



PROGRAM

October 15-17, 2020

<http://conference.aises.org> • #AISESNC20

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Phil Lane Jr. (*Yankton Dakota/Chickasaw*)

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Dr. Henrietta Mann (*Southern Cheyenne*)

Artley M. Skenandore (*Oneida*)

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

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Andrea Axtell (*Nez Perce*)

Horace Axtell (*Nez Perce*)

Eddie Box, Sr. (*Southern Ute*)

Franklin Kahn (*Navajo*)

Mary Kahn (*Navajo*)

Bow Lane (*Chickasaw*)

Phil Lane, Sr. (*Yankton Sioux*)

Stanley Lucero (*Laguna Pueblo*)

Dr. James May (*United Keetoowah Band of Cherokee Indians*)

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Region 1

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Salish Kootenai College

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Alex Armendariz (*Mescalero Apache*)
California State Polytechnic University, Pomona

Region 3

Jasmine Charley (*Navajo*)
Navajo Technical University

Region 4

Tsali Smith (*Ojibwe, Oneida, and Cherokee*)
University of Oklahoma

Region 5

Danielle Arpan (*Oglala Lakota*)
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Region 6

Abigail Reigner (*Comanche*)
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Region 7

Mikaela David-John (*St. Regis Mohawk*)
University of Florida

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Jayne Sandoval (*Navajo*)
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Junior U.S. National Representative

Adrian Riives (*Sault Ste. Marie Tribe of Chippewa Indians*)
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Jacob Calderone (*Fort Nelson First Nation*)
Queen's University

Junior Canadian National Representative

Celeste Groux (*Bigstone Cree Nation*)
McGill University

2020 AISES National Conference

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In Memoriam

In Memoriam

AISES has many paths crossing at the intersection of life. We acknowledge five brilliant family members who are now the heartbeat between this world and the next. We are grateful for their generosity, attention and kindness, and the presence of their spirit in this material world. The AISES family offers our sincere condolences to each of these great spirits' family, friends, and community for their loss.





Andrea Axtell

AISES Council of Elders member Andrea Axtell (*Nez Perce*) served for decades along with her partner, Horace P. "isluumc" Axtell. At AISES, where they were Sequoyah Fellows, they facilitated talking circles and mentored Indigenous students from across the U.S. and Canada. Horace opened many AISES gatherings ringing a small golden bell and singing for all to come together in community. Andrea was always at Horace's side, offering a smile and a warm embrace for anyone who desired it. Witalaliikma (Andrea Axtell) began her spirit journey in December 2019.

Dr. Iona N. Black

Dr. Black attended AISES events where she shared her own story of educational and teaching success. In 2017, she served on the AISES Professional of the Year selection committee at the University of Hawai'i in Honolulu. She served two terms on the AISES Board of Directors. She was active with the Education Committee, Academic Advisory Committee, and was past secretary of the AISES Publishing, Inc. She was a Sequoyah Fellow. Dr. Black began her journey home on August 4, 2020 in Philadelphia, Pennsylvania.

Thomas F. Dawson, Sr.

Thomas Dawson, Sr. (*Eastern Cherokee*), an early member of AISES, died February 10, 2020, in Morehead City, North Carolina. A longtime Sequoyah Fellow, he served AISES as president and chairman emeritus, as well as being involved in *Winds of Change* magazine. A primary focus of Tom's long and distinguished professional career as an electrical engineer was interplanetary probes and plasma instrumentation in spacecraft environments.

Mary Jane Kahn

Mary Kahn served for decades along with her partner, Franklin Kahn, on the AISES Council of Elders. Her clans were Naakaii Dine doo Maiideeshgiizhnii Dine. At AISES gatherings you could recognize Mary with her concho-embellished straw hat, sturdy walking shoes, and floor-length skirt. Her irresistible energy seemed to eclipse human capability, and she made most people feel like they were standing still. She encouraged others to open themselves to different people, understand new perspectives, and navigate unfamiliar environments. She passed away in November 2019 in Arizona.

Stanley Lucero

AISES Council of Elder Stan Lucero served for over 14 years as an integral Council member, with his partner Cecelia. They have shared their creativity, vision, and cultural values with AISES. Through their wonderful beauty, friendship, and teachings, they have strengthened generations of AISES students and professionals in STEM. This includes their enthusiasm and laughter with everyone at AISES gatherings. They were LGBTIQ2S+ advocates and facilitated the annual Rainbow Talking Circle. Stan, Laguna Pueblo, is known for referring to the AISES family as "Beautiful Nerds." He passed away peacefully at his home on April 5, 2020 in New Mexico.

