



# REGION 3 CONFERENCE

Expanding the Possibilities

CONFERENCE PROGRAM

THE UNIVERSITY OF ARIZONA MARCH 22-23, 2024

# 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 UArizona AISES executive 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 this Code of Conduct.

# LAND ACKNOWLEDGEMENT

We respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. Committed to diversity and inclusion, the University strives to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.



University of Arizona American Indian Science & Engineering Society Shantz Building 1177 E. 4th Street, Room 429 Tucson, AZ 85721

March 22, 2024

#### Greetings!

Thank you for joining us for the 2024 AISES Region 3 Conference at the University of Arizonal It is my pleasure to welcome you all to wonderful city of Tucson. If this is your first visit to Tucson, I hope you will enjoy the area known for its moderate spring weather, beautiful desert landscapes, vibrant Mexican-American culture, and delicious cuisine. Just minutes away from Saguaro National Park, and one hour away from the 9,157-foot summit of Mount Lemmon, the Tucson area is surrounded by richly diverse lanscapes. If this is your first time visiting the University of Arizona, our chapter extends a special "welcome".

As we begin our time together, we respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. Committed to diversity and inclusion, the University strives to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.

The University of Arizona executive board, conference planning committee, and volunteers have worked hard to ensure that your time at the Region 3 Conference is exciting, enjoyable, and valuable. We're thrilled to host over 200 registered conference attendees on our campus!

Over the next two days, you will be immersed in STEM through activities, sessions, and special tours. With more than 30 sessions facilitated by presenters from federal, corporate, and academic sectors, we are confident that you will find one that interests you.

We're excited to offer a tour of the Biosphere 2, the world's largest Earth science experiment! Participants will have the opporunity to explore the world in a 3.14-acre laboratory with active research systems spanning from ocean to desert environments and much more. Additionally, we're excited to also offer tours of the Wyant College of Optical Sciences, Arizona Simulation Technology & Education Center (ASTEC) Laboratory, and Arizona State Museum.

Our team is here to help! Volunteers and chapter members are ready to offer their assistance and guidance wherever needed. Additionally, we encourage you to meet new friends, exchange ideas, build interests, influence others, and focus on your intellectual growth.

I hope you enjoy your time in Tucson and at the University of Arizona. If you have any questions, suggestions, or just want chat, look for me during the conference. Thank you for being apart of this monumental event and showing your support!

Bear Down,

#### **Christian Jimmie**

**UArizona AISES Chapter President** 

# **CONFERENCE LOGISTICS**

Note: All times are Mountain Standard Time (local time)

# University of Arizona Guest Wi-Fi

Network: **UAGuest** 

UAGuest is a wireless network available to visitors of the University of Arizona. After visitors select the UAGuest network on their devices, they can establish UAGuest accounts by entering a username and phone number. The account will be valid for five days. After that time, visitors will need to establish a new account.

UAGuest is an unsecured network. Do not send private information such as credit card numbers over this network. UA students, faculty, and staff should use UAWiFi.

# On-Site Registration Check-In and Information

Registration check-in will take place in the Integrated Learning Center lobby (outside auditorium 120) on Friday, March 22nd from 8:00 AM to 10:00 AM and will reopen at 12:00 PM at McClelland Hall on the first floor near the south entrance. Registration check-in will remain open on the first floor of McClelland Hall throughout Saturday, March 23rd. Stop by to pick up your conference badge or connect with conference volunteers with questions. Your name badge allows you access to all daily conference functions. **Please always wear your badge**. If you lose your badge, please go to the registration check-in table for a replacement.

#### Resume Room

The Resume Room is available for students to fine tune their resumes to distribute at the College and Career Fair. The room will be equipped with printers and staffed by volunteers from the RTX Alliance of Indigenous Nations (RAIN) to help you polish your resume.

## Student Research Poster Presentations

High School, Undergraduate, and Graduate students will showcase their STEM research during the poster presentation session on Saturday, March 23. We encourage all conference participants to show thir support by attending the poster presentations in the McClelland Hall Atrium.

