

ANNUAL REPORT







AISES Council of Elders

Mary Kahn (Navajo)

Phil Lane Jr. (Yankton Dakota and Chickasaw)

Stan Lucero (Laguna Pueblo)

Cecelia Lucero (Acoma Pueblo)

Dr. Henrietta Mann (Southern Cheyenne)

Dr. James May (United Keetowah Band)

Faith Spotted Eagle (Ihanktonwan Band of the Dakota/Nakota/Lakota Nation of South Dakota)

Dr. Bret R. Benally Thompson (White Earth Ojibwe)

Antoinelle Benally Thompson (Navajo)

AISES Council of Elders Emeriti

Andrea Axtell (Nez Perce)

AISES Council of Elders in Memorium

Horace Axtell (Nez Perce)

Eddie Box, Sr. (Southern Ute)

Franklin Kahn (Navajo)

Bow Lane (Chickasaw)

Phil Lane, Sr. (Yankton Sioux)

Lee Piper, Ph.D. (Cherokee)

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Michael Laverdure (Turtle Mt. Chippewa)

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Sheila Lopez (Navajo)

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Hannah Balderas, Junior National Student Representative (Three Affiliated Tribes, Santee Sioux and Little Shell Ojibwa)

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Northeastern University

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Amanda James (Pyramid Lake Paiute Tribe), Bureau of Land Management (BLM)

Marcellus Proctor (*Piscataway-Conoy*), National Aeronautics and Space Administration (NASA)

Professional Chapter Council (PC) Chair

Joseph W. Connolly (Haudenosaunee Onondaga Nation – Wolf Clan from Six Nations Reserve of the Grand River), National Aeronautics and Space Administration (NASA)

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Letter from the Chairman

AISES – Approaching 40 Years and Stronger Than Ever

As a young tribal chairman, one of the compelling recommendations I was given was to rely on the counsel of my Elders and always keep a lawyer by my side. It was sound advice. Today, I would strongly recommend that all those who lead their band or tribe continue to rely on the advice of their Elders, keep their lawyer close, but I add, keep a Native STEM professional even closer.

Founded in 1977, the American Indian Science and Engineering Society is **THE** national, nonprofit organization focused on substantially increasing the representation of American Indians, Alaska Natives, Native Hawai'ians, Pacific Islanders, First Nations, and other indigenous people of North America in science, technology, engineering, and math (STEM) studies and careers. Not a day goes by where we are not reminded of the important role we each have when it comes to decisions that are made about our world involving technology and its implications. AISES has long assumed — and continues to play — a vital role in ensuring that we are ready to respond and lead in STEM. And today's stronger AISES is more prepared than ever to meet that need.

Our 2016 annual report highlights an outstanding year of leadership, engagement, involvement, passion, and financial stability. Your AISES CEO and staff have done a remarkable job in leading the organization, and you can be proud of those you selected to be on the Board of Directors.

In addition to increases in sponsors, supporters, programs, and revenue for the organization, there are more chapters, greater awareness of what AISES does, and stronger relationships across the organization. Further, AISES Publishing, Inc., an organization principally owned by AISES, has taken a more direct and engaged role as the full publisher of *Winds of Change* since The Pohly Company decided in late 2016 to no longer provide publishing services to AISES. The transition has gone smoothly, much to the credit of the Pohly leadership and the AISES leadership. The move readies AISES Publishing for a solid future.

Next year, 2017, marks the 40th Anniversary of AISES, and I am proud to be part of the AISES Board that helped position the organization for a strong future. Please enjoy what you read in our 2016 annual report because it's about you, it's about AISES, and it's about the opportunities for our future.

Rick Stephens (Pala Band of Mission Indians)

2016 AISES Chairman of the Board

Why STEM Matters

- Available jobs in the field are set to increase 17% between 2014 and 2024, while non-STEM employment will grow just 12%. (Source: National Science Foundation)
- 8,650,000 Estimated size of the STEM workforce in the U.S. by 2018. (Source: U.S. Bureau of Labor Statistics)
- The average wage for all STEM occupations is \$85,570, nearly double the average for all occupations (\$47,230). (Source: Bureau of Labor Statistics)
- The prestigious World Economic Forum ranks the U.S. as No. 48 in quality of math and science education.
- The U.S. has fallen behind the rest of the world at an alarming rate. U.S. students recently finished 27th in math and 20th in science in the ranking of 34 countries. (Source: Organization for Economic Cooperation and Development)

Why Diversity Matters

- Companies reporting highest levels of racial diversity in their organizations bring in nearly 15 times more sales revenue than those with lowest levels of racial diversity. (Source: American Sociological Review)
- In the U.S., for every 10% increase in diversity on the senior executive team, earnings rise 0.8%. (Source: McKinsey & Company)
- While more women than men are enrolled in all U.S. undergraduate programs, as recent as 2012, just 18% of women earned a bachelor's degree in engineering. (Source: National Science Foundation)





Why STEM Matters to Indian Country

- STEM is the key to ensuring that Native People have a voice in the workforce within (non-Native) companies, institutions, and agencies – providing Tribal Nations influence beyond their borders.
- Building STEM capability within Tribal Nations provides greater control over decision-making by avoiding or reducing non-Native outsourcing; and providing stronger control of Tribal assets.
- A strong tribal STEM workforce helps generate entrepreneurial opportunities to create businesses to support tribal communities.
- Tribal STEM professionals are fundamental to the proactive management of tribal lands and resources; technical infrastructure, and health care (environmental scientists, IT professionals, medical doctors, geologists, etc.)
- In short, Native STEM workforce development is a key component of tribal sovereignty and self-determination.

The Landscape of Native STEM Education

- According to the Office for Civil Rights, fewer than half of Native high school students have the full range of math and science courses available at their schools.
- According to the National Science
 Foundation (NSF), in 2012, 66.7% of white
 freshmen intended to major in science and
 engineering fields, while only 2.5% of Al/
 AN freshmen declared the same. 33% of
 white students and 42% of Asian-American
 students who started college as STEM
 majors graduated with STEM degrees vs.
 19% of Native American students.
- According to the Alfred P. Sloan Foundation, of the 11,764 research doctorates awarded in engineering and scientific fields in 2012, only 48 were awarded to Al/AN (0.4%).
- According to the U.S. Census, White Non-Hispanics hold 71% of STEM jobs vs. 0.4% held by AI/AN.

HOW WE DOWHAT WE DO

WHY AND HOW WE DO WHAT WE DO

VISION

The vision of the American Indian Science and Engineering Society (AISES) is for the next seven generations of Native people to be successful, respected, influential and contributing members of our vast and ever changing global community.

MISSION

Founded in 1977, The American Indian Science and Engineering Society (AISES) is a national, nonprofit organization focused on substantially increasing the representation of American Indians, Alaska Natives, Native Hawaiians, Pacific Islanders, First Nations and other indigenous peoples of North America in science, technology, engineering and math (STEM) studies and careers.