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 the virtual 2020 AISES National Conference to help us create safe and positive experiences for everyone.

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 asked to leave the conference immediately. Please contact any AISES staff member or board member if you have any questions.

Code of Conduct

The American Indian Science & Engineering Society (AISES) was established with the goal of developing Native professionals and leaders in the areas of science, technology, engineering and math. In light of this goal, the first student leaders of AISES developed a set of principles that prohibited alcohol, illegal drugs, and harassment. These principals 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 and all forms of harassment and discrimination. This code is meant to reflect the ideals of our Native communities by establishing an expectation that we agree to protect and promote the well-being and growth of all people. This code is expected to be honored when individuals are representing the AISES organization and by all persons participating in AISES activities. To this end, each person is asked to adhere to this 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 this Code of Conduct.

Volunteers

Thank you for spearheading the collection of conference prizes and working with AISES to recruit volunteers!

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

Puget Sound AISES Professional Chapter
Dr. Cara Cowan Watts

Conference Donations

AISES thanks the following for their donations and support of this year’s National Conference. Their generous donations funded the student prizes!

Nancy Papineau
Tacoma, Washington

Sashea Sandoval
Boulder, Colorado

Tulsa Pier Drilling
Claremore, Oklahoma





AMERICAN INDIAN SCIENCE
AND ENGINEERING SOCIETY

At AISES, we are resilient. We are still committed to the bigger picture. Our work continues and we remain singularly focused on our mission.

October 15, 2020

Dear AISES Friends and Family,

Welcome to the 2020 AISES National Conference, the first virtual conference in the history of the organization with lots to look forward to. The National Conference is our signature event, and we are very pleased you can join us over the next three days to learn, share, and interact with people from across the globe – yes, we have a participant joining from Guam.

With everything that is going on, this year's event has greater value and makes our time together even more precious. We believe in staying positive and responsive to the ongoing needs of our members and supporters. Holding the national conference – on schedule – while upholding the safety and wellbeing of our members is at the core of everything we do. We may not be able to change what is happening around us, but we can surely make lemonade from lemons.

Appropriately themed “AISES – Achieve, Inspire, Support, Explore, and Succeed” – our conference speaks to our values and the attributes we strive to accomplish each day – is the stage where trends, research, and opportunities in science, technology, engineering and math (STEM) are discussed in depth.

One of the most important aspects of our national conference is the level of professional development opportunities available. We hope you find encouragement in the line-up of speakers, presenters, research, and events. You will find our agenda to be rich with information and insights from the best and the brightest.

We are pleased to share that in addition to announcing Oscar-winning actor Wes Studi as the featured keynote speaker and entertainer Sage Cornelius, we will proudly unveil the Professional Award winners, the Community and Partner Service Award winners, the Ely S. Parker Award winner, and welcome back Lillian Sparks Robinson as the master of ceremonies. Please join us in congratulating them all!

This year's event is not a leap of faith, but a responsibility to the AISES family, partners, students, and professionals. Joining us are continuing and new regional and national student representatives from across the U.S. and Canada. Their recorded videos show their wisdom and leadership. They are a daily reminder of what is important. They have overcome formidable circumstances, navigating change, and are turning obstacles into learning opportunities. We follow their lead.

AISES is counting on you to: **achieve** a new goal; **inspire** yourself and others; **support** your growth and learning; **explore** and seek out new information and friends; and be **successful** during our time together at the 2020 AISES National Conference.

We wish you good spirits and good health. Enjoy the virtual conference!

