



# 45 Years of Advancing **Indigenous** People in STEM

October 6 - 8, 2022 • Palm Springs Convention Center



# PROGRAM

## 2022 NATIONAL CONFERENCE

[conference.aises.org](https://conference.aises.org) #AISESNC22

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### Volunteers

AISES would like to express its gratitude for all the hard work from our community partners and local professional chapter for their volunteer services!

**AISES Conference Volunteer Coordinator**  
Nancy Papineau, President, Dualos, LLC

#### Powwow Organizers

Alex "Panda" Armendariz, Co-Advisor, Cal Poly Pomona College Chapter  
Kathleen Dvorak

### Conference Donations

AISES thanks the following for their generous donations that funded prizes and gifts!

Nancy Papineau, Tacoma, Washington

Michelle's Shellcraft - Adelná Nogoy  
Navajo Jewelry & Crafts - Karen Sanchez  
TalaSoap - Caroline Armijo  
Bear Tracks - Caryn Bundy  
Cassy's Arts and Craft - Cassandra Billy

These Native Artisan vendor booths are displayed at the conference and the powwow.

45 Years  
of Advancing  
**Indigenous**  
People in STEM

## Safe Camp and Code of Conduct

All conference participants are expected to adhere to the AISES standards of conduct. We invite all those who participate in any AISES event to help us create safe and positive experiences for everyone.

### Safe Camp

AISES events are a "Safe Camp," meaning this is a welcoming, inclusive, supportive, and safe environment for all our AISES family members regardless of race, color, sex, religion, sexual orientation, or gender expression/identity. Safe Camp includes recognizing the AISES Code of Conduct and anyone found violating the code will be asked to leave the conference immediately. Please contact any AISES staff member or board member if you have any questions.

### Code of Conduct

AISES was established with the goal of developing Indigenous professionals and leaders in the areas of science, technology, engineering, and math. Considering this goal, the first student leaders of AISES developed a set of principles that prohibited alcohol, illegal drugs, and harassment. These principles have become core values of the organization and are incorporated as the Code of Conduct.

The AISES Code of Conduct promotes professional development and personal growth by strictly prohibiting the use of intoxicating drugs or alcohol, all forms of harassment and discrimination, and encourages respectful and civil dialog and group discussions. The Code is meant to reflect the ideals of our Indigenous communities by establishing an expectation that we agree to protect and promote the well-being and growth of all people.

The Code is expected to be honored when individuals are representing the AISES organization and by all persons participating in AISES activities, events, and conversations. To this end, each person is asked to consider the spirit of the Code and promote its intent by refraining from prohibited activities and encouraging others to do the same.

AISES will continue to maintain the Code of Conduct as a symbol reflective of the teachings and values of our ancestors. The Code of Conduct represents the ideas and visions set-forth by the AISES founders and the student leadership. AISES values and respects the rights and privileges of others and asks that you honor the AISES organization, its mission, and the family of AISES by adhering to the Code of Conduct.

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# *Walking on* **In Memoriam**

## Gene A. Keluche

Gene A. Keluche, Wintun, passed away in February and will be much missed by the AISES family. Throughout his career, he helped Indigenous people in every way he could, spending much of his time promoting economic development in Indian Country. A resort developer in Arizona and Colorado, Keluche was founder and CEO of International Conference Resorts, which provides hospitality and meeting facilities as well as technical and marketing services to the resort industry. He was a great friend of AISES and an early supporter of the Leadership Conference (now the Leadership Summit), which he hosted for a decade at his Cheyenne Mountain Resort in Colorado Springs. Keluche was a former co-chair of the International Founder's Council of the National Museum of the American Indian. He and his wife, Freita, founded the nonprofit Native American Sports Council (NASC), which has given many young people an opportunity to pursue their dreams of Olympic-level athletic success. Tribes nationwide are benefiting from sports wellness programs modeled by the NASC. Gene Keluche was born in 1933 in Mount Shasta, Calif., and spent his first 12 years in foster care before returning to live with his mother. He worked his way through college at California State University, Chico, graduating with a degree in applied science engineering. After a stint as a Navy pilot during the Korean War, he went to Harvard Business School and earned an MBA. In addition to his wife Keluche leaves two sons, Cameron and Colton.

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### Dr. Nancy B. Jackson

It is with great sadness that we mark the passing of Dr. Nancy B. Jackson, 65, the week of January 1 in Albuquerque, N.M. Throughout her distinguished career, her advocacy for the AISES mission aligned with her own goals of developing, nurturing, and advancing scientists worldwide, especially women and Indigenous students and professionals.

Despite a busy career at Sandia National Laboratories in Albuquerque, Dr. Jackson attended science fairs and judged student presentations and posters at the National Conference. In recognition of her leadership and technical achievements, AISES presented the Professional of the Year award to Dr. Jackson in 2005.

Dr. Jackson was Seneca ancestry. She earned a BS degree at George Washington University and an MS and PhD in chemical engineering at the University of Texas at Austin.

Dr. Jackson joined the American Chemical Society (ACS) in 1980 and served on numerous committees as well as a three-year term on the organization's board. When she was elected president of the society in 2008 — designated the International Year of Chemistry by the United Nations — *Chemical and Engineering News* reported that she received over 11,000 votes. Dr. Jackson was in Amman, Jordan, when she learned of her election. She took that opportunity to express her views about chemistry saying, "In our culture, the contributions of science are undervalued. Chemistry is near the bottom of the sciences in the public's interest. As we know, the irony is that chemistry is essential for virtually every other science to flourish. It is time that we resolve to take whatever steps are necessary to inform the public of the importance — and wonder — of the central science of chemistry."

Her career took her to the Middle East and Southeast Asia, and she served on numerous boards in the U.S. At Sandia National Laboratories Dr. Jackson was manager of the International Chemical Threat Reduction Department and a Franklin Fellow. She spent two years as a tribal government liaison where she represented Sandia at local, state, and national Native events. Also, at Sandia she served as deputy director of the International Security Center (2004–2006) and department manager for Chemical and Biological Sensing, Imaging and Analysis (2002–2004). In addition, she was an associate research professor at the University of New Mexico, and at the State Department Dr. Jackson worked on the Chemical Security Engagement Program.

Her professional memberships included the International Union of Pure and Applied Chemists and the Industrial and Chemical Engineering, Business Development and Management, and Colloid and Surface Chemistry divisions of the ACS. Dr. Jackson was a Fellow of the American Association for the Advancement of Science (AAAS), which chose her as recipient of the 2012 Award for Science Diplomacy for her outstanding contributions.

We at AISES esteemed Dr. Jackson and valued her commitment and enduring contributions to the entire organization. We will miss her dynamic leadership, influence, and friendship. Please keep her husband, James Miller, and their sons, Christopher Miller, and Jackson Miller in your thoughts at this difficult time.

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# Celebrating tomorrow's change makers.

Apple proudly supports the American Indian Science and Engineering Society's work to uplift Indigenous STEM students, connecting them with the support and access they need to become the leaders of tomorrow.

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Dear Friends,

“Míyaxwe” and thank you for joining us in Palm Springs—the site of the 2022 AISES National Conference. If this is your first visit to Palm Springs, we hope you will enjoy the area known for its year-round sunshine, outdoor recreation, art, dining, and festivals. Just two hours from ocean beaches, and one hour from Joshua Tree National Park, the Palm Springs area has endless things to do. If this is your first AISES National Conference, we extend a special “welcome.”

Over 100 federally recognized tribes, rancherias, and unrecognized tribes comprise the Indigenous portrait of present-day California. Before we share some highlights about this year’s National Conference, we respectfully acknowledge that we are gathered on the traditional territories of the Cahuilla people. At this confluence of land, people, and environmental assets, we respectfully acknowledge the ancient ones and express our gratitude to all who live here today.

Our conference theme is *45 Years of Advancing Indigenous People in STEM*. The theme is especially appropriate as this anniversary marks decades of commitment to fostering Indigenous science, technology, engineering, and math talent across Turtle Island. Thank you for joining us as we celebrate this milestone.

Over the next three days we encourage you to listen and learn from presenters who have come from the four directions to share their knowledge, experiences, and expertise in over 100 planned activities and events. Here is a brief overview:

- **Wednesday, October 5 (Pre-conference):** STEM Activity Day is free with 18 STEM events planned – this year we are offering the most activities yet geared toward PK–12. Take advantage of this pre-conference day to network with others, pick up your conference registration, review the program, visit the merchandise booth, familiarize yourself with our host hotel — the Renaissance Palm Springs — and the Palm Springs Convention Center where the events will be held.
- **Thursday, October 6:** Starting at 8:30 a.m., the Opening Ceremony features keynote speaker Bird Runningwater, who will describe global Indigenous representation in film and television in notable hits such as *Reservation Dogs*, *Rutherford Falls*, and *Dark Winds*. Following the keynote, you can stay busy with sessions, meetings, and tours. Thursday ends with a Graduate Student Mixer, Networking Suites, and the popular AISES Hackathon.
- **Friday, October 7:** Rise early for the Morning Blessing with our Esteemed AISES Council of Elders. Other activities include a Professionals Keynote Breakfast, the largest College and Career Fair in Indian Country with over 225 exhibitors including a full day of research presentations, both poster and oral. If you’re energized, make your way to the student social event with DJ Element starting at 8:00 p.m.
- **Saturday, October 8:** Check-in for the Sequoyah Breakfast begins at 6:30 a.m. or join in the 7:00 a.m. lacrosse demonstration activity. The morning is filled with a variety of sessions. Find a seat at the Student Awards Luncheon at 11:45 a.m. Afternoon sessions will culminate with the Closing Talking Circle, Closing Banquet, and the outdoor Powwow.

Throughout your time in southern California, we encourage to participate, contribute, and make memories! AISES staff and volunteers will be around to welcome and help you, including at the conference registration desk. Connect with us whenever you have questions!

Again, thank you for joining us in Palm Springs. We look forward to seeing you!

With kind regards,



Michael Laverdure  
(Turtle Mountain Band of Chippewa)  
AISES Board Chair



Sarah EchoHawk  
(Pawnee Nation)  
AISES Chief Executive Officer





# City of Palm Springs

Lisa Middleton, Mayor

3200 E. Tahquitz Canyon Way • Palm Springs, California 92262  
Tel: 760.323.8200 • Fax: 760.323.8207 • Email: Lisa.Middleton@palmspringsca.gov

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October 2022

Greetings and welcome to the 2022 American Indian Science and Engineering Society (AISES) National conference here in beautiful Palm Springs, California, a city that prides itself on being one of the most inclusive and welcoming communities in the nation.

This important conference brings together students and professionals from around the United States and Canada, as well as corporations, educators, tribal leaders, and nonprofits to discuss STEM (science, technology, engineering, and math).

Indeed, STEM is critical to the growth, prosperity and future of indigenous education, workforce, and tribal economic development, as well as to the economic future prosperity of the City of Palm Springs; a community that is proud to celebrate our Native American heritage as the home of the sovereign nation of the Agua Caliente Band of Cahuilla Indians.

On behalf of our residents, we thank you for choosing sunny Palm Springs to host your conference and invite you to enjoy all the magnificent tourist attractions the city has to offer – from hiking the Agua Caliente’s magnificent Indian Canyons to enjoying the spectacular views from atop the world famous Palm Springs Aerial Tramway -- to enjoying our world-class Palm Springs Art Museum, Downtown Park, and uniquely eclectic shops, restaurants and galleries along Palm Canyon Drive, we hope you enjoy the magic that makes Palm Springs like no place else and wish you a successful event. By the way, don’t forget to take your selfie in front of Forever Marilyn!

Sincerely,

Lisa Middleton  
Mayor of Palm Springs



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# Keynote



Photo credit Josh S. Rose

## Bird Runningwater

**Bird Runningwater** belongs to the Cheyenne and Mescalero Apache Tribal Nations and was raised on the Mescalero Apache Reservation in New Mexico. He is a Producer and Executive Producer for film and television and most recently entered into an exclusive first-look deal with Amazon Studios. He is currently serving as a Co-Executive Producer on the TV show “Sovereign” currently in development with Ava DuVernay, Warner Brothers Television, and Array Filmworks. He has other projects in development with Showtime Networks and Amazon Studios.

Prior to launching his producing career, Runningwater guided the Sundance Institute’s commitment to Indigenous Filmmakers for 20 years nurturing new generations of filmmakers through the Institute’s Labs and Sundance Film Festival. The films championed by Runningwater have put Indigenous Cinema into the global marketplace. Prior to departing Sundance Institute, Runningwater served as the Director of Sundance Institute’s Indigenous Program; Diversity, Equity and Inclusion; and Artist Programs. Under his tenure 154 different Indigenous filmmakers were mentored and supported through Sundance Labs, Grants, and Fellowships programs. More than 119 films written, directed, and produced by Indigenous filmmakers were curated by Runningwater to premiere at Sundance Film Festival. In the last 10 years of his tenure, Sundance Institute welcomed artists representing more than 95 different Indigenous Nations from around the world into its programs.

Runningwater is a member of the Academy of Motion Pictures Arts and Sciences and serves on the boards of directors of Illuminative and the Arctic Indigenous Film Fund. He was recently appointed to serve on the Library of Congress’ National Film Preservation Board and is a past member of the Board of Jurors for the George Foster Peabody Awards. In Time Magazine’s 2019 Optimist Issue, Runningwater was listed among “12 Leaders Who Are Shaping the Next Generation of Artists”. Last year he was honored by the Los Angeles City/County Native American Indian Commission as the *Spirit of Creativity* Honoree for Native American Heritage month for his outstanding contributions to Los Angeles’ American Indian and Alaska Native Community and the Los Angeles community at large.

Runningwater began his career in media 26 years ago as a Program Associate for the Media, Arts and Culture Program at the Ford Foundation in New York where he helped fund non-commercial radio, tv and film work across the U.S. and around the world in Africa, Asia, Latin America, and Russia. He is a graduate of the University of Oklahoma with degrees in Journalism and Native American Studies, and he received his Master of Public Affairs degree from the University of Texas at the Lyndon B. Johnson School of Public Affairs in Austin.

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## Mistress of Ceremonies



### Lillian Sparks Robinson

Lillian Sparks Robinson is the CEO and Owner of Wopila Consulting, LLC, an American Indian and woman owned small business that provides a wide range of specialized consulting and strategic development services to federal, state, and tribal government clients.

A member of the Rosebud Sioux Tribe, Lillian has worked in Washington, D.C. for nearly 20 years, devoting her career to supporting the educational pursuits of Native American students, protecting the rights of indigenous people, and empowering tribal communities. In 2010, Lillian was appointed by President Obama, and confirmed by the U.S. Senate, to serve as the Commissioner for the Administration for Native Americans. In this role, she worked on programs and policy impacting Native languages and education, social development, and economic development for American Indian, Alaska Native, and Native Hawaiian and Pacific Islander communities. Prior to her service at ANA, Lillian served as the Executive Director of the National Indian Education Association (NIEA), where she worked extensively on education policy and appropriations impacting American Indian, Alaska Native, and Native Hawaiian students. A former staff attorney at the National Congress of American Indians, Lillian has received numerous awards and recognition, including being named as one of seven young Native American Leaders by USA Today Magazine, one of "40 Under 40" from the National Center for American Indian Enterprise Development, and American Indian Woman of the Year.

A graduate of Morgan State University and Georgetown University Law Center, Lillian resides in Baltimore, Maryland with her husband, Corey and son, Connor.

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# Entertainment

## DJ ELEMENT

**DJ ELEMENT** | el•e•ment [el-uh-muhnt] –noun

*A component or constituent of a whole or one of the parts into which a whole may be resolved by analysis.*

DJ Element is an eclectic DJ from Phoenix, Arizona with a repertoire to encompass hip-hop, funk, soul, neo-soul, reggae, EDM, moombahton, trap, twerk, 80's, electro and everything in between. He has guested at worldwide events and venues in Korea, Japan, United Kingdom, Spain, and Italy, to name a few. He has opened for heavy hitters such as James Brown, A Tribe Called Quest, Nas, Krs-One, De La Soul, Big Daddy Kane, Rakim, Slick Rick, The Roots, Jane's Addiction, Incubus, and Audioslave. DJ Element was named the B-Boy City King of Scratch Champion in 2019 and recognized in 2015 by the Native American Heard Museum in Phoenix, Arizona for his contribution and dedication to music. Notably, DJ Element was the official 2020-2021 tour DJ for Supaman. DJ Element is a member of the Salt River Indian Community and began his career in 1996.

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# Closing Banquet Performers

## The Soaring Eagles

San Diego County, California, USA

### “Preserving Traditions and Culture through Diversity and Education with our Native American Youth.”

Soaring Eagle Dancers is a group of Native American youth dancers who perform throughout the San Diego Metro area. They are part of the Soaring Eagles Education Program that was established in 2008 to provide a unique cultural learning environment for young Native American students in grades K-12. In this exciting program, Soaring Eagle children combine their interest in dancing and live performance with cultural teachings and learn dance styles, cultural protocols, crafting tribal regalia, and more.

The Soaring Eagles Education Program allows children to prepare for their best future in dance and beyond by supporting their career and educational goals. Learning begins at home and in the classroom environment with close supervision and active family support. The Soaring Eagle Program team values their role in encouraging children to explore and experience the dances of their ancestors.

Dance is important in Native American cultures, as a central element in both religious and secular life. Each Tribal Nation has its own unique cultural traditions and various styles of dances. In the late 1800s, many Plains Tribal Nations formed intertribal alliances. Such alliances provided the opportunity for Tribal Nations to exchange cultural knowledge regarding songs, dances, and ceremonies, and served as the foundation of what we know today as Intertribal powwows.

Many of these cultural traditions and ceremonies were subject to severe restrictions during the late 1800s and early 1900s, as part of the United States government’s “assimilation” policy. In response to these restrictions, many ceremonies and dances went “underground” and were held in secret or were disguised as other kinds of events. In 1933, as part of the historic “New Deal” policies, the Federal Government lifted the religious and cultural bans. In 1978, Congress passed the American Indian Religious Freedom Act recognizing the practice of Native American religions, including access to sacred sites and use of sacred objects and materials.

At the end of World War II, with the return of Native American soldiers from abroad, the traditional warrior society dances began to acquire new meaning – evolving further when returning Native American soldiers returned from the Korean War were honored at powwows or “Homecoming Dances,” as they were sometimes called on the Southern Plains, which included the songs, dances, and regalia of earlier traditional warrior societies. Outside of the dance arena, important social ties and customs were also rebuilt, including the honoring of elders, naming and adoption ceremonies, the reception of families back into public life following a period of mourning, and a general bonding between families and friends. The general structure of these early powwows resembled the summer dance celebrations of the past century and included the use of a camp crier or announcer, the gathering of families at tribal celebration grounds, and important social interaction as relatives and community.

