

# 2018 SACNAS

**The National Diversity in STEM Conference**



**October 11 -13, 2018**

**Henry B. González Convention Center**



*45 Years of Diversifying STEM &  
Building Leaders*

# CONFERENCE PARTNERS

## PLATINUM PARTNER



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## MEDIA PARTNERS



# Agenda at a Glance

## WEDNESDAY, OCTOBER 10

8:00 AM - 12:00 PM	COACH - Professional Skills Training for Minority Graduate Students and Postdocs	303 A
9:00 AM - 6:00 PM	Get More from Your Data: Software & Data Carpentry; and Data Platforms for Life Science Workshops	303 B-C
9:00 AM - 3:00 PM	NRMN/Northwestern University Grant Writing Coaching Group	302 A
9:30 AM - 5:00 PM	Exhibitor Registration	Lobby
11:00 AM - 4:30 PM	Exhibitor Move-In	Hall 2
12:00 PM - 8:00 PM	Registration Open	Lobby
12:45 PM - 6:00 PM	Community College Day	221 A
1:00 PM - 5:00 PM	COACHing Strong Academics in the Art of Strategic Persuasion	303 A
1:00 PM - 5:45 PM	Modern Math Workshop	225 A-C
2:00 PM - 9:00 PM	Cyber Café	3rd Floor
3:00 PM - 9:00 PM	Diversifying the Biomedical Scientific "Thinkforce" through Training and Partnerships	304 B-C
5:00 PM - 6:00 PM	Chapter Welcome Meet & Greet – <b><i>Hosted by National Security Agency (NSA)</i></b>	301 B
5:45 PM - 6:45 PM	Modern Math Reception	225 D
6:00 PM - 7:30 PM	American Chemical Society (ACS) Reception	302 B
6:00 PM - 7:00 PM	Eli Lilly and Company Reception	302 C
6:00 PM - 7:00 PM	GlaxoSmithKline (GSK) Reception	301 C
6:00 PM - 7:00 PM	National Geographic Society Reception	302 A
6:30 PM - 7:00 PM	LEVERAGE Welcome Meet & Greet	304 A
7:00 PM - 8:00 PM	Engineering Community Reception	304 A
7:00 PM - 8:00 PM	Native Student Meet & Greet	303 A

# Agenda at a Glance

7:00 PM - 8:30 PM	Travel Scholarship Reception	Stars at Night B4
8:30 PM - 9:30 PM	Student Presentation Coaching Session	Stars at Night B1
<b>THURSDAY, OCTOBER 11</b>		
7:00 AM - 8:00 PM	Registration Open	Lobby
7:00 AM - 8:00 PM	Cyber Café	3rd Floor
7:00 AM - 4:30 PM	Exhibitor Registration	Lobby
7:30 AM - 9:00 AM	Exhibitor Move-In	Hall 2
7:30 AM - 8:30 AM	Mentor Judges Orientation and Breakfast	Stars at Night B1
7:30 AM - 8:30 AM	Student Presenters Orientation and Breakfast	Stars at Night B4
8:00 AM - 8:00 PM	Indigenous Marketplace	2nd Floor
8:00 AM - 8:00 PM	Native Gathering Room	222
8:45 AM - 10:15 AM	<b>PROFESSIONAL DEVELOPMENT SESSIONS</b>	
	Anatomy of a Strong Diversity Statement	304 C
	Becoming a Postdoc: How to Choose the Right Mentor and Make the Most of Your Postdoctoral Training	301 A
	Becoming a Resilient Scientist	221 B
	Broadening Your Horizons: A Peer Perspective on Applying to Graduate School	303 A
	Building and Maintaining Professional Networks	302 B
	Exploring Career Pathways in the Biotech Industry	304 A
	Funding Opportunities for Graduate School & Beyond	221 D
	How Are Grants Reviewed at the National Institutes of Health	302 A