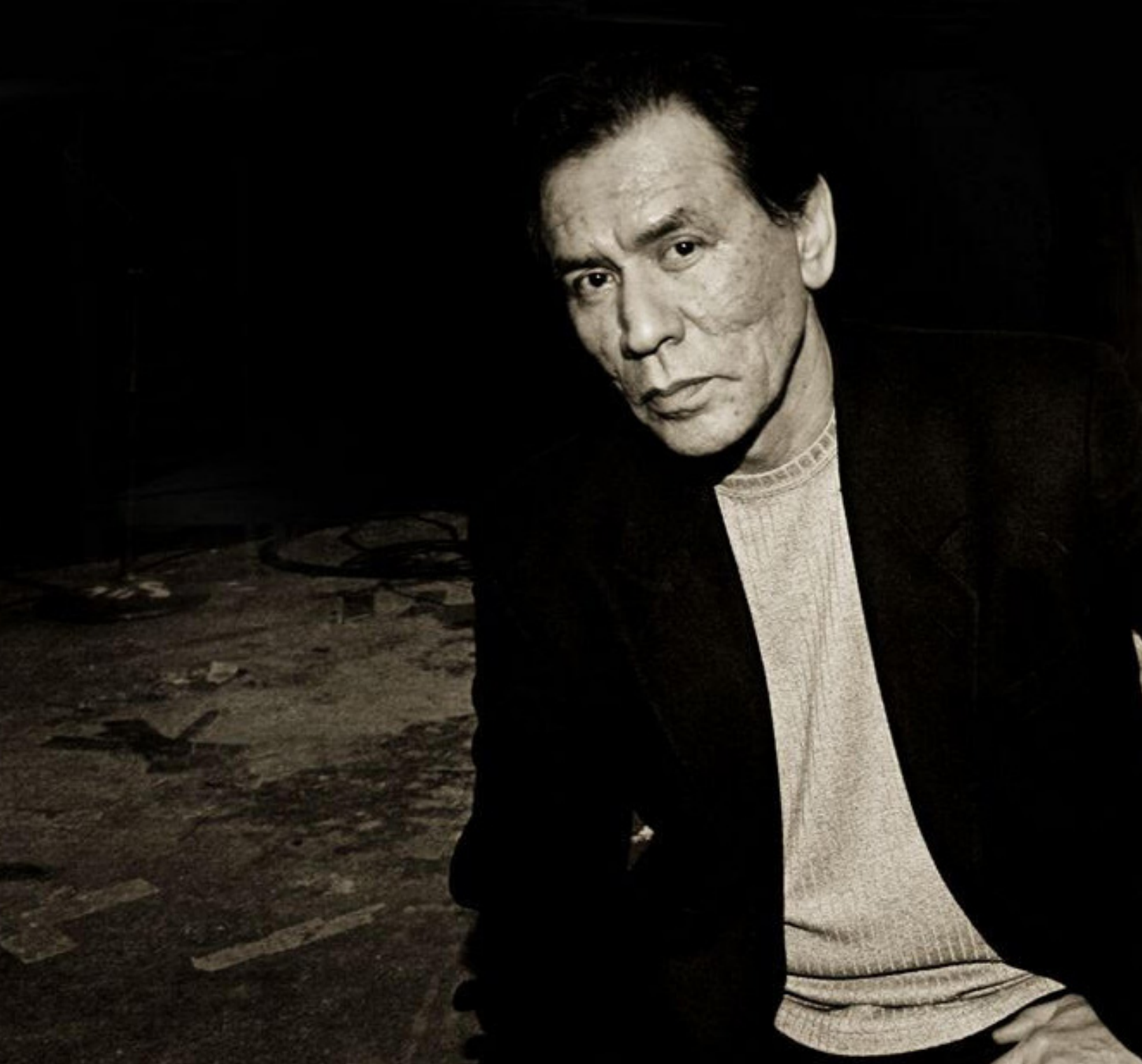
Warmly and with immense gratitude,


Gary Burnette
Board Chair


Sarah EchoHawk
Chief Executive Officer

Keynote Speaker

Yes Audi



Wes Studi, from small-town Oklahoma to internationally acclaimed actor and musician.

The eldest son of a ranch hand, Wes was born in 1947 in Nofire Hollow, in Northeastern Oklahoma. He spoke only his native Cherokee until he was 5. Wes joined the U.S. Army and was stationed at Fort Benning, Georgia. With only 12 months left of his six-year service, he volunteered to go to Vietnam. After an honorable military discharge, Wes returned home with a fire in the belly, and became seriously involved with Native American politics.

After college at Northeastern University in Tahlequah, Oklahoma, Wes shifted his attention to running his own horse ranch and became a professional horse trainer. It was during this era that he began acting at The American Indian Theatre Company in Tulsa in 1983, where he found both the adrenaline rush he craved and the cathartic release he needed. "When you're able to release those feelings in an acting form, it's healthier than leaving them inside," he says of discovering acting.