Powwows have continued to grow and today, some of the largest are now held in outdoor and indoor venues in cities throughout the U.S. and Canada. Today, Powwows are both a community gathering, community celebration, and cultural sharing and awareness opportunity. It is an important spiritual and social gathering of people to celebrate Native American traditions, dance, and social customs that have lasted for generations.

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# SPONSORS

## MEDALLION



## TURQUOISE



## CORAL



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### SWEETGRASS



### SAGE



### CEDAR



### PINON



### EAGLE



### BEAR





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## Other Sponsors

### Educational Programming and Academic Competitions

#### Research Competitions

##### Graduate Student Research

Burroughs Wellcome Fund  
Sloan Indigenous Graduate  
Partnership

##### Undergraduate Student Research

Lawrence Livermore National Lab  
Pfizer

##### Pre-College Poster Competition

Bureau of Ocean Energy Management

##### Student Research Abstract

**Booklet**  
The Aerospace Corporation

### Educational Sessions and Workshops

#### Student Orientation

The Boeing Company

#### Professional Session Track

NSF's Directorate for Technology,  
Innovation and Partnerships

#### Health and Medical Science

**Session Track**  
McKesson

#### STEM & Business Session Track

Johnson Scholarship Foundation

#### Research Session Track

Integra Foundation

#### STEM Activity Day

The Boeing Company

### Event Sponsorship Opportunities

#### Resume Room

IBM  
Lawrence Livermore National Lab

#### Student Awards Luncheon

Department of Air Force  
Jack Kent Cooke Foundation  
National Security Agency

#### Closing Banquet

Wells Fargo Bank

#### Professional Keynote Breakfast

3M

#### Professional Members Mixer

The Boeing Company  
VGT by Aristocrat Gaming

#### Graduate Student Mixer

DOE Office of Energy Efficiency &  
Renewable Energy  
Sloan Indigenous Graduate  
Partnership

#### Corporate Advisory Council and Tribal Nations Advisory Council Luncheon

Cisco

#### Networking Suite Sponsors

- 3M (Manufacturing)
- American Chemical Society (Chemistry)
- Chevron
- Honeywell FM&T, Sandia National Laboratories, Los Alamos National Laboratory and Lawrence Livermore National Laboratory
- IBM
- Johnson Scholarship Foundation (STEM & Business)
- National Security Agency (Intelligence and Armed Forces)
- Navajo Transitional Energy Company, LLC
- Nordstrom
- Raytheon Technologies
- Resolution Copper (Natural Resources)
- TC Energy (Energy)
- USDA NRCS

#### Hackathon

Chevron

#### Mini Hackathon

Wells Fargo Bank

#### Coding and Music Workshop

Meta

#### Conference Mobile App

Amazon

#### Coffee Breaks

ANTHC Division of Environmental  
Health and Engineering & Indian  
Health Service  
Girls Who Invest

#### Charging Stations

Williams

#### Powwow

AES

#### Wellness Activity

Nike

#### Water Bottles

AES

#### Footprints

3M

#### Travel Scholarships

Berkshire Hathaway Energy  
Foundation  
Chan Zuckerberg Initiative  
Comcast NBCUniversal  
Dragonfly Consulting LLC  
Engineers Canada  
Geico  
INGAA Foundation  
Koniag Government Services  
Sealaska  
Stantec  
USDA NRCS

#### Media Partners



#### Virtual Meeting Platform Sponsor

Cisco

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## Conference Logistics

Note: All times are Pacific Daylight (local time)

### AISES National Conference Wi-Fi

Network: **AISES** Password: **AISES22**

### AISES National Conference Mobile App

Sponsored by Amazon

The AISES National Conference App will allow you to get up-to-date notifications, connect with other attendees, post messages, complete session and post-conference evaluations and plan your visit to the college and career fair and more! The app is available on Android and Apple devices.

To download the app visit: [www.aises.org/app](http://www.aises.org/app)

To access the mobile app, you will need:

Login: **Email Used to Register**  
Password: **Xv94sc**

### AISES Council of Elders Lounge

Stop by the Andreas room to seek wisdom, strength, love, or personal guidance from our Elders.

**Friday, October 7 from 9:00 a.m. – 12:00 p.m.**

**Saturday, October 8 from 10:00 a.m. - 11:30 a.m.**

### AISES Merchandise

AISES gear gets scooped up fast! Make sure to stop by the AISES Merchandise Booth located near the conference registration desk in the Oasis lobby to purchase AISES-themed items. You may also order items at the [AISES online store](http://www.aises.org/store).

**Wednesday, October 5 from 9:00 a.m. - 6:00 p.m.**

**Thursday & Friday, October 6 & 7 from 7:00 a.m. - 5:00 p.m.**

**Saturday, October 8 from 10:00 a.m. - 4:00 p.m.**

### AISES Photographer and Videographer

We enjoy capturing the “faces of AISES” throughout the National Conference. Therefore, an official professional photographer and videographer will be on-site during major conference ceremonies, meetings, and sessions. Images and video will be used for AISES promotional purposes only.

## AISES Resume Room

The Resume room is available for students to fine tune their resumes for upload to the AISES Career Hub and to distribute at the National Conference College and Career Fair. Mesquite F will be equipped with computers and printers and staffed by experts from sponsor organizations to help you polish your resume.

**Thursday, October 6 from 11:00 a.m. - 6:00 p.m.**

**Friday, October 7 from 7:30 a.m. - 5:00 p.m.**

## Closing Ceremony

The Closing Ceremony will feature fun and lively entertainment and pay tribute to the AISES Professional of the Year and Partner Service Award recipients.

**Saturday, October 8 from 6:00 p.m. - 8:30 p.m.**

## College and Career Fair

AISES hosts the largest College and Career Fair in Indian Country. The Fair attracts professionals and college recruiters from over 225 corporations, government agencies, and colleges and universities. This mix encourages mentoring and sharing that is unparalleled at any other event. Check out the [booths](#) in the exhibit hall.

**Friday, October 7 from 9:00 a.m. - 4:00 p.m.**

## Conference Name Badges

Your name badge allows you access to all daily conference functions, including Saturday night's Closing Banquet. Please always wear your badge. If you lose your badge, please go to the conference registration desk for a replacement.

## Feedback and Prizes

Your feedback and observations are important to us as we continue to design programs and events to best serve our members and friends. Please take our 2022 National Conference post-conference survey, available on the conference mobile app. Also, fill out the evaluations at the end of each session to participate in drawings for great prizes which will be announced through the mobile app!

## Industry Partner/University Site Tours

All attendees who have registered for a tour will meet outside at Avenida Caballeros, just beyond the East Lawn to check in and begin the tours. All tours will depart promptly at 1:30 p.m. Be early!

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### Native Artisan Marketplace

Artisan booths will be in the Grand Ballroom foyer of the Renaissance hotel. Get a jumpstart on your holiday shopping or just indulge yourself with a treat from the AISES Marketplace where Native artisans have wonderful items available for purchase.

**Thursday, October 6 from 12:00 p.m. – 5:00 p.m.**

**Friday, October 7 from 10:00 a.m. – 6:00 p.m.**

**Saturday, October 8 from 10:00 a.m. – 5:30 p.m.**

### On-Site Registration and AISES Membership Information

Registration check-in will take place in the Oasis lobby in the Palm Springs Convention Center. Stop by to pick up your conference badge or connect with event staff or volunteers with questions.

### Safe Camp

The AISES National Conference is a “Safe Camp,” meaning this is a welcoming, inclusive, supportive, and safe environment for all our AISES family members regardless of race, color, sex, religion, sexual orientation, or gender expression/identity. Safe Camp includes recognizing the AISES Code of Conduct and anyone found violating the code will be removed from the conference. Please see the resource center for a copy of the [AISES Code of Conduct](#).

### Sessions Tracks

Although all sessions fall within a specific track, track designations are only a suggestion! We encourage you to read through the program, especially the session descriptions, and attend ANY session suited to your interests. There are many sessions to choose from, so plan carefully, be strategic, and most importantly engage with your fellow conference attendees and presenters.

### Student Research Presentation Competition

Middle School, High School, Undergraduate, and Graduate students will showcase their STEM research at oral and poster presentation sessions during the AISES National Conference on **Friday, October 7**. We encourage all conference participants to show their support by attending the oral presentations (see agenda for scheduled times and locations) and poster presentations are located in Primrose AB next to the College and Career Fair floor.

#### Oral Presentations

Presentations will take place on **Friday, October 7 between the hours of 9:30 a.m. - 5:00 p.m.**

#### Poster Presentations

Presenters are expected to mount their posters on Friday, October 7, between the hours of 8:00 a.m. and 9:00 a.m. in Primrose AB next to the College and Career Fair floor.

Presenters must be present at their poster during the entire presentation time, **9:00 a.m. - 12:00 p.m. on Friday, October 7.**

All posters are to be removed by the presenters on **Friday, October 7, between the hours of 5:00 p.m. - 8:30 p.m.**

### Help Desk

If you require technical help with the AISES mobile app, please email [support@aises.org](mailto:support@aises.org)

45 Years  
of Advancing  
**Indigenous**  
People in STEM

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## Conference Highlights

### Wednesday, October 5

- hackAISES (high school students)
- Meta Code Remix (13+ year old students)
- Registration/Check-in Opens
- STEM Activity Day (middle and high school students)

### Thursday, October 6

- Academic Advisory Council (AAC) Meeting
- Academic Institution Advisory Council Meeting
- Canadian Indigenous Advisory Council (CIAC) Meeting
- Corporate Advisory Council (CAC) Meeting
- Gemstone Sponsor Reception (Invitation Only)
- Government Relations Council (GRC) Meeting
- Hackathon (college students)
- Industry Partner/University Tours
- Native Artisan Marketplace
- Networking Suites
- Opening Ceremony
- Professional Chapters Council (PCC) Meeting
- Resume Room
- Sessions for All Tracks
- State of AISES by Chief Executive Officer (Invitation Only)
- Student Orientation
- Student Study Lounge
- Talking Circles
- Tribal Leaders Day (Invitation Only)
- Tribal Nations Advisory Council (TNAC) Meeting
- Veterans Gathering

### Friday, October 7

- College and Career Fair
- Exhibitor Feedback Session
- Graduate Student Mixer
- Morning Blessing Ceremony
- Professionals Networking Reception (Ticket purchase required)
- Resume Room
- Sessions for Selected Tracks
- Student Caucuses
- Student Poster and Oral Research Presentations and Competition
- Student Study Lounge
- Student Social Event
- Wellness Activity

### Saturday, October 8

- Closing Banquet
- Closing Talking Circle
- Members Meeting
- Sequoyah Fellows Breakfast (Invitation Only & RSVP required)
- Sessions for All Tracks
- Student Awards Luncheon
- Student Study Lounge
- Traditional Native Powwow
- Wellness Activity





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# Innovation Driven by Inclusion

Our teams are united in pushing the boundaries of imagination and excellence. Join us.



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## 45 Years of Advancing Indigenous People in STEM

All times are Pacific Daylight (local time).

Full descriptions of the sessions and events begin on page [36](#) of this program or at <https://conference.aises.org/agenda>

Start End	Session/ Event Name	Location	Session Tracks
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### Wednesday, October 5, 2022

9:00 am 6:00 pm	<b>AISES Merchandise Booth</b>	Oasis Lobby	
9:00 am 6:00 pm	<b>Conference Registration</b>	Oasis Lobby	
12:00 pm 4:00 pm	<b>STEM Activity Day</b>	Primrose AB	Educator, Pre-College
12:00 pm 6:00 pm	<b>hackAISES: Mini-Hackathon</b>	Primrose D	Educator, Pre-College
2:00 pm 4:00 pm	<b>Meta Code Remix</b>	Primrose C	Pre-College

### Thursday, October 6, 2022

7:00 am 5:00 pm	<b>AISES Merchandise Booth</b>	Oasis Lobby	
7:00 am 5:00 pm	<b>Conference Registration</b>	Oasis Lobby	
7:00 am 9:00 pm	<b>Student Study Lounge</b>	Tahquitz	College, High School
8:30 am 10:45 am	<b>Opening Ceremony</b>	Grand Ballroom	
11:00 am 11:30 am	<b>State of AISES (Invitation only)</b>	Grand Ballroom	Advisor, College, Educator, High School, Professional
11:00 am 11:50 am	<b>Academic Institution Advisory Council Meeting</b>	Pueblo	Advisor, College

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Start End	Session/ Event Name	Location	Session Tracks
11:00 am 11:50 am	<b>Inclusion in Geospatial Representation</b>	Mesquite G	Computer Science
11:00 am 11:50 am	<b>Indigenous Identity and the Twins Within</b>	Chino	Advisor, College, Educator, High School, Professional
11:00 am 11:50 am	<b>Press Start: Connecting Student Video Game Interests to Success in STEM</b>	Mesquite E	Educator
11:00 am 11:50 am	<b>Prestige Protocol</b>	Mesquite B	College
11:00 am 11:50 am	<b>Training and Career Development Funding from the NIH and the National Institute on Aging</b>	Mesquite H	Health Sciences and Medical
11:00 am 11:50 am	<b>Worrier to Warrior: Advocating for an Authentic Self</b>	San Jacinto	Professional
11:00 am 12:00 pm	<b>Student Orientation</b>	Grand Ballroom	College, High School
11:00 am 12:40 pm	<b>Creating Inclusive Spaces for our LGBTQ2S Relatives</b>	Mesquite C	Advisor, College, Educator, High School, Professional
11:00 am 12:40 pm	<b>Winds of Change Feedback, Fun, and Conversations</b>	Mesquite D	Advisor, College, Educator, High School, Professional
11:00 am 6:00 pm	<b>Resume Room</b>	Mesquite F	College, High School, Professional
12:00 pm 1:15 pm	<b>Academic Advisory Council Meeting (AAC)</b>	San Jacinto	Advisor, Professional
12:00 pm 1:15 pm	<b>Canadian Indigenous Advisory Council Meeting (CIAC)</b>	Pueblo	Advisor, College, Educator, Professional
12:00 pm 1:15 pm	<b>Government Relations Council Meeting (GRC)</b>	Mojave	Professional
12:00 pm 5:00 pm	<b>Native Artisan Marketplace</b>	Grand Ballroom Foyer	
1:00 pm 1:50 pm	<b>Conflating Privilege With Potential</b>	Mesquite C	Professional
1:00 pm 1:50 pm	<b>Natives in the Intelligence Community</b>	Chino	Professional
1:00 pm 1:50 pm	<b>Super Powers at Amazon</b>	Mesquite B	Professional
1:30 pm 2:45 pm	<b>Corporate Advisory Council Meeting (CAC)</b>	Mojave	Professional

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1:30 pm 2:45 pm	<b>Professional Development Committee Meeting</b>	San Jacinto	Professional
1:30 pm 2:45 pm	<b>Tribal Nations Advisory Council Meeting (TNAC)</b>	Pueblo	Professional
1:30 pm 4:00 pm	<b>Palm Springs Windmill Tour</b>	Meet Outside - Avenida Caballeros (beyond the East Lawn)	College
1:30 pm 5:30 pm	<b>California Indian Nations College Tour</b>	Meet Outside - Avenida Caballeros (beyond the East Lawn)	College, High School
1:30 pm 5:30 pm	<b>University of Redlands-Campus Tour</b>	Meet Outside - Avenida Caballeros (beyond the East Lawn)	College, High School
2:00 pm 2:50 pm	<b>Advancing AIANs in US Medical Education: Enhancing your Path to Success</b>	Mesquite B	Health Sciences and Medical
2:00 pm 2:50 pm	<b>Demystifying USAJOBS - How to Apply for Federal Jobs and Internships</b>	Mesquite C	College
2:00 pm 2:50 pm	<b>Opportunities with AISES (Pre-College)</b>	Mesquite G	Educator
2:00 pm 2:50 pm	<b>Tamamta (All of Us) : Transforming Western and Indigenous Fisheries &amp; Marine Sciences Together</b>	Mesquite D	Professional
2:00 pm 2:50 pm	<b>The Social and Economic Benefits of Video Gaming in Indian Country</b>	Chino	STEM & Business
2:00 pm 3:50 pm	<b>Changing attitudes and beliefs about Neurodivergence: Indigenous neurodiversity reflections and looking towards a neuro inclusive future</b>	Mesquite E	College
3:00 pm 3:50 pm	<b>5G + Optical Networks Session</b>	Mesquite G	Computer Science
3:00 pm 3:50 pm	<b>Beyond Hollywood: Get the Real Perspective on how STEM Professionals at CIA Tackle Our Nation's Highest Priorities</b>	Chino	Advisor, College, Educator, High School, Professional
3:00 pm 3:50 pm	<b>Bringing Science Fiction into Reality</b>	Mesquite H	High School
3:00 pm 3:50 pm	<b>Native American Ingenuity: A Brief History of STEM in Native American Indigenous Cultures</b>	Mesquite C	Advisor, College, Educator, High School, Professional
3:00 pm 3:50 pm	<b>NSF Innovation Programs</b>	Ventura	Professional



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3:00 pm 3:50 pm	<b>How Tribal Nations are Driving Impact with Salesforce</b>	Mesquite B	Advisor, College, Educator, High School, Professional
3:00 pm 3:50 pm	<b>Tribal Partnerships for Water Resource Projects</b>	Sierra	Professional
3:00 pm 4:00 pm	<b>Education Committee Meeting</b>	San Jacinto	Educator, Professional
3:00 pm 4:00 pm	<b>Professional Chapter Council Meeting (PCC)</b>	Mojave	Professional
3:00 pm 4:30 pm	<b>LGBTQ+ Talking Circle</b>	Primrose A	Advisor, College, Educator, High School, Professional
3:00 pm 4:30 pm	<b>Men's Talking Circle</b>	Primrose C	Advisor, College, Educator, High School, Professional
3:00 pm 4:30 pm	<b>Women's Talking Circle</b>	Primrose B	Advisor, College, Educator, High School, Professional
3:15 pm 5:00 pm	<b>Tribal Leaders Panel</b>	Catalina/ Madera	Advisor, College, Educator, High School, Professional
4:00 pm 4:50 pm	<b>AISES Earned Revenue/Fee for Service Focus Group</b>	Mesquite B	Professional
4:00 pm 4:50 pm	<b>Creating a successful AISES Chapter</b>	Chino	Advisor, College
4:00 pm 4:50 pm	<b>How to Ace Your Job Interview (Job interview preparation)</b>	Mesquite C	College
4:00 pm 4:50 pm	<b>Native Financial Cents "Train-the-Trainer" Info Session</b>	Mesquite G	Educator
4:00 pm 4:50 pm	<b>Sustainable Product Innovation at Intel</b>	Ventura	STEM & Business
4:00 pm 4:50 pm	<b>Visualizing YOU in Tech: Entry Points, Pathways, and Resources to Building Your Tech Career</b>	Mesquite H	Computer Science
4:00 pm 5:40 pm	<b>Navigating &amp; Preparing Yourself for College</b>	Mesquite E	High School
5:00 pm 6:00 pm	<b>Veterans' Gathering</b>	Mesquite D	Advisor, College, Educator, Professional
5:00 pm 7:00 pm	<b>Networking Suites</b>	East Lawn	Advisor, College, Educator, High School, Professional
5:00 pm 7:00 pm	<b>Native Food, Energy, Water Systems Networking Reception</b>	Ballroom Terrace	Advisor, College, Educator, High School, Professional

