



# 2017

## ANNUAL REPORT



*inspire + prepare*





# *The* **FUTURE** *of* **STEM** *is as* **BIG** *as* **TEXAS**

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Since 1976, we've grown from a small group of community leaders to a non-profit with a statewide reach. Mile by mile, day by day, TAME programs reach across the geographic, cultural, socioeconomic and digital divides that separate our young people from bright futures in STEM. The work we do today with students shapes what our communities, our industries and our planet (or planets!) will look like in 2056.

How does a small non-profit make an impact in a state as big as Texas? Like engineers, we start with the infrastructure.

The strong TAME network of industry, academic and community partners helps deliver targeted, relevant and up-to-the-minute programming to communities from the Gulf to the Panhandle.

*Join us as we celebrate, inspire, and prepare the next generation of Texas innovators.*

Savita Raj  
*Executive Director*



# TABLE *of* CONTENTS

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## SECTION 1: *Who we are*

Mission & Vision.....	4
A Letter from the Board Chair.....	5

## SECTION 2: *Where we work*

Chapters.....	6-7
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## SECTION 3: *What we do*

Inspire + Prepare.....	8
Program Statistics .....	9
Programs Overview.....	10-11
Comics.....	12
Trailblazer.....	13
Clubs.....	14
Competitions.....	15
Scholarships .....	16

## SECTION 4: *Making it work*

Financials.....	17
Board of Directors .....	18
Donors & Partners .....	19

# *Our* MISSION:

*To enable Texas students to pursue careers in Science, Technology, Engineering and Math (STEM) by:*

- Creating partnerships among educators, industry, government and families to inform, educate and motivate students
- Implementing classroom and extracurricular programs and activities
- Focusing on populations that remain underrepresented in fields of STEM
- Promoting diversity in STEM careers

# *Our* VISION:

*Every K-12 student has the educational experiences necessary to pursue a career in the fields of science, technology, engineering and math.*



*Let's build a workforce that looks like Texas.*



# A LETTER *from the* BOARD CHAIR

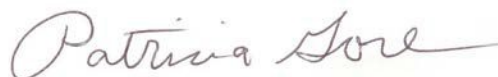
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*This* is a particularly exciting time to be on the TAME Board. This past year we celebrated the success of our great organization with 40th anniversary celebrations across the state. I want to recognize the excellent work of all of the people involved. Our teachers, librarians, and volunteers are tireless in their efforts to communicate the excitement of STEM to young people. Thanks to the dedication of many individuals, our corporate and academic partnerships are stronger than ever. I also want to recognize the work of the TAME Advisory Board and Board of Directors. We would not reach the number of students that we do, and succeed in our efforts to build a strong, diverse STEM workforce without the hard work and dedication of everyone involved.

Executive Director Savita Raj and her staff do a tremendous job every day, juggling countless details to deliver TAME's programs to students across the state. Under Savita's leadership, TAME is expanding and reaching more people than ever before. Last year, we had a record number of students enrolled in TAME clubs and a record number of students (45,306) participated in TAME programs and activities.

The need for a strong STEM workforce is greater than ever. We already see 100% of high school seniors at our annual STEM Competitions planning to attend college, with about 80% of them entering STEM fields. Going forward, I hope to see the number of STEM-bound students rise.

40 years in, we still have a lot of work to do to increase the number of females and under-represented minorities in STEM fields – but it's great to be a part of that work. If you are already a supporter of TAME, I thank you. If you're not yet a supporter, I'd like to welcome you aboard. With your help, Texas kids will be the future of STEM.

