 2020–present.
- Member, On-Line Encyclopedia of Integer Sequences Board of Trustees, 2019–present.
- Guest Editor, Permutation Patterns 2019 Conference Proceedings volume in *Discrete Mathematics and Theoretical Computer Science*.
- Member, Indiana MAA Distinguished Teaching Award Committee, 2018–2022 (chair, 2020–2021).
- Chair, Indiana Section of the MAA, 2018–2019.
- Guest Editor, Permutation Patterns 2018 Conference Proceedings volume in *Discrete Mathematics and Theoretical Computer Science*.
- Vice chair, Indiana Section of the MAA, 2017–2018.
- Member, AWM Mentoring Grant Selection Committee, 2017–2019.
- Participant, MAA Instructional Practices Workshop, October 2015.
- Mentor, MAA Project NExT Consultant Program, Red 2015, Blue 2017, Brown 2020 cohorts.
- Member, Ball State Undergraduate Mathematics Exchange editorial board, 2014–present.
- Member, Rose-Hulman Undergraduate Mathematics Journal editorial board, 2014–present.
- CUR (Council on Undergraduate Research) Councilor, Mathematics and Computer Science Division, 2014–2017.

- Member, National Science Foundation Funding Review Panel, November 2013.
- Rose Hulman Undergraduate Mathematics Conference, best student presentation selection panel, 2013.
- International Conference on Permutation Patterns Steering Committee, 2012–present.
- Authored Frankin College's Joint Comprehensive Mathematics Exam, Fall 2010, 2011.
- Member, National Science Foundation Funding Review Panel, November 2010.
- Member, National Science Foundation Funding Review Panel, January 2010.
- Member, Indiana MAA Nominating Committee, 2009–2014 (chair, 2010–2011, 2013–2014).
- Indiana Section NExT Vice Coordinator 2009–2012, Coordinator 2012–2014.
- Ad hoc reviewer for 30 journals.

SERVICE: UNIVERSITY

- Member, Arts and Sciences metrics committee, 2024
- Vice President, Phi Beta Kappa Eta of Indiana Chapter, 2022–2025.
- Member, Brandt Professorship selection committee, 2021.
- Member, Fraternity Man and Sorority Woman of the Year selection committee, 2021.
- Member, Baccalaureate Task Force, 2019–2020.
- Member, Academic Affairs Budget Working Group, 2018–2019.
- Member, Valparaiso University Fraternity and Sorority Expansion Committee, 2017 – present.
- Member, VU Campus Judicial Board, 2014 – present.
- Advisor, Phi Delta Theta fraternity, Indiana Iota chapter, (faculty advisor 2012 – 2019, advisory board chair, 2019 – present).
- Member, Valparaiso Creative Work and Research Committee, 2012 – 2020, (chair 2017 – 2020).
- Member, VU Student Scholarship Advisory Committee, 2011 – 2014.
- Member, VU Faculty Grievance Committee, 2011 – 2013.
- Member, Steering Committee for VU summer undergraduate research programs, 2010 – 2014, 2018.

SERVICE: COMMUNITY

- Member of P.E.O. (Philanthropic Educational Organization), which raises funding for grants, scholarships, and loans for higher education for women, 2010 – present.
- Authored Immanuel Lutheran School's annual academic challenge mathematics questions, Fall 2010–2019.
- STEM Mentor for Discoveries Unlimited, 2010 – 2013.

PROFESSIONAL DEVELOPMENT

- Participant in Valparaiso University's Wente Seminar on Faith and Pedagogy, Spring 2020.
- Participant in Valparaiso University's Writing-in-the-Discipline (WID) Certification Workshop, May 2019.

- Participant in MAA Minicourse on Teaching Linear Algebra: Learning Concepts Often Difficult to Understand, Mathfest 2016.
- Participant in New Directions for Mathematics Research Experiences for Undergraduates conference, June 2013.
- Participant in Trends in Undergraduate Research in the Mathematical Sciences conference, October 2012.
- Participant in MAA Short Course on Sage, Mathfest 2010.
- Project NExT Fellow, 2008–2009.

PROFESSIONAL MEMBERSHIPS

- Mathematical Association of America (since 1999)
- American Mathematical Society (since 2001)
- Association for Women in Mathematics (since 2003)
- Council on Undergraduate Research (since 2012)
- National Association of Mathematicians (since 2020)

COURSES TAUGHT

- Intermediate Algebra
- College Algebra
- Trigonometry and Functions
- Calculus and Functions I and II
- Calculus I, II, and III
- Combinatorics I and II
- Discrete Mathematics
- Experimental Mathematics
- Finite Mathematics
- Linear Algebra
- Linear Systems and Matrices
- Mathematical Ideas: Math of Voting and Elections
- Transitions in Mathematics

REFERENCES

Available upon request.