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6:00 pm 7:00 pm	<b>Judges Orientation for Research Presentations</b>	Mesquite B	Professional
6:00 pm 10:30 pm	<b>College Hackathon</b>	Primrose D	College
7:30 pm 9:00 pm	<b>Gemstone Reception (Invitation only)</b>	Catalina/ Madera/ Pasadena	
7:30 pm 9:00 pm	<b>Graduate Student Mixer</b>	Pasadena	College

## Friday, October 7, 2022

7:00 am 8:00 am	<b>Morning Blessing Ceremony with the AISES Elders</b>	Primrose C	Advisor, College, Educator, High School, Professional
7:00 am 9:00 am	<b>Wellness Activity - Lacrosse Demonstration</b>	East Lawn	Advisor, College, Educator, High School, Professional
7:00 am 5:00 pm	<b>AISES Merchandise Booth</b>	Oasis Lobby	
7:00 am 5:00 pm	<b>Conference Registration</b>	Oasis Lobby	
7:00 am 9:00 pm	<b>Student Study Lounge</b>	Tahquitz	College, High School
7:30 am 9:00 am	<b>Professionals Keynote Breakfast</b>	Catalina/ Madera/ Pasadena	Professional
7:30 am 5:00 pm	<b>Resume Room</b>	Mesquite F	College, High School, Professional
8:00 am 9:00 am	<b>Poster Research Presentations Setup</b>	Primrose AB	College, High School, Professional
9:00 am 9:15 am	<b>College and Career Fair Ribbon Cutting Ceremony</b>	Oasis Hall	Advisor, College, Educator, High School, Professional
9:00 am 12:00 pm	<b>Poster Research Presentations</b>	Primrose AB	College, High School, Professional
9:00 am 4:00 pm	<b>College and Career Fair</b>	Oasis Hall	Advisor, College, Educator, High School, Professional
9:30 am 10:20 am	<b>TEK: Protecting our Forests</b>	Mesquite B	Agricultural Sciences
9:30 am 11:20 am	<b>Code for Congress</b>	Mesquite C	High School



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9:30 am 11:30 am	<b>Chapter Advisors Meeting</b>	Mojave	Advisor, Educator
10:00 am 6:00 pm	<b>Native Artisan Marketplace</b>	Grand Ballroom Foyer	
10:30 am 11:20 am	<b>Graduate Experiences in Pictures and Words: Native STEM Portraits</b>	Mesquite B	Educator
10:30 am 11:30 am	<b>Coffee Break</b>	Oasis Lobby	
12:00 pm 1:15 pm	<b>College and Career Fair Lunch</b>	Oasis Lobby	Advisor, College, Educator, High School, Professional
1:00 pm 1:50 pm	<b>Middle School to Medical School</b>	Mesquite B	Health Sciences and Medical
1:00 pm 1:50 pm	<b>Talking Circle History and Principles</b>	Mesquite C	Advisor, College, Educator, High School, Professional
2:00 pm 2:50 pm	<b>How to Fuel Your Career AND Stay True to Yourself</b>	Mesquite B	College
2:00 pm 3:00 pm	<b>Coffee Break</b>	Oasis Lobby	
3:00 pm 4:50 pm	<b>Storytelling with The Elders</b>	Mesquite B	Advisor, College, Educator, High School, Professional
4:00 pm 4:50 pm	<b>Native FEWS Alliance Storytellers</b>	Mesquite C	Agricultural Sciences
5:00 pm 6:00 pm	<b>College Student Region 1 Caucus</b>	Mesquite D	College
5:00 pm 6:00 pm	<b>College Student Region 2 Caucus</b>	Mesquite E	College
5:00 pm 6:00 pm	<b>College Student Region 3 Caucus</b>	Mojave	College
5:00 pm 6:00 pm	<b>College Student Region 4 Caucus</b>	Mesquite C	College
5:00 pm 6:00 pm	<b>College Student Region 5 Caucus</b>	Mesquite B	College
5:00 pm 6:00 pm	<b>College Student Region 6 Caucus</b>	Mesquite G	College
5:00 pm 6:00 pm	<b>College Student Region 7 Caucus</b>	Mesquite H	College



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Start End	Session/ Event Name	Location	Session Tracks
5:00 pm 6:00 pm	<b>Pre-College Student Caucus</b>	Pueblo	High School
6:30 pm 8:30 pm	<b>Professionals Networking Reception (Ticket purchase required)</b>	Pasadena	College, Professional
7:30 pm 8:30 pm	<b>Firekeepers Reception (Invitation Only)</b>	Ballroom Terrace	Professional
8:00 pm 10:30 pm	<b>Student Social Event - DJ and Dance</b>	Catalina/ Madera	College, High School

## Saturday, October 8, 2022

6:30 am 9:15 am	<b>Sequoyah Breakfast &amp; Ceremony (RSVP required)</b>	Catalina/ Madera/ Pasadena	
7:00 am 9:00 am	<b>Wellness Activity - Lacrosse Demonstration</b>	East Lawn	Advisor, College, Educator, High School, Professional
7:00 am 12:00 pm	<b>Conference Registration</b>	Oasis Lobby	
7:00 am 3:00 pm	<b>Student Study Lounge</b>	Tahquitz	College, High School
9:30 am 10:20 am	<b>Department of the Air Force - Air Force Airmen and Space Force Guardians Paving the Way for the Next 7 Generations</b>	Mojave	Advisor, College, Educator, High School, Professional
9:30 am 10:20 am	<b>Entrepreneurship Panel</b>	Mesquite H	STEM & Business
9:30 am 10:20 am	<b>Environmental Science Careers - What do they look like and How to find them</b>	Mesquite B	Advisor, College, Educator, High School, Professional
9:30 am 10:20 am	<b>Establishing and Supporting an Indigenous Employee Resource Group</b>	Ventura	Professional
9:30 am 10:20 am	<b>Finding Balance: The Medicine Wheel for Your Education, Career, and Life</b>	Mesquite D	College
9:30 am 10:20 am	<b>Support Food Sovereignty with a Career at the Natural Resources Conservation Service</b>	Mesquite E	Agricultural Sciences
9:30 am 10:20 am	<b>Understanding Computer Science Research</b>	Pueblo	Computer Science
9:30 am 10:20 am	<b>Working in the Federal Government: An Insider Perspective</b>	Chino	Advisor, College, Educator, High School, Professional
9:30 am 11:15 am	<b>Capturing AISES History Project</b>	Sierra	Advisor, College, Educator, High School, Professional



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Start End	Session/ Event Name	Location	Session Tracks
9:30 am 11:15 am	<b>Trauma Healing in a School Setting: We Can Do This!</b>	Mesquite G	Educator
10:00 am 4:00 pm	<b>AISES Merchandise Booth</b>	Oasis Lobby	
10:00 am 5:30 pm	<b>Native Artisan Marketplace</b>	Grand Ballroom Foyer	
10:30 am 11:20 am	<b>A Mentor and Mentee Journey: How Mentoring and Being a Mentee Can Help You Navigate Your Career</b>	Mesquite C	Professional
10:30 am 11:20 am	<b>Blood Quantum</b>	Pueblo	Advisor, College, Educator, High School, Professional
10:30 am 11:20 am	<b>Changing Campus Culture for Indigenous Student Success</b>	Chino	College
10:30 am 11:20 am	<b>Creating pathways for more Native American representation in the oral health professional workforce and increasing oral health literacy to improve the overall health of our communities</b>	Mesquite H	Health Sciences and Medical
10:30 am 11:20 am	<b>Measure and Manage Complex Risks as an Actuary</b>	Mesquite E	High School
10:30 am 11:20 am	<b>Psychological Safety: 4 Stages for Cultural Change</b>	Mesquite B	Professional
10:30 am 11:20 am	<b>The Cybersecurity Workforce: REIMAGINED</b>	Mesquite D	Professional
10:30 am 11:20 am	<b>The logics of Computer Science, beyond the coding world</b>	Ventura	Computer Science
10:30 am 11:30 am	<b>Pre-College Advisors Meeting</b>	Mojave	Educator
11:45 am 1:15 pm	<b>Student Awards Luncheon</b>	Catalina/ Madera/ Pasadena	College, High School
1:30 pm 2:20 pm	<b>Canadian Members Meeting</b>	Mesquite H	Advisor, College, Educator, Professional
1:30 pm 2:20 pm	<b>Clean Energy on Tribal Lands: A Driving Force in STEM Career Opportunities</b>	Mojave	Professional
1:30 pm 2:20 pm	<b>Native Engineering Faculty and Academic Leaders</b>	Mesquite E	Educator
1:30 pm 2:20 pm	<b>Natives at NASA: Weaving Culture into STEM Stories</b>	Mesquite D	College

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Start End	Session/ Event Name	Location	Session Tracks
1:30 pm 2:20 pm	<b>Plant Medicine</b>	Chino	Advisor, College, Educator, High School, Professional
1:30 pm 2:20 pm	<b>Professional Pathways: Google Panelists</b>	Mesquite B	Professional
1:30 pm 2:20 pm	<b>Training STEM graduate students to work in Indigenous Communities to co-solve Food, Energy and Water challenges</b>	Pueblo	College
1:30 pm 2:20 pm	<b>U.S. National College Student Caucus</b>	Oasis 1 & 2	College
1:30 pm 3:20 pm	<b>Failure is an Option: How to Design &amp; Engineer Materials</b>	Mesquite C	High School
1:30 pm 3:20 pm	<b>The AISES Adventure: Your adventure through finance!</b>	Santa Rosa	Educator
2:30 pm 3:20 pm	<b>“It Takes A Village” - Talking Circle for Indigenous Students and Professionals who are also a Parent/Caregiver</b>	Mesquite D	College
2:30 pm 3:20 pm	<b>AISES Members Meeting</b>	Mojave	Advisor, College, Educator, High School, Professional
2:30 pm 3:20 pm	<b>Briefing Best Practices</b>	Chino	Professional
2:30 pm 3:20 pm	<b>Corporate Sustainability at GM</b>	Sierra	Advisor, College, Educator, High School, Professional
2:30 pm 3:20 pm	<b>Imagine yourself as a federal scientist through shared experiences from Indigenous scientists at the U.S. Geological Survey</b>	Mesquite E	Professional
2:30 pm 3:20 pm	<b>Natives in STEM: Enabling the Cloud</b>	Ventura	STEM & Business
2:30 pm 3:20 pm	<b>Recruiting and Retaining Indigenous Students and Professionals</b>	Mesquite B	Advisor, College, Educator, High School, Professional
2:30 pm 3:20 pm	<b>Sandia National Labs Professional Panel: How to Navigate Your Career</b>	Pueblo	Professional
3:00 pm 5:00 pm	<b>Closing Talking Circle (All Welcome)</b>	Oasis 1 & 2	Advisor, College, Educator, High School, Professional
6:00 pm 8:30 pm	<b>Closing Banquet</b>	Oasis 4	Advisor, College, Educator, High School, Professional
9:00 pm 11:59 pm	<b>Traditional Native Social Powwow</b>	Oasis 1 & 2	Advisor, College, Educator, High School, Professional

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All times are Pacific Daylight (local time).

Full descriptions of oral research presentations and presenter biographies can be found at the online agenda <https://conference.aises.org/agenda>

Start	End	Research Oral Presentation	Location	Session Tracks
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### Friday, October 7, 2022

9:30 am	9:50 am	<b>Airport Gaming: Can American Indian Tribes Benefit?</b>	Sierra	Research: Social Science
9:30 am	9:50 am	<b>Modeling Gene Therapy Dynamics in Oral Epithelia</b>	Pueblo	Research: Biology, Research: Health Science
9:30 am	9:50 am	<b>Investigating the impact of aerosols on primary producers in the Northeast Pacific Ocean</b>	Chino	Research: Atmospheric Science, Research: Biology, Research: Natural Resources
9:30 am	9:50 am	<b>In Situ Polymerization of Acrylic Acid Using DBD Plasma For Non-Contact Polymerization in Mesoporous Materials</b>	Ventura	Research: Physical Science
10:00 am	10:20 am	<b>Optimizing scorpion and spider DNA extractions from a century of archival collections</b>	Ventura	Research: Biology
10:00 am	10:20 am	<b>Investigating the gut microbiome-brain-metabolism axis in Familial Dysautonomia; The implication of taurine metabolism in disease phenotype and progression</b>	Sierra	Research: Biology, Research: Health Science



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Start End	Research Oral Presentation	Location	Session Tracks
10:00 am 10:20 am	<b>Numerical Modelling of Storm Surge and Wave Properties in Boundary Bay, British Columbia</b>	Chino	Research: Atmospheric Science, Research: Geoscience
10:00 am 10:20 am	<b>Dakota/Lakota Math Connections Course: Synthesizing Results from an Elder-based Approach to Co-Develop Culturally Connected Math Curriculum</b>	Pueblo	Research: STEM Education
10:30 am 10:50 am	<b>Lowering cardiovascular disease risk factors by displaying murine apolipoprotein C III variants on virus like particles to generate antibodies</b>	Sierra	Research: Biology, Research: Health Science
10:30 am 10:50 am	<b>A Non-Targeted Analysis of Aerobic and Anaerobic Membrane Bioreactors Treatment of Trace Organic Chemicals in Municipal Wastewater</b>	Chino	Research: Biology, Research: Natural Resources
10:30 am 10:50 am	<b>Initial coral assemblage reflects life history strategy, driving response to disturbance events</b>	Ventura	Research: Biology, Research: Natural Resources
10:30 am 10:50 am	<b>Machine Learning, Control Theory, and Interpretability: The Future of Intelligent Systems</b>	Pueblo	Research: Computer Science
11:00 am 11:20 am	<b>Time Resolved Emission Studies of Amino Acid Partitioning into Model Biological Membranes</b>	Chino	Research: Biology
11:00 am 11:20 am	<b>Turtles, Bees, and Amphibian Disease: Understanding the Ecology and Conservation of Threatened Animals</b>	Pueblo	Research: Biology
11:00 am 11:20 am	<b>Using MS2 Virus-Like Particles (VLPs) as Viable Platforms for Human Papilloma Virus (HPV) Vaccine Development</b>	Ventura	Research: Biology, Research: Health Science
11:00 am 11:20 am	<b>All Roots Lead Home: Developing Climate Change Adaptation Plans for Potawatomi Plants and Plant Knowledge</b>	Sierra	Research: Agricultural Science, Research: Biology, Research: Indigenous Knowledge
11:30 am 11:50 am	<b>Coverage Assessment for Wildfire Monitoring CubeSat Constellations</b>	Ventura	Research: Agricultural Science
11:30 am 11:50 am	<b>Sulphide mineral flotation using an environmentally friendly collector</b>	Pueblo	Research: Agricultural Science, Research: Atmospheric Science
11:30 am 11:50 am	<b>Characterizing seasonal and longitudinal variability of aquatic invertebrate communities below successive dams in a southeastern Oklahoma cold water tailrace</b>	Sierra	Research: Biology
11:30 am 11:50 am	<b>Using Post Translation Modifications as Biomarkers for Diagnosis and Treatment</b>	Chino	Research: Biology, Research: Health Science
12:00 pm 12:20 pm	<b>Heavy Quark Hadronization at LHCb</b>	Pueblo	Research: Atmospheric Science

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Start End	Research Oral Presentation	Location	Session Tracks
12:00 pm 12:20 pm	<b>Protein and Natural Product Characterization of Redbud Trees</b>	Chino	Research: Agricultural Science, Research: Biology
12:00 pm 12:20 pm	<b>Establishing the Co-Primer™ Real Time (RT-PCR) Saliva Testing at NTU to detect SARS COV-2 and influenza A without RNA extraction.</b>	Ventura	Research: Biology, Research: Health Science
12:00 pm 12:20 pm	<b>Antimicrobial properties of native medicinal plants</b>	Sierra	Research: Agricultural Science, Research: Biology, Research: Indigenous Knowledge
1:30 pm 1:50 pm	<b>First High-Altitude LWIR of Measurement of Cloud Top Polarization</b>	Sierra	Research: Atmospheric Science
1:30 pm 1:50 pm	<b>“It hurts to do work like that”: The Nature and Frequency of Culturally-based Ethical Barriers for Indigenous People in STEMM</b>	Ventura	Research: Indigenous Knowledge, Research: STEM Education
1:30 pm 1:50 pm	<b>Early Insights into Improving Computing Proficiency at Rural/Tribal Middle and High Schools across Northern Arizona</b>	Pueblo	Research: STEM Education
1:30 pm 1:50 pm	<b>Recruiting Native Students into Science at Turtle Mountain Community College</b>	Chino	Research: STEM Education
2:00 pm 2:20 pm	<b>Increasing representation of Indigenous voices and knowledge systems in science: Sea otter impacts to traditional shellfish foods in Southeast Alaska</b>	Sierra	Research: Biology, Research: Indigenous Knowledge, Research: Natural Resources
2:00 pm 2:20 pm	<b>So you want to be an ally? An exploration of non-Indigenous claims of allyship and an Indigenous definition of what it means to be an ally</b>	Ventura	Research: Indigenous Knowledge, Research: Social Science
2:00 pm 2:20 pm	<b>We Value: A qualitative study investigating work and educational values for indigenous and non-indigenous engineering students</b>	Pueblo	Research: Indigenous Knowledge, Research: STEM Education
2:00 pm 2:20 pm	<b>Finding Your Way to Undergraduate Research: Narrative Career Interviews with Native American Students</b>	Chino	Research: STEM Education
2:30 pm 2:50 pm	<b>Braiding cultural teachings and land: Returning to the land for healing: Land-based Youth-Elder Mentorship Model</b>	Pueblo	Research: Indigenous Knowledge, Research: STEM Education

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### DENOTES SESSION TRACK

Although all sessions fall within a specific track, track designations are only a suggestion! We encourage you to read through the program, especially the session descriptions, and attend ANY session suited to your interests. There are many sessions to choose from, so plan carefully, be strategic, and most importantly engage with your fellow conference attendees and presenters.