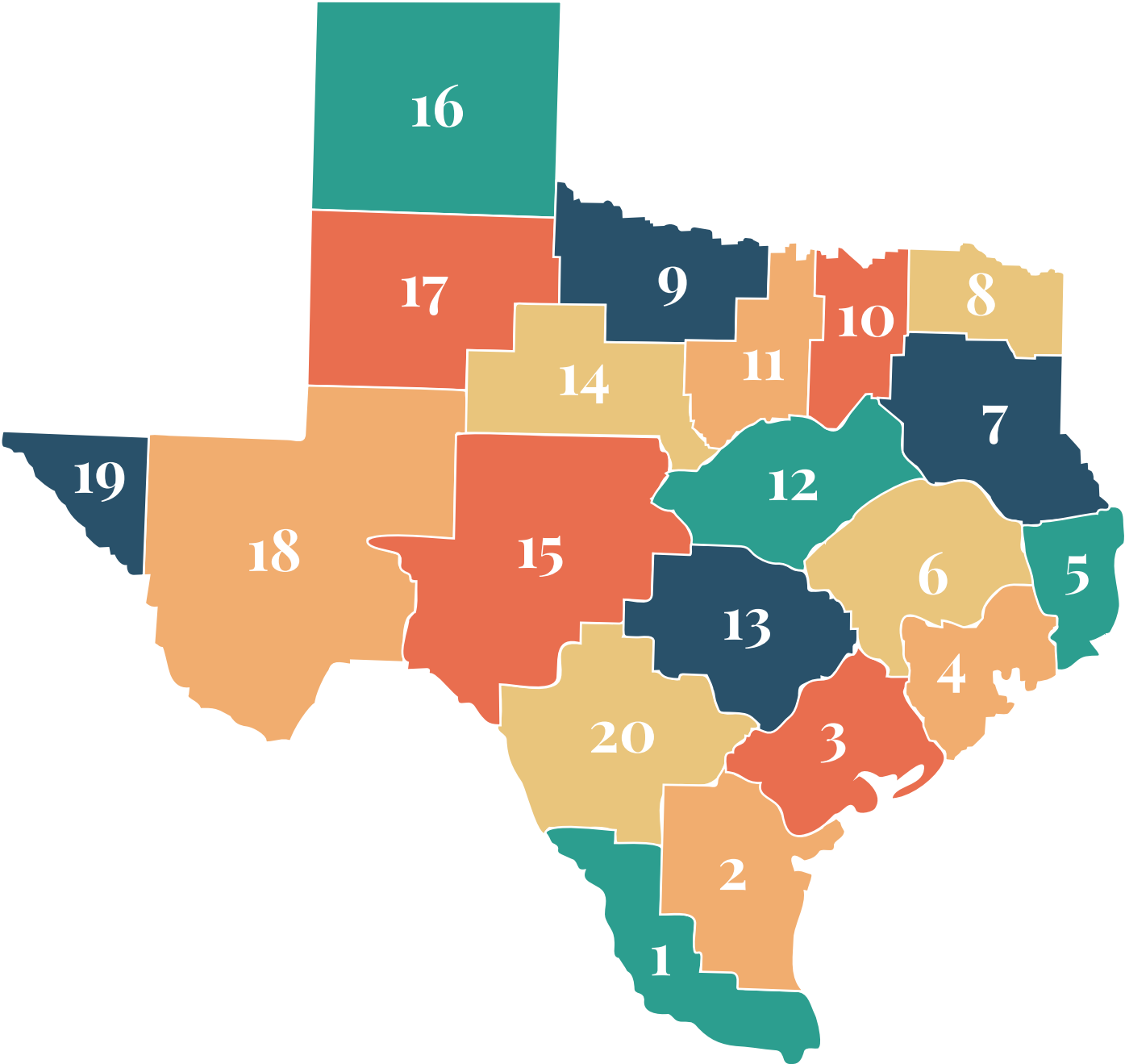


**PATRICIA A. GORE**

*Chair, TAME Board of Directors*

# TAME CHAPTERS

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TAME Chapters provide local leadership and support for STEM education. Chapters, which correspond to the regions defined by the Texas Education Agency, bring together volunteers from local schools, colleges, universities, corporations, businesses, and community organizations into a leadership team. They offer locally relevant programs like career days, factory tours, and professional development for teachers.

TEA REGION	CHAPTER	CHAIR(S)	STUDENTS SERVED 2016-17
1	Valley	Nelinda Villarreal	722
2	Corpus Christi		366
3	Victoria		414
4	GC TAME	Dan Burleson	18710
5	GT TAME	Annie Carter	2997
6	Huntsville		218
7	East Texas	Cynthia Nyvall	1833
8	Mount Pleasant		495
9	Wichita Falls	Denise Simmons, Marcie Williford	1485
10	Dallas	Maurine Amend	1424
11	Fort Worth	Eva Trevino, Steve De Leon	1515
12	Waco		377
13	Capital Area	TAME Staff	3862
14	Abilene		2399
15	San Angelo	Janice Trees	1999
16	Amarillo	Dominic Cortez, Floyd Anthony	1105
17	Lubbock	Kasaundra Garcia	295
18	West Texas	Kim McKay	1876
19	El Paso	Raquel Kuker	212
20	San Antonio	Valarie Walker	2430

# WHAT *we* DO

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□ *we envision a two-pronged strategy for transforming K-12 education.\**



*inspire*

We must *inspire* students so that all are motivated to study STEM subjects in school and many are excited about the prospect of having careers in STEM fields.