AISES IS COMMITTED TO:

Knowledge

We are committed to the pursuit of knowledge and continuous growth in learning and teaching

Innovation

We anticipate and embrace change and strive to learn and improve by trying new approaches and forward-thinking solutions

Relationships

We actively build and continually steward transparent, honest, and ethical relationships with our partners, members and all others who are part of our AISES family

Integrity

We do what we say we are going to do and conduct our business with the highest standards of professional behavior and ethics

Empowerment

We embrace the power of our people by encouraging them to take initiative, lead and make decisions

Culture

We honor our ancestors by carrying forward our cultural traditions and values in all that we do

AISES FOCUSES ON:

Educational and Professional Development for Membership and Constituencies

Public Policy, Education, and Civic Engagement

Strategic Partnerships

Research on STEM Sector Trends and Educational Issues Advocacy at Local, State and Federal Levels

AISES STRIVES TO BE:

The Preeminent Native STEM Organization in North America A Financially Accountable and Sustainable Organization An Essential Partner to Other Key STEM Stakeholders Continuously Evaluating and Improving Its Organizational Structure Honoring Traditions, Knowledge, and Values of Native People

AISES SUPPORTS:

Awareness and Retention for Native Pre-College Students and Their Parents and Educators Access and Success for Native Undergraduate and Graduate Students Leadership and Change for Native STEM Professionals

Strategic Partnerships & Research for Native People in STEM

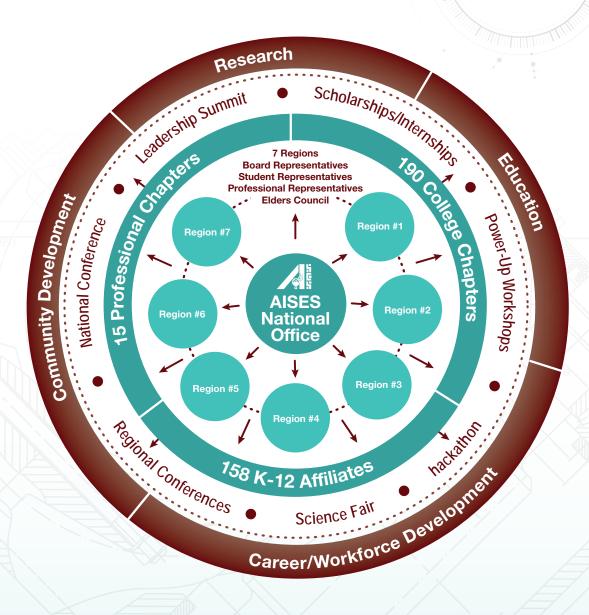
TRADITIONAL KNOWLEDGE | NEW IDEAS | A BETTER WORLD





THE STRUCTURE OF AISES

Organization, Chapters, and Programming



BY THE NUMBERS

AISES by the Numbers¹

Today

- 4,300 Individual Members
- \$10.8 Million in Academic Scholarships
- 15 Professional Chapters

- 190 College/University Chapters
- 158 K-12 Affiliated Schools enrolling more than 55,000 Native Students











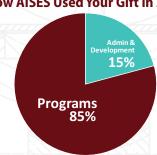


2016²

- Membership: 4,000
- Annual Revenue: \$5,435,512
- Scholarship and Program Support Provided: \$4,586,149

How we spent our funding in 2016: Administration and Development = 15% Programmatic Support = 85%

How AISES Used Your Gift in 2016



Based on 2016 Audited financials

2015³

- Membership: 3,727
- Annual Revenue: \$3,131,024
- Scholarship and Program Support Provided: \$2,619,882

How we spent our funding in 2015: Administration and Development = 24% Programmatic Support = 76%

20144

- Membership: 3,289
- Annual Revenue: \$2,740,432
- Scholarship and Program Support Provided: \$2,072,690

How we spent our funding in 2014: Administration and Development = 27% Programmatic Support = 73%

2013⁵

- Membership: 2,819
- Annual Revenue: \$2,581,298
- Scholarship and Program Support Provided: \$1,948,056

How we spent our funding in 2013: Administration and Development = 31% Programmatic Support = 69%

¹ Audited financial statements and IRS 990 forms are available at: www.aises.org

² Revenue and program funding reported in 2016 audited financial statements.

³ Revenue and program funding reported in 2015 audited financial statements.

⁴ Revenue and program funding reported in 2014 audited financial statements.

⁵ Revenue and program funding reported in 2013 audited financial statements.





Jake Uyechi, Kamehameha Schools, Class of 2019

"Thank you very much! It was an honor to have my project selected for the Energy Challenge. My experience with the AISES Energy Challenge was unlike anything I've experienced before. The Energy Challenge opened-up opportunities for my project that would have otherwise been impossible. Energy has been an interest of mine for a few years now, and only through the AISES EC was I able to pursue this topic. I'm both grateful and deeply honored that my project was selected for this year's AISES EC."



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PROGRAMS

Our Programs

Program Area One:

Awareness & Retention for Native Pre-College Students, Students' Parents and Educators

In order to increase the numbers of Native Americans seeking degrees and careers in STEM fields, students must be started on the STEM pathway early. One of the biggest challenges in reaching this goal is ensuring that students, educators, and parents have access to information and resources related to STEM. Far too often, because there is little, if any, access to these critical resources, students are unprepared to undertake a STEM major when they begin college. Many students lack the necessary high school classes required for entrance into a STEM major in college and are thus faced with the challenge of taking additional pre-requisite college classes, which require more time and more money. Given this, many Native students opt-out of STEM majors for other majors.

AISES engages in a multitude of programs and events to ensure students, educators, and parents are provided quality science, technology, engineering, and math (STEM) opportunities and resources to help to prepare Native youth for college.

In 2016, AISES provided the following programming:

Energy Challenge Competition • Power-Up Workshops • Robotics/Computer Science Programming • Research and Poster Presentations and Competitions • College and Career Fair • STEM Day Activities • College Tours • Sessions at the National Conference • K-12 Affiliate (Chapter) Membership to 158 Schools

Program Area Two:

Access and Success for Native Undergraduate and Graduate Students

AISES administers many programs, services, and events for undergraduate and graduate students designed to increase their access to college and support their success in STEM in preparation for career opportunities in STEM fields. Native college students need professional mentorship and peer support in addition to scholarship support. Students are most successful when they have a network of other Native students as well as professionals who can provide ongoing support while they are pursuing undergraduate and graduate studies. AISES provides exactly this critically-needed support through its programming.



In 2016, AISES provided the following programming:

Scholarship Funding for STEM Majors • Internships in STEM Fields with Corporations and Government Agencies • Fellowships (NSF Lighting the Pathway Program) • Research and Poster Presentations and Competitions • Professional Mentorship • 190 College Chapters Across the Nation • Regional Conferences • College and Career Fair • Leadership Development and Student Leadership Opportunities • Sessions at the National Conference

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Hannah Balderas, University of North Dakota

"I am an enrolled member of the Three Affiliated Tribes (Mandan, Hidatsa, and Arikara) on the Fort Berthold Indian Reservation. I come from the Arikara, Santee Sioux, and Little Shell Anishinaabe Peoples. I am a senior at the University of North Dakota majoring in Psychology with an emphasis in Pre-Medicine Studies. I am a third generation college student.

Great organizations like AISES expose you to many opportunities, networks, and fields you would not know about. You get to add to your family by building connections with people from all over the country. I honestly don't know where I would be if I wasn't a part of AISES. It has played such a big role in my life in finding and understanding what I what to do for The People and how I want to do it."



Program Area Three:

Leadership and Change for Native STEM Professionals

AISES is dedicated to supporting its professional members in STEM, supporting early, mid, and executive professionals in STEM fields through professional development, career opportunities, networking, research support, and opportunities to mentors who support Native students in STEM. AISES support doesn't end once a student graduates from college and enters a STEM career but rather provides ongoing career and professional development programming to help Native STEM professionals grow and succeed in their chosen career fields. Additionally, AISES offers a multitude of opportunities for professionals to "give-back" through mentoring and supporting Native STEM students.