Presenters are expected to setup their posters on Saturday, March 23, between 12:00 PM and 1:30 PM next to the College and Career Fair floor.

Presenters must be present at their poster during the presentation time, 1:30 PM - 4:30 PM on Saturday, March 23.

All posters are to be removed by the presenters on Saturday, March 23 before 5:30 PM.

# A SPECIAL THANK YOU TO OUR SPONSORS!

















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# FOUNDATION



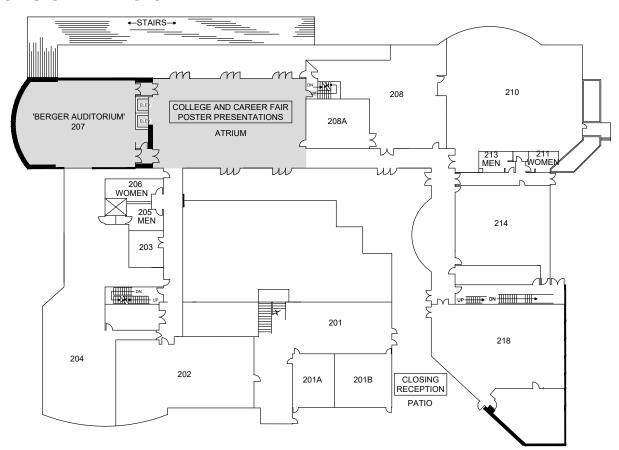


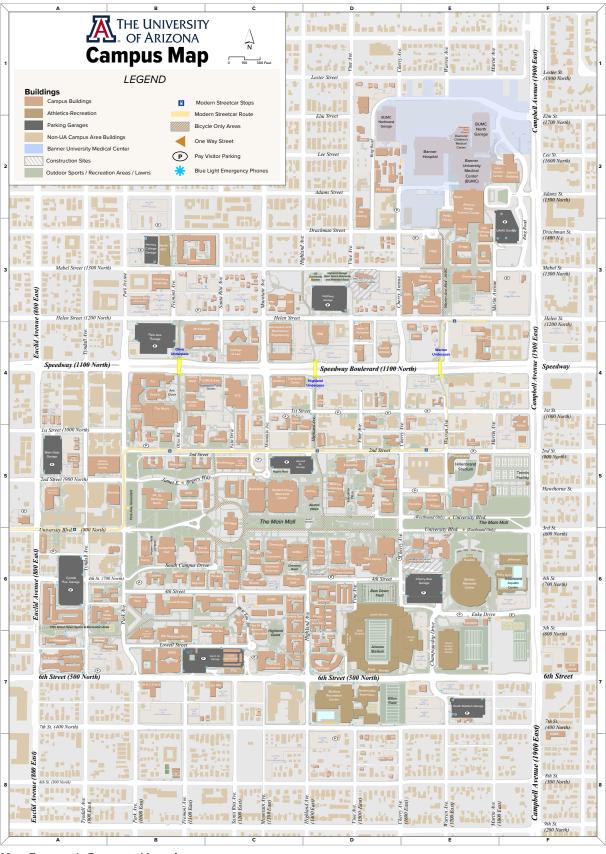


# **REGION 3 CONFERENCE FLOOR PLANS**

#### FIRST FLOOR MEN 121A WOMEN WOMEN 121C MEN COURTYARD REGISTRATION CHECK-IN

# **SECOND FLOOR**





#### **Most Frequently Requested Locations**

Location	Name	Location	Name
D5 er E2 D7 B5 E6	Highland Commons (Campus Health & Disability Resource Center) Holscaw Hall (Music Building) Main Library Main Mall Marroney Theatre (Drama Building McKale Memorial Center Museum of Art Nugent	C7 B4 D6 C5-F5 B4 E6 B4 C6	Pacheci Police Schaefe Student Student Swede Univers
	D5 er E2 D7 B5 E6 ns) C7 B6 B4	D5	D5

Name	Locatio
Pacheco ILC	D5
Police	F4
Schaefer (Center for Creative Photograph)	) B4
Student Recreation Center	D7
Student Union Memorial Center	C5
Swede Johnson (Alumni)	D4
University Services Building	A5



