

# 2015 ANNUAL REPORT





#### JOHN A. AND KATHERINE G. JACKSON SCHOOL OF GEOSCIENCES

#### THE UNIVERSITY OF TEXAS AT AUSTIN

Department of Geological Sciences • Bureau of Economic Geology • Institute for Geophysics
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#### Dear Friends.

The 2014-15 program year for GeoFORCE was a continuation of the past success of the program that was made possible by the support of sponsors and friends of GeoFORCE. Their continued financial support, especially during challenging price environments in the energy sector over the years, is instrumental in GeoFORCE's 11 years of success in changing lives. As important as the financial support is, the personal time of sponsors and friends with the students in the field, in offices and labs, and in ongoing communication with students throughout their years in high school and college is invaluable. This time commitment on the part of sponsors and friends in mentoring students was recognized by the White House awarding of the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM) to GeoFORCE. This is the nation's highest recognition of success in mentoring students in STEM. In past years, the number of PAESMEM awards recognizing individuals for mentoring success and the number of awards recognizing organizations for mentoring success has been nearly equal. This year, of the 15 awards made, GeoFORCE was the *only* organization awardee! On behalf of all of the mentors of GeoFORCE, the founding director of GeoFORCE Doug Ratcliff and myself met with the President of the United States in the Oval Office to receive his thanks for the time you commit to mentor the next generation of STEM leadership.

The 2015 GeoFORCE annual report highlights the next generation of leadership in energy, mineral, water and environmental resources. The report presents the students on different *pathways* to leadership roles, starting with students in the high school program and their field experiences, followed by data on students in college, and finally GeoFORCE alum who are now in industry and ready to do their part to change lives of students from their hometowns and alma maters.

The forward thinking of the corporations, foundations, government agencies and individuals who consistently donate time and money to GeoFORCE is greatly appreciated. In challenging price environments, talent still needs to be developed to be ready to take advantage of the future opportunities in the energy, minerals, water, and environmental markets. Thanks to your continued support, GeoFORCE is on track to becoming a leader in providing that talent.

Best regards,

Samuel L. Moore, Ph.D.
Director for Outreach and Diversity
Jackson School of Geosciences
University of Texas at Austin

#### President Obama Honors

# **GeoFORCE Texas**



IN MARCH 2015 PRESIDENT BARACK OBAMA HONORED THE UNIVERSITY OF TEXAS AT AUSTIN'S GEOFORCE TEXAS PROGRAM WITH THE PRESIDENTIAL AWARD FOR EXCELLENCE IN SCIENCE, MATHEMATICS AND ENGINEERING MENTORING. THE HIGHEST SUCH HONOR FROM THE UNITED STATES GOVERNMENT.

GeoFORCE Texas, an outreach program of the Jackson School of Geosciences, takes high school students from inner-city Houston and rural Southwest Texas on field trips each summer to geologically significant sites across the country for four years. As a result, potential geoscientists are introduced to the profession, and students from disadvantaged areas find a path to college and rewarding careers.

"We are thrilled that the president has honored the program," said Dean Sharon Mosher. "GeoFORCE plays such an important role in shaping and improving young lives, particularly from underserved populations. There is nothing more fulfilling for an educator than helping young people achieve their full academic and personal potential. GeoFORCE is a wonderful example of a program doing just that."

GeoFORCE was the only organization to be recognized with an award. The 14 other recipients were individuals.

GeoFORCE Director Samuel Moore and former Director Doug Ratcliff accepted the award at a dinner hosted by the National Science Foundation on June 17, 2015. The award winners also met with President Obama in the

The White House presents the award to individuals and organizations that mentor academic and personal development of students studying science and engineering particularly those who belong to groups that are underrepresented in these fields. It also includes \$10,000 in support from the National Science Foundation.



BOTTOM: MOORE AND RATCLIFF RECEIVE THE AND NSE DIRECTOR FRANCE A. CÓRDOVA



Eighty percent of GeoFORCE participants are members of minority groups. Since its inception in 2005, GeoFORCE has been a robust success. It's served more than 1,500 students with 100 percent of students graduating from high school; 96 percent going on to college; and 16 percent majoring in geoscience more than 50 times the national average.

"These educators are helping to cultivate America's future scientists,

engineers and mathematicians," President Obama said in a press release honoring all of this year's recipients. "They open new worlds to their students and give them the encouragement they need to learn, discover and innovate. That's transforming those students' futures, and our nation's future, too."

The program also supports high school students with SAT

and ACT preparation, and guidance in applying for college. It has also awarded more than \$2 million in scholarships. After high school, GeoFORCE continues to mentor students through college, into internships and the workforce.

"They open new worlds to their students and give them the encouragement they need to learn, discover and innovate."

-PRESIDENT OBAMA

#### **KEY STATISTICS**



#### 615 STUDENTS

Number of high school students who participated in GeoFORCE summer trips in 2015

#### 58% STEM MAJORS

Percentage of GeoFORCE College students currently pursuing STEM (science, technology, engineering, and mathematics) degrees. This is roughly double the national average (28%) of students pursuing STEM degrees. (Source: U.S. Department of Education)

# 25 MASTER OR PROFESSIONAL PROGRAMS

Number of programs being pursued by GeoFORCE College graduates

#### 126 Bachelor's Degrees

Number of degrees earned by GeoFORCE College students

#### 48 Associate Degrees

Number of degrees earned by GeoFORCE College students (9 Associate Degrees were earned by students who also earned a Bachelor's Degree)

\* The above numbers are bassed on current National Student Clearinghouse and student-reported data.

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#### **Contact Information**

GeoFORCE Texas

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#### GEOFORCE OVERVIEW

#### Mission

GeoFORCE is designed to increase the number and diversity of students pursuing science, technology, engineering, and math (STEM) degree programs, especially geology and engineering, and entering the future high-tech workforce.

# **Objectives**

- Engage high-achieving students from challenged high schools and keep them in the program through college.
- Provide spectacular learning experiences that broaden students' understanding of the Earth and emphasize geosciences and engineering.
- Build a large cohort of high achievers.
- Achieve high school graduation.
- Give students the tools, confidence, and motivation to pursue college.



#### Method

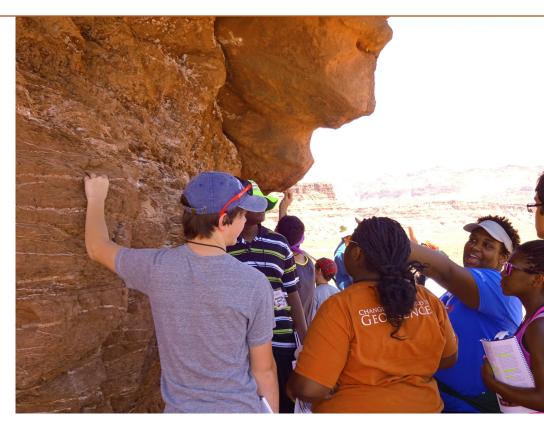
GeoFORCE operates in both inner-city Houston and rural southwest Texas. The program capacity for a summer is determined by a cohort size of 40 students maximum times the number of trips (e.g. 40 students  $\times$  15 trips = 600 students). Pilot programs average cohort sizes of 25 students. Each summer, for four years, we take the students on week-long geologic field trips across Texas and throughout the United States, where they gain valuable field experience and further knowledge of the energy industry. The academic content and rigor builds each year. The trips are taught by university faculty and research scientists.

Students also receive mentorship from professional geologists. These trips are free to students.