All presenter biographies are listed at <https://conference.aises.org/agenda>.

## 5G + Optical Networks Session

### COMPUTER SCIENCE

**Michael Beesley**  
VP, CTO  
*Cisco*

Fifth-generation (5G) wireless technology will form the backbone of future broadband access, economic development, and public services in urban and rural communities. 5G will transform how people live, work, and play by enabling new applications like:

- Self-driving cars, buses, and trains
- Telemedicine and telesurgery connecting surgeons and patients in rural and Tribal communities
- Connecting critical infrastructure, such as electrical grids and water systems
- New ways to network devices, including “smart” appliances
- Remote learning and telecommuting

This session will provide an overview of 5G networks and opportunities, software innovations, optical technologies, and Cisco's role in supporting this complex and dynamic ecosystem for Service Providers, globally.

## A Mentor and Mentee Journey: How Mentoring and Being a Mentee Can Help You Navigate Your Career

### PROFESSIONAL

**Adam Leggett** (*Dena'ina Athabascan*)  
Alaska Native Program Manager  
*Stantec*

**Brita Brookes**  
Senior Marketing Specialist  
*Stantec*

**Samantha Eddy** (*Diné*)  
Student  
*University of Utah*

Navigating the river of education and one's career journey can be a difficult task to do alone. It is always nice to have someone to share with you the location of the fallen trees that block the river, or where those rough rapids are ahead, so you can plan and paddle carefully, and eventually get to your destination. In this presentation, we hear the stories from the personal experiences of a mentor and mentee who participated in the AISES Full Circle Mentorship program, as well as other mentoring experiences from attending University and in the professional corporate work environment. Learn how to communicate, share knowledge, ask the right questions, be a good listener, and build trust in your mentorship experience. Mentor/Mentee conversations and professional relationships can lead to life-changing sources of shared knowledge which can empower and steer your education and career goals in the right direction.

## Academic Advisory Council Meeting (AAC)

### ADVISOR, PROFESSIONAL

The AAC provides advice and guidance to AISES regarding academic matters such as grant proposal writing, educational and research project design, faculty careers, college admissions and financial aid, postgraduate study and fellowship opportunities, research opportunities, and other higher education opportunities. If you are interested in joining the Academic Advisory Council, please contact Kathy DeerInWater, Chief Program Officer at [kdeerinwater@aises.org](mailto:kdeerinwater@aises.org). The Council engages in issues including, but not limited to: Providing recommendations concerning the scientific and technical merit of grant proposals and projects. Providing recommendations concerning protections for human subjects and other areas as applicable for grant proposals or projects. Making recommendations concerning appropriateness of budget requests for grant proposals and projects. Providing mentorship to AISES student members who are interested in pursuing a career in Academia. Supporting AISES activities and chapters at ACC members' colleges and universities. Alerting AISES to potential grant funding and institutional partnership opportunities.

## Academic Institution Advisory Council Meeting

### ADVISOR, COLLEGE

## Advancing AIANs in US Medical Education: Enhancing your Path to Success

### HEALTH SCIENCES AND MEDICAL

**Dr. Bret Benally Thompson** (*White Earth Ojibwe*)  
Clinical Associate Professor, Palliative Care  
*University of Wisconsin School of Medicine and Public Health*

**Dr. Charlene Green**  
Director of Outreach, Recruitment & Retention  
*UC Davis School of Medicine*

**Christina Uh** (*Yucatec Maya/ Navajo*)  
Program Coordinator, Outreach and Recruitment  
*Northwest Native American Center of Excellence (NNACoE)*

**Danielle Yancey** (*Menominee Nation, Santee Nation*)  
Director  
*University of Wisconsin School of Medicine and Public Health*

There are an increasing number of programs specifically designed for American Indian and Alaska Native (AIAN) learners pursuing medical school learners to help them fully actualize their strengths and talents along their path to medicine. This presentation is geared towards AIAN learners interested in pursuing MD/DO programs and will include: (1) an overview of the application process, including key components/experiences that are viewed positively by medical school admissions committees; (2) several highlighted programs occurring at different points of the application timeline intended to facilitate AIAN learner's



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success to medicine; (3) recommendations for learners who apply unsuccessfully to medical school and/or struggle with strengthening one or more of the key components of their application; and (4) guidance on how to choose the right medical school for learners who have been accepted to multiple medical schools.

### AISES Earned Revenue/Fee for Service Focus Group

PROFESSIONAL

**Matt Kouri**

President and Founder

*Good Works Strategic Advisors*

Matt Kouri of Good Works Strategic Advisors will be offering a focus group to gather information and identify opportunities for the development of an AISES Earned Revenue/Fee for Service Program. AISES and Matt want to hear from our members on who might be AISES' target customers, what are their needs, and what is the size of the market? What are the specific services AISES can offer to its stakeholders and customers that align with its mission, impact, and focus?

### AISES Merchandise Booth

Buy AISES branded apparel and accessories at the merchandise booth, including the official 2022 AISES National Conference t-shirt! Pick up your pre-purchased ticket for Friday night's Professional Networking Reception at the merchandise booth. Cash and credit cards are accepted for all purchases.

### Beyond Hollywood: Get the Real Perspective on how STEM Professionals at CIA Tackle Our Nation's Highest Priorities

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

**Leo Meyers**

Native American Outreach & Recruitment Program Manager

*Central Intelligence Agency*

Ever wonder what it takes to work at CIA? You are invited to experience the pride of serving the nation and learn how your skills can truly make a difference. You will have the opportunity to meet CIA officers, just like you, AISES members. Each will share powerful stories describing: college student work, an environment that is inclusive and intellectually challenging, and how they have integrated their heritage into their careers, including serving on our Council of American Indian and Alaskan Natives. The CIA is committed to building and maintaining a workforce as diverse as the nation we serve and encourages AISES members to serve their country as a CIA officer.

### Blood Quantum

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

**Norbert Hill, Jr. (Oneida)**

Council of Elders

*AISES*

Blood quantum, imposed from within and without, has shaped Native identity and has been the primary determinant in deciding "Who is an Indian" for over a century. The conversation about Native identity- sometime in civil, sometimes violent- has been

going on in Indian County far long than that. And will continue whether blood quantum laws are changed or not, We are indeed living in challenging circumstances when it comes to navigating what it means to be Native; tribal disenrollment, DNA testing, egg and Sperm banks, CDIB cards, online dating, ethnic students groups on college campuses and debates over sports mascots, all challenge our definition of being Native is. And what it is not. As you read these words, there are hundred, thousands, millions of voices talking, writing texting, Snapchattting, YouTubeing, Facebooking, and (insert newest app/ Tocology here) -ing about blood quantum, identity and belonging. Like Malcom Gladwell's tipping point," we have reached a moment in history where significant culture and intellectual moment of critical mass. A moment in history where significant culture and intellectual change has begun.

This is a leadership moment for AISES students. What does it mean to be an Indian Engineer/Scientist? We want students to land on their moccasins- not on their Gucci's when they graduate from college. You can't run from who YOU are or WHERE you came from. Are we members if a club? Or citizens of a nation? What is the responsibility of a citizen? Indigenous science require knowledge of both science and Indian ways. Balance is the key.

This session will inform and explore the issues surrounding blood quantum. Students will have a greater understanding of their responsibilities to their families and communities. There is more to life than being a scientist or engineer. What does it mean to be an Indian STEM student? You can run from who you are or where you came from. What is your responsibility? AISES has an investment in you; an investment that we call ill afford to lose.

### Briefing Best Practices

PROFESSIONAL

**Larico Harley (Piscataway-Conoy)**

Junior Officer Program Manager

*Office of the Director of National Intelligence/Intelligence Community*

Briefing a group of people can be stressful, but these panelists have seen it all. No matter how complex the topic or short the briefing, certain skills can make all the difference. Learn some best practices to help you be successful, whether briefing a C-Suite executive or the Oval Office.

### Bringing Science Fiction into Reality

HIGH SCHOOL

**Frazer Tee (Inupiaq)**

Silicon Firmware Development Engineer

*Intel Corporation*

Science fiction has always fueled our imagination and prompted us to believe in extraordinary worlds with infinite possibilities. Throughout the years, some of these ideas have even been brought into reality through advances in science and technology. These ideas are fueled by our imaginations and hopes for the future, but where do you take the first steps to actualize them? There are many paths to take and various disciplines to study. In this session we will share ideas for our future and discuss ways to begin the journey to where these innovative ideas become real.

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## California Indian Nations College Tour

COLLEGE, HIGH SCHOOL

Join California Indian Nations College (CINC) for a brief tour of our facilities, and then a question-and-answer session about CINC programs, courses, and cultural workshops. Students will receive brief tour of the facilities, then a one-hour informational session about admissions, courses, and programs. This will be followed by a snack (provided) and then two rotations of workshops so that participants can immerse themselves in CINC program offerings.

Max: 50 attendees

Target Audience: pre-college and college students

## Canadian Indigenous Advisory Council Meeting (CIAC)

ADVISOR, COLLEGE, EDUCATOR, PROFESSIONAL

The CIAC consists of representatives from the Canadian Indigenous science, technology, engineering, and math (STEM) community. The primary role of the CIAC is to advise AISES on issues of relevance and importance to its Canadian Indigenous (Status and Non-Status First Nations, Metis and Inuit) members. In addition, the CIAC also works to assist AISES in creating opportunities for Canadian Indigenous members and to support the AISES mission of substantially increasing the representation of Canadian Indigenous Peoples in engineering, science, and other related technology disciplines. If you are interested in joining the Canadian Indigenous Advisory Council, please contact Lisa Paz, Senior Director of Engagement and Advocacy at [lpaz@aises.org](mailto:lpaz@aises.org). The Canadian Indigenous Advisory Council: Advises AISES on issues important to Canadian Indigenous chapters and members. Assists in the formation of professional and post-secondary chapters of AISES in Canada. Encourages K-12 Canadian Indigenous educator and student participation in AISES programming, where appropriate Serves as a liaison between the Canadian Indigenous STEM community and AISES. Provides networking opportunities for Canadian Indigenous AISES chapters and members. Promotes communication between Canadian Indigenous AISES chapters and members. Serves as an advocate to publicize Canadian Indigenous content in Winds of Change Magazine and on the AISES website. Represents the CIAC at regularly scheduled AISES Board meetings by sending at least one co-chair. Provides input to National Conference proceedings in order to increase relevance for Canadian Indigenous AISES members. Promotes, assists and supports AISES in hosting a gathering of Canadian Indigenous AISES members and allies at the National Conference. Supports AISES in developing a biennial conference held in Canada to serve Canadian Indigenous AISES chapters and members.

## Canadian Members Meeting

ADVISOR, COLLEGE, EDUCATOR, PROFESSIONAL

All Canadian AISES members and conference attendees are welcome to gather, network, discuss and learn about future opportunities and events happening in Canada.

## Capturing AISES History Project

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

William Tiger (*Miccosukee Indians of Florida*)

Board Member

AISES

This session will discuss the Capturing AISES History project initiated by our Council of Elders to capture AISES history for future generations. We would like to discuss what is important to capture, what options work to present such information. Dave Cournoyer would like to do some taping of how AISES has impacted your career, what are some of your significant AISES events, and a thank you to those who persevered during the early days of AISES so that we are here now.

## Changing attitudes and beliefs about Neurodivergence: Indigenous neurodiversity reflections and looking towards a neuro inclusive future

COLLEGE

Kaitlyn Haskie (*Navajo*)

Student

University of Arizona

Sami Chen

Graduate Student

Stanford University

Do you have difficulties reading clock faces or books? Do you struggle with processing information or everyday executive functioning? Have you experienced large discrepancies in your skill sets and perceived intelligence between different tasks? Do you have ADHD, autism, dyscalculia, dysgraphia, or dyslexia or a combination of the above? This workshop will center the perspectives of neurodivergent students in STEM. We'll provide personal reflections on our neurodivergent journeys, provide insights on assistive technologies, and offer guidance for finding educational support. In addition, we'll discuss the strengths of being neurodivergent students in STEM. We'd like to hear from members and allies of our community about your experiences becoming aware of your learning differences and navigating higher education while neurodivergent? Let's talk about study tips, official diagnoses, and accommodations! We hope to meet you where you are on your journey; our combined knowledge, experience, and perspectives can provide answers and empower others.

## Changing Campus Culture for Indigenous Student Success

COLLEGE

Makayla Mather (*Tlingit*)

Nation and descendant of the Tsimshian Nation)

AISES Jr. US National Student

Rep

AISES

McKalee Steen (*Cherokee*)

AISES Sr. US National Student

Rep

University of California- Berkeley

Mindy Dallard (*Algonquins of Ontario*)

Jr. Canadian National Student Rep

Queen's University

The U.S. and Canadian National Student Representatives will lead a conversation about what college and universities can do to make their campuses safe, supportive, respectful, and thriving places of learning for Indigenous students. What you would you



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# SESSION DESCRIPTIONS

like to see on your campus, and what do you think your school is doing right? What policies and practices can schools implement that will support Indigenous students and how can AISES help? Share your thoughts, experiences, and ideas to help make campuses a thriving place for Indigenous students!

## Chapter Advisors Meeting

ADVISOR, EDUCATOR

All AISES college chapter advisors are invited to join this meeting. This is a time to network with other chapter advisors and discuss best practices, ideas and concerns involving advising an AISES college chapter.

## Clean Energy on Tribal Lands: A Driving Force in STEM Career Opportunities

PROFESSIONAL

Tanya Martinez (*Mi'kmaq First Nation*)

Senior Director of Development

*AES Clean Energy*

Indigenous communities are at the forefront of the clean energy transition in the US. There is a tremendous opportunity for Tribes to achieve energy sovereignty by developing their own resources. Tribal lands have potential for clean energy development, yet many households and communities have been underserved by utilities and the grid. This is where we can bring need and opportunity together. The continued growth and success of the clean energy sector depends on a strong foundation of STEM education to build a diverse, innovative clean energy workforce. In fact, renewable energy is arguably the most STEM-intensive growth sector in the economy. In this interactive presentation, the speaker will discuss career opportunities in the clean energy sector and will discuss the unique challenges of developing renewable energy projects on Tribal lands.

## Closing Banquet

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Sponsored by Wells Fargo Bank The Closing Awards Banquet features live entertainment, pays tribute to the AISES Professional of the Year awardees, and offers much more!

## Closing Talking Circle (All Welcome)

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Facilitated by the AISES Council of Elders, the closing talking circle is a unique opportunity to share your thoughts and perspectives about the National Conference or other experiences. Bring your authentic self to reflect and connect with others in a safe and supportive environment. Listen to others as they contribute a story, a song, or a point of view. Everyone can participate in complete honesty. Enter with an open heart and leave with your heart fuller until the AISES family sees you again.

## Code for Congress

HIGH SCHOOL

Joseph Alessi

Director

*Congressional App Challenge*

In the Congressional App Challenge, members of the U.S. House of Representatives challenge pre-college students in their Districts to create apps. This annual event promotes awareness of

computer science, exposes students to emerging technologies, and provides them a chance to receive national recognition from their Representatives. Learn about how you can explore your creative side, develop an app, and join a network of like-minded students. Students can create apps in any category of their choosing from gaming apps to community-based apps that serve their local community. We will host an App Conceptualization workshop to give students an opportunity to develop and pitch their app concept ideas to other students. Hear from CAC Program Director, Joseph Alessi, about how you can participate in this year's competition.

## College and Career Fair

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

AISES hosts the largest College and Career Fair in Indian Country that is for Indigenous professionals, high school, and college students from the U.S. and Canada. The Fair attracts professionals and college recruiters from 225 corporations, government agencies, and colleges and universities. This mix encourages mentoring and sharing that is unparalleled at any other event.

## College and Career Fair Lunch

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Lunch and dining tables are available in the Oasis lobby and outdoors.

## College Hackathon

COLLEGE

Sponsored by Chevron

Strategize, discover, build your tech skills, and network! During this mini-Hackathon for undergraduate and graduate students, participants will work with industry professionals on a hardware and software development project. Show your talent; test your limits; and have fun meeting interesting people while putting your best efforts forward. There will also be lots of food, drinks, and prizes! Space is limited so hurry and register now!

100 students and registration is required

## College Student Regional Caucuses

COLLEGE

AISES students are invited to gather by region to discuss issues of interest as well as plan for their upcoming regional conference. Led by the Regional Student Representatives, this is a time for students to meet other students and professionals in their region. This is a student event, and while professional members and corporate partners are welcome to attend as observers, they are not eligible to vote and do not have presenting privileges.

## Conference Registration

All conference attendees must be registered and your conference name badge worn at all times. Pick up your name badge and other important conference materials at the conference registration desk. Exhibitors who ordered lead retrieval devices may pick them up at the ATS tech table near the conference registration desk on Friday, October 7 beginning at 7:30 a.m. AISES offers membership for individuals as well as for high

All presenter biographies are listed at <https://conference.aises.org/agenda>.

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schools, colleges and universities and professional groups. Student membership is FREE. Visit the AISES Membership booth for more details and to sign up!

## Conflating Privilege With Potential

PROFESSIONAL

April Curley  
Engagement and  
Partnerships Manager  
*Last Mile Education Fund*

Ruthe Farmer  
Founder and CEO  
*Last Mile Education Fund*

The multitude of efforts to increase diversity in tech are bearing fruit and more women and underrepresented students than ever are entering computing education pathways, however structural barriers remain that prevent students from low-income families from accessing the skill-building and networking opportunities required to compete with affluent peers and launch into tech careers. Leveraging data from the Last Mile Education Fund's investments in over 1600 low-income students from 2020 to the present-day, this session will share insights into hidden barriers and educational and hiring policies that are blocking access and success for students from low-income backgrounds. In addition, this session will discuss and share actionable solutions to bridge this gap, including Last Mile's abundance approach to investing and current funding opportunities.