# FRIDAY, MARCH 22, 2024

8:00 AM - 10:00 AM	Conference Registration	Integrated Learning Center Lobby
8:30 AM – 10:00 AM	Opening Ceremony	Integrated Learning Center Room 120
10:15 AM – 3:00 PM	Biosphere 2 Tour	Biosphere 2, Oracle, AZ
10:15 AM - 12:30 PM	Optical Sciences Tour	Wyant College of Optical Sciences
	Arizona State Museum Tour	Arizona State Museum
12:30 PM - 1:45 PM	Lunch-on-Your-Own	
1:00 PM – 2:00 PM	Arizona Simulation Technology & Education Center (ASTEC) Lab Tour (3 x 20 min – 20 people each)	Health Sciences Innovation Building (HSIB), 7th Floor
1:45 PM – 4:30 PM	Resume Room (Hosted by the RTX Alliance of Indigenous Nations)	McClelland Hall Room 126
1:45 PM – 4:30 PM	Casualty Actuarial Society Sponsor Session	McClelland Hall Room 125
	Indian Health Service Sponsor Session	McClelland Hall Room 129
	Northeastern University Khoury College of Computer Sciences Sponsor Session	McClelland Hall Room 130
	RTX Sponsor Session	McClelland Hall Room 134
3:15 PM - 4:30 PM	W.L. Gore & Associates Sponsor Session	McClelland Hall Room 125
	Agnese Nelms Haury Program Sponsor Session	McClelland Hall Room 129
	NASA Sponsor Session	McClelland Hall Room 134
5:00 PM - 7:00 PM	Networking Mixer	College of Engineering Courtyard

# SATURDAY, MARCH 23, 2024

9:00 AM -4:20 PM	Native Vendor Row Opens	McClelland Hall, 1st Floor
9:00 AM - 12:00 PM	Resume Room (Hosted by the RTX Alliance of Indigenous Nations)	McClelland Hall Room 126
9:00 AM - 9:50 AM	Balancing Act: Unveiling the Complexities of Arid Forest Management Through Thinning Techniques, <b>Josephine Bitsui</b>	McClelland Hall Room 125
	Stories from and about our Indigenous Veterinarians, <b>Alberta Arviso</b>	McClelland Hall Room 127
	Summer Research Opportunities, <b>Katerina Dontsova</b>	McClelland Hall Room 128
	Putting Your Best Foot Forward – Preparing, Applying, and Interviewing for Research Positions, <b>Naomi Lee</b>	McClelland Hall Room 133
	Project Management: Bridge Building, <b>Sheri Jackson</b>	McClelland Hall Room 134
10:00 AM - 10:50 AM	Healthy Tribes: Supporting Innovative, Culturally driven approaches to improving health and wellness in American Indian/ Alaska Native populations, <b>Julianna Reece</b>	McClelland Hall Room 125
	Pathways to a Successful Career, <b>Erny Zah</b>	McClelland Hall Room 127
	The feasibility of controlled environment agriculture from the perspectives of the indigenous farmers in the San Juan River Valley, <b>Brandon Francis</b>	McClelland Hall Room 128
	Shoot for the moon, and land amongst the stars - NASEP Galileoscope Build, <b>Carol Seanez</b>	McClelland Hall Room 129
	The Value of Individual Development Plans for Professional Development, <b>Naomi Lee</b>	McClelland Hall Room 133
	Indigenous Resilience Center: Strengthening Indigenous STEM Faculty and Community Partnerships, <b>Cherie De Vore</b>	McClelland Hall Room 134