# Agenda at a Glance

	Implicit Bias and Microaggressions: How Our Brains Take Short Cuts	302 C
	Indigenous Physicists: How Our Culture Shapes Our Identity as Scientists	225 D
	Life Happens - Surviving Academia Despite Adversity	225 C
	MD-PhD, Is It Right for Me?	221 A
	Patents as a Research, Business, and Career Tool	303 C
	Seven Steps to Successfully Selling Yourself - Presented by the American Chemical Society	225 B
	Starting a SACNAS Chapter	221 C
	Storytelling: Crafting Compelling Narratives to Share Your Science	301 B
	Student and Early Career Opportunities at the National Oceanic and Atmospheric Administration (NOAA)	303 B
	Using Science to Transition to Careers in Academia, Government, Industry, Policy, and Non-Profit	301 C
	Wait, You Want to be a What?! Advice for Aligning Your Family's Hopes with Your Scientific Dreams	304 B
9:00 AM - 12:00 PM	Modern Math Workshop Day 2	225 A
9:30 AM - 12:00 PM	Graduate School & Career Expo - Open	Hall 2
10:30 AM - 12:00 PM	Native American Welcome	Stars at Night B2-B3
10:30 AM - 12:00 PM	<b>SCIENTIFIC SYMPOSIA SESSIONS</b>	
	Advances in Structural Biology	221 D
	An Update on the Maturing Field of Glycoscience - The Latest Advances and a Brief Report on The Field's Lack of Diversity	221 B

# Agenda at a Glance

Applications of Materials Science: From Energy to Medicine, Part 1	301 B
Current Topics in Engineering R&D	304 C
Fisheries, Wildlife, and Conservation Biology: The Intersection Between Science and Policy	225 C
Frontiers in Materials Science and Engineering	304 A
Interdisciplinary Climate and Weather Science and Services Supporting Community Decision Making	301 C
It's Complicated: The Ecology and Evolution of Microbes and Their Hosts	225 B
Leading Edge Research in Computational Chemistry	301 A
Multi-Messenger Astrophysics	302 C
Nextgen STEM: The Future of Regenerative Biology	302 A
Next Wave of Innovation - How Diversity is Shaping the Pharma and Biomedical Industry – <b><i>Sponsored by Eli Lilly and Company and GlaxoSmithKline (GSK)</i></b>	221 C
Nuclear and Particle Physics at the Forefront	225 D
Ocean Science in Service of Societal Needs	303 C
Research That Leads to Better Teaching and Mentoring	304 B
Strategies to Increase Equity in STEM PhD Programs	221 A
The Importance of Natural History Collections in Research	303 B
Vaping and Hookah (Waterpipe): Are You at Risk	302 B

# Agenda at a Glance

12:30 PM - 1:45 PM	<b>Luncheon Welcome Ceremony and Keynote Address:</b> * Ellen Ochoa, PhD - First Hispanic Woman in Space, Director of NASA Johnson Space Center (2013-2018)	Hall 1
2:00 PM - 5:30 PM	Graduate School & Career Expo - Open	Hall 2
2:00 PM - 5:30 PM	Expo Hall Theatre (see app for full schedule)	Hall 2
2:00 PM - 5:30 PM	SACNAS Innovation Lab (see app for full schedule)	Hall 2
<b>2:00 PM - 3:30 PM</b>	<b>GRADUATE ORAL PRESENTATIONS</b>	
	Chemistry: Inorganic Chemistry	302 A
	Chemistry: Organic Chemistry, Analytical Chemistry & Other	302 B
	Engineering: Bioengineering/Biomedical Engineering	304 C
	Geoscience & Environmental Science	301 C
	Health: Public Health & Other	225 C
	Life Science: Biochemistry	302 C
	Life Science: Biology (General)	225 D
	Life Science: Cell/Molecular Biology I	221 A
	Life Science: Cell/Molecular Biology II	221 D
	Life Science: Ecology/Evolutionary Biology	225 B
	Life Science: Genetics & Pharmacology	221 C
	Life Science: Marine Sciences, Developmental Biology & Plant Science/Botany	303 A
	Life Science: Microbiology & Cell/Molecular Biology	221 B
	Life Science: Physiology/Pathology & Neuroscience	303 B

