

## Rebecca E. Garcia

September 14, 2017

### Campus Address

Department of Mathematics and Statistics  
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Huntsville, TX 77340-2206

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### Education

#### Ph.D. in Mathematics

August 2004

New Mexico State University, Las Cruces, NM

*Dissertation:* On the minors of catalecticant matrices and on the coadunation of generalized crowns.

*Advisor:* Irena Swanson

#### M.A. in Mathematics

May 1999

University of California, Berkeley, CA

#### B.S. in Mathematics

May 1995

Loyola Marymount University, Los Angeles, CA

*Cum Laude*

### Research Interests

Computational Commutative Algebra  
Computational Algebraic Geometry  
Algebraic Combinatorics  
Theory of Order Dimension of Partially Ordered Sets  
Using Original Sources in Mathematics Education  
Broadening Participation in the Mathematical Sciences

### Professional Organizations

American Mathematical Society  
Mathematical Association of America  
Society for the Advancement of Chicanos and Native Americans in Science  
Association for Women in Mathematics

### Employment

#### Associate Professor,

Fall 2010 - Present

Sam Houston State University  
Department of Mathematics and Statistics  
Huntsville, TX 77340 - 2206

Independently conduct three mathematics classes per semester; Engage in mathematical research.

#### Co-Director of the Pacific Undergraduate Research Experience in Mathematics Program (PURE Math),

Summer 2011 - Summer 2015

University of Hawai'i at Hilo  
Department of Mathematics  
Hilo, HI 96720

Administrator for PURE Math Program and facilitate weekly professional development workshops.

#### Assistant Professor,

Fall 2004 - Spring 2010

Sam Houston State University  
Department of Mathematics and Statistics  
Huntsville, TX 77340 - 2206

Independently conduct three mathematics classes per semester; Engage in mathematical research.

**Visiting Scholar,**

Fall 2005 - Summer 2007

Texas A&M University  
Department of Mathematics  
College Station, TX 77845

Attend and participate in weekly working seminars in algebraic geometry and commutative algebra.

**Publications****In Preparation**

R. Garcia, L. García-Puente, E. Herman, A. Martin, B. Oakley, “Super-Accessible Transient of a Sandpile Monoid,” in preparation for submission to the *Electronic Journal of Combinatorics*.

R. Garcia, L. García-Puente, S. Spielvogel, “Toward the Completion of Emmy Noether’s 1908 Doctoral Dissertation on the Algebraic Invariants of Fourth Degree Forms in Three Variables,” in preparation for possible book publication through the AMS.

R. Garcia, T. Koyrshina, M. Montes, K. Watkins, “Algebraic Combinatorics of Franklin Magic Circles,” in preparation for submission to *The Australasian Journal of Combinatorics*.

R. Garcia, P. Harris, B. Kubik, S. Talbott, “The Order Dimension of Layered Non-Identical Generalized Crowns,” in preparation for submission to *Order*.

**Submitted**

F. Barrera-Cruz, R. Garcia, P. Harris, B. Kubik, H. Smith, S. Talbott, L. Taylor and W.T. Trotter, “The Graph of Critical Pairs of a Crown,” submitted (2016) to *Order*.

R. Garcia, P. Harris, B. Kubik, S. Talbott, “Block Circulant Graphs and the Graphs of Critical Pairs of a Crown,” submitted (2015), revised and resubmitted (2016) to *Graphs and Combinatorics*.

R. Garcia, , L. García-Puente, R. Kruse, D. Miyata, E. Peterson, N. Youngs, “Neural Codes in Sage,” submitted (2016) to the Journal of Software for Algebra and Geometry.

R. Garcia, L. García Puente, J. Liu, R. Kruse, D. Miyata, E. Peterson, K. Phillipson, A. Shiu, “Gröbner Bases of Neural Ideals.” submitted (2016) to MEGA 2017 (Effective Methods in Algebraic Geometry) - a refereed conference in Europe that publishes accepted papers.

**Published**

R. Garcia, C. Wyels, “Broadening Participation and Promoting Success,” *Involve* Special Issue: Trends in Undergraduate Research in the Mathematical Sciences (Chicago, 2012), **Vol. 7, No. 3**, (2014) p. 315 - 326. DOI: 10.2140/involve.2014.7-3

R. Garcia and D. Silva, “Order Dimension of Layered Generalized Crowns,” *Ars Combinatoria*, Vol. CXIIIA, January 2014, p. 171 - 186.