## Corporate Advisory Council Meeting (CAC)

PROFESSIONAL

The AISES Corporate Advisory Council (CAC) is a professional association of corporate representatives who support AISES in its mission of increasing the number of Native people in STEM. If you are interested in being involved in the Corporate Advisory Council, please contact Kellie Jewett-Fernandez, Chief Development Officer at [kjfernandez@aises.org](mailto:kjfernandez@aises.org). The CAC provides industry advice and counsel for the AISES Executive Leadership and the Board of Directors and contributes to advancing the AISES mission by: Providing scholarships, internship programs and/or employment opportunities to college students and professionals. Supporting the development and implementation of programs that engage K-12 students, teachers, and families in the STEM fields. Participating in and supporting AISES events through sponsorships, presentations, and providing career information and resources. Supporting and engaging the student and professional chapters in their local areas. Providing industry expertise and guidance related to current/projected employment trends and needs. Developing support for AISES consistent with individual company capabilities, including financial contributions, in-kind gifts and human resources. Assisting AISES in fundraising efforts through networking and participation. Facilitating effective public relations for AISES activities via coverage in company publications.

## Corporate Sustainability at GM

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Heather Heckler (*Brothertown Indian Nation*)  
Sr. Industrial Engineer/Chair Indigenous Peoples Network  
*General Motors*

Participants will learn about General Motors commitment to sustainability. From our Electric Vehicle Future to our commitment to being a good corporate citizen. At GM we strive to not only

move to a full electric vehicle future but move to 100% renewable energy power for our facilities and moving toward a landfill free model. Learn why and how we are moving towards these bold goals.

## Creating a Successful AISES Chapter

ADVISOR, COLLEGE

Stacy Thacker (*Navajo*)  
Engagement Officer  
*AISES*

This session will focus on creating a successful AISES college chapter through recruitment, retention and engagement. Attendees will leave this session with information and tips on how to successfully establish a chapter, how to engage members and how to grow membership. This session will include ideas on chapter activities, the importance of annual chapter reports and information on being a regional conference host. Although this session focuses on college chapters, there will be information provided on how to become a PK-12 affiliate as well as how to create a successful professional chapter or tribal chapter.

## Creating Inclusive Spaces for our LGBTQ2S Relatives

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Jonathan Clark (*San Carlos Apache Tribe*)  
Board Member  
*AISES*

Sheila Lopez (*Navajo*)  
LGBTQ2S Advocate / Software  
Quality Engineer  
*Intel / PFLAG*

This workshop will raise awareness of LGBTQ2S issues in schools and the workplace. Attendees will be given information on how to create inclusive environments in schools and workplaces. Attendees will be given a toolkit to create Safe Spaces in their school and workspace.

## Creating pathways for more Native American representation in the oral health professional workforce and increasing oral health literacy to improve the overall health of our communities

HEALTH SCIENCES AND MEDICAL

Dr. Joe Dill, DDS, MBA  
Chief Dental Officer  
*Delta Dental Plans Association*

It is widely known that tremendous inequities in oral health and overall health care persist in Native communities across the country, with rural areas often facing some of the most daunting barriers. These challenges include lack of access to care, affordability, historical trauma with oral health professionals and clinics, and a lack of education and understanding of oral health's critical role in the overall health of our communities. While there are inspiring and effective programs at the local level that are getting care to people through innovative means (e.g., mobile clinics), long-term solutions that permanently address the issues are urgently needed, and we must begin the journey to more sustainable solutions now. Increasing oral health literacy and creating pathways for more Natives to get into the oral health professions to serve Native communities, urban and rural, will be key to creating a healthier future.



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## Demystifying USAJOBS - How to Apply for Federal Jobs and Internships

COLLEGE

**Geralynn Cortes**  
Branch Chief

*U.S. Department of Agriculture, Agricultural Research Service*

Have you ever applied for a federal job or internship opportunity? Perhaps you have felt overwhelmed with the process of navigating USAJOBS or have never considered working for the federal government. Don't worry, you are not alone. USAJOBS can be complex and mysterious, so we've compiled strategies to help you navigate and demystify USAJOBS to increase your chances of qualifying for federal career and internship opportunities. Participants who attend this session will be more informed and prepared to successfully apply for career opportunities with federal agencies.

Topics include:

- Overview of Federal internship and employment opportunities for current students, recent graduates, and those with an advanced degree
- Federal salaries and benefits programs
- Navigating USAJobs and applying for jobs
- Creating a federal resume and application package
- What happens to my application once it is submitted?
- Additional resources and tips for success

## Department of the Air Force - Air Force Airmen and Space Force Guardians Paving the Way for the Next 7 Generations

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

**Jacqueline Melcher** (*Oglala Sioux Tribe*)  
Director, 88 CEG/CEI, Wright-Patterson AFB, OH  
*Department of the Air Force*

Department of the Air Force is comprised of Air Force and Space Force which is supported by Active Duty Officers and Enlisted Personnel, as well as Civilian members who proudly serve to protect the Nation's Air, Space and Cyber Domains. Hear stories of success from Indigenous members who dominate their respective domains and how they are removing barriers for the next 7 generations.

## Entrepreneurship Panel

STEM & BUSINESS

**Dr. Kathy DeerInWater** (*Cherokee Nation of Oklahoma*)  
Chief Program Officer  
*AISES*

An engaging panel of STEM entrepreneurs discussing their path to business ownership, developing a business plan, and the intricacies of operating tribal enterprises. The session will also highlight AISES opportunities to support Indigenous STEM entrepreneurs.

## Environmental Science Careers - What do they look like and How to find them

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

**Dr. Anna Monfils**  
Professor of Biology  
*Central Michigan University*

**Teresa Mourad**  
Director, Education and  
Diversity Programs  
*Ecological Society of America*

Would you like to learn more about what careers an environmental science degree can lead to? In this workshop, learn about the range of talents and skills sought after by employers in academia, government, industry, and nonprofits in a broad environmental field at all scales and levels. They can include careers in agriculture to sustainability and everything in between, including plants, wildlife, food production, soils, insects, energy, or water. Often, opportunities are couched in technical jargon that may draw only those familiar with those specific areas.

Come away with enhanced skills for job/internship searches in new sectors, and ideas to stand out as a candidate.

Learn if you need an advanced degree and the types of degree programs available.

Articulate skill sets you have or those you are building for your applications and interviews.

## Establishing and Supporting an Indigenous Employee Resource Group

PROFESSIONAL

Employee Resource Groups (ERG) are instrumental in establishing and maintaining an inclusive culture in organizations. ERG's create a network of support, sense of belonging, provide leadership development and programming, and can provide guidance and understanding to company leaders and colleagues impacting the individuals and communities they represent. For this panel session, we welcome Indigenous professionals who have been instrumental in establishing and leading Indigenous ERGs. From their experience, they will share insights on the stages of development, defining mission and goals, growing involvement, and more.

Moderated by **Christopher Payne** (The Boeing Company) with the following invited panelists: **Adam Leggett** (Stantec), **Joe Connelly** (NASA Glenn Research Center), **Jennifer Mayberry** (VISA), **Shannon Peterson** (Ball Aerospace), and **Carl Henderson** (NV5)

## Failure is an Option: How to Design & Engineer Materials

HIGH SCHOOL

**Dr. Henrietta Tsosie** (*Navajo*)  
Assistant Teaching Professor  
*Pennsylvania State University*

**Dr. Kōnane Bay** (*Kanaka Maoli*)  
Assistant Professor  
*University of Colorado Boulder*

Almost everything around you - the clothes you wear, the dishes you eat from, the computer you use, the bike you ride or the car you drive in - is made out of something. Materials Science and Engineering is the study of that stuff: what it's made of, how it works and what we can do with it. Join us as we explore the wonders of materials in our everyday lives. During the workshop you will learn to measure and control how materials break!

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## Finding Balance: The Medicine Wheel for Your Education, Career, and Life

COLLEGE

Brandon Polingyumtewa (*Hopi*)  
Supplier Management Procurement Agent  
*The Boeing Company*

In an ever changing world, responsibilities and demands pull us in multiple directions at once and it can be difficult to find that delicate balance where we feel like we are in control of our environment. As Indigenous people, balance is a critical component of who we are and is an essential for individual and community health. This interactive session and exercise will help the attendee assess their professional and personal environment to better balance top priorities and build a level of satisfaction in these areas. The skills learned can help the student or professional in their current environment and be revisited for their entire careers, as our situations and priorities change. Attendees will have the opportunity to share their challenges or victories and have an opportunity to walk away with not only the knowledge to benefit their entire lives, but with a special item only available in this session.

## Firekeepers Reception

PROFESSIONAL

The Firekeepers Program is designed to recognize and honor those who have made provisions for a future gift through a bequest, life insurance, annuity, or trust agreement. Learn more about becoming a Firekeeper at this reception.

## Gemstone Reception (Invitation only)

Open only to conference sponsors and by invitation only.

## Government Relations Council Meeting (GRC)

PROFESSIONAL

The AISES Government Relations Council (GRC) is comprised of U.S. Government employees. If you are interested in joining the Government Relations Council, please contact Alicia Mitchell, Senior Development Officer, at: [amitchell@aises.org](mailto:amitchell@aises.org) or (720)758-9746. The GRC establishes and supports working relationships between Federal government agencies and AISES, and identifies government resources, develops strategies, and promotes government careers in support of AISES mission by: Assisting in the placement of Native people into government jobs. Supporting the development and implementation of programs that engage and support AISES students and professionals in the STEM fields. Identifying federal internship and employment program for AISES membership. Coordinating and participating in government sponsored workshops at AISES events. Supporting student and professional chapter events. Providing industry expertise and guidance related to STEM education and workforce needs and trends. Identifying federal funding opportunities for AISES.

## Graduate Experiences in Pictures and Words: Native STEM Portraits

EDUCATOR

Dr. Maria Ong  
Senior Research Scientist  
*TERC*

Dr. Nuria Jaumot-Pascual  
Research Scientist  
*TERC*

Dr. Matthew Madison  
Assistant Professor  
*University of Georgia*

Dr. Tiffany Smith (*Cherokee/ Muscogee*)  
Director of Research and Career Support  
*AISES*

This Session Presentation will be an interactive session that provides attendees with an understanding of the process and products of the NSF-funded research project, "Native STEM Portraits" (NSP; HRD-2000619). First, attendees will participate in a mini-photo exhibit, viewing photographs and captions by Native graduate student participants. Attendees may "respond" via Post-It comments they can place on the photos. Next, attendees will learn about the photo elicitation (PE) method used in the NSP project. They will practice the PE method by breaking into pairs, sharing photos, and briefly interviewing one another. Finally, the presenters will share a formal set of survey and PE interview findings on supports and barriers (e.g., acknowledging Indigenous knowledges, two-eye seeing) for Native graduate students to persist in STEM, as well as ways in which they bring their Native and STEM identities together. The presenters are members of a team of Indigenous and non-Indigenous researchers on NSP.

## Graduate Student Mixer

COLLEGE

Sponsored by Office of Energy Efficiency and Renewable Energy U.S. Department of Energy, and Sloan Indigenous Graduate Partnership

Be part of this fun and interactive networking session for graduate level student attendees. Light hors d'oeuvres will be served.

Target Audience – 150 graduate and master level college students

## hackAISES: Mini-Hackathon

EDUCATOR, PRE-COLLEGE

Sponsored by Wells Fargo Bank

Join us for an engaging hands-on mini-hackathon to build and test your computing skills! Students will engage in a number of fun computing activities including programming Sphero robots and Pi Badges and using RVRs, small programmable vehicles.

Target Audience – 75 pre-college students Registration required.

## How to Ace Your Job Interview (Job interview preparation)

COLLEGE

Katelin Bigelow  
Business Systems Engineer  
*Merck & Co., Inc.*

Lily Cason  
Senior Talent Acquisition Advisor  
*Merck & Co., Inc.*

Join us to learn how to prepare for job interviews as you pursue your career after graduation. We will provide you helpful tips on what to do to land your dream role.

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### How to Fuel Your Career AND Stay True to Yourself

COLLEGE

Leah Fuentes

HR

Marathon Petroleum

Join this interactive discussion to learn how to leverage your unique Indigenous and cultural experiences to help strengthen your professional brand and energize your career. Identify ways to align your personal values with the company's values and understand what key qualities to look for in a potential employer. Learn how to build your professional brand, while staying true to yourself.

### How Tribal Nations are Driving Impact with Salesforce

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

At Salesforce, we believe business is a platform for change. Using our products to service a diverse customer base, including Indigenous populations, we build trust, drive customer success and promote equality for each and every customer. In this session, Salesforce employees will be joined by members of tribal nations to discuss how our software has been used to mitigate some of the historic underinvestment of technological resources faced by Indigenous communities. Tune in to learn how our customers have driven impact in tribal nations across the country, and what's being done next to continue furthering access to these resources and educational opportunities.

### Imagine yourself as a federal scientist through shared experiences from Indigenous scientists at the U.S. Geological Survey

PROFESSIONAL

Bernadette Tsoie (*Navajo*)

Director for Hydrologic Studies, USGS

U.S. Geological Survey

Raymond Kokaly (*Isleta Pueblo*)

Research Geophysicist

U.S. Geological Survey

Shaleene Chavarria (*Santa Clara Pueblo*)

Hydrologist

U.S. Geological Survey

Sheree Watson

Partnership Ecologist

U.S. Geological Survey

We propose a session highlighting research conducted by Native American scientists at the U.S. Geological Survey (USGS) and research conducted in collaboration with Tribes. The USGS is the lead Science Bureau of the Department of the Interior as such we monitor, assess, and conduct targeted science research so that policy makers and the public have the understanding they need to enhance preparedness, response, and resilience. Through short presentations followed by an interactive panel including questions from the audience, this session will highlight the extraordinary science being led by Native American scientists within our organization and in collaboration with Tribes across the country, showcase the breadth of science the USGS provides, and offer a window into what it is like to work for the USGS including the unique challenges Native American scientists face.

### Inclusion in Geospatial Representation

COMPUTER SCIENCE

James Irwin

Engineering Program Manager

Apple

Marcus Yazzie (*Navajo*)

Software Engineer

Apple

Tim Swales

Geographer

Apple

Giving an overview on the Apple Maps Digital Inclusion project. Apple Maps strives to offer a basemap representing both the physical and political world — we include terrain and physical environments, human settlements and connections, and administrative boundaries. We aim to be inclusive of all communities and local expectations. In this presentation, we will showcase the development of a new basemap layer for Apple Maps and discuss the design and data decisions/challenges, custom interactive features, and community involvement.

### Indigenous Identity and the Twins Within

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Rose Toehe Darden (*Ute*)

Council of Elders

AISES

Steve Darden (*Navajo*)

*Cheyenne Swedish*

Council of Elders

AISES

This session will introduce K'e – Dine' kinship system which is the social underpinning and foundation of Dine' lifeways. K'e is one's identity. Identity is one of the most powerful core aspects of one's life and personality. It is how one sees self in the whole mix of today's social systems. K'e provides the grounding necessary to overcome life's challenges.

The presentation will focus on the original four clans and the gifts placed with them, including a legacy bestowed upon the respective clans. K'e is the interdependent relationships which the people are to interact with. There are Fundamental Laws which guide these interactions and placed to maintain Hozho (Balance). These teachings will fold into the story of the Dine' Twin Heroes. Attendees will learn these ancient teachings are relevant today, can be used for empowerment, and spiritual strengthening.

### "It Takes A Village" - Talking Circle for Indigenous Students and Professionals who are also a Parent/Caregiver

COLLEGE

Nicole Benally (*Navajo*)

PhD Student

University of Montana

According to the Department of Education data, more than 1 in 5 undergraduate students were raising children. The average age of students pursuing master's and doctoral programs is 33 and the average age of first-time mothers and fathers is 28 and 31 respectively. Not all, but many college students balance family life and academic responsibilities while completing their advanced degrees. This session is open to all undergraduate and graduate students and professionals who are parents/caregivers. The purpose of this session is to bring Indigenous students and professionals who are parents/caregivers together to share journeys and resources. This session will be hosted by Nicole

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Benally (Navajo) who is currently a Ph.D. Student at the University of Montana and mother of two children. Nicole will share her personal college and early professional journey while being a parent, as well as facilitate the discussions among attendees.

## LGBTQ+ Talking Circle

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Circles provide space to open up fresh possibilities for connections, collaboration and understanding. Circles can hold the tensions and emotions that contribute to healing and can support people to use the collective energy to take action. It is an opportunity to express your conference experience with complete freedom. It is an effective way to remove barriers and feel the support and energy of all other participants during this moving experience. All are welcome!

## Measure and Manage Complex Risks as an Actuary

HIGH SCHOOL

**Mallika Bender**  
DE&I Staff Actuary  
*Casualty Actuarial Society*

**Rose Barrett**  
Owner and Consulting  
Actuary  
*Barrett Actuarial Consulting*

Join members of the Casualty Actuarial Society and Society of Actuaries to learn how actuaries apply analytical skills to manage complex property and casualty risks. In this session, we'll share more about the type of work that actuaries do across a variety of industries, the new and emerging risks that actuaries help manage, and the steps you can take right away to get started and advance on the actuarial career path. If you want to combine your interest in mathematics, business and human behavior to increase the economic well-being of individuals and organizations, this is a career you should know about.

## Men's Talking Circle

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Circles provide space to open up fresh possibilities for connections, collaboration and understanding. Circles can hold the tensions and emotions that contribute to healing and can support people to use the collective energy to take action. It is an opportunity to express your conference experience with complete freedom. It is an effective way to remove barriers and feel the support and energy of all other participants during this moving experience.

## Meta Code Remix

PRE-COLLEGE

Sponsored by Meta

Target Audience – 100 pre-college students (must be 13 + years old) Registration required.

A cost-free initiative that brings beatmaking and coding to life. Our workshops unlock the potential of middle and high school students in historically underrepresented communities – empowering them to program musical beats using block-based coding. Over the past year, Beats Unlocked (BU) has impacted over 1,500 learners across the United States.

Workshops Include:

- Introduction to music production

- Introduction to engineering, block-based coding, the importance of STEAM, and similarities between music and coding
- Student Beat Showcase
- Certificate of Completion for all participating students
- Oculus Headset for Beat MVP Winners
- Laptop and headphones provided by Meta for participants to use during the workshop

## Middle School to Medical School

HEALTH SCIENCES AND MEDICAL

**Danielle Thompson**  
Program Manager  
*INMED*

**Dr. Donald Warne** (*Oglala Lakota*)

Associate Dean of Diversity, Equity and Inclusion; Director, Indians Into Medicine; Chair, Department of Indigenous Health

*University of North Dakota School of Medicine and Health Sciences*

A review of the challenges and obstacles facing AI/AN students as they pursue Allied Health Careers. Discussion of programmatic offerings at UND's INMED program that address the needs of our students and our healthcare workforce in Indian Country. Establishing strategic pathways, supporting learning objectives, and setting students up for long-term success.

## Morning Blessing Ceremony with the AISES Elders

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Start your day in a reverent, meaningful and invigorating way. Join the AISES Council of Elders in welcoming a new day.