Wes first took the professional stage in 1984 with "Black Elk Speaks" and has never looked back.

In 1990, Wes portrayed a memorable Pawnee warrior in "Dances with Wolves." Two years later he landed the role of Magua in Michael Mann's "The Last of the Mohicans," the performance that put him on the map.

Throughout his 30-year career he has won numerous awards, including several First Americans in the Arts awards and the 2009 Santa Fe Film Festival Lifetime Achievement Award.

In 2019, Wes made history by becoming the first Native American actor to receive an Oscar. In a statement from the Academy of Motion Picture Arts and Sciences, Wes was honored "for portraying strong Native American characters with poignancy and authenticity." Interestingly, acting was never a goal in Wes' youth.

Wes played the title character in the Walter Hill-directed film "Geronimo: An American Legend" (1993) alongside veteran actors Gene Hackman and Robert Duvall, for which he won a Western Heritage Award. He also made memorable appearances in such films as "Heat" (1995) as Al Pacino's partner, "Deep Rising" (1998) and "Mystery Men" (1999). In 2002, he brought legendary character Lt. Joe Leaphorn to life for a series of PBS movies produced by Robert Redford and based on Tony Hillerman's books "Skinwalkers," "Coyote Waits," and "A Thief of Time."

Wes' other notable film credits include: "The Only Good Indian," which he also produced, James Cameron's Academy Award-winning "Avatar," "Hostiles," "The New World," "Street Fighter," "Seraphim Falls," "Three Priests," and such prestigious television movies as "Crazy Horse," "Comanche Moon," "Streets of Laredo," "Broken Chain," "Bury My Heart at Wounded Knee" and "Bandland." His television credits include Showtime's "Penny Dreadful," "The Mentalist," "Hell on Wheels," and General Abner in "Kings."

At home, Wes' artistic talent extends well beyond acting. He's a skilled stone carver, an accomplished musician and children's book author. "The Adventures of Billy Bean" and "More Adventures of Billy Bean" were written for the Cherokee Bilingual/Cross Cultural Education Center.

He's taken a national leadership role in the promotion and preservation of indigenous languages, acting as the spokesperson for the Santa Fe-based Indigenous Language Institute, and working as a language consultant on several films, including "Avatar" and the PBS documentary "We Shall Remain." He's also active in encouraging the next generation of filmmakers and performers, providing mentorship and participating in apprenticeship programs.



Master of Ceremonies

Lillian Sparks Robinson

CEO and owner of Wopila Consulting, LLC

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 commissioner for the Department of Health and Human Services Administration for Native Americans. In this role she worked on programs and policy, including impacting Native languages, education, and social and economic development for American Indian, Alaska Native, Native Hawaiian, and Pacific Islander communities.

Prior to her service at ANA, Lillian served as the executive director of the National Indian Education Association, where she focused on education policy and appropriations impacting Indigenous students. A former staff attorney at the National Congress of American Indians, Lillian has received numerous awards and recognitions, including being named one of seven young Native American Leaders by USA Today Magazine, one of "40 Under 40" by 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 lives in Baltimore, Md., with her husband, Corey, and son, Connor.



Entertainment

Sage Cornelius

Indigenous Violinist, Composer & Producer

Sage Cornelius is the headline entertainer at the 2020 AISES Virtual National Conference, October 15-17. Sage is a tribal member of the Oneida, Navajo and Potawatomi Nations. From the age of eight, Sage began to effortlessly put a unique spin on the traditional violin as well as his 7-string electric violin. His inspiration was hearing "The Devil Went Down to Georgia" by Charlie Daniels and he hasn't stopped playing since.

Sage has been seen busking on the streets, playing in symphonic orchestras, shredding in metal bands, accompanying Mariachi bands, playing alongside hip-hop artists as well as completing multiple U.S., Canadian, and European tours with national recording soul singer Shawn James. Most recently Sage began collaborating with the world-renowned internet YouTube vlogger, Jared Dines.

Sage has spent time as a private music teacher along with conducting workshops with native youth focused on entrepreneurship and marketing as an independent artist. Creating friendships through music, Sage strives to inspire all who can connect through the universal language of music and he plans to continue to make himself known throughout the world. Sage strives to empower and to be an inspiration to all that hears and sees his performances. Get ready to rock!