*prepare*

We must *prepare* students so they have a strong foundation in STEM subjects and are able to use this knowledge in their personal and professional lives.



I LEARNED ALL KINDS OF COOL STUFF ON THE TRAILBLAZER AND WANT TO CHANGE THE WORLD ONE DAY.

\*Report, The President's Council of Advisors on Science and Technology, September 2010  
[nsf.gov/attachments/117803/public/2a--Prepare\\_and\\_Inspire--PCAST.pdf](https://www.nsf.gov/attachments/117803/public/2a--Prepare_and_Inspire--PCAST.pdf)



# TAME PROGRAMS: 2016-17

## 45,306 *students*

*inspire 25,481 + prepare 19,825*

### *inspiring*

*Comic Books: 2,270*

*Trailblazer @ Community Events: 15,732*

*Trailblazer @ STEM Camps: 361*

*Trailblazer @ STEM Events: 3,060*

*Trailblazer @  
Science Rocks (Libraries): 4,058*

### *preparing*

*Trailblazer @ Schools: 17,055*

*Multi-week Family STEM Events: 166*

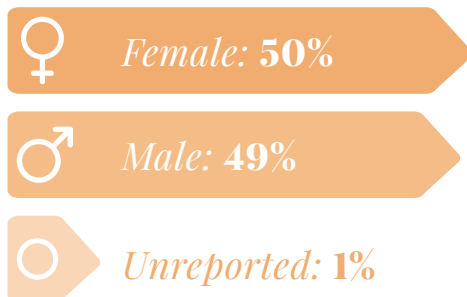
*TAME Clubs: 2,770*

*Divisional & State  
STEM Competitions: 2,361*

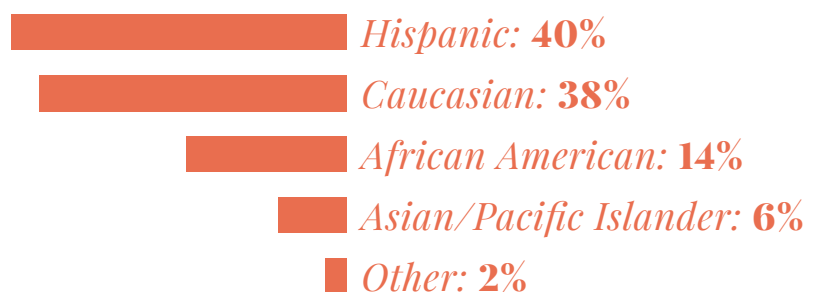
*Scholarships & Mentoring: 24*

## OVERALL PARTICIPATION STATISTICS:

### GENDER



### ETHNICITY



# PROGRAMS

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*Start with a great story:*

## TAME SCIENCE SQUAD □ COMIC BOOKS

- » Adventures of five ethnically diverse student superheroes
- » Professionally produced series in English and Spanish

*STEM saves the day!*

(Elementary School, Inspire)



*Get their hands on it:*

## TAME TRAILBLAZERS

- » STEM-museums-on-wheels visiting schools, libraries and community events
- » 5 exciting, hands-on exhibit areas
- » Fun introduction to STEM concepts, electives, and career paths with local STEM professionals

*STEM field trip comes to you!*

(Elementary/Middle School, Inspire & Prepare)



*Bring in the family:*

## FAMILY STEM EVENTS

- » Family and community-focused activities
- » Partnership with local STEM program providers
- » Increase awareness of STEM careers

*STEM in the community!*

(Elementary/Middle School, Inspire)





*inspire*



*prepare*



### *Take time to explore:* **TAME CLUBS**

- » Deeper skill building and problem solving activities
- » Peer network of students
- » Strong network of STEM educators

#### *Hands on STEM!*

(Middle/High School, Prepare)



### *Celebrate learning:* **DIVISIONAL & STATE STEM COMPETITIONS**

- » Individual math and science tests
- » Collaborative, group engineering design challenges
- » Computational thinking

#### *Showcase STEM Skills!*

(Middle/High School, Prepare)



### *See them through:* **TAME SCHOLARSHIPS & MENTORING**

- » Financial boost and encouragement
- » Support students in the critical first year of college

#### *STEM Careers take off!*

(High School/College, Prepare)





# COMIC BOOKS



The TAME *Science Squad* Comic Books are a professionally produced series showcasing the adventures of five ethnically diverse TAME students who use their abilities in math and science to save the day. The comics are available in English and Spanish.