## Native American Ingenuity: A Brief History of STEM in Native American Indigenous Cultures

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

**Dr. A.D. Cropper** (*Kalinago Carib*)

Electro-Optical, Infrared  
Engineering Fellow  
*RTX*

**Susanna Packauskas-Lewalski**

Systems Engineer  
*RTX*

From before the scientists and engineers who were hiding in plain sight when the Americas “were discovered” to Natives in Space today, travel in time as we explore the rich history of STEM within Native American Indigenous Cultures. We will explore native contributions to STEM throughout history and highlight some of the contributions that today's native engineers and scientist are doing in STEM.

## Native Artisan Marketplace

AISES is thrilled to have 20 Native Artisan booths who are technical experts in their chosen arts and crafts. We strive to have authentic, Indigenous handmade items that support Indigenous art and culture. Handcrafted items can include clothing, jewelry, art, and home goods.

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## Native Engineering Faculty and Academic Leaders

### EDUCATOR

Dr. Joseph Bull (*Delaware Tribe of Indians*)  
Dean of Maseeh College of Engineering and Computer Science  
*Portland State University*

Dr. Tim Anderson (*Pokagon Band of Potawatomi*)  
Chair, Engineering and Technology Management Dept  
*Portland State University*

Dr. Anderson and Dr. Bull know firsthand that it is hard to identify other Native colleagues in engineering colleges. This session is an opportunity for Native faculty and university leaders in engineering and computer science to get together to meet, share experiences, and advice. Higher education is going through tremendous change and this session will be a chance to make connections with colleagues that are also weathering these challenges, and to explore strategies for preparing Native colleagues for leadership positions in academia.

## Native FEWS Alliance Storytellers

### AGRICULTURAL SCIENCES

Sky Wildcat (*Cherokee/Muscogee*)  
Career Support Senior Program Officer  
*AISES*

The Native FEWS (Food, Energy and Water Systems) Alliance is focused on innovative research and community partnerships linking and addressing two interconnected challenges: a crisis in access to food, energy, and water in Indigenous communities; and limited educational and career pathways available to Indigenous populations to address these needs. The Native FEWS Storytellers “weave” communication to enable participation in the story of Native FEWS. In this session, students will tell their own stories of experiences with FEWS in their communities, culture, and academia. There will be discussion regarding what it means to be a storyteller for the future of Indigenous food, energy, and water systems, how stories are being told currently, and how we can perpetuate storytelling through both traditional and modern avenues. The goal of this session will be to contribute to the development of a framework and principles/components of Native FEWS Alliance Storytellers.

## Native Financial Cents “Train-the-Trainer” Info Session

### EDUCATOR

Ruth BlackHawk Cameron (*Ho-Chunk and Lakota*)  
Director of PK-12 Programs  
*AISES*

Stacy Smith Ledford (*Eastern Band of Cherokee Indians*)  
PK-12 Program Officer  
*AISES*

Come join us to learn about “Native Financial Cents” (NFC); a financial education program created for youth to help start their financial lives smart and strong! NFC’s culturally contextualized curriculum was designed to supplement content from Wells Fargo’s Hands on Banking® Curricula to provide financial education to students. This session is for educators, college students, and other professionals interested in learning more about the curriculum with opportunities to bring this into their respective community environments.

## Natives at NASA: Weaving Culture into STEM Stories

### COLLEGE

Aaron Yazzie (*Diné*)  
Mechanical Engineer  
*NASA Jet Propulsion Laboratory*

Caroline Montgomery  
Student Engagement and Communication Lead  
*NASA MAIANSE*

Dr. Casey Denham  
Aerospace Engineer  
*NASA Langley Research Center*

Floris White Bull (*Standing Rock Lakota Nation*)  
Master’s Student in Environmental Science  
*Sitting Bull College*

Hear from several Native American NASA employees and interns from various STEM backgrounds in a discussion based panel focused on how each of them weave their own cultures and communities into the mission driven work they accomplish at NASA. In this panel session you will have a chance to hear their unique STEM pathway stories and ask them questions live. You will also learn about various pathways to NASA and how you can start your journey to join the NASA family. The goal of this session is to highlight the incredible stories of some of NASA’s Native American employees and interns while informing AISES students and professionals on the multitude of opportunities available to engage with NASA and NASA’s missions.

## Native Food, Energy and Water Systems Networking Reception

### ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Join the Native FEWS Alliance in a networking reception to discuss the importance of Food, Energy, and Water Systems for Indigenous communities, opportunities in FEWS, and how to engage with the growing Native FEWS network.

## Natives in STEM: Enabling the Cloud

### STEM & BUSINESS

Gary Burnette (*Cheroenhaka Nottoway*)  
Vice-President and Chief Data Officer at Kyndryl  
*Kyndryl*

Robert Turner (*Cheroenhaka Nottoway*)  
US Cloud Practice Leader at Kyndryl  
*Kyndryl*

Get the know how Kyndryl, a 90K people start-up, is running the systems and the data of some of the biggest companies in the world. Join us and some of our partners in an open conversation to learn how our people is using their skills and capabilities to create a new culture while delivering critical infrastructure, security and data services to our clients. This is our way: the Kyndryl Way.

## Natives in the Intelligence Community

### PROFESSIONAL

For Indigenous people, serving in the federal government can often mean living far from their homes. Come join National Security Agency Employees as they discuss their professional pathways and building a community of Natives in the Intelligence Community.

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### Navigating & Preparing Yourself for College

HIGH SCHOOL

**Daryan Singer** (*Diné*)  
Student Program Manager  
*Native Forward Scholars Fund*

**Nakina Mills** (*Oglala Lakota*)  
Ambassador Program  
Manager  
*Native Forward Scholars Fund*

As an indigenous young person preparing for college, you face many challenges, and the process can be overwhelming. Aside from this being the next step in your education and personal development, it's the transition into adulthood and mature decision making. Join Native Forward Scholars Fund, the largest scholarship provider to Native students in the U.S. as they share 15 skills of success for entering college.

### Networking Suites

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Attend the event that has become a favorite among all conference participants! This "buffet-style" networking event offers a series of simultaneous receptions. Join conversations and meet others with common interests. This is an opportunity to meet the conference sponsors and exhibitors as well as other conference attendees in a fun and casual environment. Enjoy refreshments, conversation and make important connections for the Career Fair! It is the perfect wrap-up for your first day.

*Manufacturing Sponsored by 3M*

*Apple*

*Chemistry Sponsored by American Chemical Society*

*Chevron*

*Department of Energy National Labs and Plants Sponsored by*

*Honeywell FM&T, Sandia National Laboratories, Los Alamos National*

*Laboratory and Lawrence Livermore National Laboratory*

*IBM*

*Intel*

*STEM & Business Sponsored by Johnson Scholarship Foundation*

*Intelligence and Armed Forces Sponsored by National Security Agency*

*Navajo Transitional Energy Company, LLC*

*Nordstrom*

*Raytheon Technologies*

*Natural Resources Sponsored by Resolution Copper*

*Energy Sponsored by TC Energy*

*The Boeing Company*

*USDA NRCS*

### NSF Innovation Programs

PROFESSIONAL

**Elizabeth (Ela) Mirowski**  
SBIR/STTR Program Director  
*National Science Foundation*

Intern active session to share the experiences of American Indian professionals in working at a National Laboratory. Experiences related to their journey though college into starting into their careers.

### Opening Ceremony

Kick off the 2022 AISES National Conference with a welcome to Palm Springs by the AISES Council of Elders and inspirational speakers.

### Opportunities with AISES (Pre-College)

EDUCATOR

**Ruth BlackHawk Cameron**  
(*Ho-Chunk/Lakota*)  
Director of PK-12 Programs  
*AISES*

**Marie Casao** (*Narragansett  
Tribe of Rhode Island*)  
PK-12 Program Officer  
*AISES*

**Rennea Howell** (*Ogahpah  
Nation of Oklahoma*)  
PK-12 Program Officer  
*AISES*

**Stacy Smith Ledford** (*Eastern  
Band of Cherokee Indians*)  
PK-12 Program Officer  
*AISES*

This session is meant to be a broad overview of the AISES opportunities offered to Pre-College students and teachers. Attendees will learn about a robotics program that receives individualized training for students and teachers, financial literacy, science and engineering fairs, and a computer science program aimed at increasing the number of Native girls in CS. Each of these programs comes with special perks that we are excited to share.

Join us if you want to learn more about AISES opportunities!

### Palm Springs Windmill Tour

COLLEGE

Your journey will transport you on a private wind farm back in time 40 years ago to the present. The tour will encompass the successes and failures exhibited by inventors and engineers at the beginning of the "Wind Rush" in the 80's to the modern sleek designs we see today. You will learn about how this farm was first established by one individual investor and how it has developed to be an energy corridor. This tour will allow you to get up close to an operating modern turbine that is as tall as the Statue of Liberty. Not only will you be able to get up close to real operating wind turbines over 400 feet high, our expert guides will easily be able to describe the inner workings of wind turbines and how they contribute to our energy grid. Everyone will be able to leave the tour with a better understanding of how this renewable energy is fast becoming part of our energy solution. Great photo opportunities to last a lifetime.

Max: 50 attendees

Target Audience: College students

### Plant Medicine

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

**Cecelia Lucero** (*Acoma  
Pueblo*)  
Council of Elders  
*AISES*

**Shayai Lucero** (*Acoma  
Pueblo/Laguna Pueblo*)  
Elders Helper  
*AISES*

Wild plants given to us by Our Mother have shaped the lives of Native peoples for thousands of years. In the arid lands of Acoma and Laguna Pueblos, several species are used as medicine by the people who live in this high desert. These plants are used to cure certain illnesses and to benefit the person. The presenters will share their knowledge and present some plants used as medicines in their Pueblos. Come learn about the pharmacy that grows on the mesas, arroyos and pathways of New Mexico.

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## Poster Research Presentations

COLLEGE, HIGH SCHOOL, PROFESSIONAL

Middle School, High School, Undergraduate, and Graduate students will showcase their STEM research at oral and poster presentation sessions during the AISES National Conference on Friday, October 7. We encourage all conference participants to show their support by attending the oral presentations (see the agenda for scheduled times) and poster presentations are located in Primrose AB next to the College and Career Fair floor.

## Poster Research Presentations Setup

COLLEGE, HIGH SCHOOL, PROFESSIONAL

Presenters are expected to mount their posters on Friday, October 7, between the hours of 8:00 a.m. and 9:00 a.m. in Primrose AB next to the College and Career Fair floor.

Presenters must be present at their poster during the entire presentation time, 9:00 a.m. - 12:00 p.m. on Friday, October 7.

All posters are to be removed by the presenters on Friday, October 7, between the hours of 5:00 p.m. - 8:30 p.m.

## Pre-College Advisors Meeting

EDUCATOR

This meeting is for K-12 educators that work with an AISES club or would like to start one. Meet other AISES advisors, learn how to start a club, how to keep one going, and what is important for your students to know about AISES.

## Pre-College Student Caucus

HIGH SCHOOL

AISES Pre-College students are invited to gather to meet new friends and hear more about AISES opportunities! This is a student event, and while professional members and corporate partners are welcome to attend as observers, they are not eligible to vote and do not have presenting privileges.

## Press Start: Connecting Student Video Game Interests to Success in STEM

EDUCATOR

Angelica Romines (*Chickasaw / Choctaw / Mississippi Choctaw*)  
Graduate Research Assistant  
*Oklahoma State University*

Dr. Nicole Colston  
Assistant Research Professor  
*Oklahoma State University*

Are your students always on their devices? Video games are popular and educators could utilize the positive benefits to assist students. This workshop provides an alternative perspective on video games and how they can connect to STEM learning. The benefits of gaming can include positive identity development and social-emotional and leadership skills in supportive communities. Many games introduce students to translational STEM skills and contexts through role-play, design, and competition (i.e. Minecraft, Animal Crossing, Roblox). There are also a growing number of college and career opportunities in gaming. Video games can be part of a holistic approach to youth well-being. Participants will learn how to support students by (1) identifying/ creating gaming clubs, (2) fostering positive gaming mindsets,

and (3) connecting gaming to STEM college/career opportunities. We address tough issues like negative stereotypes, toxicity, and the lack of representation in the video game industry and in video games.

## Prestige Protocol

COLLEGE

Alex Tsosie (*Navajo*)  
Sr. EHS Specialist  
*Boeing Company*

Mina Martinez  
Chief Etiquette Officer  
*Prestige Protocol*

Prestige Protocol will conduct a Professional Development Session on Protocol, Diplomacy and Professional Etiquette. The session is dedicated to teaching valuable life skills through emphasizing proper usage of etiquette, civility and diplomacy in both professional and social settings to effectively build stronger relationships.

## Professional Chapter Council Meeting (PCC)

PROFESSIONAL

The Professional Chapters Council (PCC) consists of representatives of the AISES professional chapters whose goal is to provide guidance and representation for professional chapters, to advise AISES on issues important to professional chapters and members, and to increase opportunities for AISES professionals. If you are interested in joining the Professional Chapter Council, please contact Lisa Paz, Senior Director of Engagement and Advocacy at [lpaz@aises.org](mailto:lpaz@aises.org). The PCC supports AISES mission by: Meeting quarterly to support and represent the AISES professional chapters. Advising AISES on issues important to the professional chapters and members. Supporting the formation of additional professional chapters. Assisting professional chapters in fundraising ideas and programs. Serving as a liaison between professional chapters and AISES Headquarters. Assisting professional chapters to recruit new members and retain current members. Assisting professional chapters in providing professional development for members. Providing networking opportunities for professional chapters and members. Assisting professional chapters in their outreach to AISES students and student chapters. Reviewing professional chapter Affiliation Agreements and Professional By-laws and presenting any proposed changes to AISES Headquarters. Promoting communication between professional chapters. Having the PCC Chair represent the PCC at regularly scheduled AISES Board meetings. Providing input for the Professional Networking reception at the National Conference

45 Years  
of Advancing  
**Indigenous**  
People in STEM

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## Professional Pathways: Google Panelists

PROFESSIONAL

Allyssa Concepcion (*Ojibwe and Yuron tribes*)  
Recruiter, Early Career SWE  
Google

Blair Huffman  
Group Product Manager  
Google

Caleb King (*Seldovia Village tribe in Seldovia, Alaska*)  
Medical Device and Compliance Operations Specialist  
Google

Kathryn Bunner Swafford  
Software Engineer  
Google

Mark Webber (*Cherokee*)  
Strategic Program Manager Lead  
Google

Suzanne DePoe  
Test Engineer  
Google

Everyone's professional pathway looks differently, and nothing can prepare you for your own quite like hearing other's personal journeys. Please join us (and bring your questions!) as three Googlers from both tech and non-tech functions share about their pathways and what helped them to be successful.

## Professionals Keynote Breakfast

PROFESSIONAL

Jayshree Seth  
Corporate Scientist, Applied Technology Development for Industrial Adhesives and Tapes Division  
3M

Sponsored by 3M  
Target Audience – 250 professionals  
Registration required  
Join 3M for breakfast and a presentation titled Not the Science Type! Jayshree Seth will discuss the future success of businesses, economies, and humanity hinges on the continued advancement of science, and the development of sustainable innovations. This in turn, is dependent on the inclusion of diverse perspectives inside our organizations, and in our communities, to bring creative thinking, innovative mindset, and scientific prowess together with lived experience to solve real-world problems. Jayshree will provide an overview of the 3M State of Science Index, a global research initiative to uncover what people think of science, and how the pandemic has shaped the public's thinking. Many of the findings highlight the importance of a healthy pipeline of diverse scientists, technologists, and engineers to solve the complex and global humanitarian challenges we face. The presentation will include Jayshree's reflections from a childhood where she didn't think she belonged in STEM, to a successful career in science, and her perspective on leadership for the path forward.

## Professionals Networking Reception (Ticket purchase required)

PROFESSIONAL, COLLEGE

Sponsored by Aristocrat and The Boeing Company This fun and interactive event welcomes professional and student members that are about to become professionals to network in a comfortable setting. Students will also be able to interact with Professional Chapter representatives and talk about professional membership. The event is intended for professionals and college

students that will soon be entering the work force. Space is limited. Light hors d'oeuvres will be served.

## Psychological Safety: 4 Stages for Cultural Change

PROFESSIONAL

Dr. Andrekka Lanier  
Organizational Development Consultant  
Lawrence Livermore National Laboratory

This session is designed to give individuals an alternative perspective and appreciation for the value of inclusion through a lens that goes beyond the aesthetic (what we see on the surface). The training is designed to help participants understand the value of inclusion as a basic human right, based on the premise that the need to be accepted precedes the need to be heard. Participants have a better understanding of how to impact cultural change utilizing Dr. Clark's 4 Stages of Psychological Safety framework with four sequential stages that build upon one another: Inclusion safety, Learner Safety, Contributor Safety, and Challenger Safety. After deepening the order and understanding of these stages, individuals will leave as empowered cultural architects who have a foundational understanding of psychological safety, and social awareness while refining leadership expertise.

## Recruiting and Retaining Indigenous Students and Professionals

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

AISES proudly partners with industry partners and academic organizations who share our mission to increase the representation of Indigenous people in science, technology, engineering and science studies and careers! A panel of experienced professionals representing various corporations, federal agencies, and academia will share insight and best practices for attracting, supporting, and retaining Indigenous students and employees.

Moderated by Laurence Brown (Sandia National Labs) with the following panelists: Fernita C. Dailey (NSA), Daniel Sestiaga Jr.(University of Arizona), Sarah Lincoln (Raytheon Technologies)

## Resume Room

COLLEGE, HIGH SCHOOL, PROFESSIONAL

Sponsored by IBM and Lawrence Livermore National Lab The Resume Room will be available to students on Thursday and Friday. Come fine-tune your resume and upload it to the AISES resume database (Career Hub) as well as distribute it at the AISES College and Career Fair. The room is equipped with computers, printers and staffed with professional volunteers to answer questions about resume development.

## Sandia National Labs Professional Panel: How to Navigate Your Career

PROFESSIONAL

Lori Torres  
Sandia National Labs Professional Panel: How to Navigate Your Career  
Sandia National Laboratories

Intern active session to share the experiences of American Indian professionals in working at a National Laboratory. Experiences



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related to their journey though college into starting into their careers. The goal is to share and provide tips for having a successful career in STEM and at Sandia Labs.

## Sequoyah Breakfast & Ceremony (RSVP required)

This breakfast is held to honor the AISES Sequoyah members and to celebrate and welcome new, lifetime Sequoyah members.

This private event for Sequoyah members and their guests requires a reservation, prior to the event.

Check-in: 6:30 a.m.- 7:00 a.m.  
Program: 7:00 a.m. - 9:15 a.m.