S. Chapman, L. García-Puente, R. Garcia, M. Malandro, and K. Smith, “Algebraic and combinatorial aspects of sandpile monoids on directed graphs,” *Journal of Combinatorial Theory, Series A*, **120** (2013) 245 - 265.

R. Garcia, M. Lane and B. Loft, "Enumeration and Construction of Magic  $n$  Circles," *Mathematics and Computers in Simulation*, **82** (2011) 44 - 53.

R. Garcia, S. Meyer, S. Sanders, and A. Seitz, "Construction and enumeration of Franklin circles," *Involve*, **2** Issue 3 (2009), 357 – 370. Also available online at <http://pjm.math.berkeley.edu/involve/2009/2-3/index.xhtml>

R. Garcia, "On the Minors of Catalecticant Matrices and on the Coadunation of Generalized Crowns," Ph.D. Dissertation, New Mexico State University (2004)

R. Garcia (as R. Pablo), J. Little, D. Ortiz, R. Ortiz-Rosado, and K. Rios-Soto, "Some Remarks on Fitzpatrick and Flynn's Gröbner Basis Technique for Padé Approximation," *Journal of Symbolic Computation* **35** (2003), 451-461.

#### **Grants, Fellowships, Awards and Scholarships**

**Focused Research Group Grant** Through the Banff International Research Station (BIRS), the Focused Research Group is a program that allows a dedicated small group of mathematicians to spend three days at BIRS in Alberta, Canada to work on a project as specified in the proposal. (Submitted Fall 2016)

**SQuaRE Grant** Through the American Institute of Mathematics (AIM), the Structured Quartet Research Ensembles (SQuaREs) is a program that allows a dedicated small group of mathematicians to spend a week at the AIM in San Jose, California to work on a project as specified in the proposal, with the possibility of returning in following years. (Submitted Fall 2016)

**Distinguished College or University Teaching of Mathematics Award** bestowed by the Texas Section of the Mathematical Association of America ( Awarded Spring 2015)

**Mathematical Sciences Program of the National Security Agency Research Experience for Undergraduates Grant (Awarded)** Through the National Security Agency, the Division of Mathematical Sciences awards grants in support of undergraduate research programs in mathematics which target severely underrepresented groups. This grant will be used to help fund the Pacific Undergraduate Research Experience in Mathematics, beginning Summer 2014. **Amount awarded \$58,530.** (Submitted Fall 2013, Awarded Fall 2013)

**Mathematical Sciences Program of the National Security Agency Research Experience for Undergraduates Grant (Awarded)** Through the National Security Agency, the Division of Mathematical Sciences awards grants in support of undergraduate research programs in mathematics which target severely underrepresented groups. This grant will be used to help fund the Pacific Undergraduate Research Experience in Mathematics, beginning Summer 2012. **Amount awarded \$60,970.** (Submitted Fall 2011, Spring 2012)

**National Science Foundation Grant - Enhancing the Mathematical Sciences Workforce in the 21st Century (Awarded)** in collaboration with University of Hawai'i at Hilo to begin an undergraduate research program in mathematics targeting Pacific Islanders: Pacific Undergraduate Research Experience in Mathematics (PURE Math) to be launched Summer 2011. **Amount awarded \$1,473,691.** (Submitted Fall 2010, Awarded Spring 2011)

**National Science Foundation Grant - Research Experience for Undergraduates** in collaboration with University of Hawai'i at Hilo to begin an undergraduate

research program in mathematics targeting Pacific Islanders: Pacific Undergraduate Research Experience in Mathematics (PURE Math) to be launched Summer 2010. (Submitted Fall 2009)

**Center for Undergraduate Research in Mathematics Grant (Awarded)** Each year, eight to ten professors at various institutions across the United States are awarded grants to assist them financially, instructionally, and organizationally in operating successful undergraduate research groups at their own institutions during the academic year. **Amount awarded \$16,450.** (Summer 2007 - Spring 2008)

**SHSU Enhancement Grant for Research (Awarded)** Toward the planning and developmental stages of the 2011 Pacific Undergraduate Research Experience in Mathematics in the academic year 2009 - 2010. **Amount awarded \$18,000.** (Summer 2009 - Summer 2010)