In our Academy program, 9th graders travel to Austin and Florida to study sedimentary processes. High school sophomores go to Arizona and Utah, visiting the Grand Canyon and Zion National Park to study layered rocks and geologic time. We take juniors to the Pacific Northwest to study tectonics and volcanic rocks. They visit Mt. St. Helens, Mt. Hood, Newberry Crater, and Crater Lake. Seniors traverse the Appalachian Mountains, learning about structural geology and metamorphic rocks.

In 2015, we ran 17 field trips with 615 students. We logged over 35,000 miles in planes, buses, and served over 18,000 meals. Students studied geological concepts such as sedimentation and plate tectonics while performing tasks such as beach profiling on the barrier islands in Florida or learning how to measure strike and dip in the Appalachian Mountains.

GeoFORCE does not end when students leave the field. Mentoring continues through high school



and college. We offer PSAT and SAT preparation. We help with college and financial aid applications, provide scholarships, and assist students with finding internship opportunities in college.

#### Keys to Success

#### For the Students

- Engage the students over four years
- Take the students out to new environments
- Expose students to various universities
- Provide the students with role models

#### For the Program

- Metrics on student participants
- Strong university support
- Strong industry support
- Passionate staff

#### Results

#### Mission

GeoFORCE has completed 11 full years of activities. We track our students throughout high school and college, as well as into the workforce which allows us to know that we are meeting our objectives.

#### **Demographics**

In 2015 over 80% of high school participants were minority students. About 55% of our students are Hispanic, coming primarily

#### **STEM Fields**

As of 2015, 58% of GeoFORCE grads in college are declared STEM majors, almost double the national average. Geology (23%), Engineering (20%), and Biology (21%) are the top three major choices for our students.



#### **S**PONSORS

#### Thank you

Thank you to our generous sponsors! GeoFORCE is a public/private partnership, receiving its funding from private industry, foundations, state and federal government, and individual donors.

**AAPG** Foundation

Anadarko Petroleum Corporation

Bahamas Petroleum Company PLC

**Baker Hughes** 

bhpbilliton

**BP** British Petroleum

Chevron

**ConocoPhillips** 

Drillinginfo

**Ed Rachal Foundation** 

ExxonMobil

Friends of GeoFORCE

**GDL** Foundation

Halliburton

George and Mary Josephine Hamman Foundation

Kinder Morgan Foundation

Marathon Oil Corporation

Newfield

Schlumberger

**SEG** Foundation

Shell

Talisman Energy

**Texas Workforce Commission** 

Valence Operating Company



# GEOFORCE FINANCIAL STATUS

# **GeoFORCE Financial Summary**

	10-11	11-12	12-13	13-14	14-15
CARRY FORWARD	1,296,765	959,047	815,499	856,299	611,307
INCOME					
Jackson School / Sponsorships / Gifts (for Programs/Ops)	1,422,240	1,676,843	1,620,803	1,669,373	1,761,647
Contracts & Grants	133,339	36,286	42,083	25,000	-
Endowment (Payout)	5,353	6,365	7,421	8,052	12,049
Total Income	1,560,931	1,719,494	1,670,307	1,702,425	1,773,696
EXPENSES					
Jackson School / Sponsorships / Gifts (for Programs/Ops)	(1,587,306)	(1,793,867)	(1,567,267)	(1,846,688)	(1,839,178)
Contracts & Grants	(310,123)	(70,395)	(42,086)	(91,205)	(710)
Endowment	(1,221)	1,221	(20,155)	(9,524)	(5,415)
Total Expenses	1,898,649)	(1,863,042)	(1,629,508)	(1,947,417)	(1,845,303)
ENDING BALANCES (carry forward plus net income)					
Jackson School / Sponsorships / Gifts (for Programs/Ops)	848,804	731,780	785,316	608,001	530,470
Contracts & Grants	101,027	66,918	66,915	710	(0)
Endowment	9,216	16,802	4,068	2,596	9,230
Total Ending Balances (carry forward plus net income)	959,047	815,499	856,299	611,307	539,700

Note: Contracts and Grants includes University overhead



# GeoFORCE Income

	10-11	11-12	12-13	13-14	14-15
JACKSON SCHOOL / SPONSORSHIPS / GIFTS (for Programs and Operations)					
Jackson School Diversity Program (Gifts)					1,014,308
Jackson School Diversity Program (JEF)					747,339
Jackson School Diversity Program (Gifts/JEF)	1,422,240	1,676,843	1,620,803	1,669,373	
Subtotal	1,422,240	1,676,843	1,620,803	1,669,373	1,761,647
CONTRACTS & GRANTS					
BOEMRE/MMS	50,000				
USGS 8/31/11	44,649				
GEOF-RATCLIFF TXWC 08-31-11 1410WSW000					
UTIG-RATCLIFF TXWC 10-31-12 1412TAN003		36,286			
TXWC 9-30-13			42,063		
42063 FY11-12				25,000	
Title V CAMSC (SWTJC)					
GEOF-RATCLIFF TXWC 08-31-11 2011 Summer Merit Program	38,700				
Subtotal	133,349	36,286	42,063	25,000	-
ENDOWMENT / PROGRAMMATIC					
GeoFORCE Texas Fund	2,791	2,836	2,903	2,971	3,041
Darwin Family Endowment	2,561	3,529	4,518	5,081	5,647
GeoForce Endowment in Honor of Doug Ratcliff					3,361
Subtotal	5,353	6,365	7,421	8,052	12,049
Total Income	1,560,941	1,719,494	1,670,287	1,702,425	1,773,696

Note: Contracts and Grants includes University overhead

# GeoFORCE Endowment

	10-11	11-12	12-13	13-14	14-15
JACKSON SCHOOL ENDOWMENT FUNDING (for Programs and Operatio	ns)				
Jackson Endowment Funding	718,217	718,217	879,413	960,652	747,340
Jackson Endowment sweep back			(135,987)	(230,280)	(142,968)
Subtotal	718,217	718,217	743,426	730,372	604,372
ENDOWMENT / PROGRAMMATIC MAJOR GIFTS					
GeoFORCE Texas Fund	2,791	2,836	3,056	2,971	3,964
Rainey Endowment	64	271	438	975	1,859
DARWIN FAMILY ENDOWMENT	2,561	3,529	4,518	5,081	5,543
ExxonMobil	7,500	7,500	7,500	7,500	
GEOFORCE ENDOWMENT IN HONOR OF DOUG RATCLIFF					
Fidelity Charitable Gift Fund					20,000
Individual Donors					44,957
Lehman Family Charitable Foundation					5,000
Shell					5,000
Southwestern Energy Company					5,000
GDL Foundation					6,000
ConocoPhillips				50,000	
Subtotal				50,000	97,322
Total	1,462,266	732,353	758,938	796,899	701,695

# GeoFORCE Major Gifts<sup>1</sup>

	10-11	11-12	12-13	13-14	14-15
JACKSON SCHOOL MAJOR GIFTS (for Programs and Operations)					
AAPG	15,000	30,000			15,000
AIPG Foundation	15,000				
Andarko Petroleum			55,000	60,000	50,000
Baker Hughes	20,000	20,000			20,000
BHPB Petroleum²		75,000	100,000		100,000
BP Amoco	120,000	120,000	240,000		120,000
Chevron <sup>3</sup>	120,000	120,000		120,000	140,000
ConocoPhillips <sup>4</sup>	21,000	21,000	21,000		30,000
Devon Energy	40,000	40,000			
ExxonMobil	130,000	140,000		305,000	150,000
GDL Foundation <sup>5</sup>	7,500	20,000	12,000		
Halliburton	25,000	25,000	25,000	30,000	25,000
Hamman Foundation	20,000	20,000	20,000	20,000	30,000
Kinder Morgan Foundation	5,000	5,000	5,000	5,000	5,000
Marathon Oil	100,000	100,000	75,000	75,000	75,000
Newfield		10,000			5,000
Rachal Foundation	20,000	20,000	20,000	20,000	20,000
Schlumberger		40,000	25,000	30,000	30,000
SEG	5,083	5,000	10,100	9,492	10,000
Shell	125,000	125,000	125,000	125,000	145,000
Talisman Energy			50,000	50,000	50,000
Valero	10,000				
Subtotal	798,583	936,000	783,100	849,492	1,020,000

Major donations are greater than \$5000.
 FY1314 gift arrived in FY1415.
 Prepaid in FY0809 and FY1011/FY1112 were for the subsequent year.
 In FY1314 contributed to the Ratcliff endowment.
 In FY1415 contributed to the Ratcliff endowment.