In 2016, AISES provided the following programming:

Mentoring of Students • Scholarship Review and Scoring • Research and Science Fair Judging • Serving as Speakers and Trainers at AISES Events • Corporate Advisory Council Service • Government Relations Council Service • Professional Chapter Council Service • Academic Advisory Council Service • Professional Development Programming • Career Fair • Professional of the Year Awards • 15 Professional Chapters Across the Nation • Opportunities to Present Research

Program Area Four:

Strategic Partnerships and Research for Native People in STEM

In addition to AISES' three core programs – Pre-College, College, and Professional – AISES also engages in strategic partnerships and conducts research to further our mission of substantially increasing the representation of Native people in science, technology, engineering, and math (STEM) studies and careers.

In 2016, AISES engaged in the following partnerships, projects, and research:

Growing the Legacy Program – Supported by Intel

AISES received a \$1.32 million contribution from Intel to support undergraduate and graduate scholarships for Native Americans. The support is part of a partnership between Intel and AISES to increase the number and success of Native American students in science, technology, engineering and mathematics (STEM) fields. In October 2016, Intel hosted a thought leadership event in partnership with the National Center for Women & Information Technology (NCWIT). The event brought together key leaders in academia; government; tribal nations; nonprofit organizations, including AISES; and the tech industry to facilitate constructive collaboration aimed at increasing Native American leadership in STEM. From this convening, Intel produced a white paper outlining six key recommendations for increasing Native American student participation and retention in STEM (science, technology, engineering, and math) education. Based on the recommendations from the white paper, Intel made a tremendous four-year commitment to support the "Growing the Legacy" scholarship program at AISES to support 40 Native American university students every year for four years by providing them with financial support, Intel mentors, paid internships, and an Intel job upon successful graduation. Students who are awarded will receive scholarships ranging from \$5,000 to \$10,000 per academic year. In addition to scholarship support, Intel and AISES are planning to develop culturally-appropriate computer science curriculum for Native American high school students.







In 2016, AISES received a four-year grant totaling almost \$700,000 to work with the Cheyenne-Eagle Butte Schools (C-BE) and the Cheyenne River Sioux Tribe (CRST) to address barriers to college and career readiness, specifically in the fields of science, technology, engineering, and mathematics (STEM), among American Indian students. Through this project, AISES is working to increase interest and engagement in STEM subjects among students of all ages, build the capacity of C-EB Schools to support students in STEM, and generate CRST parent and community support of and engagement in STEM studies and careers, particularly for CRST youth. Improving STEM education by introducing novel and culturally relevant curriculum and programs provides C-EB students with opportunities to grow and flourish in new environments is the core mission of this collaborative project. The project builds upon existing relationships, opportunities, and infrastructure to provide novel STEM programming to C-EB students; working toward restoring hope and paving a vibrate future in STEM for the whole CRST community.



NBCUNIVERSAL

Comcast/NBC Universal Public Service Announcements (PSAs)

In 2016, the Comcast Foundation provided over \$1.8 million in airtime to broadcast AISES' two Public Service Announcements (PSAs). The PSAs are designed to convey how, through our work at AISES, intergenerational traditional Native American cultural knowledge is woven together with new ideas to generate innovative technology, ideas and people that create a better world for everyone. The PSAs will again run in 2017 in multiple markets on multiple channels and can also be viewed on the AISES website.



National Science Foundation (NSF) ASSIST and LEVERAGE Projects

Funded by the National Science Foundation (NSF) and in partnership with Great Minds in STEM (GMiS); Latinos in Science and Engineering (MAES); National Society of Black Engineers (NSBE); Advancing Chicano/Hispanics & Native Americans in Science (SACNAS); Society of Hispanic Professional Engineers (SHPE); and Society of Women Engineers (SWE), AISES is working to support Native Americans who are early-career faculty, graduate students, and post-doctoral researchers in any field of engineering. The overall focus of the project is to target and support those who are traditionally underrepresented in engineering fields.



50k Coalition - 50,000 Diverse Engineers by 2025

AlSES, in partnership with the National Society of Black Engineers (NSBE), the Society of Hispanic Professional Engineers (SHPE) and the Society of Women Engineers (SWE), the preeminent engineering professional societies focused on diversity and inclusion, and who collectively serve more than 75,000 precollegiate, collegiate, and professional members, formed the 50k Coalition. The Coalition is working toward a singular goal: to increase the annual number of engineering bachelor's degrees awarded to underrepresented minorities and women from 30,000 to 50,000 by 2025 – a 66% increase. The Coalition intends to achieve this goal by collecting and monitoring plans generated by Coalition partners to achieve this strategic goal and by measuring, monitoring, and reporting on key indicators, including the number of women and underrepresented minorities qualified to enter the engineering pipeline and the number earning engineering degrees. The 50k Coalition was created in 2015 and will continue its work to 2025. For more information, visit: www.50k.org.





National Science Foundation (NSF) REESE Project

This project is an empirical research study using a resiliency-based framework to investigate the factors that contribute to American Indian and Alaska Native (AI/AN) success and achievement in STEM education and careers. The focus is on what makes people successful rather than what makes them fail. It was developed through a partnership between the American Indian Science and Engineering Society (AISES), the Office for Community Health (OCH) at the University of New Mexico (UNM), and Northwestern University. The aim of this research is to identify the role of culture, individual identity, epistemology, and bi-cultural efficacy in this process. This information is particularly salient in the face of the continuing stagnation of AI/AN STEM graduation rates and the ongoing need for expansion and equity in the STEM pipeline that has been identified as a national priority. The project utilizes AISES historical American Indian STEM data collected over its almost 40-year existence. Developing a plan for several journal articles and the creation of a database to house the data were the primary focus of the project in 2016.

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Shaun Tsabetsaye

"The AISES organization has been a mainstay throughout my education and career since 1994. AISES continues to provide a vast source of opportunities for Native Americans in the STEM fields. The organization uniquely provides identity and strength that resonates with its members whether they are a K-12 participant, college chapter member, professional member, Sequoyah Fellow, or an onlooker, there is always a special place for everyone.





My family and I deeply value the very existence of AISES which is only possible through the support of its members, partners and sponsors. Thank you!" -- Shaun Tsabetsaye

Shaun Tsabetsaye is an enrolled tribal member of the Zuni Pueblo and is a lifetime Sequoyah Fellow for the American Indian Science & Engineering Society serving as a dedicated mentor and advocate for the organization. His involvement with began in 1994. He continues to contribute today as a member of the Corporate Advisory Council. Shaun has over 13 years of engineering and project management experience including his current role at NextEra Energy Resources as a Project Manager of Tribal Renewable Energy Development. He has over 10 years of experience with Intel Corporation in engineering & project management roles. Shaun has earned degrees for an Executive Masters of Business Administration, Bachelors in Electrical Engineering and completed significant work towards a Masters of Engineering in Semiconductors and Electronics Manufacturing.





Dr. Cynthia Welsh, Cloquet Science Teacher, Cloquet, MN

"As a result of the help and support from my school district (Cloquet Public Schools), local AISES members such as Dr. Mark Bellcourt, Holly Pellerin, Dr. Diana Dalboten, and Dr. Emi Ito (University of MN), and the opportunities provided by the National American Indian Science and Engineering Fair (NAISEF), hundreds of my American Indian students have chosen to participate in Science and Engineering Fairs. This participation has led to thirteen of my American Indian high school students to be awarded a Grand Award at NAISEF and resulted in them participating in the Intel International Science and Engineering Fair (ISEF) thirty-two times."