**Application for SHSU Enhancement Grant for Research** Toward the planning and developmental stages of the 2009 Pacific Undergraduate Research Experience in Mathematics during the academic year 2008 - 2009. (Fall 2007)

**Application for Conferences, Workshops, and Special Situations Grant** National Security Agency Grant, Division of Mathematical Sciences. Toward the support of the pilot year of the Pacific Undergraduate Research Experience in Mathematics in Summer 2009. (Fall 2007)

**Application for Travel Grant,** Association for Women in Mathematics. (Spring 2005)

## Teaching Experience

### Sam Houston State University

#### *Courses Taught*

College Mathematics  
 Precalculus Algebra  
 Mathematics for Managerial Decision-Making I  
 Mathematics for Managerial Decision-Making II  
 Calculus I  
 Calculus II  
 Calculus Survey  
 Linear Algebra  
 Discrete Mathematics  
 Introduction to Mathematical Proofs  
 Algebraic Structures  
 (Graduate) Numerical Linear Algebra  
 (Graduate) Algebra I  
 (Graduate) Algebra II  
 (Graduate) Topics Course: Computational Commutative Algebra  
 (Graduate) Complex Analysis

#### *Direction of Masters Students' Projects / Thesis*

- **Joshua Miller**, “The Sandpile Group of Thick Cycles.” (2015)
- **Francisco Quiroz**, “The Duals of the Series-Parallel Graphs  $C_{a,n}$  and  $||_i P_{a_i}$ .” (Prospectus, 2014)
- **Ashani Gamage**, “On the Sandpile Group over Generalized Crowns.” (Prospectus, 2014)

- **Sarah Spielvogel**, “Toward the Completion of Emmy Noether 1908 Doctoral Dissertation on the Algebraic Invariants of Fourth Degree Forms in Three Variables” (Thesis, 2012)
- **Charity Bankhead**, “Strict Hypergraph of Critical Pairs for Generalized Crowns” (Thesis, 2011)
- **Khulud Alyousef**, “Towards a Generalization of the Sandpile Group of Cycles” (2008)
- **Mark Lane**, “Algebraic Combinatorics of Magic  $n$ -circles” (2008)
- **Darrel Silva**, “Layers of Generalized Crowns” (2007)

*Direction of Undergraduate Students’ Projects*

- PURE Math 2015 Ryan Kruse, Dane Miyata, Ethan Peterson “Gröbner Bases of Neural Ideals.” (Summer 2015)
- PURE Math 2014 Amadeus Martin, Brian Oakley, Elizabeth Hermann “Super-Accessible Transient of a Sandpile Monoid.” (Summer 2014)
- PURE Math 2014 Bianca Mastache, Vincent Longo, Angel Castillo “Sandpile Group of Series Parallel Graphs.” (Summer 2014)
- Caroline Tillman “Updating the Statistics for ‘Odds on You.’” (Fall 2013)
- LURE Research Advisor for Tatiana Kovyrshina, Maxsimino Montes, Katie Watkins on “Enumerating and Constructing Magic Circles” (Summer 2010 - Summer 2012) – Montes wins the Undergraduate Poster Award in General Mathematics at the 2011 SACNAS National Conference.
- Stefanie Meyer, Stacey Sanders and Amanda Seitz, “Algebraic Combinatorics of Franklin Magic Circles” (Fall 2007 - Spring 2008)
- Mark Lane, “Constructing and Enumerating Diametric Magic  $n$ -Circles” (Spring 2005 - Fall 2006)

**Invited  
Talks**

**“Neural Ideals and Gröbner Bases”** February 2017  
Keynote presentation for the 2017 ASPIRE Conference, Florida Gulf Coast University, Fort Myers, FL

**“Enumeration and Construction of Franklin’s Magic Circle”** December 2016  
Active-learning mathematics presentation at the Saturday Mathematics Workshop, Charter Oak High School, Covina, CA.

**“Sandpile Group on Series-Parallel Graphs”** April 2016  
Presented at the Infinite Horizons Lecture Series sponsored by the Kennesaw Women in Mathematics, Kennesaw State University, Atlanta, GA.

**“Enumeration and Construction of Franklin’s Magic Circle”** Fall 2014  
Presented at the Women of Color in the Mathematical Sciences, The United States Military Academy, West Point, NY.