# TRAILBLAZERS



The TAME Trailblazers are unique, interactive classrooms traveling to schools and communities across Texas to bring hands-on science to students. With curated content from NASA, NOAA and the National Energy Discovery Project, the Trailblazers offer hands-on activities and exhibits that allow students to explore concepts of energy, space, weather, biotechnology, and aerodynamics. The Trailblazers anchor Family STEM Events, Science Rocks summer reading events at libraries and large public events like the Super Bowl.

Family STEM Events encourage participants to explore STEM concepts, learn about STEM careers, and interact with STEM professionals in an informal learning setting. These events are designed to strengthen family awareness of and support for their students' involvement in STEM.

Science Rocks Library Programs are offered in the summer, typically in conjunction with reading programs. A visit from the TAME Trailblazer, training and toolkits help library staff offer informal STEM programs in their community.



## TRAILBLAZER PROGRAM VISITS

*Community Events: 35*

*School Events: 118*

*Science Rocks Events: 39*

*STEM Camp Events: 5*

*Family STEM Events: 19*

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**TOTAL VISITS: 216**

**TOTAL STUDENT VISITORS:  
39,299**

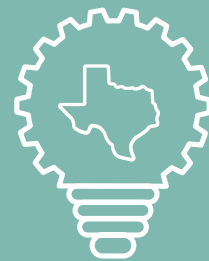
*Title I Schools visited: 100*



# TAME CLUBS



A TAME Club is an enrichment program designed to support students interested in exploring STEM subjects with the guidance of sponsors and leaders. While all TAME programs are inclusive, TAME Clubs focus on recruiting women and under represented minority students. The clubs are typically sponsored by teachers or community partners and are usually hosted on a school campus. Clubs meet regularly and program activities are designed to increase student skills, awareness of STEM careers and access to role models.



*Number of clubs : 174*

*Title I schools: 75*

*Club members: 2,770*





# STEM COMPETITIONS



TAME Club members in grades 6–12, from all across Texas, compete in math & science tests, and in solving real-world engineering design challenges.



**99%** *of High School seniors at the STEM Competitions plan to go to college*

**77%** *plan to major in STEM* | **48%** *in engineering*

“ I LOVED DOING THE ENGINEERING CHALLENGE. SO FUN! YOU GOT TO MEET NEW PEOPLE AND HAVE SOME FUN BUILDING SOMETHING NEW.



## GENDER



*Female: 56%*



*Male: 44%*

## ETHNICITY



# SCHOLARSHIPS

TAME supports careers in science, technology, engineering, and mathematics by offering scholarships to TAME Club members who have been accepted into an accredited university or community college to pursue higher education in a STEM-related field.

NAME	MAJOR	COLLEGE
Andrea Orji	Chemical Engineering	Massachusetts Institute of Technology
Anthony Teeter	Business Administration and Architecture	Vernon College
Austin Warren	Civil Engineering	University of Texas at Austin
Christopher Warren	Computer Science	University of Texas at Austin
Connor Bachert	Computer Science	Midwestern State University
Jagadesh Lagisetty	Computer Science	Texas A&M University
Jared Cervantez	Engineering	University of Texas at Austin
Jeffry Martin	Finance and Accounting	University of Texas at Austin
Mitchell McDonald	Mechanical Engineering	Texas A&M University
Mostak Ahmed	Computer Engineering	Texas A&M University
Mya Soto	Computer Science	University of Texas Permian Basin
Oscar Martinez	Industrial Engineering	St. Mary's University
Payton Fisher	Computer Science	Midwestern State University
Robert "Zeke" Kollman	Nuclear Engineering	Texas A&M University
Tashiana Shipman	Science	Odessa College
Tray Dickson	Architecture	Texas Tech University
Trista Gerner	Civil Engineering and Architecture	Texas Tech University
Xiangwei Chen	Computer Science	University of Texas at Austin
Natalie Sahagun	Aerospace Engineering	University of Texas at Austin
Nicholas Curtis	Chemical Engineering	University of Texas at Austin
Shaharyar Ali	Mechanical Engineering	University of Texas at Austin

# FINANCIALS: 2016-17

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## REVENUE

Grants & Contributions	\$619,598.00
Program Revenues	\$183,070.00
Other Income	\$10,770.00
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<b>TOTAL</b>	<b>\$813,438.00</b>

## EXPENSES

Program	\$780,742.00
Administration	\$43,991.00
Fundraising	\$23,680.00
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<b>TOTAL</b>	<b>\$848,413.00</b>