\* Meal service concludes 30 minutes after the program begins

# Agenda at a Glance

	Mathematics & Mechanical Engineering	304 B
	Other STEM Education & Learning Research	303 C
	Physical Chemistry & Materials Research	301 A
	Physics, Astronomy & Other	301 B
	Psychology & Social Science	304 A
3:30 PM - 5:30 PM	Student Poster Presentations 1	Hall 2
4:15 PM - 5:30 PM	Meet the Board of Directors Candidates	Hall 2 Theater
5:45 PM - 7:15 PM	<b>Dinner &amp; Conversations with Scientists - <i>Sponsored by Amgen</i></b>	
	Animal Sciences, Zoology/Entomology, General Biology & Other Biological Sciences	301 A
	Biochemistry/Biophysics	302 B
	Botany/Forestry/Plant Sciences/Other Agricultural Sciences	301 B
	Cell/Molecular Biology, Neuroscience, and Microbiology	Stars at Night B1
	Ecology and Evolution	221 C
	Environmental Science/Studies, Marine Sciences, Oceanography, and Ocean Engineering	225 A-B
	Genetics	303 B-C
	Pharmacology, Physiology/Pathology	225 C-D
	Computer/Information Sciences	221 D
	Discipline Based Education Research and Traditional Knowledge	304 C
	Engineering	221 B
	Health & Nutrition	Stars at Night B2-B3

# Agenda at a Glance

	Industry	303 A
	Applied Mathematics, General Mathematics, Operations Research	Stars at Night B4
	Statistics	301 C
	Atmospheric Sciences/Meteorology, Earth Sciences, Geology, Other Physical Sciences	221 A
	Chemistry (Except Biochemistry) & Food Sciences	302 A
	Physics and Astronomy/Astrophysics	302 C
	Psychology and Social Sciences	304 A
7:45 PM - 8:45 PM	Chapter Awards Ceremony and Reception - <b><i>Hosted by National Security Agency (NSA)</i></b>	Stars at Night B4
7:45 PM - 8:45 PM	LGBTQ+ Reception - <b><i>Sponsored by Genentech</i></b>	301 A
7:45 PM - 8:45 PM	National Research Mentoring Network (NRMN) Meet & Greet	225 C-D
7:45 PM - 8:45 PM	Native Community Reception	225 A-B
8:45 PM - 9:45 PM	SACNAS Leadership Alumni Reception	220
8:45 PM - 9:45 PM	Women in STEM Reception - <b><i>Hosted by National Security Agency (NSA)</i></b>	Stars at Night B1

## FRIDAY, OCTOBER 12

7:00 AM - 6:00 PM	Registration Open	Lobby
7:00 AM - 8:00 PM	Cyber Café	3rd Floor
7:30 AM - 8:30 AM	Breakfast Meet and Greet: Eli Lilly and Company	Stars at Night B2-B3
7:30 AM - 8:30 AM	Breakfast Meet and Greet: GlaxoSmithKline (GSK)	Stars at Night B1
8:00 AM - 12:00 PM	Exhibitor Registration	Lobby
8:00 AM - 6:00 PM	Indigenous Marketplace	2nd Floor
8:00 AM - 8:00 PM	Native Gathering Room	222

# Agenda at a Glance

8:45 AM - 12:00 PM	Graduate School & Career Expo - Open	Hall 2
8:45 AM - 10:15 AM	One-on-One Mentoring with a SACNAS Leader: Advice from Faculty and STEM Mentors on Planning for Your Science Career	Stars at Night B4
8:45 AM - 10:15 AM	<b>PROFESSIONAL DEVELOPMENT SESSIONS</b>	
	20/20 Foresight: How to Build a Road Map to Your PhD and Your Career	303 C
	Arctic and Antarctic Sciences: Get Involved	303 B
	Be a Proactive Mentee: Taking an Active Role in Your Research Training	301 C
	Belonging: A Documentary Short and Facilitated Conversation on the Academic, Emotional, Social, Political, and Cultural Hurdles to STEM Fields for People of Color	221 C
	Building Strong Mentoring Networks	301 A
	Central Intelligence Agency STEM Career Exploration: An Introspective Discussion on How to Apply Your Field of Studies to Protecting our Country - <b><i>Sponsored by Central Intelligence Agency</i></b>	225 D
	Energizing Academic Startups through Government Grants	225 A
	Engaging First Year Students in Research Experiences	302 B
	Exploring Diversity and Career Pathways in Science Policy	302 A
	Heart to Heart: A Dialog About and Between Underrepresented Women in Science	225 B
	If We Can See It, We Can be It: Visibility in the Mathematical Sciences	304 C
	Improving Work Climate: Responding to Sexual Harassment	303 A