**“Sandpile Group on Series-Parallel Graphs”** Fall 2014  
Presented at the Mathematics Seminar, Texas A & M University, Galveston, TX.

**“Enumeration and Construction of Franklin’s Magic Circle”** Spring 2014  
**Plenary Talk** presented at the CombinaTexas, Texas A & M University, College Station, TX.

- “PURE Math”** Fall 2013  
Presented at the Journeys Seminar for the Honors College, Sam Houston State University, Huntsville, TX.
- “Strict Hypergraphs of Critical Pairs for Generalized Crowns”** Fall 2013  
Presented at the Scientific Symposia Session *Current Contributions by Women Mathematicians*, SACNAS National Conference, San Antonio, TX.
- “Enumeration and Construction of Franklin’s Magic Circle”** Fall 2012  
Presented at the Combinatorics Seminar, Texas State University, San Marcos, TX.
- “Enumeration and Construction of Franklin’s Magic Circle”** Spring 2012  
Presented at the American Mathematical Society Western Regional Conference, University of Hawai’i at Manoa, Honolulu, HI.
- “Benjamin Franklin’s Magic”** Spring 2011  
Presented at the Infinite Horizons Lecture Series sponsored by the Kennesaw Women in Mathematics, Kennesaw State University, Atlanta, GA.
- “Order Dimension of Layered Generalized Crowns”** Fall 2009  
Presented at the Department of Mathematics and Statistics Colloquium, Sam Houston State University, Huntsville, TX.
- “Enumerating and Constructing Magic  $n$ -Circles,”** Fall 2009  
Presented at the 2009 SACNAS Conference: An Abstract Look at Algebra, Dallas, TX.
- “Enumerating and Constructing Magic  $n$ -Circles,”** Spring 2009  
Presented at the Mathematics Colloquium at Reed College, Portland, OR.
- “Sandpile Groups of Flowers”** Fall 2008  
Presented at the Algebraic Combinatorics Seminar, Sam Houston State University, Huntsville, TX.
- “Sandpile Groups”** Fall 2008  
Presented at the Department of Mathematics Friday Colloquia, University of Dallas Irving, TX.
- “Layers of Generalized Crowns”** Spring 2007  
Presented in the Research Presentation Sessions, Infinite Possibilities Conference, North Carolina State University, Raleigh, NC.
- “On Hillar’s and Nie’s Elementary and Constructive Solution to Hilbert’s 17<sup>th</sup> Problem”** Spring 2007  
Presented at the Department of Mathematics and Statistics Colloquium, Sam Houston State University, Huntsville, TX.

**Contributed  
Talks**

**“Coadunation of Generalized Crowns”** Spring 2007  
Presented at the Special Session of Universal Algebra and Ordered Sets, AMS - MAA Joint Meetings,  
New Orleans, LA.

**“Coadunation of Generalized Partially Ordered Sets”** Spring 2005  
Presented in the Professional Talks, Infinite Possibilities Conference, Spelman College,  
Atlanta, GA.

**“REUs: Broadening Participation and Promoting Success”** Fall 2013  
presented at the ADVANCE Purdue 2013 Women of Color Faculty in STEM Conference,  
Indianapolis, IN.

**“Benjamin Franklin’s Magic”** Spring 2012  
presented at the 2012 Joint Mathematics Meeting, MAA General Contributed Paper Session  
“Other”,  
Boston, MA.

**“Mathematical Models: Current Research of Present-Day Role Models of the Underrepresented,”** Fall 2011  
organized Scientific Symposium for the 2011 SACNAS National Conference - William Ryan,  
San Jose, CA.

**“Benjamin Franklin’s Magic”** Spring 2011  
presented at the Freshman Seminar for Mathematics Majors, Loyola Marymount University  
Los Angeles, CA.

**“Dimension Theory of Layered Generalized Crowns,”** Fall 2010  
Poster presented at the 2010 Aspectos Combinatorios y Computacionales de Optimización,  
Topología y Algebra (ACCOTA),  
Playa del Carmen, Mexico.

**“Dimension Theory of Layered Generalized Crowns,”** Fall 2010  
Presented at the 2010 SACNAS Conference,  
Anaheim, CA.

**“Enumerating and Constructing Franklin Circles,”** Spring 2010  
Presented at the 2010 Infinite Possibilities Conference, University of California - IPAM,  
Los Angeles, CA.