The first student to attend NAISEF from Cloquet Senior High School, Dr. Jillian (Beaufeaux) Zuzulka, has a Ph.D. in Pharmacy. Courtney Jackson, a four time NAISEF participant, who mapped Venus for her project, was chosen by AISES to attend the first White House Science Fair. She has a B.S. from Penn State and a M.S. from the University of North Dakota in GIS mapping. Jackson will be returning to Penn State this fall to work on a PhD in GIS disaster mapping. Logan Pallin, a three time NAISEF Grand award winner, has made two research trips studying hump back whales to Antarctica. Pallin has a B.S. in Marine Conservation Biology from Duke University, a M.S. from Oregon State studying Whale Genetics, and he has been awarded a NSF Fellowship and will begin to work on his Ph.D. and continue to study humpback whales while attending the University of California Santa Cruz.

Participation in science fairs such as NAISEF enhances life skills that serve students well in the adult world. They learn how to talk to adults, how to share and explain in simple terms what they are studying. They learn that failure often is the best road to success, to keep their eye on the next task at hand without getting overwhelmed by all that life asks of them. Essentially, they learn how to be successful at whatever they decide to do.











Annual National Conference

The Annual AISES National Conference is a one-of-a-kind, three-day event focused on educational, professional and workforce development. Attendees include American Indian high school and college students, educators, professionals; tribal nations and tribal enterprises; universities, corporations, and government agencies. The AISES National conference has become the premier event for American Indian science, technology, engineering and math (STEM) students and professionals from across the country.

Highlights Include:

- Amazing Keynote Speakers: Actor and physician Dr. Evan Adams (Sliammon Band, BC Canada), and Camille Chang Gilmore, Vice President Human Resources at Boston Scientific Corporation
- Indian Country's largest College and Career Fair
- Sessions Designed for Students and Professionals Covering Topics and Providing Resources and Information Pertaining to Educational and Career Access and Development in STEM Fields
- Student Research Competitions for High School, College and Graduate Students
- Interactive Tours of Colleges, Universities and Industry Partner Facilities 2016 Tours included 3M, CHS, Inc., and the University of Minnesota
- STEM Activity Day with Interactive, Hands-On Sessions, Events and Activities for Middle School, High School and College Students
- Professional Opportunities Expo for AISES Professional Members
- Grand Awards Banquet on the Closing Night
- Native American Powwow and American Indian Products Marketplace







The 2016 National Conference was held in Minneapolis, Minnesota, where 1,900 participants joined us! Minneapolis is a destination city because of its economic impact, hospitality, strong college representation, and its diverse business industries. Data shows the AISES National Conference is clearly growing in professional, college, and high school student areas. AISES is creating opportunities and is successfully preparing and promoting Indigenous students in STEM education and careers. It reiterates that AISES is the best kept secret in STEM education that corporate partners have taken notice. They have ramped up their efforts to align with AISES that in time gives our students and professional members better chances at landing jobs.

2014 National Conference Registration Numbers:

Professionals 184
College Students 509
High School Students & Chaperones 138
Educators & Judges 61
Exhibitors/Sponsors 438
Speakers 58
Other 3
Total 1,391

2015 National Conference Registration Numbers:

Professionals 278
College Students 587
High School Students & Chaperones 267
Educators & Judges 76
Exhibitors/Sponsors 562
Speakers 41
Other 4
Total 1,815

2016 National Conference Registration Numbers:

Professionals 289
College Students 615
High School Students & Chaperones 304
Educators & Judges 75
Exhibitors/Sponsors 548
Speakers 65
Other 4
Total 1,900



Annual Leadership Summit

2016 Location: IBM and the Mayo Clinic in Rochester, MN

Number of Participants: 183

AISES' Leadership Summit is aimed at providing Native higher education students and AISES professionals with in-depth professional development workshops and networking opportunities. Multiple sessions engaged participants on personal and professional development topics such as "Rising Up from Technical to Management" to "Impact of Leadership Styles on Decision Making" and "Harness the Teamwork." The Leadership Summit also offers networking opportunities for early to mid-career level professionals and Native students in STEM and fosters the matching of STEM professionals with STEM students for mentoring. Studies prove that building peer support networks and providing positive role models, mentors, and career development programs have profound effects on minority college students in STEM and, we all know, that it's important for professionals too!





Regional Conferences

AISES' Regional Conferences take place every spring and provide an opportunity for AISES College and Professional Chapters to gather and share information, form partnerships, and to network with each other and with selected presenters and partners. Each regional conference has informative sessions and activities for both college and high school students. Among the activities provided are mini career fairs, poster presentations, and engineering competitions. Generally, each Regional Conference host develops a theme or focus area for the Regional Conference (environmental, bridging native cultures with science, etc.). Local and national professionals within a variety of fields provide workshops, seminars, and discussion groups about a wide variety of topics.

AISES' student representatives and the host chapters for the following year are selected during the regional conferences. Chapters interested in hosting the regional conference indicate their interest in hosting and make a presentation regarding their resources, planning, and ability to host the conference. Each college chapter that is in "Good Standing" is allowed one vote and the most votes determines the location of the regional conference.

2016 Regional Conferences

- Region 1 Virtual Conference, Friday, April 8, 2016
- Region 2 California State Polytechnic University at Pomona, Pomona, CA, March 18-19, 2016
- Region 3 Navajo Preparatory School, Farmington, NM, March 11-12, 2016
- Region 4 University of Oklahoma, Norman, OK, March 4, 2016
- Region 5 University of North Dakota, Grand Forks, ND, March 4-5, 2016
- Region 6 McGill University, Montreal, Canada, February 28-March 1, 2016







Dr. Daniel R. Howard, University of New Hampshire, Durham, NH

Dr. Daniel R. Howard (Cherokee/Shawnee) is from Tahlequah, Oklahoma and attended Northeastern State University for this BS ('02) and MS ('04) degrees. While enrolled at NSU he served as the AISES Chapter president, and then was instrumental in establishing a new AISES chapter at the University of Tulsa while working on his Ph.D. in the Biological Science there from 2004-2007. After completing a 3-year National Science Foundation (NSF) postdoctoral research fellowship at the University of Toronto from 2007-10, he accepted a tenure-track faculty position at Augustana College (Sioux Falls, SD) where he started a new college chapter with which he served as faculty sponsor from 2010-15. He and his wife Carrie moved to the University of New Hampshire in 2015, where he now teaches Neurosciences and Behavior courses in the Department of Biological Sciences. Dr. Howard is an AISES Sequoyah Fellow, serves as a faculty mentor in the NSF-funded Lighting the Pathways to the Professorate Program, and is a board member on both the AISES Winds of Change Advisory Board and the AISES Academic Advisory Board. Dr. Howard is also co-owner, with spouse Dr. Carrie Hall, of Greyfeather Ecological Solutions LLC, a Native American and US Veteran-owned environmental consulting company based in Oklahoma.



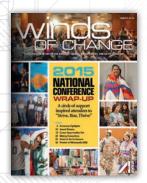


Winds of Change Magazine

Expanding Opportunities for Native American Students and Professionals

Winds of Change magazine consistently delivers content relevant to every segment of the AISES family. Students, professional members, retirees and our elders, as well as our sponsors and supporters, all look to Winds of Change for articles that are both interesting and informative. From inspiring profiles to member news and feature articles, each issue is a reliable resource that brings indigenous STEM students and professionals content that will help them realize their aspirations and advance on their career path. Selective advertising promotes products and services that serve a diverse base of readers, increasing awareness of promising trends and opportunities that are shaping STEM careers. Through a combination of print and digital publishing, Winds of Change reaches a growing audience. The digital version employs social media to deliver compelling content and promote advertising campaigns that effectively target specific demographics.