# **GeoFORCE** Expenditures

	10-11	11-12	12-13	13-14	14-15
JACKSON SCHOOL / SPONSORSHIPS / GIFTS (for Programs and Operations)					
Jackson School Diversity Program (Sponsorships / Gifts)					(1,192,937)
Jackson School Diversity Program (JEF)					(646,241)
Jackson School Diversity Program (JEF / Sponsorships / Gifts)	(1,587,306)	(1,793,867)	(1,567,267)	(1,846,688)	
Subtotal	(1,587,306)	(1,793,867)	(1,567,267)	(1,846,688)	(1,839,178)
CONTRACTS & GRANTS					
BOEMRE/MMS	(49,999)	(1)			
USGS 8/31/11	(41,508)	(769)		(2,373)	
GEOF-RATCLIFF TXWC 08-31-11 1410WSW000	(110,399)	(33,336)		(0)	
UTIG-RATCLIFF TXWC 10-31-12 1412TAN003		(36,286)			0
TXWC 9-30-13			(42,066)	3	(0)
TXWC 9-30-14				(24,290)	(710)
Title V CAMSC (SWTJC)	(74,098)			(59,978)	
GEOF-RATCLIFF TXWC 08-31-11 2011 Summer Merit Program	(34,129)	(4)		(4,567)	
Subtotal	(310,133)	(70,395)	(42,066)	(91,205)	(710)
ENDOWMENT / PROGRAMMATIC					
GeoFORCE Texas Fund			(11,086)	(2,961)	(3,115)
Darwin Family Endowment	(1,221)	1,221	(9,069)	(6,564)	(2,300)
GeoForce Endowment in Honor of Doug Ratcliff					
Subtotal	(1,221)	1,221	(20,155)	(9,524)	(5,415)
Total Expenses	(1,898,659)	(1,863,042)	(1,629,488)	(1,947,417)	(1,845,303)

Note: Contracts and Grants includes University overhead



#### Friends of GeoFORCE Endowment

Thank you for all the contributions to support GeoFORCE in building the newly established endowment fund in honor of Doug Ratcliff. Donors contributed \$284,238 toward the endowment. This was matched dollar for dollar by generous anonymous donors. This endowment aims to ensure that students in the future have access to the GeoFORCE experience for years to come. Congratulations GeoFORCE supporters for truly making a difference!

1	8	11	, 8
AAPG Foundation	Ms. Patricia O. Downs	Mr. Stuart L. Jackson	Jay A. Raney, Ph.D.
Mr. William N. Agee, Jr.	Drillinginfo	Ms. Lisa Karki	Ms. Laura Reich
Anadarko Petroleum	Dr. Laurie S. Duncan	Ms. Lauren Michelle Kasney	Dr. Wendy M. Rober
Corporation	ExxonMobil Corporation	Kinder Morgan Foundation	Mrs. Margaret Anne
Anonymous Donor	William L. Fisher, Ph.D.	Mr. Travis T. Kloss	Thayne Shaw Roone
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Bahamas Petroleum Company	Hamman Foundation, George	Mr. Bruce A. Kuyper	Evelyn Sanchez
Mr. Robert W. Baumgardner, Jr.	William E. Galloway, Ph.D.	Ms. Elaine G. Leddy	Mr. James W. Sanson
Ms. Annell Bay	Ms. Tomica Gawlik	Lehman Family Charitable	Schwab Charitable F
Mr. Christopher A. Beard	Ms. Belle German	Foundation	Ms. Lindsay Scott
Mr. Reginald D. Beasley	Ms. Natalie B. Givens	Mr. Chris S. Lerch	Schlumberger
Mrs. Tiffany Benavidez	Ms. Lisa K. Goetz	Mr. Bruno Maldonado	SEG Foundation
BHP Billiton	Ms. Darby Nicole Gonzales	Marathon Oil	Steven J. Seni, Ph.D.
Mr. Robert L. Bluntzer	Mr. David Luke Gorney	Mr. Bruce E. McCommons	Shell E & P Technolo
Dr. Robert Leigh Boyce	Mr. Christopher L. Graham	Mr. Joseph A. Medina	SIPES - Central Texas
Mr. Alfredo Boyles	Ms. Laurie Green	Mrs. Martha B. Mills	Ms. Christine M. Ski
BP Corporation	Mr. Jeremy T. Greene	Samuel Lewis Moore, Ph.D.	Ms. Crystal S. Sower
Mr. Philip Braithwaite	Dr. Charles G. Groat	Newfield Exploration Company	Ms. Pamela S. Specia
Ms. Meredith Anne Bush	Mr. Michael Ryan Grossman	Mr. Andrew Joseph Nicholson	Talisman Energy
Ms. Denise M. Butler	Mr. Paul R. Gucwa	Noble Corporation	Mr. Dennis R. Tromb
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Mr. William D. Demis	Mr. Ben P. Hooper	Ms. Holly Pils	Mrs. Lila M. Beckley
Ms. Marion W. Deford	Baker Hughes	Mr. David A. Pustka	Mr. Mark Wieders
Ms. Laura Michelle Demott	Mr. Gary A. Hummel	Rachal Foundation, Ed	

eich Л. Robertson ret Anne C. Rogers w Rooney Company hez V. Sansom, Jr. ritable Fund Scott er tion ni, Ph.D. Technology Co ral Texas Chapter e M. Skirius S. Sowemimo S. Speciale ergy R. Trombatore . Winchester erma gliotti n Ward A. Way R. Weise Beckley and Wiederspahn

Mr. Philip B. Hunter

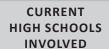
Ms. Tara M. Radjef

Mrs. Susann V. Doenges

#### **P**ARTNERSHIPS

# **GEAR UP Update**

The GeoFORCE GEAR UP cohort now has two summers under its belt so far. 41 students returned this year (1 student from Lubbock ISD was added this year) and proved they were ready to take on Arizona. The GEAR UP students made vast improvements from last year as shown through their greatly improved daily quiz and final grades. They all look forward to continuing with GeoFORCE next year as they look to Oregon for the summer of 2016.



**Business Careers HS** 

Estacado HS

John F Kennedy HS

John Jay HS

Macarthur HS

Manor HS

Manor New Technology HS

Memorial HS

Sidney Lanier HS

Somerset HS



Region	GEARUP
Date of Event	June 20–27, 2015
Number of Students:	42
Coordinator:	John Hash
Instructor:	Peter Flaig
<b>Corporate Guests:</b>	Kean Bliss - BHP Billiton
	Karen Cochran - JSG Development

#### STEMFORCE: Building the Next Generation of Geoscientists

The ever-growing age gap within the oil and gas industry workforce is a phenomenon that companies are all too aware of. It is projected that within five to seven years, roughly 50 percent of the industry's workforce will be retired. STEMFORCE, funded by Drillinginfo and ExxonMobil and founded by GeoFORCE Texas, is a new program that aims to encourage students to pursue careers in the geosciences by exposing high school students to geologic fieldwork.