**“Enumerating and Constructing Magic Circles,”** Fall 2009  
Presented at the 2009 Texas Undergraduate Mathematics Conference, Sam Houston State  
University,  
Huntsville, TX.

**“Constructing and Enumerating Magic Circles and Franklin Circles,”** Summer 2009  
Presented at the 2009 Applications of Computer Algebra Conference,  
Montréal Quebec, Canada.

**“Magic Circles,”** Spring 2009  
Presented for the Gifted and Talented at Mance Park Middle School,  
Huntsville, TX.

	<b>“Layers of Generalized Crowns”</b>	Spring 2008
	Presented at 2008 Intermountain Regional MAA Spring Conference, Brigham Young University, Provo, UT.	
	<b>“Encouraging Women in Science and Mathematics”</b>	Fall 2006
	Presented with Jacqueline Jensen, 17th Annual Alliance of Universities for Democracy (AU-DEM) Conference, Katowice, Poland.	
<b>Exhibits and Panels</b>	<b>USTARS Panel: Mentoring Panel</b>	Spring 2016
	Panelist, Huntsville, TX.	
	<b>MAA Panel: Undergraduate Research as a Capstone Course.</b>	Spring 2016
	Panelist, 2016 JMM, Seattle, WA.	
	<b>Operation Math Girls Workshop: Bubbles and The Steiner Problem</b>	Spring 2016
	Workshop leader, OMG 2016, Huntsville, TX.	
	<b>MAA Panel: How to begin an undergraduate research program at JMM 2014, Panel organizer.</b>	Spring 2014
	Co-organizer with Dr. Herbert Medina, 2014 JMM, Baltimore, MD.	
	<b>Operation Math Girls Workshop: Bubbles and Geodesics</b>	Fall 2014
	Workshop leader, OMG 2014, Huntsville, TX.	
	<b>“Working with Underrepresented Groups on Undergraduate Research,”</b>	Fall 2012
	Panelist at the MAA Trends in Undergraduate Research Conference, Chicago, IL.	
	<b>“Navigating Trans-Cultural Identities,”</b>	Spring 2012
	Panelist at the 2012 Infinite Possibilities Conference, Baltimore, MD.	
	<b>“Issues for Early Career Mathematicians in Academia,”</b>	Fall 2011
	Panelist at the 2011 MathFest, Lexington, KY.	
	<b>“Moving up the career ladder in academia,”</b>	Fall 2011
	AWM Panel Organizer at the 2011 MathFest, Lexington, KY.	
	<b>“Being a Female Mathematician From an Underrepresented Group,”</b>	Spring 2011
	Panelist at the 2011 National Conference for Undergraduate Women in Mathematics, Lincoln, NE.	
	<b>“The Role of Mentoring in Undergraduate Mathematics: Promising Re-</b>	



	<b>cruitment and Retention Strategies,”</b> Panelist at the 2011 Joint Mathematics Meetings, New Orleans, LA.	Spring 2011
	<b>“The Role of Mentoring in Undergraduate Mathematics: Promising Recruitment and Retention Strategies,”</b> Panelist at the 2010 MathFest, Pittsburgh, PA.	Summer 2010
	<b>“Motherhood and Mathematics,”</b> Panelist at the 2010 Infinite Possibilities Conference, University of California - IPAM, Los Angeles, CA.	Spring 2010
	<b>“Starting and Maintaining an Academic Year Undergraduate Research Program”</b> Panelist at the 2009 Joint Meeting of the MAA and AMS, Washington, D.C.	Spring 2009
	<b>“Graduate Programs in the College of Arts and Sciences”</b> Exhibitor, Society for the Advancement of Chicanos and Native Americans in Sciences, Kansas City, MO.	Fall 2007
	<b>“Graduate Programs in the College of Arts and Sciences”</b> Exhibitor, Society for the Advancement of Chicanos and Native Americans in Sciences, Tampa Bay, FL.	Fall 2006
Contributed Biography	<b>Featured and quoted in the 2016 American Mathematical Society’s Annual Report as a volunteer member of the Committee on Meetings and Conferences,</b> Fall 2016.	
	<b>“Grassroots: A Series of Conversations on Leadership in a Diverse Community,”</b> interview hosted by the Student Advising and Mentoring Center, Sam Houston State University, Huntsville, TX in Spring 2011.	
	<b>“Students Find Female Role Model In Male-Dominated Field”</b> for SHSU Homepage and in the Huntsville Item, interview conducted by SHSU Media in Fall 2010.	
	<b>“The SACNAS Biography Project,”</b> includes 77 written biographies of the professional lives of Latino and Native American scientists, mathematicians, and engineers for use in the K-12 classroom. Society for the Advancement of Chicanos and Native Americans in Science (SACNAS)	
	<b>“The SACNAS Video,”</b> includes 9 video interviews on the development of the professional lives of Latino and Native American scientists, mathematicians, and engineers. Society for the Advancement of Chicanos and Native Americans in Science (SACNAS)	
Professional Development	<b>USTARS Early Career Workshop: Setting Yourself Up For Success</b> Sam Houston State University, Huntsville, TX.	Spring 2016
	<b>Organized and attended The Workshop on Dimension Theory of Posets and Its Applications</b>	Spring 2016