# SATURDAY, MARCH 23, 2024

11:00 AM - 11:50 AM 12:00 PM - 1:30 PM	Indigenous Knowledge, Food, Sovereignty, and Wellness with Rob Kineen, IndigiWellbeing	McClelland Hall Room 127
	New Hires: Navigating the Transition from College to Industry, <b>Alexa Martinez</b>	McClelland Hall Room 128
	Shoot for the moon, and land amongst the stars - NASEP Galileoscope Build, <b>Carol Seanez</b>	McClelland Hall Room 129
	Administration for Native Americans (ANA) 101: Learn how ANA funding can assist in supporting projects in the areas of STEM for the benefit of Indigenous communities, Richard White	McClelland Hall Room 133
	American Indian Cancer Disparities in the Southwest – Perspectives of Clinicians, Community, and Cancer Researchers, Allan Paxson	McClelland Hall Room 134
	Career Fair and Poster Presentation Setup	McClelland Hall Atrium
	Lunch (meal cards)	Student Union Memorial Center
1:30 PM - 4:30 PM	Career Fair and Poster Presentations	McClelland Hall Atrium
	Is your destiny healing your community?,  Dougherty Tsalabutie	McClelland Hall Room 125
1:30 PM - 2:20 PM	Healing Our Communities: Exploring Nursing Pathways and Climate Justice, <b>Lisa Kiser, Tarnia Newton, and Timian M. Godfrey</b>	McClelland Hall Room 127
	Natives in Data Science: A Panel About Data Use in Indian County, <b>Angela Marquez</b>	McClelland Hall Room 128
	Agrovoltaic Planting Beds to teach Native K-8 students about the food, energy and water nexus, Kelly Simmons-Potter, Karletta Chief, Sean Ryan, and Andy LaFrate	McClelland Hall Room 129
	Camera from an Optics Perspective, <b>Micah Mann</b>	McClelland Hall Room 133

# SATURDAY, MARCH 23, 2024

2:30 PM - 3:20 PM	AISES Chapter Success, <b>Lisa Paz</b>	McClelland Hall Room 125
	Photovoice: A Community Dialogue Around how we Define Success through Participatory Photography, <b>Angela Marquez</b>	McClelland Hall Room 128
	It's About Time – Practical Time Management Practices to Maximize Your Productivity,  Brandon Polingyumptewa	McClelland Hall Room 129
	Culture, Community, Science: Foundations of Indigenous Civilizations of the Western Hemisphere, <b>Jon Ghahate</b>	McClelland Hall Room 133
	Nurturing Plants: Hydroponics to Increase Food Security and Indigenous Food Sovereignty, <b>Breanna Lameman</b>	McClelland Hall Room 134
3:30 PM - 4:20 PM	Bridging the Gap Between Brain and Machine – Developing Novel Semiconductor Electronics for Neuromorphic Computing, Xiaodong Yan	McClelland Hall Room 127
	Strengthening Community STEAM Assets on the Navajo Reservation, <b>Victoria Roanhorse</b>	McClelland Hall Room 128
	Navajo Nation Artemisia Fungal Endophyte Diversity and Climate Change, <b>Jessica</b> <b>Begay</b>	McClelland Hall Room 129
	Factors of Health: Genetic Counseling,  Juliana Williams	McClelland Hall Room 133
4:30 PM -5:30 PM	AISES Region 3 Caucus, <b>Leo Bia</b>	McClelland Hall Room 207
6:00 PM - 8:00 PM	Closing Reception	McClelland Hall Patio



# **EXECUTIVE BOARD**

#### Dr. Karletta Chief (Navajo)

Professor, Department of Environmental Science Co-Advisor

#### **Dr. Cherie De Vore** (Navajo)

Assistant Professor, Department of Chemical & Environmental Engineering Co-Advisor

#### Leo Bia (Navajo)

Graduate Student, Optical Sciences AISES Region 3 Student Representative

#### Kiara Begay (Navajo & Tohono O'odham)

Graduate Student, Applied Biosciences AISES Region 3 Conference Sponsorship Director

#### Christian Jimmie (Navajo)

Graduate Student, Civil Engineering President

#### Aiden Tsingine (Navajo)

Sophomore, Electrical Engineering Vice President

#### Joshua Henry (Navajo & White Mountain Apache)

Graduate Student, Biomedical Engineering Secretary

### **Emery Jackson** (Navajo)

Sophomore, Physiology & Medical Sciences Treasurer

## **Kailey Curley (Navajo)**

Sophomore, Neuroscience Historian





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