Exposing high school students to fieldwork and introducing them to a variety of different careers within the STEM field helps students make more informed decisions about which career path they should take. The students recruited into the STEMFORCE program already have an affinity towards the sciences, but we help expose them to a deeper understanding of the world by doing hands-on geology fieldwork. This program will help them develop a better perspective of Earth systems as they pursue careers in either the geosciences or other branches of the STEM field.

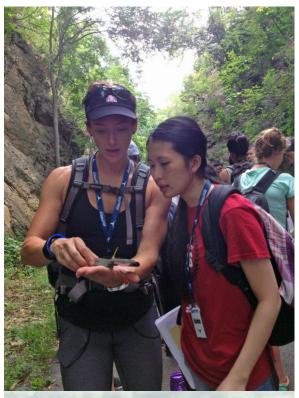
[This excerpt was taken and adapted from a blogpost written by Bridget Haby on Drillininfo's blog site at Forbes.com. The full article can be found at www.forbes.com.]



Region	STEMFORCE
Date of Event	June 13–19, 2015
Number of Students	36
Coordinator	Bridget Haby
Instructor	Tiffany Caudle
<b>Educational Coach</b>	Emily Taylor

The valuable partnership that GeoFORCE made this year with AISD and DISD helped make STEMFORCE possible. A special thanks goes out to these two school districts as well as the above-mentioned sponsoring companies, ExxonMobil and Drillinginfo, who funded this pilot program.

# Industry and Government Participation





COMPANY/ORGANIZATION	INDIVIDUAL		
Anadarko	Robert Tally		
Anadarko	Chelete Burnett		
Baker Hughes	Jenna Ponzi		
BHP Billiton	Chris Lerch		
BHP Billiton	Christine Skirius		
BP	Kira Diaz Tushman		
BP	Larry Thomas		
Chevron	George Hildebrandt		
Chevron	Joni Baird		
Chevron	Karen Rawls		
Chevron	Danielle Carpenter		
ConocoPhillips	Melissa Lloyd-Furnas		
Drilling Info	Mark Nibbelink		
Drilling Info	Allen Gilmer		
ExxonMobil	Mike Loudin		
ExxonMobil	Nick Way		
ExxonMobil	Julie Cogswell-Maher		
Houston ISD	Yolanda Evans		
Houston ISD	Karla Auzenne		
Houston ISD	Hortense Campbell		
Marathon Oil	Richard Deene		
Marathon Oil	Shawnda Ward		
Marathon Oil	John Gates		
Marathon Oil	Timothy Fischer		
Marathon Oil	George Laguros		
Marathon Oil	John Gates		
Marathon Oil	Donna Boyer		
Marathon Oil	Kathleen Sauve		
Newfield	Lindsay Counsellor		
Schlumberger	Susan Rosenbaum		
Schlumberger	Paula McHann Harris		
Schlumberger	Joel le Calvez		
Shell	Mike Alvarez		
Shell	Mark Martin		
Southwest Texas Junior College	Blaine Bennett		
Texas Workforce Commission	Emily Clodfelter		
Valence Operating Company	Bud Scherr		

# Other Professionals

Balmorhea State Park:	Jacob Barton Karl Coughlin
Barton Springs Pool:	Daniela Heinrich
Cape Perpetua:	Lori Robertson, Brian Hoeh
Carlsbad Caverns:	Sam Durbin
Chihuahuan Desert Research Institute:	Lisa Gordon
Colorado River Discovery:	Dianne Powers, Korey Seyler, Kris Sams
Crater Lake National Park:	Amelia Bruno
Crown Point Vista:	Dorothy Brown-Kaiser
Ft. De Soto:	Jim Wilson
Franklin Mountains State Park:	Erika Rubio
Glacial Sand & Gravel Co.:	Jocelyn Lewis-Miller
Glen Canyon Dam:	Nikki Johnson, Rachel Dawavendewa, Dana Crane, Curtis Jaborski, Sarah Doyle
Grand Canyon:	Roger Benefield, Nancy Reilly, Jacob Fillian
Great Falls Park:	Craig Madison, Cheryl Bresee
Guadalupe Mountains:	Edna Flores Elizabeth Garcia
Harpers Ferry National Historical Park:	Jeff Woods, Rebecca Harriett, Roxanne Ruppenthal
John Pennekamp Coral Reef:	Cecelia McCafferty, Jesula Milfort
John U. Lloyd State Park:	Carmelo Duesler
KATY Research Vessel:	Captain Stan Dignum, Dana Sjostrom
Leesylvania State Park:	Karen Lambey, Maribel Cervantes
Lovers Key State Park:	Gloria Beauchamp
Marine Science Institute:	Linda Fuiman, Lynn Ulch
McDonald Observatory:	Frank Cianciolo
Meteor Crater:	Janet Joselane Jo Nell
Mt Hood National Forest-Timberline Lodge:	Kristin A Garrett
Mt St Helens:	Kristine Cochrane-Bell
Newberry National Volcanic Monument:	Elizabeth Wasserman, Karen Gentry
Oregon Coast Aquarium:	Paula Lafferty
Padre Island National Seashore:	Buzz Botts
Pennsylvania State Geological Survey:	Gary Fleeger
Siuslaw National Forest:	Lori Robertson, Brian Hoeh
Sunset Crater/Wupatki National Monument:	Inez Paddock, Jeff Beauchamp, Erin Cox
Texas Memorial Stadium:	Lauren Lichterman
Texas State Aquarium:	Stacy Treviño
Tualatin Valley Fire & Rescue:	Jeff Rubin
United States Geological Survey:	Randy Orndorff, Lydia Quintana, Michael Marketti, Jess Rodysill
Valley of Fires:	Albert Najar
Washburn St. Park (Heceta Head):	Debbie
White Sands National Monument:	Rebecca Burghant Emily Guss
Windley Key Fossilized Coral Reef:	Michael Guarini
Zion National Park:	David Walker, Amy Esplin, Allison Christofis, Matthew Cardwell

<sup>\*</sup>Park Rangers, Museum Staff, and Other Professionals Who Provided or Arranged for Learning Opportunities

# SUMMARY OF 2015 ACTIVITIES

#### **Academies**

#### 9th Grade:

Austin and Florida

Geological Topics Rivers, erosion, sediment transport, coastal erosion, barrier islands, carbonate production, reefs, sea-level change, uniformitarianism, superposition

#### **Objectives**

- 1. Introduce students to basic geological terms and processes
- 2. Give students the opportunity to experience life on a major university campus

#### Austin Field Stops

- McKinney Falls
- Barton Springs
- TX Memorial Museum
- UT Austin Texas Campus

#### Florida Field Stops

- Fort De Soto Park
- Lovers Key
- Big Carlos Pass
- John U Lloyd Park
- Pennekamp Coral Reef