United States Military Academy, West Point, NY.

**Organized and attended The Workshop on  
Dimension Theory of Posets and Its Applications**

Spring 2015

United States Military Academy, West Point, NY.

**Participated in Workshop on Sandpiles**

Fall 2015

Banff International Research Station - Casa Matematica Oaxaca (BIRS-CMO) Oaxaca City,  
Oaxaca, Mexico

**Attended Friday Afternoon Clubs**

Fall 2010 - Present

Sam Houston State University, Huntsville, TX.

**Attended Departmental Colloquia**

Fall 2004 - Present

Sam Houston State University, Huntsville, TX.

**Participated in Algebra / Algebraic Combinatorics  
Seminar**

Fall 2007 - Present

Sam Houston State University, Huntsville, TX.

**Participated in Wiley's Faculty Network**

Spring 2008

"Live. Love. Math: Putting Your Students on the Path to Success"  
Austin, TX. Supported.

**Met with Program Directors at the National Science Foundation**

Fall 2007

Toward building a Research Experience for Undergraduates in the Mathematical Sciences  
Lloyd Douglass and Jody Chase  
Arlington, VA. Supported.

**Attended Workshops at the Infinite Possibilities Conference**

Spring 2007

Workshop on Funding Opportunities  
Workshop on Balancing Career and Family  
North Carolina State University, Raleigh, NC. Supported.

**Attended the Summer Workshop**

Summer 2007

Center for Undergraduate Research in Mathematics, Brigham Young University  
Provo, UT. Supported.

**Participated in MAA PREP Workshop**

Summer 2007

"How to Build and Run a Successful Emerging Scholars Program"  
Austin, TX. Supported.

**Participated in Wiley's Faculty Network**

Spring 2007

"Visualizing the Future of Mathematics Education Reform"  
Los Angeles, CA. Supported.

**Participated in the Algebra and Combinatorics Seminar**

Fall 2006

Department of Mathematics, Texas A&M University  
College Station, TX.

**Participated in the Workshop in Algebraic Coding Theory**

Summer 2006

Department of Mathematics, Texas A&M University  
College Station, TX.

<b>Conferences Attended</b>	<b>Participated in the Texas Algebraic Geometry Seminar</b> Department of Mathematics, Texas A&M University College Station, TX.	Summer 2006
	<b>Attended Workshops at the Infinite Possibilities Conference</b> Workshop on Funding Opportunities Workshop on Balancing Career and Family Spelman College, Atlanta, GA. Supported.	Spring 2005
	<b>Joint Meetings of the Mathematical Association of America and the American Mathematical Society (JMM)</b> Seattle, WA.	Spring 2017
	<b>TPSE Math Chairs +1 Conference</b> <b>Transforming Post-Secondary Education in Mathematics at the AAAS</b> Washington D.C.	Fall 2016
	<b>JMM</b> Seattle, WA.	Spring 2016
	<b>Sandpile Groups Workshop at the BIRS-CMO</b> Oaxaca City, Oaxaca. Mexico.	Fall 2015
	<b>Texas Sectional of the MAA Meeting</b> San Antonio, TX.	Spring 2015
	<b>JMM</b> San Antonio, TX.	Spring 2015
	<b>SACNAS National Conference</b> Los Angeles, CA.	Fall 2014
	<b>CombinaTexas</b> College Station, TX.	Spring 2014
	<b>JMM</b> Baltimore, MD.	Spring 2014
	<b>SACNAS National Conference</b> San Antonio, TX.	Fall 2013
	<b>JMM</b> San Diego, CA.	Spring 2013
	<b>Trends in Undergraduate Research Conference</b> Chicago, IL.	Fall 2012
	<b>SACNAS Conference</b> Seattle, WA.	Fall 2012
	<b>Infinite Possibilities Conference</b> Baltimore, MD.	Spring 2012
	<b>American Mathematical Society Western Sectional Meeting</b>	Spring 2012