## State of AISES (Invitation only)

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Join AISES Chief Executive Officer, Sarah EchoHawk, as she gives quality insights of the “State of the Organization” address.

## STEM Activity Day

EDUCATOR, PRE-COLLEGE

Sponsored by The Boeing Company

This fun, interactive day of activities will include hands-on STEM-themed ideas and challenges. Start your AISES National Conference off right with a full afternoon of STEM activities and information. This event includes chances to win great prizes! STEM Activities Day will feature a Marketplace where middle school and high school students and educators can learn more about AISES PK-12 opportunities and gain valuable professional development skills such as resume building, college application tips, AISES opportunities, and more! Food and beverages will be provided.

Target Audience – 250 pre-college students and registration is required.

Activities Include:

3 ... 2 ... 1 ... Takeoff! Create Your Very Own X-Plane  
ACS Hands on Activities  
AISES Marketplace  
Alexa, Teach me How to Program  
Cryptographic Exploitation  
DreamLearners - Paper Airplane Competition  
Drones and Robotics  
Exploring the Science of Retroreflectivity  
Ice Cream and Aquifers  
Meshing Together  
Mysterious materials - how do they do that?  
NASA's Unmanned Aerial Vehicles  
Pizza Scientists, Snake Milkers, Bigfoot Scientists Oh My!  
Robot Grab Bag, Designing and Building Attachments from Everyday Items  
Robots to the Rescue!  
Sphero Robot Level-Up Challenge  
U.S. Department of Energy Office of Legacy Management  
Radiation and You  
Windmills

## Storytelling with The Elders

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Come sit and relax with the AISES Council of Elders as they take turns sharing stories told with love, humor, and traditional

knowledge. The importance of storytelling has always been woven into our lives – as much a part of our future as our past. Join them to enjoy stories that have the power to heal, teach, and prepare future generations.

## Student Awards Luncheon

COLLEGE, HIGH SCHOOL

Sponsored by Jack Kent Cooke Foundation, The National Security Agency, and US Air Force Target Audience – 500 pre-college and college students Registration required. This event honors the incredible STEM talent at AISES from scholarship awardees to interns, as well as the exemplary chapters who power, connect, and elevate the AISES mission. All student research presenters should attend the Luncheon as research award winners will be announced.

## Student Orientation

COLLEGE, HIGH SCHOOL

The Boeing Company is the proud sponsor of the student orientation and welcomes all students to come and learn what to expect at the 2022 AISES National Conference, as well as, what is expected of you. Learn how to make the most of your experience at this year's conference!

## Student Social Event - DJ and Dance

COLLEGE, HIGH SCHOOL

This fun filled social event will include networking, entertainment dancing and snacks!

## Student Study Lounge

COLLEGE, HIGH SCHOOL

Students, do you need a safe and quiet place to study while attending the 2022 AISES National Conference? All students are invited to utilize this space to relax and unwind, clear out any tension or stress on your mind, and study in this quiet place without interruption. WiFi provided.

## Super Powers at Amazon

PROFESSIONAL

Caleb Dunlap (*Anishinaabe (Fond du Lac Band of Lake Superior Ojibwe, Minnesota)*)  
Program Manager  
Amazon

Fawn Sanchez (*Shoshone-Bannock*)  
Senior HR Leader, AWS  
Amazon

Jamie Collins (*Cherokee*)  
Operations Manager III  
Amazon

Shannon Hokulani Sharp (*Native Hawaiian*)  
Supply Chain Manager,  
Regional Terminal Operations  
Manager  
Amazon

We all possess unique strengths and attributes that make us stand out. At Amazon, these are referred to as super powers and are integral elements in guiding and propelling one's career development. Do you know what your super powers are? If so, do you know the origin story of your super powers? Why is it important to recognize your super powers? Do you understand the relevancy of your super power(s) in your day-to-day interactions?

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In this session, attendees will learn about Amazon's culture through its use of Super Powers and how these unique strengths are valued and encouraged in one's personal and professional development. Amazonians from various lines of business will share their individual paths to Amazon, their definition of super powers, how super powers are used in their respective roles and the impacts of varying super powers across teams and within projects at Amazon.

## Support Food Sovereignty with a Career at the Natural Resources Conservation Service

AGRICULTURAL SCIENCES

**Catherine Cannon**  
Tribal District Conservationist  
USDA-Natural Resources  
Conservation Service

**Rick Tafoya**  
Human Resources Specialist  
- Diversity Outreach &  
Recruitment  
USDA Food Production and  
Conservation Business Center

Population growth and climate change is increasing the challenge to create and maintain accessible and resilient food systems that are also ecologically-sound. Minority and low-income populations are disproportionately affected by a lack of both affordable nutritious food and culturally appropriate foods, leading to an increase in health risks such as heart disease and Type II diabetes. Our mission at the USDA Natural Resources Conservation Service (NRCS) is "helping people help the land". A rewarding career with NRCS puts you at the forefront of directly helping people tackle these challenges through hands-on technical and financial assistance programs. This session will explore what we do, the multitude of career paths available, the educational requirements to qualify, and internship opportunities available to help you get started helping people help the land. For an example of some of the work we do visit <https://youtu.be/6lyGtpIlyC0>.

## Sustainable Product Innovation at Intel

STEM & BUSINESS

**Das Kamhout**  
Vice President & CTO, Sr.  
PE, and General Manager  
Intel Cloud and Enterprise  
Software  
Intel Corporation

**Ryan Tabrah** (*Direct  
descendant of the Choctaw-  
Apache Tribe of Ebarb*)  
General Manager - Xtreme  
Throughput Platform Team  
Intel Corporation

Technology advancements are happening at a torrid pace while our world continuously changes! Learn about Intel's focus on sustainable products and development procedures, with a focus on the importance and impact of sustainable software. Join two Executive engineering managers explain the importance of creating ecological solutions while meeting customer quality and performance requirements. Explore methods of how together, as a community, can be on the forefront to reduce the carbon footprint of the entire technology ecosystem. Intel keeps in mind that Innovation starts with acknowledging the power of our entire workforce and impacting the communities in which we operate and feel strongly that including all cultures will strengthen and direct our focus areas to build a brighter future for all.

## Talking Circle History and Principles

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Join Phil Lane, Jr., from the Council of Elders, to learn about the Talking Circle teachings utilized by Four Worlds and the principles that ensure that Talking Circles create a safe place for sharing, listening, and exploring different points of view without criticism or judgments. This process also strengthens our understanding, appreciation, and respect for points of view, other than our own. Moral or ethical issues can also be brought forward in a Talking Circle and addressed without offending or hurting anyone.

## Tamamta (All of Us): Transforming Western and Indigenous Fisheries & Marine Sciences Together

PROFESSIONAL

**Dr. Courtney Carothers**  
Professor  
University of Alaska Fairbanks

**Dr. Jessica Black** (*Gwich'in*)  
Associate Professor  
University of Alaska Fairbanks

**Dr. Sonia Ibarra** (*Caxcan, Apache*)

Tamamta Program Coordinator & Tamamta Postdoctoral Fellow  
University of Alaska Fairbanks

Motivated by deep inequities, Indigenous erasure, racism, and continued violence against Alaska Native peoples, Tribal sovereignty, Indigenous values, governance practices, and knowledge systems, the Tamamta program seeks to transform education, research, governance systems in Alaska and beyond. We envision a future where Indigenous Peoples and our/their knowledge and governance systems steward land, fish, and animal relations. Our program will support three cohorts of Alaska Native and Indigenous students to pursue their graduate degrees in western and Indigenous fisheries and marine sciences. We are working to decolonize and Indigenize our curriculum, programs, and institutions. We are hosting difficult dialogues, providing short courses, and cultural exchanges for state and federal partner agencies to join this collective transformation. In this work, we center deep relational work based on reciprocity, respect, and redistribution. We will share our origin story, the work of our first year, and some opportunities and challenges along the way.

## TEK: Protecting our Forests

AGRICULTURAL SCIENCES

**Dr. Mark Bellcourt** (*White  
Earth Nation*)  
Retired  
Educator

**Dr. Michael Dockry** (*Citizen  
Potawatomi Nation*)  
Professor  
University of Minnesota

**Michael Dockry Paredes**  
(*Citizen Potawatomi*)  
Student  
High School

Our ancestors maintained reciprocal relationships with the natural world for many millennia. However, the demands of colonization and industrialization during the last few centuries have repressed or thwarted the people's ability to care for Akin (mother earth). Unlike those who exercise dominion over nature to use it for personal and economic gain, there are many

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Indigenous people who assume responsibility for maintaining harmonious relationships with the natural world. The presenters will highlight Indigenous science and tribal forestry that includes the production of sustainable forest products, preservation of culturally important species, and diverse habitats all while embracing the knowledge and passion of their ancestors.

## The AISES Adventure: Your adventure through finance!

**EDUCATOR**

**Ruth BlackHawk Cameron** (Ho-Chunk and Lakota)  
Director of PK-12 Programs  
AISES

**Stacy Smith Ledford** (Eastern Band of Cherokee Indians)  
PK-12 Program Officer  
AISES

Come join us for some hands-on financial literacy fun in our new Wells Fargo Native Financial Cents Experience, The AISES Adventure! AISES has enhanced Hands on Banking to connect with and incorporate Native customs, traditions, and culture so content and supporting activities will be more relevant, easily understood and applied by YOU, our Native learners!

Adventure with us in an interactive experience where you can move from station to station and see how financial literacy relates to your future and your community. Your challenge will be to select a profession and skillset to navigate through “life” with, make decisions and prepare for expected and unexpected financial events.

Are you an accountant, Tribal leader or teacher? Find out if you can make it through all of the workshop stations while managing your budget!

Educators, please join us for this second session after your Native Financial Cents “Train the Trainer” info session!

## The Cybersecurity Workforce: REIMAGINED

**PROFESSIONAL**

**Lynn Dohm**  
Executive Director  
Women in CyberSecurity (WiCyS)

Imagine a workforce where inclusive cultures drive nonuniformity, all while lending itself to the powerful diversity of thought. One that challenges the status quo and inspires an environment where all genders, identities, cultures, ethnicities, races, backgrounds, and experiences are entered into a shared space of the cybersecurity workforce. Where the obstacles that existed before are tackled strategically and patiently. And a new reality of a gender-balanced workforce emerges.

For us, at Women in CyberSecurity (WiCyS), this new workforce is tomorrow’s reality that we work towards building every day. It’s more than a mission; it is the core of our existence and the driver of our actions. During this presentation, Lynn Dohm, WiCyS executive director, will share the story and powers of the WiCyS community, showcasing how far women have come and how much further we have to go in building a bigger table that represents us all.

## The logics of Computer Science, beyond the coding world

**COMPUTER SCIENCE**

**Kunal Lalwani**  
Data Engineer  
Nordstrom

Coding is process of implementing the solutions to problems found in computer science. The computer scientist can act as an architect who designs the house but does not have to build it. Instead of focusing on mastering a particular tool and creating finished projects, school teachers should teach their students to ‘think like a computer scientist’. If we teach kids how to code without also teaching them some basic principles of computer science, we are likening it to asking them to do a fun exploding baking soda and vinegar experiment without explaining the science involved. To help our students solve problems, design solutions, and build them in code, let’s give them the right amount of computer science context. Students should learn to code so they can express their creativity, while also being provided with just enough computer systems, algorithms, and more so they feel empowered when working on coding projects

## The Social and Economic Benefits of Video Gaming in Indian Country

**STEM & BUSINESS**

**Dr. Brandon Mastromartino** Assistant Professor, Experiential Marketing  
San Diego State University

**Hai Ng** Co-Founder  
Project Quipu

Video gaming can be limited in Indian Country, due to a lack of resources and infrastructure. With a deeper understanding of the benefits of video gaming in these communities, opportunities to attract infrastructure funding to Indian Country may be possible. This session will focus on a discussion of a research initiative being launched to develop an understanding of the social and economic benefits gaming has on Indian Country. This research project is being undertaken by Project Quipu (PQ), a national nonprofit corporation that aims to utilize video gaming, competitive gaming, and esports as a vehicle to enhance cultural and social cohesion, and to create new career and economic opportunities with and between American Indian Tribal Nations. Through this session, we will discuss recommendations concerning how video gaming can be better leveraged to transmit important cultural values, support tribal youth engagement, and encourage public and private investment in tribal broadband initiatives.



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## Traditional Native Social Powwow

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Sponsored by AES Rock your Mocs and join us for what has become our most popular tradition! Open to all!

Head Staff

MC - **Glen Begay**

Arena Director - **Victor Chavez**

Head Woman - **Maxine Orozco**

Head Man - **Johnny Nieto**

Host Drum - **Bearspring**

Featuring **Aqua Caliente Bird Singers**

Changing rooms will be in Smoketree A (Men) and Smoketree B (Ladies)

## Training and Career Development Funding from the NIH and the National Institute on Aging

HEALTH SCIENCES AND MEDICAL

Dr. Maria Carranza

Training Officer

NIH/National Institute on Aging

Maria Carranza is a program officer specializing in training and career development at the National Institute on Aging, an institute of the National Institutes of Health. She will begin the session with an overview of NIH grants available to graduate students, postdocs, and early career faculty pursuing research in the biomedical sciences. She will cover important details such as timelines, eligibility policies, and available resources for compiling a strong application. Then, drawing on experience in advising applicants, observing application review, and participating in funding decisions, she will provide tips, strategies, and best practices for writing your application. Topics will include: how to assemble a strong mentorship team, how to write a compelling career development statement, and when and how to reach out to NIH program officers for advice or feedback.

## Training STEM graduate students to work in Indigenous Communities to co-solve Food, Energy and Water challenges

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Dr. Karletta Chief (*Diné*)

Professor & Extension Specialist

University of Arizona

Christopher Yazzie (*Navajo*)

PhD candidate

University of Arizona

Parvannah Lee (*Diné*)

Solar Installer

GRID Alternatives

Jaymus Lee (*Diné*)

Master's Student (PSM)

University of Arizona

Veronique Arguello (*Pueblo of Acoma and Kewa Pueblo*)

Masters Student

University of Arizona

Chantel Harrison (*Diné*)

Masters Student

University of Arizona

Developing technical solutions to Food, Energy and Water (FEW) challenges in Indigenous communities requires an understanding of Indigenous societies, knowledges, governance, and culture.

This talk will focus on a NSF funded graduate research training program entitled Indigenous Food, Energy, and Water Security and Sovereignty or Indigi-FEWS. The vision of Indigi-FEWS is to develop a diverse workforce with intercultural awareness and expertise in sustainable food, energy, and water systems (FEWS), specifically through the design of fit-for-purpose water and controlled environment agricultural (CEA) technologies to address the lack of safe water, energy, and food security in Indigenous communities. The overarching goal is to provide a unique, on-site research, and training opportunity for masters and PhD students that bridges engineering, social, and physical sciences. We combine classwork, internships, teaching, and community interactions to enable trainees to tackle critical real world FEWS problems, with an understanding of the cultures and sovereignty of Indigenous peoples.

## Trauma Healing in a School Setting: We Can Do This!

EDUCATOR

Jeremy Fields (*Pawnee/Crow/Chicasaw*)

Director

Thrive Unlimited

Shatta Mejia (*White Mountain Apache/Alabama Coushatta*)

MAEd

Shatta-I Consulting llc

It is hard to learn when important needs are not being met. This is especially true when students are on a rigorous STEM pathway in school. When teachers have little knowledge of Native culture, they tend to make poor choices on behalf of their Native students – their lens is limited. Teachers should see their students as relatives.

Jeremy Fields and Shatta Mejia will provide a blueprint for creating a Trauma Healing cohort in a school, and Jeremy will provide a powerful example of a successful Trauma Healing project he completed.

Schools are evaluated on student performance, not safety or happiness. There is little incentive for schools to develop the emotional and mental needs of students; It is a value. Native students need a different kind of classroom support. If teachers saw all students as relations, learning will come.

## Tribal Leaders Panel

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

This session will feature tribal leaders that invest and support AISES. This session will be moderated by current AISES Board Chair Emeritus Rick Stephens. Panelists will be asked to provide an introduction about themselves and their leadership journey. Moderator and attendees will explore and discuss challenges, lessons learned, advice, and connect with students and young professionals.

## Tribal Nations Advisory Council Meeting (TNAC)

PROFESSIONAL

The TNAC of AISES consists of representatives from Tribal Nations in the United States and Canada. The primary role of the TNAC is to advise AISES on issues of relevance and importance to Tribal Nations. In addition, the TNAC also works to assist AISES in creating opportunities for Tribal Nations and their citizens, and to support the AISES mission of substantially increasing the representation of Indigenous Peoples of North America in

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Science, Technology, Engineering, and Math. If you are interested in joining the Tribal Nations Advisory Council, please contact Shayna Gutierrez, Tribal and Business Development Officer at [sgutierrez@aises.org](mailto:sgutierrez@aises.org). The Tribal Nations Advisory Council: Advises AISES on issues important to tribal AISES chapters and their members. Participates in and supports AISES events through sponsorships, presentations, and providing career information and resources. Assists in the formation and development of Tribal AISES Chapters. Encourages K-12 Tribal educator and student participation in AISES programming. Provides scholarships, internship programs, and/or employment opportunities. Provides expertise and guidance related to current/projected employment trends and needs in Tribal communities. Develops tribal support for AISES including financial contributions, in-kind gifts, and human resources. Assists AISES in fundraising efforts through networking and participation. Serves as a liaison between Tribal Nations and AISES. Provides networking opportunities for tribal AISES chapters and members. Serves as an advocate to publicize content in Winds of Change Magazine and on the AISES website to represent Tribal Nations. Represents the TNAC at regularly scheduled AISES Board meetings by sending at least one co-chair. Provides input to AISES National Conference proceedings to increase relevance for Tribal Nations. Promotes, assists, and supports AISES in hosting a gathering of Tribal Nations' representatives at the AISES National Conference and other Native-focused events.

### Tribal Partnerships for Water Resource Projects

PROFESSIONAL

Lavonna Begay (*Navajo*)  
Civil Engineer  
*US Army Corps of Engineers*

Michelle Larson (*Leech Lake Ojibwe*)  
Senior Professional Engineer  
*US Army Corps of Engineers*

Quana Higgins (*Oglala Sioux Tribe*)  
Senior Water Resources Planner  
*US Army Corps of Engineers*

Stephen Scissons (*Acoma Pueblo*)  
Hydrology and Hydraulic Branch Chief  
*US Army Corps of Engineers*

The Tribal Partnership Program (TPP) provides authority for the U.S. Army Corps of Engineers to investigate water-related planning activities and activities related to the study, design and construction of water resources development projects located primarily on tribal lands that substantially benefit federally recognized tribes. The presentation will go over how the program is used and provide an overview of current TPP projects. Some examples of projects include fish passage, aquatic ecosystem restoration, flood risk management, aquifer studies, and watershed studies.