# Agenda at a Glance

	Is Pharmaceutical Science for Me? “Degrees of Separation”	302 C
	Making the Short List—Crushing the Interview: Securing Your First Academic Job	221 D
	Mental Health and Wellness in the Graduate and Postdoctoral Trainee Populations: An Open and Necessary Discussion	304 B
	Town Hall Meeting: Establishing the NSF Hispanic Serving Institution STEM Resource Hub	221B
	Opportunities for Undergraduates, Graduate and Post-Doctoral Students and Early-Career Faculty in the Directorates of Biological and Geological Sciences at the National Science Foundation	225 C
	Stories from the Other Side of the Blurry Tunnel: It Gets Better after All	301 B
	Submitting a Competitive Internship Application	304 A
	Training Opportunities at the NIH	221 A
<b>10:30 AM - 12:00 PM</b>	<b>SCIENTIFIC SYMPOSIA SESSIONS</b>	
	An Overview of Computational Protein Engineering and How to Fold Proteins Using a Video Game (Foldit)	225 B
	Applications of Materials Science: From Energy to Medicine, Part 2	221 D
	Biophysics: An Amazing Power-Tool to Bridge Science and Life	225 A
	Bridging Museums and Working-Class Neighborhoods of Color	304 C
	Crowdsourcing Science for a Changing World	303 C
	Data Science: The Rise of the Machines	304 B

# Agenda at a Glance

Diversifying the Agricultural Microbiomes Research Community: Challenges and Opportunities	301 B
Engineering and Mathematics of Biology	304 A
Environmental and Dietary Impact on Physiology, Gene Expression, and Epigenetic Inheritance	301 C
Explanatory Models of Alcohol Misuse and Sobriety in an Alaska Native Healthcare System	302 C
Exploring Careers in Oceanic and Atmospheric Sciences with the National Oceanic and Atmospheric Administration (NOAA): Opportunities in Science, Service, and Stewardship	221 C
Exploring Earth Changes from Space – Traveling through Time with Landsat	221 A
Exploring the Space Environment	302 B
Interdisciplinary Applications in Engineering: What Do You Do with Control Systems, Robotics, Remote Sensing, and Imaging	301 A
Physics Education Research: What We Know and Where We Are Going	221 B
Recent Advances from the Intersection of Biology, Mathematics, and Statistics	225 C
The Cultures of Science: The Intersection between Western and Indigenous Knowledge	302 A
The Stories That Rocks and Sediments Tell: Unraveling the Earth's History	303 A
Tricks of the Trade: How Our Innate Immune System Keeps Us Alive	225 D
Women in Mathematics	303 B

# Agenda at a Glance

12:15 PM - 1:30 PM	<b>Luncheon Plenary Session and Featured Speakers:*</b> <ul style="list-style-type: none"> <li>• Lauren Esposito, PhD - Curator of Arachnology, California Academy of Sciences</li> <li>• Kat Milligan-Myhre, PhD - Assistant Professor, University of Alaska Anchorage</li> <li>• Ed Yong - Science Writer, The Atlantic</li> </ul>	Hall 1
1:45 PM - 5:00 PM	Graduate School & Career Expo - Open	Hall 2
1:45 PM - 3:45 PM	Student Poster Presentations 2	Hall 2
2:00 PM - 5:00 PM	Expo Hall Theatre (see app for full schedule)	Hall 2
2:00 PM - 5:00 PM	SACNAS Innovation Lab (see app for full schedule)	Hall 2
4:00 PM - 5:00 PM	Biomedical Sciences Networking Session with UNT Health Science Center	302 B-C
4:00 PM - 5:00 PM	Friends of Society and Life Members Reception (Invitation Only)	221 A
4:00 PM - 5:00 PM	Judges Tally	221 C
5:00 PM - 8:00 PM	Exhibitor Move Out	Hall 2
5:30 PM - 7:30 PM	<b>45th Anniversary Dinner with Our Founders &amp; Elders:*</b> <ul style="list-style-type: none"> <li>• Ciriaco Gonzales, PhD – Retired Senior Executive Service, Department of Health and Human Services</li> <li>• Marigold Linton, PhD – Director of American Indian Outreach, University of Kansas</li> <li>• J.V. Martinez, PhD – Retired Senior Science Advisor, Office of Science, Department of Energy</li> <li>• Clifton A. Poodry, PhD – Senior Fellow, Howard Hughes Medical Institute</li> <li>• Richard Tapia, PhD – University Professor, Rice University</li> <li>• Lydia Villa-Komaroff, PhD – Principal, Intersections SBD Consulting</li> </ul> Panel Moderator: Sonia Zárate, PhD – SACNAS President-Elect & Program Officer, Howard Hughes Medical Institute	Hall 1