Region	HOUSTON	MIXED	SOUTHWEST
Date of Event	June 13-19, 2015	June 6–13, 2015	June 20–27, 2015
Number of Students	38	42	42
Coordinator	Chris Graham	John Hash	Lisa Aguiñaga
Instructor	Wonsuck Kim	Ruth Costley	Laura DeMott
<b>Educational Coach:</b>	Karla Auzenne	Phil Caggiano	Alejandra Martinez
Corporate Guests	Bill Magee (Shell)	Pete Hargrove (BP)	Oswaldo Cataldo (Shell)
	Jessica Parker (Chevron)	Susan Howes (Chevron)	
		Alicia Hewlett (BHP Billiton)	



## **Academies**

#### 10th Grade:

Arizona and Utah

Geological Topics

Geologic time, law of superposition, lateral continuity, crossbedding, unconformity, desert varnish, monocline, gradient, antecedent drainage, mass wasting, uniformitarianism, differential erosion, dendrochronology, cinder cone, stratovolcano, sedimentary rocks



#### Objectives

- 1. Inspire students to "think like a geoscientist"
- 2. Apply geological concepts to what is seen in real time
- 3. Expose students to sedimentary structures, processes, and environments

#### Arizona Field Stops

- Grand Canyon
- Balancing Rock
- Navajo Bridge
- Glen Canyon Dam
- Wupatki Ruins
- Sunset Crater
- Meteor Crater

#### Utah Field Stops

Zion National Park



Region	HOUSTON	SOUTHWEST	MIXED
Date of Event	May 30–June 6, 2015	June 6–13, 2015	June 13–20, 2015
Number of Students	39	40	41
Coordinator	Bridget Haby	Lisa Aguiñaga	Matt Hofer
Instructor	Mike Prior	Dolores van der Kolk	Michelle Gevedon
<b>Educational Coach</b>	Cynthia Maye	Michael Arratia	Tanya Tijerina
Corporate Guests	Chris Yarborough (BHP Billiton)	Michael Loudin (ExxonMobil- Retired)	Ana Pape (ExxonMobil)
	Samantha Ewing (ExxonMobil)	Bonnie Loudin (Guest)	Adam Chain (Marathon Oil)
		Christine Skirius (BHP Billiton)	

#### **Academies**

#### 11th Grade:

Oregon and Washington

#### Geological Topics

Plate tectonics, subduction, volcanoes, crosscutting relations, igneous rocks, magma, lava, fissure, vesicular texture, pyroclastic flow, caldera, columnar basalt, longshore current

#### GENEDA GENERAL GENERAL

#### Objectives

- 1. Expose students to volcanic structures, processes, and environments
- 2. Compare beach environments on east and west coasts of the United States
- 3. Reinforce geological concepts from 9th and 10th Grade Academies

#### Oregon Field Stops

- Columbia River Gorge
- Mount Hood
- Newberry Caldera
- Crater Lake
- Salt Creek and Multnomah Falls
- Oregon Coast
- Oregon Coast Aquarium

#### Washington Field Stop

• Mount St. Helens



Region	HOUSTON	SOUTHWEST
Date of Event	July 10 –17, 2015	July 25-August 1, 2015
Number of Students	39	42
Coordinator	John Hash	Chris Graham
Instructor	Jeff Paine	Jeff Paine
<b>Educational Coach</b>	Van Runnels	Lauren Oefinger
<b>Corporate Guests</b>	Sam Moore (JSG)	Jessica Errico (BHP Billiton)
	Belle German (JSG Development)	Danielle Carpenter (Chevron)
	Tom Griffith (Anadarko)	



#### **Academies**

#### 12th Grade:

Pennsylvania, Maryland, West Virginia, Virginia, & Washington D.C.

Geological Topics Orogeny, metamorphic rocks, geologic provinces, Appalachian geology, continental collision, Pangaea, fossil fuels, valley and ridge, coastal plains, faults, folds, rifting, anticlines and synclines



#### Objectives

- 1. Compare the ancient convergent plate boundary of the Northeast with the active convergent plate boundary of the Northwest
- 2. Reinforce geological concepts from past three summers

#### Pennsylvania Field Stops

- McConnells Mill State Park
- Graff North Mine

#### Maryland Field Stops

- Roundtop Hill
- Sideling Hill



#### West Virginia Field Stop

 Harpers Ferry National Monument

#### Virginia Field Stops

- Rift Basin
- Great Falls Park
- Leesylvania State Park
- USGS Headquarters

# Washington D.C. Field Stops

- Smithsonian Museum
- National Mall



Region	HOUSTON	SOUTHWEST
Date of Event	July 25-August 1, 2015	July 25-August 1, 2015
Number of Students	41	43
Coordinator	John Hash	Matt Hofer
Instructor	Jamie Austin	Jamie Austin
<b>Educational Coach</b>	Karla Auzenne	Michael Arratia
<b>Corporate Guests</b>	Genevive Mathers (BP)	Tony Riccardi (BP)
	Roland Fernandes (Marathon Oil)	David Mirakian (Shell)
	Sam Moore (JSG)	Karen Barton (JSG)

## Young Geoscientists

#### 11th Grade:

Texas and New Mexico

In 2014, GeoFORCE began expanding the Academy program and phasing out the Young Geoscientist program. No 9th grade or 10th grade Young Geoscientists Field events were held. They were replaced by combined academies.

#### Objectives

- Expose students to the many types of careers in the geosciences, all while giving them first-hand experience in the field
- 2. Expose students to basic tectonic concepts
- 3. Compare fluvial systems in depth
- 4. Reinforce geological concepts from past two summers

#### Geological Topics

Aquifer, groundwater, basin, desertification, depositional environment, eolian dunes, subduction, tectonics, water table, recharge, discharge, and spring

#### Texas Field Stops

- Balmorhea State Park
- Davis Mountains
- McDonald Observatory
- Chihuahuan Desert Nature Center
- Guadalupe Mountains

#### New Mexico Field Stops

- White Sands National Monument
- Carlsbad Caverns
- Valley of Fires
- Oliver Lee Memorial State Park
- Franklin Mountains

Region	SOUTHWEST	HOUSTON
Date of Event	June 27–July 3, 2015	July 11–17, 2015
Number of Students	42	33
Coordinator	Matt Hofer	Bridget Haby
Instructor	Stacy Loewy	Gregory Frébourg
<b>Educational Coach</b>	Marla Hibbits	Michael Arratia
<b>Corporate Guests</b>		Keith Mahon (Anadarko)
		Yolanda Evans (HISD)





# Young Geoscientists

#### 12th Grade

Utah, Wyoming & Montana

Geological Topics Orogeny, metamorphic rocks, geologic provinces, plate tectonics, Basin and Range, geysers, hydrothermal, caldera, faults, folds, rifting, anticlines and synclines



#### Objectives

- 1. Study the ancient convergent plate boundary of the Northwest and how it relates to the topography today
- 2. Expose students to hydrothermal features
- 3. Reinforce geological concepts from past three summers

#### Wyoming Field Stops

- Grand Tetons
- Yellowstone National Park
- Mammoth Hot Springs



#### Utah Field Stops

- Antelope Island
- Little Cottonwood Canyon
- Castle Gate
- Dinosaur National Monument

Region	SOUTHWEST	HOUSTON
Date of Event	July 11–17, 2015	July 25-31, 2015
Number of Students	38	17
Coordinator	Matt Hofer	Lindsay Stephens
Instructor	Laura DeMott	Peter Flaig
<b>Educational Coach</b>	Marla Hibbits	Erin Balazs
<b>Corporate Guests</b>	Stefan Punnette (BP)	Denise Butler (Shell)
	Corey Moss (Talisman)	Josh Payne (Shell)
Consultant	Jay Raney (Guest)	Rachel Murphy (BP)



Photo Credit Colby Wright

# **Educator Professional Workshops**

Without dedicated teachers GeoFORCE would not be able to recruit the outstanding students we have in the program. Our educators play a tremendous part in just about every process. They are our biggest advocates for the program. During the recruitment phase, teachers help to identify and encourage those students they believe to be great candidates. They guide students through the application process and monitor these students throughout their high school years once the are accepted in the GeoFORCE program. This process is why we recruit education professionals as well to assist us in our GeoFORCE Academy field courses every summer as Educational Coaches.

