

Contents

Introduction: The Power of Community	ix
Acknowledgments	xiii
Part 1: Communities for Undergraduate and Secondary-School Mathematics Students	1
1 Building Community in the Classroom	3
<i>Erica Winterer</i>	
Winterer outlines research-based strategies for building community in the classroom.	
2 St. Olaf's Big Tent: From Teaching Mathematics to Teaching Students	15
<i>Deanna Haunsperger and Stephen Kennedy with Ted Vessey</i>	
St. Olaf made a dedicated decision in the 1980s to build a departmental community and welcome a wider group of students to the major.	
3 Todxs Cuentan en ECCO: Building a Mathematical Community	23
<i>Federico Ardila-Mantilla and Carolina Benedetti-Velásquez</i>	
ECCO is a collaborative community of students and researchers that gather biannually for a two-week summer school with minicourses, research talks and posters, and legendary social events.	
4 The Carleton SMP: Planning the Unplanned	35
<i>Deanna Haunsperger and Stephen Kennedy</i>	
Originally a four-week summer program to advance undergraduate women in math, the Carleton Summer Mathematics Program has grown into an ongoing community of women at many stages in their careers.	
5 The Nebraska Conference for Undergraduate Women in Mathematics	45
<i>Christine Kelley and Glenn Ledder</i>	
The NCUWM annual three-day conference was designed to increase the number of women who continue on to advanced degrees in mathematics.	

- 6 The EDGE Community** **55**
Amy Oden and Ami Radunskaya
 The Enhancing Diversity in Graduate Education Program was founded in 1998 as a summer experience to encourage women in graduate school through mathematics, community-building, and mentoring.
- 7 Prepare2Nspire: Effects of a Near-Peer Tutoring Program** **65**
Elena A. Contreras Gullickson and Lesa M. Covington Clarkson
 A 2011 Minnesota state mandate for algebra led to the creation of an 8th- and 11th-grade tutoring program to support students.
- 8 Bryn Mawr College, 1885–1940: “mathematics on its mind”** **75**
Madeline E. Polhill
 Leaders at Bryn Mawr College in 1885–1940 implemented successful strategies with timeless possibilities for supporting women and other underrepresented groups in mathematics.
- 9 The Smith College Center for Women in Mathematics** **83**
Patricia Cahn and Stefanie Wang
 The Center for Women in Mathematics Postbaccalaureate Program encourages women with non-traditional backgrounds interested in pursuing graduate work in mathematics.
- 10 Math Alliance: Investing in Tomorrow Today** **93**
Alexander J. Barrios, Ranthony A. C. Edmonds, and Roberto Soto
 Math Alliance aims to increase the number of individuals from underrepresented groups that earn PhDs in mathematics.
- 11 Youngstown State AWM: Mentorship and Fellowship** **99**
Monica Busser, Alanis Chew, Jacquelyn Ehko, and Ashley Orr
 Youngstown State revived its AWM chapter in 2013 to attract more women to mathematics and create community within the department.
- 12 Honoring Culture in Indigenous and Latinx Communities** **109**
Belin Tsinnajinnie with Sam Kennedy
 Mathematics is advanced in Indigenous and Latinx communities by initiatives, like Math Circles, that involve families and communities.
- 13 The Duluth Undergraduate Research Program: A Community of Peers** **115**
Joseph A. Gallian
 A vertically-integrated program, the Duluth community brings together talented mathematicians of all ages to do research.

Part 2: Communities for Graduate Students and Professional Mathematicians	123
14 Women in Numbers: a Research Community	125
<i>Michelle Manes</i>	
WIN was formed to increase the number of active female researchers in Number Theory; now other research collaboration conferences for women imitate its success.	
15 The Women and Mathematics Program at the IAS	135
<i>Michelle Huguenin, Dusa McDuff, Margaret Readdy, and Karen Uhlenbeck</i>	
WAM is a week-long program involving women at all stages from undergraduates to faculty.	
16 The Infinite Possibilities Conference: Creating Moments of Belonging	145
<i>Lily S. Khadjavi, Tanya Moore, and Kimberly Weems</i>	
IPC is designed to support, encourage, and celebrate underrepresented women in the mathematical sciences.	
17 On Building a Research Community of Women Mathematicians in Africa	157
<i>Karin-Therese Howell and Nancy Ann Neudauer</i>	
Two research conferences begin to build a community for women in mathematics in Africa.	
18 MAA Project NExT: Community During a Critical Transition	167
<i>Julie Barnes, Alissa S. Crans, Matthew DeLong, Dave Kung, and T. Christine Stevens</i>	
Project NExT provides beginning faculty members the opportunity to explore professional issues and instructional practices in a community of peers.	
19 Math Mamas: Navigating Mathematics and Motherhood	177
<i>Emille Davie Lawrence</i>	
Math Mamas is a Facebook group supporting women who are both math professionals and mothers as they navigate these two responsibilities.	
20 From the Diary of a Black Mathematician	183
<i>Edray Herber Goins and Amy Oden</i>	
The National Association of Mathematicians promotes excellence for all underrepresented people in mathematics, Black mathematicians in particular.	

21	Fostering a Community of LGBTQ+ Mathematicians	191
	<i>Christopher Goff, George Bradley, Alexander Hoover, and Aubrey Kemp</i>	
	Spectra formed to create a supportive environment for LGBTQ+ mathematicians and has grown to provide programming at national meetings.	
22	The Community of AIM SQuaREs	201
	<i>Estelle Basor</i>	
	An AIM SQuaRE provides an intense research opportunity for a small community of four to six collaborators.	
23	The EPaDel Community	207
	<i>Ximena Catepillán and Linda McGuire</i>	
	The EPaDel section of the MAA is building a thoughtful and intentional community to support all members of their section.	
24	The Mathematicians of Color Alliance	217
	<i>Michael Young</i>	
	MOCA offers mentoring to math graduate students of color at Iowa State University.	
25	The Story of RUME: Forging a Community of Practice	225
	<i>Stacy Brown and Annie Selden</i>	
	Colleagues interested in the Research in Undergraduate Mathematics Education came together to grow a professional community.	
26	MSRI Addresses the Challenge	231
	<i>Hélène Barcelo and Michael F. Singer</i>	
	The Mathematical Science Research Institute builds communities that support a diverse collection of researchers and catalyze their collaborations.	
	Afterword	241