Honolulu, HI.	
<b>JMM</b> Boston, MA.	Spring 2012
<b>SACNAS National Conference</b> San Jose, CA.	Fall 2011
<b>MathFest</b> Lexington, KY.	Summer 2011
<b>CombinaTexas</b> Huntsville, TX.	Spring 2011
<b>National Conference for Undergraduate Women in Mathematics</b> Lincoln, NE.	Spring 2011
<b>JMM</b> New Orleans, LA.	Spring 2011
<b>2010 Aspectos Combinatorios y Computacionales de Optimización, Topología y Algebra (ACCOTA),</b> Playa del Carmen, Mexico.	Fall 2010
<b>Long-term Undergraduate Research Experience Conference</b> Huntsville, TX.	Fall 2010
<b>SACNAS National Conference</b> Anaheim, CA.	Fall 2010
<b>MathFest</b> Pittsburgh, PA.	Summer 2010
<b>Infinite Possibilities Conference</b> Los Angeles, CA.	Spring 2010
<b>Texas Undergraduate Mathematics Conference</b> Huntsville, TX.	Fall 2009
<b>Conference of SACNAS</b> Dallas, TX.	Fall 2009
<b>2009 Applications of Computer Algebra Conference</b> Montréal Quebec, Canada.	Summer 2009
<b>JMM</b> Washington, D.C.	Spring 2009
<b>Texas Undergraduate Mathematics Conference</b> Huntsville, TX.	Fall 2008
<b>2008 Intermountain Regional MAA Spring Conference</b> Provo, UT.	Spring 2008

	<b>Wiley's Faculty Network Workshop</b> Austin, TX.	Spring 2008
	<b>JMM</b> San Diego, CA.	Spring 2008
	<b>Conference of SACNAS</b> Kansas City, MO.	Fall 2007
	<b>Infinite Possibilities Conference</b> Raleigh, NC.	Fall 2007
	<b>Wiley's Faculty Network Workshop</b> Los Angeles, CA.	Spring 2007
	<b>JMM</b> New Orleans, LA.	Spring 2007
	<b>Conference of SACNAS</b> Tampa Bay, FL.	Fall 2006
	<b>17th Annual Alliance of Universities for Democracy (AUDEM) Conference</b> Katowice, Poland.	Fall 2006
	<b>Workshop for Algebraic Coding Theory</b> College Station, TX.	Summer 2006
	<b>Texas Undergraduate Mathematics Conference</b> Huntsville, TX.	Fall 2005
	<b>Infinite Possibilities Conference</b> Atlanta, GA.	Spring 2005
	<b>JMM</b> Atlanta, GA.	Spring 2005
	<b>JMM</b> Pheonix, AZ.	Spring 2004
<b>Academic Service to the Mathematics Community</b>	<b>MAA Project NExT Mentor for Dr. Alicia Machuca</b>	Fall 2016
	<b>Member-at-large AMS Committee on Meetings and Conferences</b>	Spring 2016 - Fall 2018
	<b>Chair of MAA Subcommittee on Research Done by Undergraduates</b>	Spring 2016 - Fall 2018
	<b>Member of MAA Subcommittee on Research Done by Undergraduates</b>	Spring 2014 - Fall 2015
	<b>Evaluation of Tenure and Promotion Packet for Loyola Marymount University</b>	Fall 2016

