

## MAA Award for Inclusivity

This award is given annually to a person or persons (not a program) who has performed significant, sustained work to broaden access to mathematics. The award may be made based on one or several activities that exemplify inclusivity and embrace and affirm diversity. The contribution should be such as to influence the community and culture of mathematics or mathematical education in a significant and positive way on a national scale or have that potential.

### Rebecca E. Garcia

*Sam Houston State University*

Rebecca E. Garcia earned a bachelor's degree at Loyola Marymount University of Los Angeles, CA, a master's degree from the University of California at Berkeley and a doctor of philosophy from New Mexico State University. Her research interests are at the intersection of computational and commutative algebra and combinatorics, with contributions in computational algebraic combinatorics, the theory of sandpile groups, and dimension theory of partially ordered sets. In 2017, Garcia advanced to the rank of professor at Sam Houston State University (SHSU), Department of Mathematics and Statistics.

Rebecca Garcia is a mathematician whose career reflects consistent threads of concern for creating new generations of mathematicians that are more diverse and for enriching the mathematical experiences of students at all levels. The choices she made in her professional life are a reflection of her love for her community and her commitment to equity, diversity and inclusion. Her own biographical sketch set the stage for a life of service when she wrote "I am Chamorro, born and raised in the island of Guam, and as far as I know, the first Chamorro to receive a doctoral degree in pure mathematics." This status as "the first" has led her to engage in efforts across the mathematics community to ensure that there will be many more students of diverse backgrounds to follow in her footsteps. For example, she works to grow the community of Indigenous Mathematicians by promoting the collaborative effort [IndigenousMathematicians.org](http://IndigenousMathematicians.org), a website to connect, network, and inspire the next generation of Indigenous Mathematicians.

Currently Rebecca Garcia serves as Co-Director of the Mathematical Sciences Research Institute's Undergraduate Program (MSRI-UP). MSRI-UP is a national undergraduate research program that aims to increase the number of underrepresented students obtaining advanced degrees in mathematical science. Garcia was the lead director for two of the past five summer programs at MSRI-UP. In the very recent past, Garcia has taken a leadership role in other funded efforts within the mathematics community that allowed her to

influence the mathematical development of students at the college or pre-college level. In most of these projects she works with professional mathematics organizations of which she is an active member. For example, she is currently co-director of the National Research Experiences for Undergraduates Program for the MAA and also co-director for the Travel Grants for Women in the Mathematical Sciences awarded through the Association for Women in Mathematics. Prior to those she was founder and co-director of the Pacific Undergraduate Research Experience in Mathematics (PURE Math), a five-year mentoring and research program. Other service in this arena includes running Math Circles at SHSU and a preparatory program for local middle school students. These provide just a glimpse of the many efforts through which Rebecca Garcia's commitment to diversity and inclusion has been realized.

## Response

I am deeply humbled and grateful to receive the MAA Inclusivity Award. This recognition is also a testament to the work of all those who share my passion for creating a more just, diverse, equitable, and inclusive math community. My heartfelt thanks goes out to everyone who made this recognition possible: my dearest students, colleagues and friends, the MAA, and my beloved family. Their support, encouragement, and guidance have been invaluable, and I could not have achieved this without them. Saina ma'åse todū ham-yu! My experiences as a native Chamorro woman mathematician have given me first hand perspective of the many issues faced by underrepresented in the mathematical sciences: battling negative stereotypes, no sense of belonging, the feeling of isolation, exclusion from opportunities, the struggle in finding resources, being overlooked, the lack of self-confidence, etc. Our roles as mathematicians and educators must expand to address and confront the inequities that have dammed the river of opportunity for marginalized students and colleagues. Dismantling this dam will help restore balance to our community, but there is a great deal of effort and care that we all must take in doing this kind of work—otherwise, a devastating flood of misinformation and resentment will create policies that would further destroy the delicate bonds that keep us from washing out completely. We must each do our part in removing it layer by layer, beginning with learning more about the issues that marginalized groups face, then learning what to do and what not to do in our classrooms, in our meetings, in our hallways, in our lives. Bit by bit, we must tear down the constructs that stifle talent and growth, especially those that lie within our own selves. As I reflect on this honor, I am reminded of the words of Rev. Dr. Martin Luther King, Jr. who writes, "And there comes a time when we must take a position that is neither safe, nor politic, nor popular, but

one must take it because it is right.” It is our moral obligation to continue to work to bring diversity, equity, and inclusion in the mathematical sciences in all aspects of our profession and to fight racism in all its forms. It is my hope that my work in promoting inclusivity and diversity in mathematics has made people feel welcomed, valued, and empowered. And that, to me, would be the greatest reward of all..

## Biographical Sketch

Rebecca E. Garcia is Professor of Mathematics at Sam Houston State University, Co-Director of the Mathematical Sciences Research Institute Undergraduate Program (MSRI-UP), and Project Director for the MAA National Research Experience for Undergraduates (NREUP). She is a native Chamorro, born and raised in Guam. Her journey in mathematics began at Loyola Marymount University in Los Angeles, CA, where she earned her bachelor’s degree. She earned her master’s degree from the University of California at Berkeley, and her doctoral degree from New Mexico State University under the direction of Irena Swanson. Her research interests are at the intersection of computational and commutative algebra and combinatorics, with contributions in computational algebraic combinatorics, theory of sandpile groups, and dimension theory of partially ordered sets.

Her record of service is a reflection of her love for her community and a commitment to equity, diversity, and inclusion: from running math circles at SHSU and preparatory programs for local middle school students to directing national undergraduate research programs that aim to increase the number of underrepresented students attaining advanced degrees in the mathematical sciences. She is dedicated to growing the community of indigenous mathematicians beginning with co-directing and founding of the five-year mentoring and research program Pacific Undergraduate Research Experience in Mathematics (PURE Math). Currently, Dr. Garcia is part of the collaborative effort IndigenousMathematicians.org, a website and community dedicated to spotlighting the journey and mathematical contributions of Indigenous mathematicians including Native Americans, Native Alaskans, Native Hawai’ians, and Native Pacific Islanders.

Dr. Garcia is an active member of the American Mathematical Society, the Mathematical Association of America, the Association for Women in Mathematics, the Society for the Advancement of Chicanos and Native Americans in Science. She is the recipient of the 2015 Texas Section MAA Award for Distinguished College and University Teaching of Mathematics. She is the proud mother of three daughters and the loving wife of fellow mathematician, Dr. Luis David Garcia Puente, professor of mathematics and computer science at Colorado College.