Winds of Change is designed to reach readers with articles that resonate with critical AISES constituencies. Every issue includes the CEO Welcome, AISES Notebook, AISES People, Career Builder, Paths in Education, Partner Index, and Last Word. Together these components draw readers closer to AISES, and forward our mission, by offering extraordinary stories **only** AISES can tell. Cover articles are an engaging "hook" that gets younger readers interested in and inspired by the possibilities that STEM education and careers can open for them. Behind the success of Winds of Change are the writers, editors, sales force, designers, advertisers, and others who creatively work together to build relationships with AISES and attract readers. Why STEM? That is the key question Winds of Change will continually work to answer in ways that inspire students, promote STEM careers, and address the current challenges of increasing diversity in STEM and promoting involvement with AISES. Ultimately, Winds of Change is dedicated to helping students and professionals succeed in doing what they love.











Advertising in Winds of Change

With a print distribution of more than 6,000 and an email distribution that exceeds 13,000 to students, professionals, supporters, universities, and commercial and government businesses, *Winds of Change* remains unsurpassed in its commitment and ability to reach a broad spectrum of rural and urban American Indians/ Alaska Natives/Native Hawai'ians/First Nations. Readers anticipate arrival of the magazine for career and educational opportunities, for inspiration and motivation, and for information about and for Native people and their careers.

Winds of Change is also a valuable recruitment tool for corporations, government agencies, tribal and non-tribal businesses, and colleges and universities across the U.S. The editorial focus of this dynamically designed magazine honors tradition while exploring topics in STEM fields, as well as health, education, business and culture.

To submit a story or story idea to *Winds of Change*, please contact *Winds of Change* Editor, Karen English at kenglish@aises.org / 617-827-3395. To advertise, contact Candace McDonough at cmcdonough@aises.org / 617-969-2137. To access our media kit visit www.aises.org/mediakit.

2015-2016 AISES Student Representatives

National Student Representative: **Crystal Tulley-Cordova** (*Navajo*), University of Utah Junior National Student Representative: **Kory Joe** (*Asa'carsarmiut*), Northern Arizona University

Region 1- **Jason Slats** (Chevak Native Village), University of Alaska, Anchorage

Region 2- Raquel Kamalu (Native Hawaiian), University of Hawai'i, Manoa Region 3- **Nikki Tulley** (*Navajo*), University of New Mexico

Region 4- **Ashleigh McIntosh** (*Caddo*),
University of Oklahoma

Region 5- **Hannah Balderas** (*Three Affiliated Tribes*), University of North Dakota

Region 6- **Ben Oster** (*Mohawk*), Cornell University Region 7- **Joi Owle** (*Eastern Band of Cherokee*), Western

Carolina University

2016 Professional of the Year Award Winners

In recognition of the significant contributions American Indians, Alaska Natives, Native Hawaiians, Pacific Islanders, First Nations and other indigenous peoples of North America have made to the STEM disciplines, AISES conducts the Professional Awards Program. Each year, AISES produces a short video highlighting the accomplishments of each category winner. The videos are shown during the awards banquet at the AISES National Conference where each winner receives an engraved Nambe Silver Eagle Award.

Overall Professional of the Year Award

Karletta Chief, Ph.D., (Navajo) University of Arizona

Blazing Flame Award

Marie Capitan (Navajo), Sandia National Labs

Executive Excellence Award

Richard Johnson (Cherokee), Boeing

Most Promising Engineer or Scientist Award

Michael Dockery, Ph.D., (Citizen Potawatomi Nation), United States Forestry Service

Technical Excellence Award

Tara Astigarraga (Choctaw), IBM Research

Professional of the Year - The AISES Professional of the Year Award is presented for overall leadership and technical achievement. This individual is selected from among the top candidates submitted in all categories; therefore, individual nominations are not accepted for this award.

Blazing Flame Award - The Blazing Flame Award is presented to an individual who blazes a path for indigenous people in STEM careers. This award recognizes individuals with 10 or more years of professional experience with significant accomplishments in advancing STEM education and careers.

Executive Excellence Award - Executive Excellence nominees must be an experienced upper-level manager or a career-path engineer, scientist, professional, or academician who has significant department and budget responsibilities.

Most Promising Engineer or Scientist Award - The Most Promising Engineer or Scientist nominee must be a professional engineer or scientist with less than five years' experience after earning his/her degree. The candidate's early technical contributions should already indicate a promising career.

Technical Excellence Award - The Technical Excellence nominee must have made a significant contribution to science, engineering, or technology by having designed, developed, managed, or assisted in the development of a product, service, system or intellectual property.

Ely S. Parker Award Winners

The Ely S. Parker Award is the highest honor bestowed by AISES, given in honor of the first recognized American Indian scientist/engineer. Recipients of the Ely S. Parker Award are leaders who carry on Parker's legacy and contributions to U.S. society. Parker was a sachem Seneca chief, who studied law. He was also a peacemaker and engineer. The award recognizes individuals whose training, education and experience is exemplary in service to others. Their talent and brilliance sustains AISES' mission and powerfully illustrates Native Americans' contributions to STEM.

- 1983 A.T. (Andy) Anderson, (Seneca) Engineering
- 1984 **Phil Stevens**, (Oglala Sioux) Engineering
- 1985 Mary G. Ross, (Cherokee) Mathematics & Engineering
- 1986 Al Qöyawayma, (Hopi) Engineering
- 1987 **Phil Lane Sr.**, (Yankton Sioux) Engineering
- 1988 **Tom Dawson**, Engineering *(Cherokee)*
- 1988 **Don Ridley**, (Shoshone) Engineering
- 1989 **Dr. Louis Steele**, (Assiniboine) Medicine
- 1990 **Dr. George Blue Spruce**, (*Laguna/Ohkay Owingeh*)
 Dentist
- 1992 Dr. Fred Begay, (Navajo) Physics
- 1993 **Dr. Taylor Mackenzie**, (Navajo) Medicine
- 1994 **Dwight Gourneau**, (Chippewa) Engineering & Physics

- 1995 **Dr. Cliff Poodry**, (Seneca) Biology
- 1996 **Dr. Fred Cooper**, (Shoalwater Bay) Engineering
- 1997 **Dr. Jane Mt. Pleasant**, (*Tuscarora*) Agronomy & Soil Science
- 1998 **Dick French**, (Yakama) Forestry
- 1999 **Dr. Robert Megginson**, (*Lakota*) Mathematics
- 2000 **Dr. Jim May**, (Cherokee) Engineering/Business/ Library Science
- 2001 **Dr. Carolyn Elgin**, (Choctaw) Educator
- 2002 **Dr. Judith Kaur**, (Choctaw/ Cherokee) Medicine
- 2003 **Carole Gardipe**, (Penobscot) Geology
- 2004 **Jerry Elliott**, (Osage/ Cherokee) Physics
- 2005 **George Thomas**, (Cherokee) Engineering

- 2007 **Governor Joe A. Garcia**, (Ohkay Owingeh) Engineering
- 2008 Norbert S. Hill, Jr., (Oneida) Educator
- 2009 **Sandra Begay-Campbell**, (Navajo) Engineering
- 2010 **Dr. Robert Whitman**, (Navajo) Engineering
- 2011 **Everett Chavez**, (Kewa Pueblo) Educator
- 2012 **Dr. Henrietta Mann**, (Southern Cheyenne) Educator
- 2013 **Bessie Newman Spicer**, (Navajo) Nursing
- 2014 **Dr. Jason Younker**, (Coquille) Educator
- 2015 **Dr. Bret Benally-Thompson**, (White Earth Band of Ojibwe) Medicine
- 2016 **Dr. Robin W. Kimmerer**, (Citizen Potawatomi Nation) Educator

2014-2016 Fellows - Lighting the Pathway to Faculty Careers for Natives in STEM

Supported by the National Science Foundation (NSF), the Lighting The Pathway program focus is to increase the representation of Native Americans in STEM faculty positions in higher education through the creation and support of an intergenerational community of undergraduate and graduate students, postdoctoral scholars, and junior and senior faculty members.