GeoFORCE hosts one major event every year for teachers from our target schools. Educator Professional Workshops are free and available to our math and science teachers. They provide educators with hands-on field exposure to STEM topics taught in the outdoor classroom, as well as lessons they can take back to their schools. Our fall workshop, held November 15–17, 2014, took place in Austin, Texas. The workshop was attended by nearly 40 educators. Our first night included a meet & greet on Austin's famous Rainey Street. Dr. Katherine Ellins, a Geoscience Education Researcher, lectured on the climate, the deposition and transport of sediments, and

how professionals read and understand core samples for what the samples tell researchers. Our educators were asked to build a drilling mechanism given many basic items. Through much teamwork each of our teacher groups constructed some of the most amazing "working" contraptions! Educators were also taken out in the field to the Redbud Center, Lower Colorado River Authority (LCRA) for a tour & history of our local Texas river systems, so that they can inspire their students to be lifelong stewards of the Colorado River.



## **GeoFORCE High School Events**

#### **PSAT** and **SAT** Prep

This year, GeoFORCE provided a SAT workshop for high school juniors and seniors along with a PSAT workshop for all freshman and sophomores. This is the second time GeoFORCE has provided PSAT information for younger GeoFORCE students and have had great responses from students and parents. Since the PSAT determines the National Merit Scholars, we feel this is another opportunity to prepare our students in college readiness.

# College Admission Workshops

GeoFORCE provided two college admission workshops in the fall of 2014 to high school juniors and seniors along with their parents. Throughout these presentations, GeoFORCE staff provided information concerning the college admission process, financial aid and scholarship opportunities. In the future, GeoFORCE will invite parents of freshman and sophomores to our college admission workshops. Since many college applications require information from freshman year and beyond, it is important that we all encourage our students to engage in activities earlier.

#### High School Senior Events

In the fall of 2014, GeoFORCE hosted our annual Career Day for all GeoFORCE seniors to consider possible career paths. Both the Houston and Southwest cohorts visited Shell headquarters in Houston. Shell provided a panel consisting of various employees to give insight to all the employment opportunities provided by an energy company. Shell also presented the students with challenging scenarios to encourage them to pay attention to detail, communicate, and provide instruction to others.

Beyond our visit with Shell, students also received a tour of the University of Houston campus. Students toured dorm halls, rec facilities and spoke with current students about their experiences. This year, the Southwest cohort also had a visit to UTSA. The students toured the campus and had lunch with former GeoFORCE students now attending the university.

In the spring, GeoFORCE students were invited to Austin for a final celebration before they head off to college. During the spring senior trip, students hiked Enchanted Rock for a spectacular view of the Texas hill country before enjoying a picnic at the bottom. Back in Austin, former GeoFORCE students currently in college were brought in for round table discussions with the seniors about the high school-college transition. This was all capped off with a beautiful dinner cruise on Lake Austin with GeoFORCE staff. sponsors, and instructors.



## Valedictorians and Salutatorians

Our graduating GeoFORCE students leave a legacy of success. Their perseverance and hard work, sets the stage for further leadership in their college endeavors.

We congratulate our GeoFORCE students Class of 2015 Valedictorians & Salutatorians!



Hannah Anderson Salutatorian Lamar HS



Estefani Berrios
Salutatorian
E.L. Furr HS



David Chavarria Valedictorian C.C. Winn HS



Joshua Currie Valedictorian Hondo HS



Natalya Doria Salutatorian Carrizo Springs HS



Jacy Gray Valedictorian Leakey HS



Hailey Hart Salutatorian Leakey HS



Abby Jones Valedictorian Sabinal HS



Clarissa Lopez Salutatorian Sabinal HS



Katrina Martinez
Valedictorian
Dilley HS



Krista McDonald Salutatorian Utopia HS



Ariana Moncada Salutatorian Crystal City HS



Rolando Osorio Valedictorian N. Houston E.C. HS



Stacey Peralta Salutatorian Westbury HS



Theresa Perez Salutatorian Waltrip HS



Steven Salazar Valedictorian Pearsall HS



Cecelia Schafer Valedictorian Utopia HS



Dallin Williams Valedictorian Knippa HS



Michaela Williams Salutatorian Uvalde HS

#### 10-Year Event

#### University of Texas mentorship program celebrates a decade of inspiring young people

GeoFORCE Texas has touched the lives of more than 1,500 young people over the past decade, blazing a trail of academic success that was honored earlier this year with the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring, the highest such distinction from the United States government.

The program commemorated the 10-year milestone August 14 with a Celebration Gala on The University of Texas at Austin campus that brought together alumni, sponsors and others who support GeoFORCE. "This program thrives because of the assistance and partnership of school districts, corporations, government agencies, and higher education," said GeoFORCE Texas Director Samuel Moore.

Denise Butler of Shell Oil and Reggie Beasley, who retired from ExxonMobil, gave the keynotes at the gala event.

GeoFORCE is more than an introduction to the geosciences. It also offers high school students support through high school. The program helps prepare students for the SAT and ACT, offers guidance applying for college, and has awarded more than \$2 million in scholarships. After high school, GeoFORCE continues to mentor students through college, into internships and into the workforce.

Individuals who were honored at the GeoFORCE Event:

- Doug Ratcliff, GeoFORCE Founder and First Director
- Sharon Mosher, Dean of the Jackson School of Geosciences
- The late Ina Pearl Riggs Brundrett, Supporter of GeoFORCE and the Jackson School
- Eleanour Snow, Former GeoFORCE Associate Director
- Julie O'Shaughnessy, Former GeoFORCE Program Coordinator
- Yolanda Evans, Former Houston Independent School District Liaison
- Blaine Bennett, Former South West Texas Junior College Dean of Institutional Advancement and Technology



GeoFORCE 10-Year Celebration Gala at The Texas Union

[This excerpt was taken from an article published by The Jackson School of Geosciences on August 24, 2015 about the 10-Year Celebration Gala.]

#### STAFF



**Dr. Sam Moore**, the Director of Outreach and Diversity, oversees the GeoFORCE program. For more than 20 years he has provided leadership in engaging faculty with K-12, undergraduate, and graduate students. He has also worked with STEM industries and government agencies to develop successful STEM diversity initiatives. Along with

GeoFORCE, Sam also oversees Jackson School Outreach Programs to increase participation in the geosciences.

Lindsay Stephens, has recently transitioned to the College Coordinator position for the GeoFORCE program. She oversees the GeoFORCE College Program, which includes maintaining statistics, college leadership opportunities, and scholarship management. Bridget Haby, who is a JSG graduate and new to GeoFORCE, assists as our Career Coach and provides access to internship opportunities and advancement in career development for all GeoFORCE alumni in the College Program.

The high school GeoFORCE Program is overseen by Matt Hofer. Matt has advanced to oversee the GeoFORCE High School Program as of this August. He is assisted by Coordinators, John Hash, Lisa Aguiñaga, and the first GeoFORCE Graduate to become a Coordinator, Christopher Graham. Chris joined the GeoFORCE team in April to assist with summer field events.