Visit <https://www.sagecornelius.com/> to learn more about the talented multi-instrumentalist musician, Sage Cornelius.



2020 National Conference Sponsors

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America's NAVY

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Student Research

AASONA

Undergraduate and Graduate Student Research

Sloan Indigenous Graduate Partnership

High School Poster Research

Bureau of Ocean Energy Management

STEM Activity Day

The Boeing Company

College Student Hackathon

Chevron

hackAISES: High School Mini-Hackathon

Wells Fargo Bank

Student Awards Presentation

National Security Agency
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Networking Suites

National Security Agency
Williams

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Other

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Winds of Change Magazine



Conference Logistics

Note: All Times Listed in Mountain Daylight Time

AISES Council of Elders

Join our Elders at these unique AISES cultural events:

Morning Blessing on Friday, October 16 from 9:00 am - 9:30 am

Talking Circle (LIVE) on Thursday, October 15 from 11:30 am - 1:00 pm

AISES Merchandise

AISES gear gets scooped up fast! Make sure to stop by the [AISES online store](#) to purchase AISES-themed items.

Attendee Orientation Webinar

Visit the AISES YouTube channel to watch a [13-minute webinar](#) that shows the ins and outs of this year's landmark all-virtual conference.

Closing Ceremony

Features fun and lively entertainment, pays tribute to the AISES Professional and Service Award recipients on Saturday, October 17 from 3:30 pm- 5:30 pm.

College and Career Fair

AISES hosts the largest College and Career Fair in Indian Country. The Fair attracts professionals and college recruiters from over 150 corporations, government agencies, and colleges and universities. This mix encourages mentoring and sharing that is unparalleled at any other event. Check out the [booths](#) on the exhibit hall for more information like the *Winds of Change Magazine*, AISES scholarships, internships, program opportunities, and prizes. Interact with exhibitors through chat and video calls on Thursday, October 15 from 12:00 pm - 6:00 pm.

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 2020 National Conference post-conference survey, available in the platform. Also, complete the evaluations at the end of each session to participate in drawings for great prizes which will be announced on the leaderboard under the Help Desk.

Networking

Chat Threads

Access the networking chat threads from the navigation bar located at the top of each screen.

Networking Suites

Interact and meet others with similar interests, including sponsors and exhibitors, on Wednesday, October 14 from 5:00 pm - 7:00 pm in the Posters Hall.

Networking Mixers

LIVE networking sessions for students, graduate students, or professionals on Friday, October 16 from 5:30 pm - 6:30 pm.

Opening Ceremony

Join us as we kick off the first ever all-virtual 2020 AISES National Conference featuring Wes Studi as our keynote speaker and many more inspiring participant messages. Thursday, October 15 from 10:00 am - 11:30 am.

Protocols

Chat conversations are moderated, and the expectation is that everyone always remains respectful and considerate or they will be removed from the conference.

Turn off your virtual backgrounds for better internet connectivity.

No recording through social media or personal devices.

Do not take screen shots with people's faces.

Registration

October 5 is the no exceptions deadline to register for the conference. [Register now!](#)

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, be strategic, and most importantly engage with your fellow conference attendees and presenters. The chat function will be available during the sessions to ask questions of the session presenters.

Student Research Presentation Competition

Pre-college, Undergraduate, and Graduate students will showcase their STEM research at oral and poster presentation sessions during the National Conference on Friday, October 16. We encourage all conference participants to show their support by attending the oral presentations (see the agenda for scheduled times) and poster presentations located in the Posters Hall. Interact with research poster presenters from 9:00 am - 12:00 pm.

Technical (On-line essentials)

Decide on a device. You will be able to attend the conference via any device – tablet, laptop, desktop, or even a mobile phone. While a laptop or desktop is optimal, participants can use any device with an Internet connection. Topical group text chats will be available to attendees on all devices, one-on-one video calls can be accessed only on a laptop or desktop.

Update your Internet browser. To avoid access issues or slow load times, make sure you have the most updated version of your browser. If you need help, there are useful online resources like whatismybrowser.com. The conference platform is most compatible with the Google Chrome Browser.

Check your bandwidth. For a good virtual conference experience, ensure you have enough bandwidth. Generally, an Internet connection between five and 10 megabytes per second (Mbps) should be enough. If you Google “test speed,” you’ll get links to sites such as Speedtest and Measurement Lab that will measure your device’s bandwidth.