Cohort One

Angelita Bearquiver
(Northern Cheyenne)
Rene Begay (Navajo)
Rebecca Buckman (Hopi)
Katherine Crocker
(Kaw Nation)
Joshua Danny (Navajo)
Megan Dunn (Cherokee
Nation)
Devin Etcitty (Jemez
Pueblo, Navajo)
Amber Eule-Nashoba

Bradley Ganoe (Anishinaabe)
Jennifer Remme (Fort Peck
Assiniboine, Sioux)
Ariel Helms (Cherokee Nation)
Kelsea Hosoda (Native
Hawaiian)
Carrie Joseph (Hopi)
Nicole Kenote (Menominee)
Sandra Kjono (Mohawk)
Janie Locklear (Lumbee)
Jacinda Mainord (Village
of Selawik, Village of
White Mountain)

Jack Martin (Navajo)
Alexander McGirt (Lumbee)
Na'ta'ne Miles (Comanche,
Pine Ridge Oglala Sioux,
Salt River Pima- Maricopa)
Jocelyn Painter (Winnebago
Tribe of Nebraska)
Keith Parker (Yurok)
Anthony Barela Nystrom
(Chickasaw Nation)
Mackenzie Pearson
(Menominee)

Jesse Peltier (Turtle
Mountain Chippewa)
Darryl Reano (Acoma Pueblo,
Santo Domingo Pueblo)
Biidaaban Reinhardt (Sault
Ste. Marie Chippewa)
Joshua Thomas (Seneca
Nation of New York)
Ranalda Tsosie (Navajo)
Crystal Tulley-Cordova
(Navajo)

Cohort Two

(Choctaw Nation)

Chad Auginash (Red Lake Chippewa) Shanadeen Begay (Navajo) Johnny Buck (Yakama) Katrina Claw (Navajo) Jesse Gibson (Poarch Creek) Ciarra Greene (Nez Perce) Candice Guy (Delaware)
Megan Kiedrowski (Sault Ste.
Marie Chippewa)
Naomi Lee (Seneca
Nation of New York)
Rebekah Lester (Osage)

Danielle Guzman (Nez Perce)

Kristen Lycett (Cow Creek Umpqua) Phillip Medina IV (Huron Potawatomi) Jordan Oshiro (Native Hawaiian) Ulali Phillip (Navajo) Canek Phillips (P'urepecha)

Dylan Suvlu (Artic Slope
Inupiat)

Scott Tan (Blackfeet)

Henrietta Tsosie (Navajo)

Delbert Willie (Navajo)

Cohort Three

Sarah Aarons (Village of Unalakleet) Mark Berger (United Nation of New York) Edward Chew (Tuscarora) Alexander Cody (Kickapoo Tribe of Kansas) Kyle Dahlin (Native Hawaiian) Tammi Duncan (Navajo) Maxwell Goldstein (Seminole Nation of Oklahoma)

Joshua Lelemia Irvine
(Native Hawaiian)
Laurel James (Yakama)
Jordan Kennedy (Blackfeet)
Donna Kuehu (Native
Hawaiian)
Moses Leavens
(Chippewa-Cree)
Lizzie Lightning (Ponca
Tribe of Oklahoma)

Benjamin Lilley
(Eastern Cherokee)
Michaela Long (Navajo)
Kevin McPherson
Jenny Nakai (Navajo)
Cheyenne Nelson (Santa
Ynez Chumash Mission)
Talia Quandelacy (Zuni)
Kyle Roessler (Salish Kootenai)
Kenneth Swift Bird (Pine
Ridge Oglala Lakota)

Jackie Taylor (Choctaw Nation)
Sidney Thompson (St.
Regis Mohawk)
Kayle Thunstrom
(Minnesota Chippewa)
Lani Tsinnajinnie (Navajo)
Tada Vargas (Cheyenne
River Sioux)
Noelani Villa (Kaw Nation)
Clayton Wauneka (Navajo)

National Science Foundation ASSIST Travel Fellows

2016 ASSIST Fellows

Funded by National Science Foundation (NSF) ASSIST Project, this program is designed for early-career faculty, post-doctoral fellows, and graduate students in engineering. The program provided support to travel to and attend the 2016 AISES National Conference as well as specific professional development sessions.

Chad Auginash (Red Lake Chippewa) Grace Bulltail (Crow) Michael Charles (Navajo) Ronson Chee (Navajo) Karletta Chief (Navajo) Otakuye Conroy-Ben (Pine Ridge Oglala Sioux) Ann Cross (Pine Ridge Oglala Sioux) Franklin Dollar (Dry Creek Pomo) Megan Dunn (Cherokee Nation) Juanita Francis (Navajo)

2016 ASSIST Fellows cont.

Joshua Gosney (Little Shell Chippewa) Joshua Lelemia Irvine (Native Hawaiian) Melia Iwamoto (Native Hawaiian) Sonu Jose Carrie Joseph (Hopi)

Donna "Sweetie" Kuehu (Native Hawaiian) Sandra Manosalvas-Kjono (Mohawk) Phillip Medina (Huron Potawatomi) Benjamin Parker (Chippewa-Cree, Squaxin Island, Turtle Mountain Chippewa) Canek Phillips (P'urepecha) Christina Smith (Navajo)
William Terrell
Henrietta Tsosie (Navajo)
Michael Valdez (Cherokee Nation)
Clayton Wauneka (Navajo)
Delbert Willie (Navajo)

2015-2016 AISES Scholars

2015-2016 BNSF Scholars

Kira Brown Nicho (*Cherokee Nation*) (*Ch*

Jordan Kennedy (Blackfeet)

Nicholas Burt (Cherokee Nation) **Braden Edwards** (Cherokee Nation, Osage) Lindsey Hancock (Choctaw Nation) Haley Hilborn (Laguna Pueblo)



2015-2016 Intel Scholars

Mark Berger (Oneida Nation of New York)

Maxwell Goldstein (Seminole Nation of Oklahoma) Phillip Medina IV (Huron Potawatomi)

Cameron Sharpe (Citizen Potawatomi Nation) Lonny Strunk (V. of Kwinhagak)

Paul Stoner, Jr. (Village of Savoonga)

Lonny Strunk (Village Cherokee Nation)

Adam Williams (Bad River Lake Superior Chippewa, Cherokee Nation)



2015-2016 NextEra Energy – Ford Dry Lake Scholars

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Dusti Bacon (Chemehuevi)

Sydney Harper (Colorado River)

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Leanna Mike (Twenty Nine Palms)

Kaitlyn Snodgrass (Chemehuevi)



2015-2016 NAVSEA – Naval Seas Systems Command Scholars

Christon Manuelito (Navajo) Felix Yepa (Jemez Pueblo) **Kyle Rhine** (Cherokee Nation) **Zachery Herman**

Shanya Whitehorse (Navajo)

Jessica Meylor (Osage)



Barbara Whye Chief Diversity & Inclusion Officer, Vice President, Human Resources,

"Intel has been committed to creating pathways for Native American students for many years and our partnership with AISES has been instrumental. In 2016, we expanded our partnership with AISES and created the 'Growing the Legacy' scholarship program for Native American undergraduate and graduate students to provide students with financial support, Intel mentors, and opportunities for paid internships or jobs at Intel upon graduation. Additionally, we are collaborating with AISES on a culturally-appropriate computer science curriculum for Native



American high school students. We know that if a subject interests a student, education happens. We believe an engaging curriculum and exposure to Intel role models and mentors can make a huge difference."