Karen Barton and Alex Vlahodimitropoulos assist with accounting, finances, and purchasing. Alex has recently become a part of the Jackson School of Geoscience community and a recent member of the GeoFORCE team. Many others in the Jackson School assist with GeoFORCE. We would especially like to thank Jay Raney,

Susie Doenges, Jamie Coggin and Dr. Katherine Ellins.





Matt Hofer
High School Program Coordinator
ROLE: Oversee logistics and operations for all high school program field courses and events



John Hash
Coordinator, Houston Region
ROLE: Coordinate the Houston
Academy trips; Assist with development activities for GeoFORCE



Lisa Aguiñaga
Coordinator, Southwest Region
ROLE: Coordinate the Southwest
Academy trips; Communications
point person for GeoFORCE
(Se habla español)



Chris Graham
Coordinator, Southwest Region
ROLE: Coordinate the Southwest
Academy trips; Social media
point person for GeoFORCE



#### GEOFORCE COLLEGE PROGRAM

#### **New Positions**

Lindsay Stephens,

College Program Coordinator



Lindsay will be managing the GeoFORCE College Program and coordinating all activities and events for GeoFORCE college students. This includes overseeing events for students making the

transition from high school to college as well as events for students preparing for their next steps after college. Also, she oversees the GeoFORCE Scholarship Program and manages the processing of scholarships to students. Lindsay looks forward to increasing students' access to academic resources on their campuses and increasing their connections with corporate sponsors via internships, enhanced mentoring, and leadership training.

#### Bridget Haby, Career Coach



Bridget's role with the GeoFORCE College Program will focus on assisting students with their career goals. She will provide students with information about internships, full-time

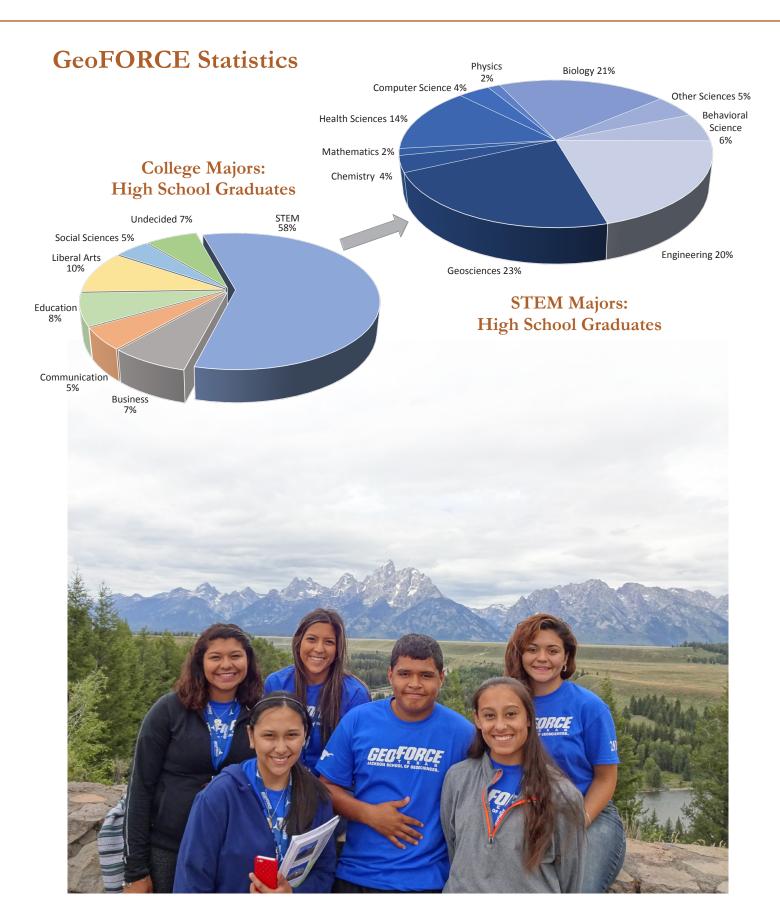
employment, and other career-enhancing opportunities. She will help organize several events throughout the school year focused on job skills and developing student relationships with employers as well as organize a mentoring program for GeoFORCE freshmen college students. Bridget looks forward to applying her past experience of assisting and mentoring students as a College Adviser with Advise TX to her new role as Career Coach with GeoFORCE.

#### **GeoFORCE** College

GeoFORCE has over 578 students attending colleges across the nation. With this expansion, the program has reached new heights. More students are interested in diverse disciplines and are engaging in many careerbuilding activities while pursuing their higher education. GeoFORCE will continue to offer opportunities for students to build their portfolios and gain invaluable experience through internships, philanthropy, and mentoring while in college. (Working as a GeoFORCE high school counselor for example!) GeoFORCE has identified 25 students who are pursuing Master's Degrees, a number expected to grow in the immediate future. The program is now growing & shifting to cover any past gaps to help students make the transition to graduate programs. This year, GeoFORCE hopes to include programs for GMAT & GRE courses, professional mentorship with professors in their fields, as well as GeoFORCE Coordinator internships during the summer.

#### **Scholarships**

For many GeoFORCE high school seniors, getting into college is a challenge, but it only sets the stage for a more formidable obstacle—paying for it. GeoFORCE is fortunate to have donors who understand this problem. In 2015, thanks to generous donor support, we were able to continue the GeoFORCE Graduate Scholars Partnership for the class of 2014. This partnership is open to participation by other donors and the program continues to promote the funding opportunity to all available potential donors. The goal of these college scholarships is to provide financial resources to GeoFORCE alumni who are outstanding students and have demonstrated the potential to become future leaders in their fields. We now have over 120 scholars who have chosen to major in STEM fields and who have unmet financial need. The scholarships provide four years of funding. Student recipients are required to live on campus for the first year of college, meet monthly with their assigned mentor, and serve as peer mentors for younger scholars on their college campuses.



# **GeoFORCE College Students**

American Musical and Dramatic Academy	1
American University	1
Amherst College	1
Angelo State University	3
Art Institute of SA	1
Austin College	1
Austin Community College	2
Baylor University	5
Beloit College	1
Bowdoin College	2
Brown University	1
Bucknell University	1
BYU	1
BYU Idaho	1
Carleton College	2
Case Western Reserve University	1
Colorado School of Mines	1
Colorado State University	1
Culinary Inst. Of America	1
DePauw University	1
Devry University	1
El Paso Community College	1
Embry-Riddle Aeronautical University	1
Emory University	1
Franklin Pierce University (Rindge NH)	1
Harvard University	1
Harvey Mudd College	1
Houston Baptist University	2
Houston Community College	25
Howard University	2
Johns Hopkins University	1
Knox College (IL)	1
Lamar University	3
Lone Star College	4
McMurry University	1
Middlebury College	1
Midland College	1

Mount Holyoke College	1
Northwest Louisiana Technical College	1
Northwest Vista College	3
Northwestern University	1
Oberlin College	1
Occidental College	1
Olin College of Engineering	1
Our Lady of the Lake	2
Prairie View A&M	5
Presentation College	1
RI School of Design	1
Rice University	6
Rochester Institute of Technology	1
Sam Houston State University	12
Samford University	1
San Antonio College	2
San Jacinto College	2
Sanford-Brown College	1
Schreiner University	1
Smith College	1
Soka University	2
South Plains College	1
Southern University and A&M College	1
Southwest Texas Junior College	20
St. Edward's University	1
St. Mary's University	4
Stephen F Austin	6
Sul Ross State University	5
Tarelton State University	2
Tennessee Wesleyan	1
Texas A&M Commerce	1
Texas A&M Corpus Christi	8
Texas A&M Galveston	4
Texas A&M International	4
Texas A&M Kingsville	4
Texas A&M San Antonio	1
Texas A&M University	78