Don’t forget your Internet basics. If a session or web page won’t load, you can refresh the page. Remember to hit the refresh button. It might seem obvious, but sometimes people get frustrated waiting around rather than refreshing the page. Not sure how to do this? Get some [help online](#).

Virtual Platform

Auditorium

Access all sessions and other agenda events through the auditorium.

Help Desk

If you require technical assistance while in the conference platform, please go to the help desk.

Lobby

3D lobby functions as a launchpad guiding participants to various sections of the event. From here you may click on our sponsors’ logos for direct access to their exhibit booth or website.

Navigate to all our conference areas, via the lobby graphics or the navigation bar at the top of the screen.

Login credentials

All registered participants will be emailed their username and password by October 7 along with ‘what to know’ information. If you do not receive this email, please contact us at conference@aises.org.

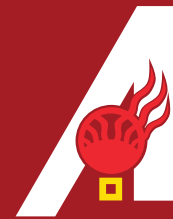
Resource Center

Find documents, poster presentations, session presentations, etc. from the conference host, presenters, exhibitors, or sponsors.

Scavenger Hunt, Gamification and Prizes

Earn points and win prizes with your live interaction in all the areas of our conference. There are over 60 donated prizes! Watch the leaderboard for up-to-date results!





Conference Highlights and Attendee Orientation

AISES is pleased to bring an all-new virtual format to the 2020 National Conference. The conference will include some of the traditional in-person activities through the virtual platform including networking suites, an opening ceremony, sessions for all tracks, research presentations, Indian Country's largest College and Career Fair, and so much more. Learn more about the conference, membership, and resume upload by viewing the [attendee orientation](#).

Highlights

- Full access to the AISES virtual conference platform for the duration of the event
- The Largest College and Career Fair in Indian Country. Attendees will be able to interact with exhibitors through chats and video calls
- 60 live and pre-recorded events. Attendees will be able to chat with presenters to ask questions and take live polls, surveys and quizzes
- Research Competitions (virtual oral and poster presentations)
- Sessions for all tracks
- Keynote Speaker
- Access to the Opening and Closing Ceremonies including entertainment
- Student Awards presentation
- Engage in virtual networking sessions
- Opportunity to participate in a virtual talking circle
- Virtual STEM Activity Day
- Virtual hackAISES (high school students) and Hackathon (college students)
- Games and Scavenger Hunts
- The ability to interact and chat with conference attendees, sponsors, partners, and exhibitors.

A woman wearing a white hard hat and a light blue pinstriped shirt is seen from behind, looking out at a field of wind turbines under a clear blue sky. Her hair is tied back in a ponytail with a purple hair tie.

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Agenda

All EVENTS will have audience interaction through chat function.
For full session descriptions and presenter bios, please go to
<https://conference.aises.org/agenda>

Wednesday, October 14, 2020

All Times Listed in Mountain Daylight Time

TRACK	TIME (MT)	PRESENTATION TITLE
Boeing STEM Day / High School	12:00pm - 1:00pm	Boeing STEM Day: ecoAction Virtual Field Trip & Creating Solutions for the AISES Energy Challenge
Boeing STEM Day / High School	1:00pm - 2:00pm	Boeing STEM Day: Hoop Gliders
Boeing STEM Day / High School	2:00pm - 3:00pm	Boeing STEM Day: Weaving Traditional Knowledge into Western Science using the Canadian Light Source Synchrotron
Boeing STEM Day / High School	3:00pm - 4:00pm	Boeing STEM Day: An energetic session on Land, Food, Energy, Air and Water i.e. Matter that matters; and Space, or lack thereof...
Boeing STEM Day / High School	4:15pm - 7:00pm	hackAISES: Wells Fargo Bank Mini-Hackathon
General	5:00pm - 7:00pm	Networking Suites - 3M, Intel, The Boeing Company, Armed Forces and Intelligence – Sponsored by National Security Agency, Health and Medical Sciences, Energy – Sponsored by Williams, Tech, Telecom and Casino Gaming, Academia and Research, Natural Resources, Food and Agriculture, Transportation Manufacturing and Consumer Goods