2015-2016 A.T. Anderson Memorial Fund Scholars

Supported by: Bayer USA Foundation, Boeing, Chrysler, Lockheed Martin, Northrop Grumman Corporation, Oracle, Rosemary Schaefer, San Manuel Band of Mission Indians, and individual supporters.

Abby Jessell (Cherokee Nation)
Alexander McGirt (Lumbee)

Erica Poe (Cherokee Nation)

Emily Wheeler (Choctaw Nation)

Emery Whitfield (Navajo)
Brandt Daniels

(Chickasaw Nation)

Keely Moriarty (Standing Rock Sioux)

Shannon Peterson (Navajo)

Biidaaban Reinhardt (Sault Ste. Marie Chippewa)

Blake Yort (Citizen Potawatomi Nation)

Sheilah Allison (Navajo)

Shanice Britton (Round Valley)

Amy Irons (Picayune Chukchansi)

Ashley Martinez (Navajo)

Tyler Rust (Pine Ridge Oglala Sioux)

Justin Sanders (Cherokee Nation)

NaShowda Shadley (Yurok)

Daven Tagaban (Navajo, San Carlos Apache)

Henrietta Tsosie (Navajo)

Luke Gibson (Navajo)

Micah Hawk-Lowenstein (Apache Tribe of Oklahoma)

Braden Heid (Cherokee Nation)

Jennifer Jones (Navajo)

Trevor Mackey (Seminole Nation of Oklahoma)

Dillon Nockideneh (Navajo)

Andrew Quinton (Cherokee Nation) **Thaddeus Smith**

(Shoshone-Bannock)

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Council of Tlingit & Haida)

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Juliana Alden (Native Hawaiian)

Gabriella Alden (Native Hawaiian)

Rene Begay (Navajo)

Andrew Cloud (Red Lake Chippewa)

Ashton Fishinghawk (Cherokee Nation) Shelbi Fitzpatrick (Blackfeet)

Danielle Freemont

(Northern Cheyenne)

Consuelo Gurule (Navajo)

Ariel Helms (Cherokee Nation)

Shawn Poe (Cherokee Nation)

Annabeth Pruett (Three Affiliated Tribes)

Ivan Rajen (Navajo)

Nicholas Santine (Choctaw Nation)

Anna Teague (Muscogee Nation)

Romilly Tsinhnahjinnie (Navajo)

Lani Tsinnajinnie (Navajo) Riley Vancuren (Cherokee

Nation, Choctaw Nation)
Chase Voirin (Navajo)

2015-2016 Travel Support Scholars

Supported by: AMB Foundation, San Manuel Band of Mission Indians, U.S. Environmental Protection Agency, Bayer Foundation, CHS Foundation, General Motors, Google, Lawrence Livermore Labs, USDA NRCS (United States Department of Agriculture Natural Resources Conservation Service), and individual donors.

Chad Auginash (Red Lake Chippewa)

Brooke Fettig (Three Affiliated Tribes)

Tyler Rust (Pine Ridge Oglala Sioux)

Kayla Murphy (Prairie Band of Potawatomi)

Roxanne Benally (Navajo)

Ivan Rajen (Navajo) Lisa Willis (Navajo)

Drew Williams (Oneida Tribe of Wisconsin)

Eron Guy (Navajo)

Blake Yort (Citizen Potawatomi Nation) Erica Poe (Cherokee Nation)

Maveric Abella (Native Hawaiian)

Michael Charles (Navajo)

Emily Irey (Chippewa-Cree)

Tayler Pave (Native Hawaiian)

Torvald Thomas (Village of Koyuk)

Jordon Melcher (Native Hawaiian)

Jennifer Osborne (Curyung Tribal Council)

Ivan Rajen (Navajo)

Brendan John (Seneca Nation of New York) Adam Williams (Bad River Lake Superior Chippewa, Cherokee Nation)

Kimberlynn Cameron (Standing Rock Sioux)

Levi Hoffman (Three Affiliated Tribes)

Adam Williams (Bad River Lake Superior Chippewa, Cherokee Nation)

Jenna Blue (Turtle Mountain Chippewa)

Brooke Fettig (Three Affiliated Tribes)

Breon Cree (Menominee, Turtle Mountain Chippewa) Ashley Carlisle (Navajo)
Jonathan Clyde (Navajo)

Brien Gabriel (Turtle Mountain Chippewa)

Trey Goodsell (Sisseton-Wahpeton)

Shangreaux Greydon (Rosebud Sioux)

Dara Jerome (Turtle Mountain Chippewa)

Thomas Jones (Cherokee Nation)

Tadlock Sonni (Colville)
Tada Vargas (Cheyenne
River Sioux)

2016 Bonneville Power Administration Summer Student Interns

Sage Wagner (Jemez Pueblo)

Kimberly Stewart (Yakama)

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IMPACT FOUNDATION

Alfred P. Sloan

The Sloan Indigenous Graduate Partnership (SIGP) makes scholarships available to American Indians and Alaska Natives for Master's and Ph.D. degree programs in designated STEM fields. American Indian Science and Engineering Society has always been very supportive of SIGP, welcoming us to have the annual meeting of SIGP directors at their meeting and encouraging the full participation of SIGP Sloan Scholars in meeting activities. This has included Scholars' volunteering for "give-back" activities such as judging the undergraduate research competitions. Attendance at the national AISES meeting is critical for project directors to meet, review progress towards goals and plan for the next year and for Scholars from our seven universities to have an opportunity to interact and network.

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AISES | ANNUAL REPORT 2016



Honoring New 2016 AISES Sequoyah Fellows (Lifetime Members)

The AISES Lifetime Membership program was named in memory of Sequoyah, a member of the Cherokee Nation who perfected the Cherokee alphabet and syllabary in 1821, resulting in the Cherokee Nation becoming literate in less than one year. In this spirit, AISES Sequoyah Fellows are recognized for their commitment to AISES mission in STEM and to the American Indian community as a whole. They bring honor to AISES by engaging in lifelong leadership, mentorship, and other acts of service, including making annual financial contributions, to support the students and professionals in the AISES family.

New Sequoyah Members in 2016 are listed below:

Teri Allery Dr. James Cotter Raquel Kamalu Cynthia Sanders Tara Astigarraga Madison Esposito Dr. Adrienne Laverdure Jim Sappier Marcy Averill Naomi Farabee Regal Leftwich Fillip Southerland Todd Mitchell Vanessa Bailey Victoria Fuentes Dylan Suvlu Jolene Begay Sage Garcia Lisa Paz Nikki Tulley D'Lisa Penney-Pinkham **Gabriel Brien Emily Irey** Christina Thalia Uh Dr. Kimon Valavanis Olester Benson Richard Johnson Ben Oster Melissa Clah Dr. Wren Walker-Robbins **Aaron Jones** Jody Pfotenhauer

The total number of Sequoyah Fellows is now over 1,300!

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Roberta Well, Civil Engineer U.S. Department of Interior Office of Energy and Economic Development

"Partnering with AISES and working with our Native youth is one of the best parts of my job. I have been a part of and involved with the organization for almost 8 years now, since my first year in college, and I love the opportunities they provide. I have always wanted to stay connected and work with our youth and partnering with AISES has allowed me to do that. Working with AISES this year on the Energy Challenge has been a very rewarding experience."

IMPACT TRIBAL

San Manuel Band of Mission Indians Business Committee

"The San Manuel Band of Mission Indians is a proud supporter of AISES."