### Understanding Computer Science Research

COMPUTER SCIENCE

Brett Butler  
Brett Butler, Sr Director, Research & Development  
*Aristocrat Technologies Inc*

Computer Science is often interpreted as software development. However, individuals, teams, and companies can greatly benefit from placing more emphasis and process in the "science" of computer science. This means transforming software developers to become software engineers who efficiently work through the many phases of engineering. Allocating standards,

tools, and process to researching the market, competitors, incubators, and internal solutions leads to more informed and valuable technology solutions. This presentation will explore the governance, process, benefits, and excitement of a computer science research and development organization who is inventing the future of technology.

### University of Redlands-Campus Tour

COLLEGE, HIGH SCHOOL

This is a one-hour walking tour of the University of Redlands. It can be accompanied by a 30-minute information session led by an admissions counselor who will provide information about Redlands, our application process, financial aid, and next steps.

Max: 50 attendees

Target Audience: pre-college and college students

### U.S. National College Student Caucus

COLLEGE

AISES College students are invited to attend this Caucus to vote on their next U.S. Junior National Student Representative. There is also the chance to meet their Regional Student Representative and hear what is important for AISES College Student members to know. This is a college student event, and while professional members and corporate partners are welcome to attend as observers, they are not eligible to vote and do not have presenting privileges.

### Veterans' Gathering

ADVISOR, COLLEGE, EDUCATOR, PROFESSIONAL

This session is for Veterans who seek to address their specific issues as they seek guidance/ assistance in either their path to STEM education or finding opportunities in STEM upon completion of their service obligation. It is also for our partners who wish to support and hire skilled, brave and honorable individuals who have served our country.

### Visualizing YOU in Tech: Entry Points, Pathways, and Resources to Building Your Tech Career

COMPUTER SCIENCE

Dwana Franklin-Davis  
CEO

*Reboot Representation*

There's no single journey into tech—and the pathways for entering this space are growing and expanding. When representation for Native women in tech stands at 0.1%, it can be difficult to confidently pinpoint, let alone visualize, what the best path forward for YOU can be. Reboot Representation—a tech coalition doubling the number of Black, Latina, and Native American women receiving computing degrees by 2025—brings together a panel of accomplished Native American and Indigenous women in tech to share their professional journeys with you and help you visualize what your own pathway can look like. Whether you're looking to find support and resources as a budding technologist or are exploring a career switch into this space from a pathway outside tech, these trailblazing women are ready to answer the questions you have and those you haven't yet imagined when it comes to navigating the tech world.

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## Wellness Activity - Lacrosse Demonstration

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Dr. Thomas Reed (*Oneida*)

Assistant Professor  
California State University of Long Beach

Sponsored by Nike

Join us for a demo and exhibition of the Creator's Game, Medicine Game, and Spirit Game, sometimes referred to as lacrosse.

What to expect: A 2-hour instructional and experiential learning opportunity around the game of lacrosse, one of the oldest games in North America. According to Chief Oren Lyons, this game was being played on the other side of the stars when this world was filled with water. Get ready to join us at your comfort level, whether it is getting good medicine from watching and listening or taking a turn participating. If you have your own lacrosse stick, feel free to bring it to use, otherwise, they will be provided.

## Winds of Change Feedback, Fun, and Conversations

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Karen English  
Editor  
*Winds of Change magazine*

Kristen Goodfriend  
Art Director  
*Winds of Change magazine*

Meghan Little  
Managing Editor  
*Winds of Change*

Montoya Whiteman  
(*Cheyenne and Arapaho*)  
Senior Director of Marketing  
AISES

Here's your chance to be part of a change-making feedback session — and win a valuable prize just for sharing your opinion. This session is designed as a focus group where participants will have the opportunity to help shape AISES publications. Tell us what you think about Winds of Change magazine and the Paths to Opportunities newsletters — after all, these are your publications so help us make them work for you. Session participants will be able to weigh in on written questionnaires and through guided discussions. Bring your friends and make some new ones as you have a bit of fun giving back to AISES.

## Women's Talking Circle

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Circles provide space to open up fresh possibilities for connections, collaboration and understanding. Circles can hold the tensions and emotions that contribute to healing and can support people to use the collective energy to take action. It is an opportunity to express your conference experience with complete freedom. It is an effective way to remove barriers and feel the support and energy of all other participants during this moving experience.

## Working in the Federal Government: An Insider Perspective

ADVISOR, COLLEGE, EDUCATOR, HIGH SCHOOL, PROFESSIONAL

Anthony Sanders  
Division Chief  
NASA Goddard Space Flight  
Center

Candace Spore (*Kiowa*)  
Intergovernmental Liaison  
Project Manager  
U.S. Nuclear Regulatory  
Commission

Dr. Christopher Payne  
Deputy for Operations:  
Building Technology & Urban  
Systems Division  
Energy Technologies Area,  
Lawrence Berkeley National  
Laboratory

Marcellus Proctor (*Piscataway-  
Conoy*)  
Associate Division Chief  
NASA Goddard Space Flight  
Center

This panel discussion is sponsored by the AISES Government Relations Council (GRC). The audience will hear from several federal government employees and gain knowledge about what it takes to be hired and work within a government department/agency. The audience will come away with what is needed to successfully apply to a government position and hear the personal journey of several government employees on how they navigated through their perspective department/agency.

## Worrier to Warrior: Advocating for an Authentic Self

PROFESSIONAL

Octavio Rodriguez Coria (*Purépecha*)  
Senior Division Engineer  
3M Company

Have you ever found yourself holding back from asking for what you want due to fear? Have you ever felt like an imposter in an unfamiliar environment, when you were simply trying to fit in, or go along with others? Do you find yourself capable of helping others, but stopping when it comes to you? Advocating for yourself is possible without sacrificing your values or beliefs. This session will introduce you to wisdom from others that have learned how to navigate being strong while embracing their Indigenous values. Learn the difference between Self-Advocacy and Self-Promotion. Learn what imposter syndrome is and how it may be holding you back. Join us in this session to share insights and actions you can take that honor yourself, family and community.



## National Conference Floor Plan

Renaissance Hotel and Palm Springs Convention Center

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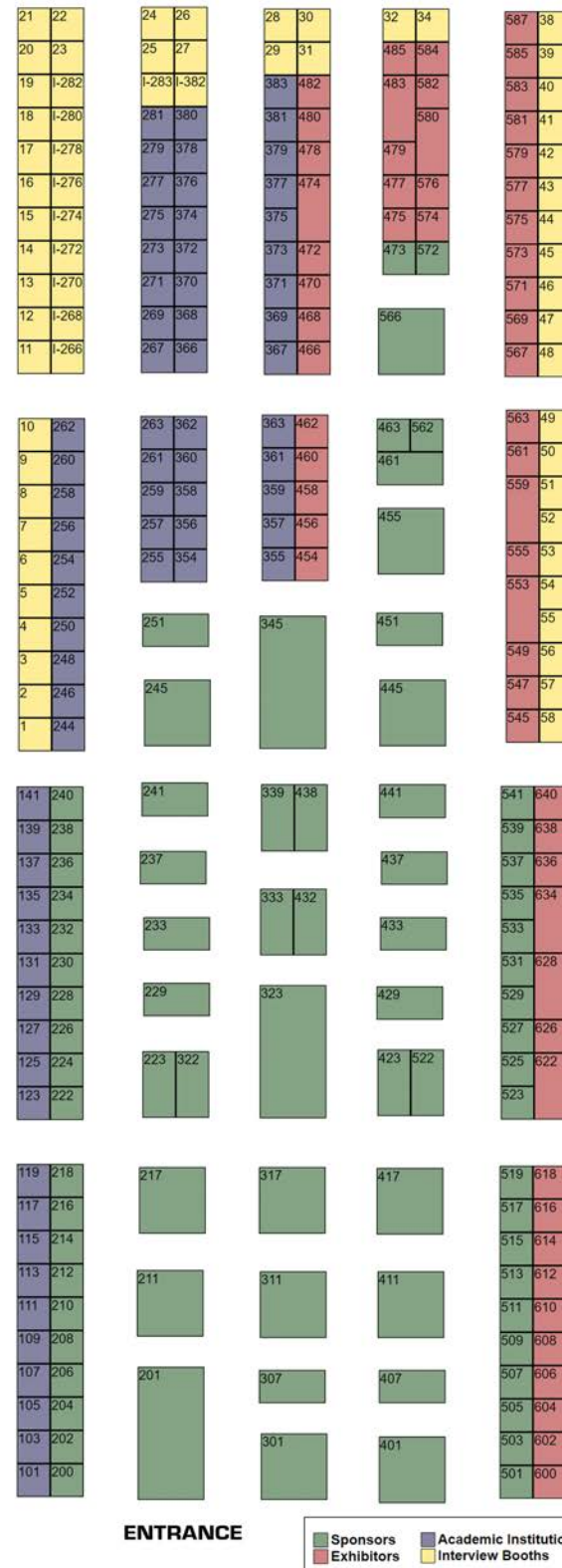
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## Exhibit Hall Floor Plan



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3M	●	211
AAAS Science & Technology, Policy Fellowship		479
ABK Indigenous Network		634
<b>Accenture</b>	●	513
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AEOP		478
<b>AES</b>		541
AIM-AHEAD		113
<b>Alyeska Pipeline Service Company</b>		537
<b>Amazon</b>	●	317
<b>American Chemical Society</b>	●	429
American Physical Therapy Association		614
<b>America's Navy</b>	●	509
<b>AMERIND</b>		
<b>ANTHC Division of Environmental Health and Engineering &amp; Indian Health Service</b>		
<b>Apple Inc</b> - Located in Smoketree C (S-3)	●	S-3
Association of American Medical Colleges (AAMC)		460
<b>AT&amp;T</b>	●	202
Ball Corporation		618
<b>Bank of America</b>		527
Be An Actuary		109
Berkeley Lab		576
<b>Berkshire Hathaway Energy Foundation</b>		
<b>Best Buy, Co. Inc</b>		
BetMGM		608
<b>BNSF Railway</b>	●	511
<b>The Boeing Company</b>	●	345
Bonneville Power Administration	●	563
<b>Booz Allen Hamilton</b>		503
Brookhaven National Laboratory		582
<b>Bureau of Ocean Energy Management (BOEM)</b>	●	
<b>Burroughs Wellcome Fund</b>		
Cal Poly Humboldt	■	367
Carnegie Mellon University		252
<b>Central Intelligence Agency</b>	●	423



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<b>Chan Zuckerberg Initiative</b>			<b>Georgia Tech Research Institute</b>		461
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<b>Cisco</b>		307	<b>Google</b>	●	229
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Columbia Engineering		115	Harvard Business School		277
<b>Comcast NBCUniversal</b>	●		Harvard T.H. Chan School of Public Health		368
Cornell University - College of Engineering	■	131	Hesperus		470
Cronkite School	■	246	Higher Education Recruitment Consortium-HERC		549
Dartmouth		254	<b>IBM</b>	●	301
<b>Deloitte</b>		501	Indigenous Futures in Engineering at Queen's University		271
<b>Delta Dental</b>		311	<b>Integra Foundation</b>		
Department of Energy/Legacy Management	●	580	<b>Intel</b>	●	401
<b>Department of the Air Force</b>		433	Iowa State University, College of Engineering	■	263
<b>DOE Office of Energy Efficiency &amp; Renewable Energy</b>			IU School of Medicine Biomedical Science Graduate Programs		141
<b>Dow, Inc.</b>		507	<b>Jack Kent Cooke Foundation</b>		577
<b>Dragonfly Consulting LLC</b>			<b>Jet Propulsion Laboratory</b>		535
Drug Enforcement Administration - DEA		466	Johns Hopkins Bloomberg School of Public Health		355
Eastern Washington University		125	<b>Johnson Scholarship Foundation</b>		
Emory University, Laney Graduate School		101	Jopwell		LI
<b>Enbridge Inc.</b>		236	<b>Kansas City National Security Campus Managed by Honeywell</b>		232
<b>Engineers Canada</b>			Keysight Technologies		545
Environmental Protection Agency		483	KFI Engineers		640
Environmental Science Program-Navajo Technical University		258	<b>Koniag Government Services</b>		216
<b>ExxonMobil</b>	●		<b>Kyndryl</b>		
<b>F5</b>		228	<b>Lawrence Livermore National Laboratory</b>	●	438
Federal Bureau of Investigation		547	Leidos		555
Federation of American Societies for Experimental Biology		482	Lithium Nevada Corp.		636
First Nations Launch		363	Los Alamos National Laboratory		567
Fred Hutchinson Cancer Center		380	Los Angeles Department of Water and Power		610
<b>Freepoint-McMoRan</b>		523	<b>Marathon Petroleum</b>		432
Fulton Schools of Engineering- Arizona State University	■	372	<b>Mayo Clinic</b>	●	529
<b>GE</b>		562	McGill University		362
<b>GEICO</b>		234	<b>McKesson</b>		
<b>Genentech, Inc.</b>		525	MD-PhD Program, University of Utah		269
<b>General Motors</b>	●	451			

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<b>Meta</b>	●	533	NYU Tandon School of Engineering		119
<b>Microsoft</b>	●		Oregon State University College of Pharmacy	■	127
MIT Leaders for Global Operations		376	Pacific Northwest National Laboratory		584
MIT Lincoln Laboratory		569	Pathway Scholars Program; University of Arizona		139
Montana State University		357	<b>Pechanga Band of Indians</b>		
<b>Morgan Stanley</b>		210	Penn State University		255
<b>NASA</b>	●	437	<b>Pfizer</b>		515
National Academies of Sciences, Engineering, and Medicine		573	<b>Pinterest</b>		218
National Geospatial-Intelligence Agency		462	<b>Poarch Band of Creek Indians</b>		
National Institute of Arthritis and Musculoskeletal and Skin Disease		626	Procter & Gamble		638
National Institute of Diabetes and Digestive and Kidney Diseases		585	<b>Raytheon Technologies</b>	●	517
National Institute of Neurological Disorders and Stroke		622	<b>Resolution Copper</b>		417
<b>National Oceanic and Atmospheric Administration</b>		571	<b>Rocket Companies</b>		212
National Research Mentoring Network (NRMN)		117	SACNAS		275
National Science Foundation	●	553	<b>Saks</b>		230
<b>National Security Agency</b>	●	522	<b>Salesforce</b>	●	251
Native American Center for Health Professions		261	San Diego Gas & Electric		587
<b>Native Food, Energy, and Water Systems National Science Foundation Alliance</b>			<b>Sandia National Laboratories</b>	●	233
Navajo Technical University		260	<b>Sealaska</b>		204
<b>Navajo Transitional Energy Company</b>	●	214	SKC TREES		480
Naval Nuclear Laboratory		454	<b>Sloan Indigenous Graduate Partnership</b>		
Navy Civilian Careers		474	<b>Soboba Band of Luiseño Indians</b>		
New Mexico Tech		256	Society of Women Engineers		377
<b>NextEra Energy, Inc.</b>		206	<b>Software Engineering Institute - CMU</b>		238
<b>NIKE, Inc.</b>	●	200	<b>Southern California Tribal Chairmen's Association</b>		
<b>Nordstrom</b>		445	Southwestern Indian Polytechnic Institute		281
Northeastern University Khoury College of Computer Sciences		244	Space Force		574
Northwest Native American Center of Excellence		616	<b>SpaceX</b>		240
Northwestern University Master of Science in Law		358	Spotify		583
<b>NSF's Directorate for Technology, Innovation and Partnerships</b>			Stanford University	■	375
Nueta Hidatsa Sahnish College	■	366	<b>Stantec</b>	●	208
			<b>Stark Neurosciences Research Institute (Indiana University School of Medicine)</b>		222
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Tepa Companies		531	University of Colorado Anschutz Medical Campus	■	354
TerraPower LLC		604	University of Florida, College of Liberal Arts and Sciences	■	370
Tesla		245	University of Idaho, College of Graduate Studies		250
Texas Department of Transportation		485	University of Maryland-Engineering		359
<b>The Aerospace Corporation</b>			University of Minnesota Duluth		360
The Cobell Scholarship Program		379	University of North Dakota - Indians Into Medicine	■	123
<b>The INGAA Foundation</b>		<b>561</b>	University of Oklahoma Gallogly College of Engineering		378
The Student Conservation Association		472	University of Southern California	■	129
<b>Torres Martinez Desert Cahuilla Indians TANF</b>			University of Washington, College of Engineering	■	383
<b>Twenty-Nine Palms Band of Mission Indians</b>			University of Washington, Dept of Microbiology	■	381
<b>U.S. Army Corps of Engineers</b>	●	<b>455</b>	University of Wisconsin Law School	■	267
<b>U.S. Department of State</b>	●	<b>323</b>	UNM School of Engineering		262
U.S. Fish and Wildlife Service		468	US CDC- NCIRD		628
<b>U.S. Intelligence Community</b>	●	566	US Department of Transportation		559
U.S. Nuclear Regulatory Commission (NRC)	●	477	<b>USDA Agricultural Research Service</b>		322
UArizona College of Medicine - Phoenix		137	USDA Forest Service Research and Development	●	575
UC Postbaccalaureate Consortium		103	<b>USDA Natural Resources Conservation Service</b>	●	223
UCLA Health		602	<b>VGT by Aristocrat Gaming</b>	●	411
UCSF		374	Virginia Tech - College of Engineering	■	248
UMass Chan Medical School		111	<b>Visa</b>		519
Union of Concerned Scientists		612	<b>Wells Fargo</b>		217
<b>Union Pacific Railroad</b>		226	West Virginia University School of Medicine		133
Unisys		456	<b>Williams</b>		
UNITY		606	<i>Winds of Change/AISES</i>		407
United States Coast Guard		475	Women in CyberSecurity (WiCyS)		581
United States Military Academy at West Point	■	273	<b>Wondr Nation</b>		
University at Buffalo (SUNY)	■	107	WSP USA		600
University of Alaska Fairbanks	■	279	<b>Yahoo</b>		539
University of Arizona	■	361	Yale School of the Environment	■	369
University of Arizona Cancer Center		105	<b>Zoom</b>		333
University of Arizona College of Engineering		135			
<b>University of Arizona Haury Program</b>		241			
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<b>University of California, Davis</b>	■	339			

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#### Region 7:

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Student Success Program Manager

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Program Manager

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Michaela Henry (*Navajo*)  
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