Thursday, October 15, 2020

All Times Listed in Mountain Daylight Time

TRACK	TIME (MT)	PRESENTATION TITLE
General	10:00am - 11:30am	Opening Ceremony
General	11:30am - 1:00 pm	Virtual Talking Circle (All Welcome)
College / Professional	12:00pm - 6:00pm	College and Career Fair
Agricultural Sciences / High School / College	1:00pm - 1:50pm	Forestry Fun with Phone Apps and Project Learning Tree Activities
College / High School / Professional / General	1:00pm - 1:50pm	Forming Tribal Partnerships Through USGS Technical Training Opportunities
High School	1:00pm - 1:50pm	Navy's \$180,000 Scholarship Program
Health Sciences & Medical / High School / College	2:00pm - 2:50pm	Careers with a PhD in Medical Research - Preparing for, finding, and applying to graduate programs in biomedical research
College / General	2:00pm - 2:50pm	Career Wheel

Agenda

All EVENTS will have audience interaction through chat function.
For full session descriptions and presenter bios, please go to
<https://conference.aises.org/agenda>

College / Professional / General	2:00pm - 2:50pm	IBM Apprenticeships: No Degree? No Problem
Computer Science / General	3:00pm - 3:50pm	Computer and Information Science and Engineering Funding Opportunities and Advice for Applying for Competitive National Science Foundation Proposals
High School / Educator	3:00pm - 3:50pm	The Verna J Kirkness Education Foundation
College	4:00pm - 4:50pm	Funding Graduate School and Beyond
General	4:00pm - 4:50pm	Perceptions of an Indigenous STEM Nonprofit Contributions to Self-Efficacy and Educational Experience
High School / Educator	4:00pm - 4:50pm	Co-Op Not Your Typical Education

Friday, October 16, 2020

All Times Listed in Mountain Daylight Time

TRACK	TIME (MT)	PRESENTATION TITLE
General	9:00am - 9:30am	Morning Blessing with the AISES Elders
High School / College / General	9:00am - 12:00pm	Poster Research Presentations
Agricultural Sciences / General	9:30am - 10:20am	NASA and Food Production: From the Home Planet to Mars plus Stories from Natives at NASA taking us to Space
College / General	9:30am - 10:20am	Facilitating Successful Meetings
High School / College / General	9:30am - 10:20am	STEM Careers in the Casino Industry
High School / College	9:30am - 10:20am	Blazing a Pathway Towards Indigenous Resilience: Preparing for a Career in Computer Science and Native Representation in Artificial Intelligence to Effect Change in Our Communities
Research	9:30am - 10:20am	Undergraduate Presentation: Building an Efficient Reversible Fuel Cell Stack for Use as a Backup Power Source
Health Sciences & Medical / College / General	10:30am - 11:20am	Opportunities and Career Options in Biomedical Sciences and Tribal Health Research
STEM & Business / Computer Science / General	10:30am - 11:20am	Hospitality and Indian Gaming Technology Applications: Media, Computer Vision, 5G, Robotics, Cloud Computing
College / Professional / General	10:30am - 11:20am	Authentic Executive Presence

Agenda

All EVENTS will have audience interaction through chat function.
For full session descriptions and presenter bios, please go to
<https://conference.aises.org/agenda>

High School / College	10:30am - 11:20am	Landing on Your Moccasins: Not on Your Gucci's: Blood Quantum, STEM, and You
Research	10:30am - 11:20am	Graduate Presentation: Breeding for Reduced Cadmium Accumulation in Baby Leaf Spinach Undergraduate Presentation: The Effect of Photovoltaic Panels on Ecoroof Moisture Content
College / Professional / General	11:30am - 12:20pm	Improving your Chemistry Outreach through Improving Participant Attitudes
High School / College / General	11:30am - 12:20pm	It's a Material World: Materials Science & You!
High School / College	11:30am - 12:20pm	The Video Gaming and Esports Ecosystem
Research	11:30am - 12:20pm	Graduate Presentation: The Security-Utility Trade-off for Iris Authentication and Eye Animation for Social Virtual Avatars Undergraduate Presentation: Detecting Self-Harm in Patients with Diabetes Utilizing Unsupervised Learning Techniques
STEM & Business / General	1:00pm - 1:50pm	The Benefits of the Video Gaming and Esports Industry for Indian Country
General	1:00pm - 1:50pm	NSA Cybersecurity
High School / College	1:00pm - 1:50pm	Disruptive Technologies in a World of Innovation
High School / College	1:00pm - 1:50pm	Transitioning Between Two Worlds: Reservation to the Great Big World
Research	1:00pm - 1:50pm	Graduate Presentation: In-situ Oxygen Isotopic Exchange Vibrational Spectroscopy of Rhenium Oxide Surface Structures on Cerium Oxide.
STEM & Business / General	2:00pm - 2:50pm	Turning your ideas into Patents!
College / Professional / General	2:00pm - 2:50pm	The importance of publications and their role in growing your sphere of influence
Computer Science / College	2:00pm - 2:50pm	Semiconductors, Transistors, and Microchips: How to design and make microelectronics that impact people's lives
High School / College	2:00pm - 2:50pm	Native Financial Cents for College Students
Research	2:00pm - 2:50pm	Graduate Presentation: Sustainability Indicators for Selected Greenhouse Production Facilities in North America Graduate Presentation: Cultural Burning and Heat Treatments for Forest Insect Management of the Goldspotted Oak Borer (GSOB)
College	3:00pm - 3:50pm	Explore NASA: Internships and Pathways Info Session and NASA Managers Overview