# BOARD *of* DIRECTORS

BOARD MEMBER	EMPLOYER	POSITION
Tricia Gore	University of Texas at Austin (Retd.)	<b>Chair</b>
Andy Deck	National Instruments	<b>Past Chair</b>
Deb Dorman	IBM	<b>Secretary</b>
Tamara Crawford	Lockheed Martin	<b>Treasurer</b>
Mike Alvarez	Shell	Member
Laura Bosworth-Bucher	TeVido BioDevices	Member
Grant Butkus	Macquarie Capital	Member
Tramaine Chargois Singleton	Halliburton	Member
Dominic Cortez	B&W Pantex	Regional Representative
Steve De Leon	Lockheed Martin (Retd.)	Regional Representative
Steve Gonzales	Vickrey & Associates	Member
Britiany Hayes	ConocoPhillips	Member
Deborah Kariuki	Round Rock ISD	Teacher Representative
Jeff Lacy	Trinity University	Member
Aaron Maestas	Raytheon Corporation	Member
Michele Meyer	University of Texas at Austin	Member
Karl Nichols	E3 Alliance	Member
Ifeanyi Okonkwor	BASF	Member
Marcos Villarreal	University of Texas Rio Grande Valley	Member

## ADVISORY BOARD

Annie Carter // *Chevron Phillips (Retd.)*  
 Cres Guzman // *Texas Civil Engineering Foundation*  
 Bridget Lauderdale // *Lockheed Martin*  
 Stu Mussler // *ConocoPhillips*  
 Pat Rossman // *BASF*

## DONORS

### PLATINUM: 50K+

Boeing  
ConocoPhillips  
Halliburton  
Shell Oil Company

### DIAMOND: 25 - 50K

Alcoa Foundation  
Chevron Phillips  
Chevron Phillips  
Chemical Company  
Lockheed Martin  
Raytheon  
Tocker Foundation

### GOLD: 15 - 25K

3M Foundation  
Arconic Foundation  
Workforce Solutions of West  
Central Texas

### SILVER: 10 - 15K

Concho Valley Workforce  
GM Foundation  
IBM  
Marathon Oil Company  
Port Arthur Industrial Group

### BRONZE: 5 - 10K

BASF  
Dow Chemical Company  
Emerson Process Management  
McCoy Foundation  
Pratt and Whitney Canada Corp  
Steve and Mary De Leon

### FRIENDS OF TAME

Amazon Smile Foundation  
Andy Deck  
Annie Carter  
BP America Inc.  
Brian Rogers  
Bridget Lauderdale  
Bright Futures Fair  
Cheniere Energy Inc.  
Clinton Blackburn  
Evette Torres  
Flint Hills Resources  
Foster CM Group, Inc.  
Halliburton  
Jeff Lacy  
Jessie Temple  
Kathy & Bob Zerda  
Laura Bosworth  
Leslie Diamond  
Marathon Oil Company  
Motiva Enterprises  
National Instruments  
Oxbow  
Paypal Giving Fund  
Port Arthur Housing Authority  
Region VI Educational  
Service Center  
Sam Zigrossi  
Samsung Semiconductor  
Sarah Griffin  
Sharon Renee Brummet  
The Lexington Foundation  
The Sundt Foundation  
TOTAL  
Tracy Cuington  
Tramaine Singleton  
Tricia Gore  
Valero  
Veolia  
Wayman Smith  
Wood Group USA, Inc.

## PARTNERS

### SCHOOL DISTRICTS

Alamo Heights ISD  
Alvin ISD  
Amelia Elementary School  
Cactus Ranch Elementary  
Crosby ISD  
Deep Wood Elementary  
Galveston ISD  
George West ISD  
Hitchcock ISD  
Hutto ISD  
Lake Travis ISD  
Navarro ISD  
Rankin ISD  
Snyder ISD  
Wimberley ISD

### COMMUNITY PARTNERS

Albertsons  
City of Denison  
Denton Public Library  
George Memorial Library  
Houston Hispanic Forum  
Port Arthur Housing Authority  
Port Arthur Public Library  
Rankin Hospital District  
Shepherds of Journey IFC  
Texas ASCE  
Texas Board of Professional Engineers

### UNIVERSITIES

Angelo State University  
Jones County Junior College Foundation  
Lamar University  
LaTourneau University  
Midland College  
Odessa College  
St. Philip's College  
Tarrant County Community College  
Texas A&M International University  
Texas A&M University  
Texas Tech University  
The University of Texas - Permian Basin  
The University of Texas - Rio Grande Valley  
The University of Texas at Austin  
University of Houston



## SEE WHERE A LITTLE INSPIRATION CAN TAKE YOU!

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**TAMESTEM**



*Pinterest.com/*  
**TAME\_STEM**



**@TAME\_STEM**  
**#LONESTARSTEM**

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