\* Meal service concludes 30 minutes after the program begins

# Agenda at a Glance

8:00 PM - 10:30 PM	Annual SACNAS Pow Wow (Public Welcome)	Stars at Night B1-B3
8:00 PM - 10:30 PM	Indigenous Marketplace	Stars at Night B1-B3
<b>SATURDAY, OCTOBER 13</b>		
8:00 AM - 12:30 PM	Registration Open	Lobby
8:00 AM - 2:00 PM	Cyber Café	3rd Floor
8:00 AM - 2:00 PM	Indigenous Marketplace	2nd Floor
8:00 AM - 8:00 PM	Native Gathering Room	222
8:15 AM - 9:30 AM	<b>Breakfast Award Ceremony and Keynote Address</b> (Meal Service begins at 7:45 AM): Mica Estrada, PhD – Associate Professor, Dept. of Social and Behavioral Sciences, UC San Francisco	Stars at Night B2-B4
9:45 AM - 5:00 PM	Canyon Lake Gorge Geology Field Trip - <b><i>Sponsored by United States Geological Survey</i></b>	Bus Loading Area
9:45 AM - 5:00 PM	Día de la Física / Day of Physics Field Trip	Bus Loading Area
9:45 AM - 5:00 PM	Ecology and Evolution Field Trip	Bus Loading Area
9:45 AM - 5:00 PM	UTSA Field Trip Day - <b><i>Sponsored by The University of Texas at San Antonio, Graduate School</i></b>	Bus Loading Area
9:45 AM - 11:15 AM	<b>PROFESSIONAL DEVELOPMENT SESSIONS</b>	
	What Do I Do? Voicing Your Values as a Scientist	304 B
	A Great Interview! How to Excel at Your Graduate School Interview	221 D
	Applying to Graduate School and the Interview Process	303 A
	Expanding Diversity as a Broader Impact of Your Research	303 B

\* Meal service concludes 30 minutes after the program begins

# Agenda at a Glance

Getting Ready for the Next Step in Your Research Career- The Advantages of Doing a Postbac Research Program	304 A
Internship and Scholarship Opportunities in the Geosciences for STEM Majors	225 A
Intersectionality: Embracing and Advocating for Your Whole Self and Others in STEM	301 C
Mentoring Our Own Native Scientists: Preparing Native American Students for Graduate School	221 B
Navigating the Channels between Ocean Science and Societal Needs: Academia to Agencies, Industry to Non-Profits	303 C
Peer Mentoring for Mutual Success: How to be a Great Peer Mentor and Grow Your Peer Mentoring Network	302 A
Postdoc Fundamentals: Selecting a Training Experience to Match Your Career Goals	301 B
Promising Practices of NSF Research Traineeships: Promoting Interdisciplinary Researchers and Transformative Approaches to Graduate Education	302 C
Reflections on Leadership and Wisdom	301 A
SACNAS Chapter Best Practices	221 C
Science Advocacy: How to Get Involved and Make an Impact	302 B
Science at the Market: Bringing Outreach to Non-Science-Themed Community Spaces	225 B
STEM Research Abroad with Fulbright	304 C
Thinking Fast Makes Changing Slow: How Cognitive Processes Impede Diversity in STEM	225 C