Agenda

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Professional / General	3:00pm - 3:50pm	Values Assessment
Agricultural Sciences / High School / College	3:00pm - 3:50pm	Exploring Opportunities with the Natural Resources Conservation Service
Computer Science / High School / College	3:00pm - 3:50pm	Computer Science Opens Doors – Walk Through Them
Research	3:00pm - 3:50pm	Graduate Presentation: Ethical/Cultural/Spiritual Conflicts Indigenous Students and Professionals in STEM Face
College	4:00pm - 4:50pm	College Chapters: Getting Started and Staying Successful
Educator	4:00pm - 4:50pm	Engaging Youth through STEM Competitions
Professional / General	4:00pm - 4:50pm	Model Small Canadian Communities & Asset Management
General	4:00pm - 4:50pm	Planetary Nomenclature and Indigenous Communities
Research	4:00pm - 4:50pm	Undergraduate Presentation: Incorporation of Functionalized Bone Improves Mechanical Strength of PEGDA Scaffold Graduate Presentation: Plant-Microbial Feedbacks in Intercropping Systems
Virtual Student Mixer	5:30pm - 6:30pm	Virtual Student Mixer
Virtual Graduate Student Mixer	5:30pm - 6:30pm	Virtual Graduate Student Mixer
Virtual Professional Mixer	5:30pm - 6:30pm	Virtual Professional Mixer
College Student Hackathon	5:30pm - 10:00pm	Chevron College Student Hackathon

Saturday, October 17, 2020

All Times Listed in Mountain Daylight Time

TRACK	TIME (MT)	PRESENTATION TITLE
General	9:30am - 10:30am	Sequoyah Acknowledgement Ceremony
STEM & Business / General	10:30am - 11:20am	Native Financials Cents Train-the-Trainer
High School / College	10:30am - 11:20am	Indigeneering in the Automotive Industry
High School / College	10:30am - 11:20am	Indigenous Engineering Design, Ethics & Role Models

Agenda

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For full session descriptions and presenter bios, please go to
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General	11:30am - 12:20pm	The Symbiotic Relationship Between the AISES Energy Challenge and Future STEM
High School / College	11:30am - 12:20pm	Pathways to Google: A Panel
High School / College / General	11:30am - 12:20pm	United States Air Force Pathway to Wings Career Brief
High School / College	12:30pm - 1:00pm	Student Awards Presentation
General	12:30pm - 1:00pm	State of AISES
College / Professional	1:00pm - 2:00pm	AISES Members Meeting
Professional / General	1:00pm - 1:50pm	Agility & Leadership in Challenging Times
General	1:00pm - 1:50pm	Inside the Smile: Learning about Culture, Career, and Inclusion at Amazon
High School	1:00pm - 1:50pm	What I Wish I Knew Before Going To College: An Indigenous Student's Perspective of Higher Education
STEM & Business / General	2:00pm - 2:50pm	Tribal Energy Innovators - Resilience and Sovereignty through Renewable Energy
College / General	2:00pm - 2:50pm	Invention to Impact
High School / College	2:00pm - 2:50pm	College Scholarship Application Workshop: Going to School Debt Free
General	3:30pm - 5:30pm	Closing Ceremony





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