<b>Organizer of the SHSU Mathematical Scholars' Circle</b>	Fall 2014 - Spring 2016
<b>Editorial Board for the MAA's Mathematics Magazine</b>	Spring 2015 - Present
<b>MAA Project NExT Mentor for Dr. Martha Precup</b>	Fall 2015
<b>Judge Student Posters for JMM</b>	Spring 2015
<b>Judge Student Posters for Conference of the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS)</b>	Fall 2014
<b>Letter of Support for Dr. William Velez for AWM Gwyneth Humphreys Award</b>	Fall 2014
<b>Letter of Support of CURM as AMS Programs that Make a Difference</b>	Fall 2014
<b>Judge Student Posters for JMM</b>	Spring 2014
<b>Nominator for Dr. Herbert A. Medina for the SACNAS Distinguished Mentor Award 2014</b>	Fall 2013
<b>Nominator for Dr. Herbert A. Medina for the Presidential Award (PAESMEM) 2014</b>	Fall 2013
<b>Judge Student Posters for SACNAS</b>	Fall 2013
<b>Judge Student Posters for JMM</b>	Spring 2013
<b>Judge Student Posters for SACNAS</b>	Fall 2012
<b>Judge Student Abstracts for SACNAS</b>	Summer 2012
<b>Judge Student Posters for JMM</b>	Spring 2012
<b>Judge Student Posters for SACNAS</b>	Fall 2011
<b>Judge Student Abstracts for SACNAS</b>	Summer 2011
<b>Judge Student Posters for SACNAS</b>	Fall 2010
<b>Judge Student Abstracts for SACNAS</b>	Summer 2010
<b>Reviewer for MSTAAR Screener</b>	Spring 2010
<b>Reviewer for CURM Grants</b>	Spring 2010
<b>Faculty Liaison to the MAA</b>	Fall 2006 - Present.
<b>Panelist for "Starting and Maintaining an Academic Year Undergraduate Research Program"</b>	Spring 2009

	at the JMM	
	Judge Student Posters for SACNAS	Fall 2009
	Judge Student Abstracts for SACNAS	Fall 2009
	Judge Student Abstracts for SACNAS	Fall 2008
	Judge Student Posters for SACNAS	Fall 2007
	Judge Student Abstracts for SACNAS	Fall 2007
	Reviewed an article for <i>Communications in Algebra</i>	Spring 2007
	Reviewed an article for <i>Texas College Mathematics Journal</i>	Spring 2007
	Judge Student Posters for SACNAS	Fall 2006
	Judge Student Abstracts for SACNAS	Fall 2006
	Judge Student Abstracts for SACNAS	Fall 2005
	Judge Student Abstracts for SACNAS	Fall 2005
Academic Service to the University	Member of CoS Curriculum Committee	Fall 2013 - Present
	Member of CoS Committee on Undergraduate Research	Fall 2012 - Spring 2013
	Member of the Provost Search Committee	Spring 2011
	Member of CAS Appeals Committee	Fall 2010 - Present
	Member of Core Curriculum Assessment Committee	Fall 2007 - Present
	Member of Faculty Diversity Committee	Fall 2006 - Present
	Volunteer Judge for Academic Challenge	Fall 2008
	Member of Underrepresented Minority Faculty Populations Committee	Fall 2005 - Spring 2007
	Member of Women's Advisory Committee	Fall 2005 - Spring 2006
	Volunteer Judge for Academic Challenge	Fall 2006
	Volunteer Judge for Academic Challenge	Spring 2005

<b>Academic Service to the Department</b>	<b>Mathematics Area Undergraduate Coordinator</b>	Fall 2012 - Present
	<b>Chair of the Search Committee</b>	Fall 2012 - Spring 2013
	<b>Chair of the Search Committee</b>	Fall 2011 - Spring 2012
	<b>Member of the Search Committee</b>	Fall 2010 - Spring 2011
	<b>Assistant to Undergraduate Advisor</b>	Spring 2009 - Present
	<b>Member of College of Arts and Sciences Core Curriculum Assessment Committee</b>	Fall 2008 - Present
	<b>Chair of the Honors Committee</b>	Fall 2006 - Present
	<b>Faculty Liaison to the MAA</b>	Fall 2006 - Present
	<b>Chair of the Textbook Committee for Trigonometry</b>	Spring 2006
	<b>Member of the Search Committee</b>	Fall 2007 - Spring 2008
	<b>Member of the Honors Committee</b>	Fall 2004 - Summer 2006
<b>Languages and Skills</b>	<u>Languages:</u> Fluency in English and Spanish Reading Knowledge of German and French	
	<u>Software:</u> Maple, Mathematica, Macaulay 2, CoCoA, Singular, GAP, SAGE; Microsoft PowerPoint, Word, and Excel; LaTeX, C, C++ and Fortran	