# Agenda at a Glance

11:30 AM - 1:00 PM	SCIENTIFIC SYMPOSIA SESSIONS	
	Building Community Through Mathematics Research	304 A
	Cell Biology: The Ins and Outs	221 B
	Current Topics in Materials Science and Engineering	225 D
	Disease Surveillance and Research	302 A
	Diversity in Aquatic Science: Connecting the Transitional Pipeline from the Classroom to the Profession	221 A
	Drug Discovery in South Texas: Tapping into the Natural World for Solutions	303 C
	How Social Science Informs Hurricane Recovery: Puerto Rico and Maria	304 C
	Ideas in Action: Improving the Science of Human Evolution Via Inclusion and Innovation	303 A
	Marine Genomics: Exploring the Evolution of Non-Model Organisms	302 B
	Molecular Battlegrounds during Pathogenic Infections	221 C
	NSF UT-Louis Stokes Alliance for Minority Participation Research Presentations	301 B
	Personalized Models and Diverse Approaches to Studying Brain Health and Disease	225 A
	Post Doc Presentation: Engineering, Mathematics & STEM Education	301 C
	Post Doc Presentation: Ecology/ Evolutionary Biology & Microbiology	303 B
	Post Doc Presentation: Neuroscience, Cancer Biology & Pharmacology	304 B

# Agenda at a Glance

	Post Doc Presentation: Other Life Sciences, Biology (general), Cell Molecular Biology & Genetics	302 C
	The Importance of Diversity in Precision Medicine Research	225 C
	The Strong Heart Study, Community Based Participatory Research, and the Translation of Indigenous Genomics Studies	225 B
2:00 PM - 4:00 PM	Assess Yourself and Start Advancing Your Career Workshop	221 B
2:00 PM - 6:00 PM	GEM Grad Lab	223
2:00 PM - 6:00 PM	SecureSTEM: Cyber Security Symposia & Expo - <b>Hosted by National Security Agency (NSA)</b> - <i>National Meets Local</i>	301
3:30 PM - 4:30 PM	2019 National Diversity in STEM Conference - Hawai'i Advisory Group (All Attendees from Hawai'i Welcome)	225 C
6:00 PM - 8:00 PM	Story Collider - <b>Hosted by Story Collider</b>	Jokesters 22 Pub 'N' Grub
8:30 PM - 11:00 PM	SACNAS Dance - ¡Pachanga!	Stars at Night B1-B3



# *We are* **#SACNAS2018**



## **Conference Program App**

To download, search "Attendee Hub" in your app store. Once you're in the app, search "SACNAS."



## **Wifi Access**

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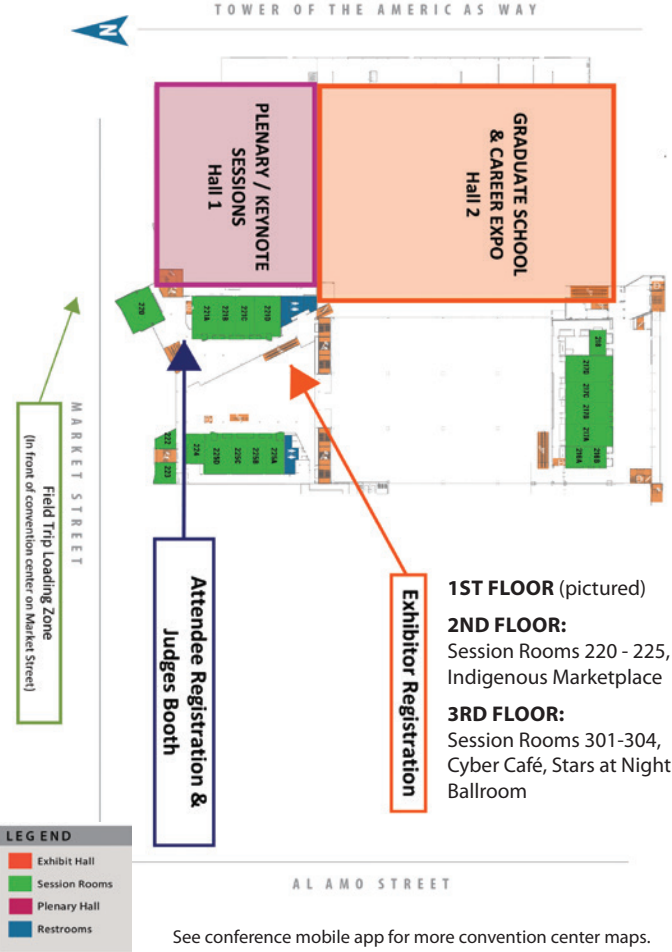
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# HENRY B. GONZÁLEZ CONVENTION CENTER



**SAVE THE DATE**  
**2019**  
**National Diversity in STEM Conference**



**Honolulu, Hawai'i**  
**Oct. 31 - Nov. 2, 2019**