Texas Christian University	1
Texas Lutheran University	1
Texas Southern University	7
Texas State University	19
Texas Tech University	22
Texas Woman's University	1
Trinity University	3
UCLA	1
Ultimate Medical Academy	1
University of Alabama	1
University of Chicago	1
University of Houston	28
University of Houston-Clear Lake	1
University of Houston-Downtown	17
University of Houston-Victoria	1
University of Minnesota	1
University of North Texas	4
University of Oklahoma	1
University of Oregon	1
University of the Incarnate Word	7
University of Wisconsin	1
UT Arlington	3
UT Austin	118
UT Dallas	1
UT San Antonio	53
UT Tyler	1
Washington and Lee University	1
Washington University	1

Total GeoFORCE College Students	563
STUDENT BREAKDOWN	
Texas State 4-Year Colleges	412
Texas State 2-Year Colleges	61
Out-of-State Colleges	54
Private Colleges	80
Total Number of Different Colleges	103

## GeoFORCE College Graduates in Industry

**DOMINIQUE ZVORAK** began working for *Schlumberger* as a Field Technical Analyst in San Antonio this year after graduating from UTSA with a Bachelor's degree in Geology. Dom was a GeoFORCE Southwest Academy student in high school and worked as a GeoFORCE counselor for two summers during college.

**Debbie Duran** began working for *Talon/LPE* as a Staff Geologist in San Antonio in March 2014 after graduating from UTSA with a Bachelor's degree in Geology. Debbie worked as a counselor for GeoFORCE for three years while in college. She is originally from Eagle Pass, TX and was part of the very first GeoFORCE cohort.

**STEPHEN CANTU** began working for *Marathon Oil* in North Dakota after graduating with a Bachelor's degree in Petroleum Engineering from Texas A&M University. He is originally from Del Rio, TX and attended all four Southwest Academy trips.

MELANIE LYNCH began working for *Performance Technologies*, *LLC* in San Antonio after graduating from UTSA with a Bachelor's degree in Geology. She was a GeoFORCE counselor for two summers during college and was part of the very first GeoFORCE cohort.

ERYN FREITAS began working for *Phoenix Technology* Services as a Prism Coordinator after graduating from Tarleton State University with a Bachelor's degree in Geology. She is originally from Moore, TX from the Southwest GeoFORCE region and completed all four Academy trips.

# Schlumberger











# APPENDICES

# **Participating Schools**

Houston Middle Schools	Number of Students
Clifton Middle School	5
Fondren Middle School	4
Grady Middle School	10
Hamilton Middle School	2
Holland Middle School	4
Johnston Middle School	2
Lanier Middle School*	3
Patrick Henry Middle School	1
Revere Middle School	9
Thomas Middle School	1
Welch Middle School	1
Woodson Middle School	4
Young Men's College Prep Academy	2
Young Women's College Prep Academy	10
Total	58

<sup>\*</sup>GeoFORCE did not recruit at Lanier Middle School in 2014 but did accept applications from this school

Southwest Districts	Number of Students
Brackettville	1
Carrizo Springs	7
Cotulla	5
Crystal City	2
Del Rio	4
D'Hanis	2
Dilley	1
Eagle Pass	23
Hondo	6
Knippa	0
La Pryor	1
Leakey	2
Nueces Canyon	0
Pearsall	1
Rocksprings	1
Sabinal	1
Utopia	1
Uvalde	6
Total	64



# **Spring Advisory Council Meeting**









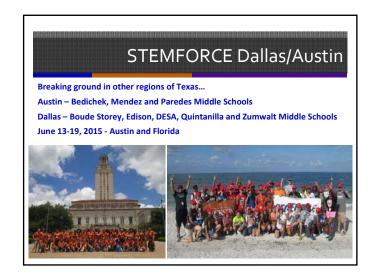
#### GeoFORCE Presidential Award

- "These educators are helping to cultivate America's future scientists, engineers and mathematicians," President Obama said. "They open new worlds to their students, and give them the encouragement they need to learn, discover and innovate. That's transforming those students' futures, and our nation's future, too."
- March 27, 2015 White House Press Release

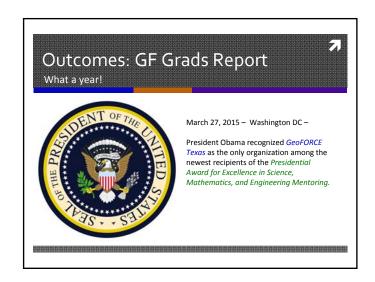












# College Graduation 2009: 59 in Cohort 46 students hold 34 Bachelors and 14 Associates degrees 81% are pursuing degrees 2010: 97 in Cohort 65 students hold 56 Bachelors and 12 Associates degrees 84% are pursuing degrees 2011: 91 in Cohort 44 students hold 35 Bachelors and 10 Associates degrees 90% are pursuing degrees Spring 2015:

28 BS Degrees 28 BA Degrees



Job hunting

Working in STEM

Villanueva III TAMUCC

TAMU

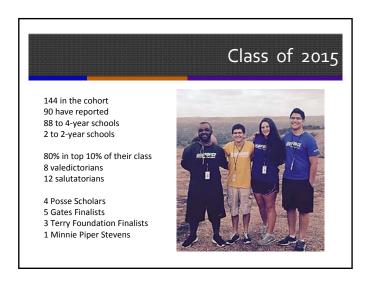
Davis

Felipe

Javonda

Scholarships Geology Majors GF Graduates Partnership Scholarship **▶** 108 students on full scholarships 15 on partial scholarships 43 in Geology **3** 33 in Engineering BP Scholarship 16 22 students supported this year BS Chevron Scholarship Degrees **7** 13 students supported this year Gerson Garcia Scholarship Reached payout. Working on awards





#### 10 Year Reunion and Gala August 14, Austin TX

#### **Afternoon: Reunion**

#### **Evening: Gala**

**₹**10:30 Check in

**7**6-7 Cash Bar and hor

₹11:00 Class Reports

**₹**7-9 Dinner with Keynote and

**7**12-1 Lunch

Awards **₹9-10** Wrap up, mingle, dance

**₹1-5** Round table and small group discussions about college and career

**⊘**Continuous: Slide show of

GeoFORCE

\* Possible Golf Tournament Fundraiser the following morning

#### Discussion

- On Long-Term Sustainability
  - Effect of current oil prices
  - Expanding the sponsor base
  - Leveraging the Presidential Award

#### Financial Report

- Endowment
- Financial Reporting Spreadsheet

#### Discussion

- Thinking Forward
- Cost reductions (e.g cohort size, destination)
- Organizational structure/effectiveness
- Staffing strategies
- Expansion/replication strategies
  - Teacher professional development (New Orleans 2016, West Texas 2017)
  - **ℬ** STEMFORCE Pilots

#### Discussion

- Thinking Forward
- GeoFORCE Director corporate visits
- Corporate Branding/Naming opportunities
- STEM Networking (e.g. Texas Science Fair Board)

# Fall 2015 GFAC Meeting

- Tuesday, October 13, 2015
- Sheraton Brookhollow

#### Discussion

- Thinking Forward
- Leveraging recognitions (NAS reports, PAESMEM)
- Coordination with JSG development (e.g. endowment, growth)
- Communication
  - **Ϡ** Storytelling (e.g. student profiles from annual report)
  - **ℬ** Workforce development

# Notes

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