San Manuel has been a long-time supporter of AISES and Native STEM students. In 2012, the Tribe honored AISES with its Yawa' Award. Yawa' is a word and concept in the Tribe's native Serrano Language that calls for one to act on their beliefs. Seen as a milestone in the Tribe's philanthropic giving, the annual Yawa' award is given in four categories - Education, Health, Economic Development, and Special Projects.

TRADITIONAL KNOWLEDGE | NEW IDE



Each represents the focus areas in which San Manuel seeks to make a positive difference in the lives of others. The San Manuel Band of Serrano Mission Indians is a federally recognized American Indian tribe located near the city of Highland, Calif. The Serrano Indians are the indigenous people of the San Bernardino highlands, passes, valleys and mountains who share a common language and culture. The AISES Family is honored to have the ongoing partnership and support of the San Manuel Band of Mission Indians.

AISES Circle Partners

The following outstanding organizations are recognized for their commitment to supporting the educational and professional development of American Indians, Alaska Native, Native Hawaiians, and other indigenous people of North America in STEM fields. AISES' Circle Partners diversify their involvement over at least two national events or programs. For more information on how to become a Circle Partner, please contact Kellie Jewett-Fernandez at kifernandez@aises.org.

2016 Full Circle of Support —









2016 Circle of Support _



















2016 Excellence Partners





2016 Success Partners —————



THE FUTURE

Looking To The Future: What's New In 2017

National Native Health Research Training Initiative and National Conference

AlSES is one of three national Native nonprofits launching the National Native Health Research Training Initiative in 2017 to expand the number of American Indian and Alaska Native (AI/AN) health researchers while supporting health care, health concerns, reducing health disparities, and enhancing quality health care to American Indian and Alaska Native communities.

Funded by the U.S. Department of Health and Human Services, Indian Health Service, AISES, the American Indian Higher Education Consortium, and the Native Research Network will partner in the First Annual National Native Health Research Training (NNHRT) Conference. The conference will offer professional development and training to AI/AN scientists, students, and professionals as a venue to share biomedical, clinical, behavioral and health science research that is responsive to the needs of American Indian and Alaska Native communities.





Canadian Indigenous Advisory Council

The Canadian Indigenous Advisory Council (CIAC) of AISES is a formal organization of representatives from the Canadian Indigenous science, technology, engineering, and math (STEM) community, whose role is to advise AISES on issues of relevance and importance to its Canadian Indigenous (Status and Non-Status First Nation, Metis, and Inuit) members. In addition, the CIAC will work to assist AISES in creating opportunities for Canadian Indigenous members, and support the AISES mission to substantially increase the representation of Canadian Indigenous Peoples in engineering, science, and other related technology disciplines.

The CIAC Charter will be developed in 2017 to support and represent Canadian Indigenous interests. It will advise AISES on issues important to Canadian Indigenous chapters and members from professional and post-secondary chapters of AISES in Canada. The CIAC will encourage K-12 Canadian Indigenous educator and student participation in AISES programming, where appropriate. Other activities are liaison between the Canadian Indigenous STEM community and AISES, create networking opportunities for Canadian Indigenous AISES chapters and members, advocate to publicize Canadian Indigenous content in *Winds of Change* and on the AISES website, increase relevance for Canadian Indigenous AISES members, host a gathering of Canadian Indigenous AISES members and allies at the National conference, and more.

Getting the CIAC up and running is an important step for AISES that not only reinforces our mission, and further our connection with our Canadian relatives. It is a natural progression a part of our larger organizational structure and growth capability.



Tribal Nations Advisory Council

In 2017, AISES will introduce a new Advisory Council, the Tribal Nations Advisory Council (TNAC). The role of this Council will be to advise AISES in its work with Tribal Nations and will be comprised of representatives from Tribal Nations across the nation. AISES currently has five other advisory Councils, the Corporate Advisory Council (CAC), Government Relations Council (GRC), Academic Advisory Council (AAC), Professional Chapter Council (PCA), and the Council of Elders. Each of these Councils plays an important role in advising AISES in its work. The development of the TNAC will meet help to address the growing tribal STEM workforce development needs while also advising AISES in our work with representatives from Tribal Nations to help shape and guide STEM programming for Native youth in those communities. The inaugural meeting of the TNAC will be held at the 2017 AISES National Conference in Denver, Colo. in September.



AMERICAN INDIAN SCIENCE AND ENGINEERING SOCIETY

Celebrating 40 Years

2017 is the 40th anniversary for AISES that is sure to generate much excitement and energy amongst our AISES family and partners. The tagline for our 40th anniversary is "Forty Years Supporting Natives in STEM" and will be utilized throughout the year in public relations opportunities and messaging via our website, social media platforms, and other mediums. Throughout our 40 years, AISES has continually reinventing and reinvigorating the AISES mission to best meet the needs of a new generations of Native leaders, academicians, and scientific innovators. Throughout the AISES journey, we have been supported by extraordinary people who have nurtured and supported our work passing from generation to generation. It is has been a movement larger than AISES itself.

As we move into 2017, AISES is experiencing its highest member enrollment to date and are creating an array of initiatives, advisory councils, and affiliate partnerships that will take us into new areas of expansion and adventure. AISES remains the central hub for Native STEM students and professionals to engage and explore together an environment to educate, advance, and inspire one another in our collective journey. Our goal beyond our 40th anniversary year is to continue working within our growing and thriving AISES family toward our shared vision for the next seven generations of Native people to be successful, respected, influential, and contributing members of our vast and ever changing global community. Onward and upward to the next 40!

AISES & Indigenous Education, Inc. (Cobell Scholarship Fund) to Partner on Scholarship Management and Administration

AISES is excited to announce a new partnership with Indigenous Education, Inc. (IEI), the nonprofit corporation that administers the Cobell Scholarship Fund that was established to distribute \$60 million in scholarship funding in accordance with the Settlement Agreement that resolved the Cobell v. Salazar class action litigation. What does this mean for AISES students? Beginning in the 2018-19 academic year, the AISES scholarship application will reside on the IEI website, cobellscholarship.org. Students will still be able to access AISES scholarship information and the link to the application on the AISES website as well. With this partnership, AISES students will have the opportunity to apply for additional scholarship opportunities more easily and students applying to the Cobell Scholarship Fund will have the opportunity to apply for AISES scholarships as well. It will be a win-win for Native students, AISES, and IEI!

VVINCS OF CHANGE

Winds of Change Transition

In 2017, AISES will start managing the *Winds of Change Magazine* which was previously managed for seven years by the full-service publisher, The Pohly Company, Inc. located in Boston, Mass.

The transition of *Winds of Change* in-house is a strategic move that will have long-term benefit. *Winds of Change* is being produced by a printing and publications transition team made up of editors, freelance writers, graphic artist, art director, and a managing editor. The transition team is responsible with tackling technology that includes developing and implementing new internal processes, data transfer, contracts, and platform training and design. *Winds of Change* is at the heart of our business. Our goals are to continue to provide the best quality content and grow the magazine over time.



"New" Tribal Enterprises to Watch List

Winds of Change publishes annual research-based feature articles such as the Top 50 Workplaces for Native American STEM Professionals and the Top 200 Colleges for Native Americans. A feature article on the 25 Native STEM Enterprises to Watch will be in research and development in 2017. The economy is growing again and AISES aims to develop more business opportunities with tribes and corporations to raise more capital to do more for our students and professionals. Tribal enterprises are remarkably changing the landscape of STEM in Indian country through job creation, broad impact, efficiency and innovation. These organizations are leaders in meeting, the technological needs, challenges, and advances of the 21st century and we want to honor them.





2016 - 2017 AISES Staff

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Chief Operating Officer

Kyle Coulon (family from Onondaga) Program and Development Officer

Emerald Craig (Navajo)

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