

THE



UtahStateUniversity

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A CELEBRATION OF GREAT
ACHIEVEMENTS IN
2023

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Dear Utah, Our USU Community, Supporters and Friends,

I am pleased to share this Year in Review to showcase the academic highlights, collective achievements, and spirit of innovation that defines Utah State University — a testament to the dedication of our faculty, the passion of our students, and the unwavering support of our communities across Utah.

This celebrates just some of our accomplishments, aspirations, and challenges, and I hope it inspires you as we embark on a new chapter in our university's history. The photos and stories within these pages are more than just statistics — they are narratives of impact in our communities, resilience, and passion in the pursuit of knowledge.

I am excited about the possibilities that lie ahead. We will continue to invest in cutting-edge research, create environments that encourage collaboration, drive interdisciplinary initiatives with economic impact, and build strategic public-private partnerships — all while nurturing the talents of our students and faculty, and strengthening our connections with the broader community and state in the pursuit of access, excellence, and impact.

I invite you to explore the pages with the same enthusiasm and pride that I feel as your new president. Our journey together promises to be exciting, and I am confident that, with your support, we will continue to write a story of success, resilience, and progress.

With great anticipation and optimism for the journey ahead,

Elizabeth R. Cantwell
President



VIDEO: President Elizabeth Cantwell discusses her initial areas of focus for the university.

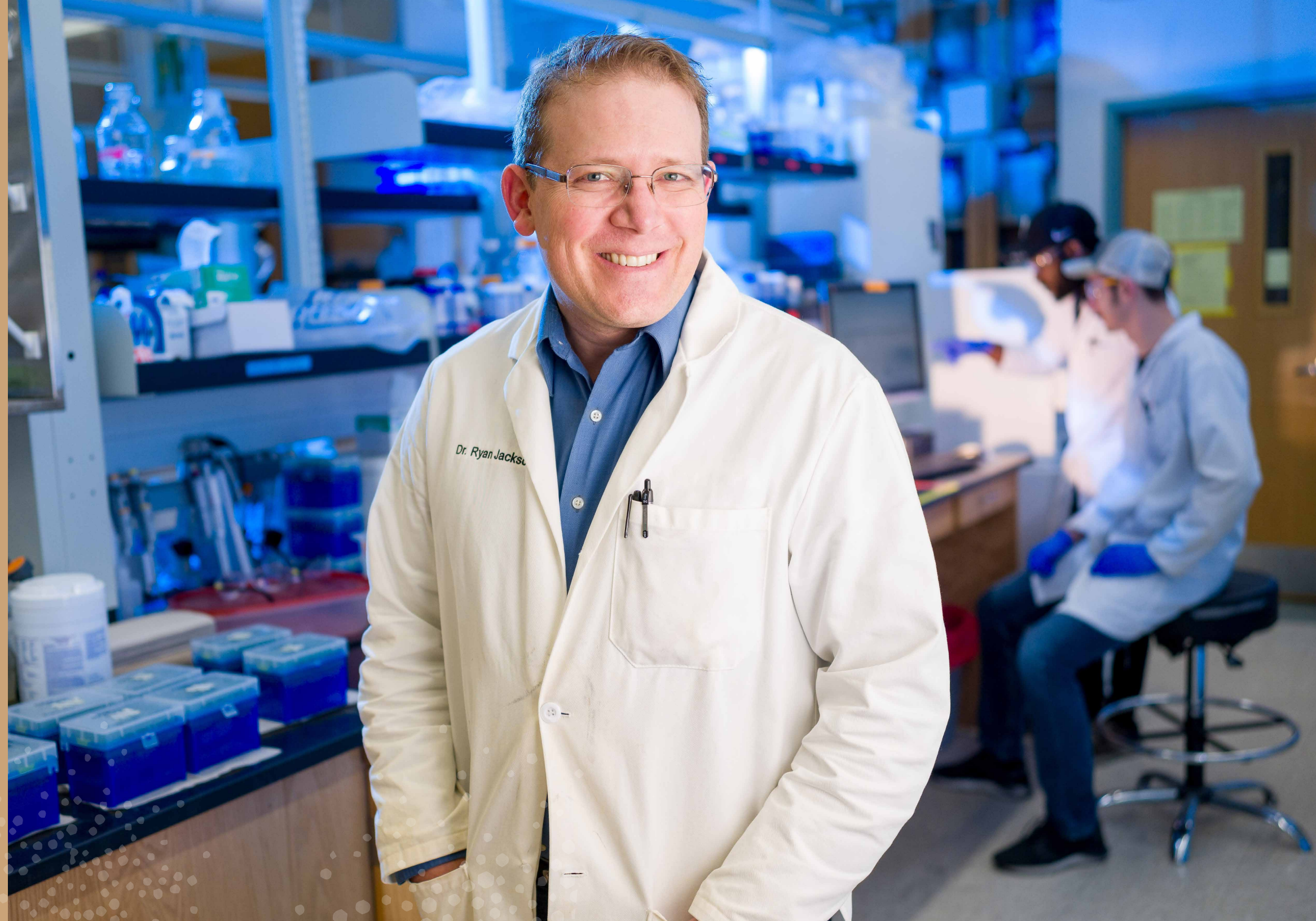
REVOLUTIONARY RESEARCH

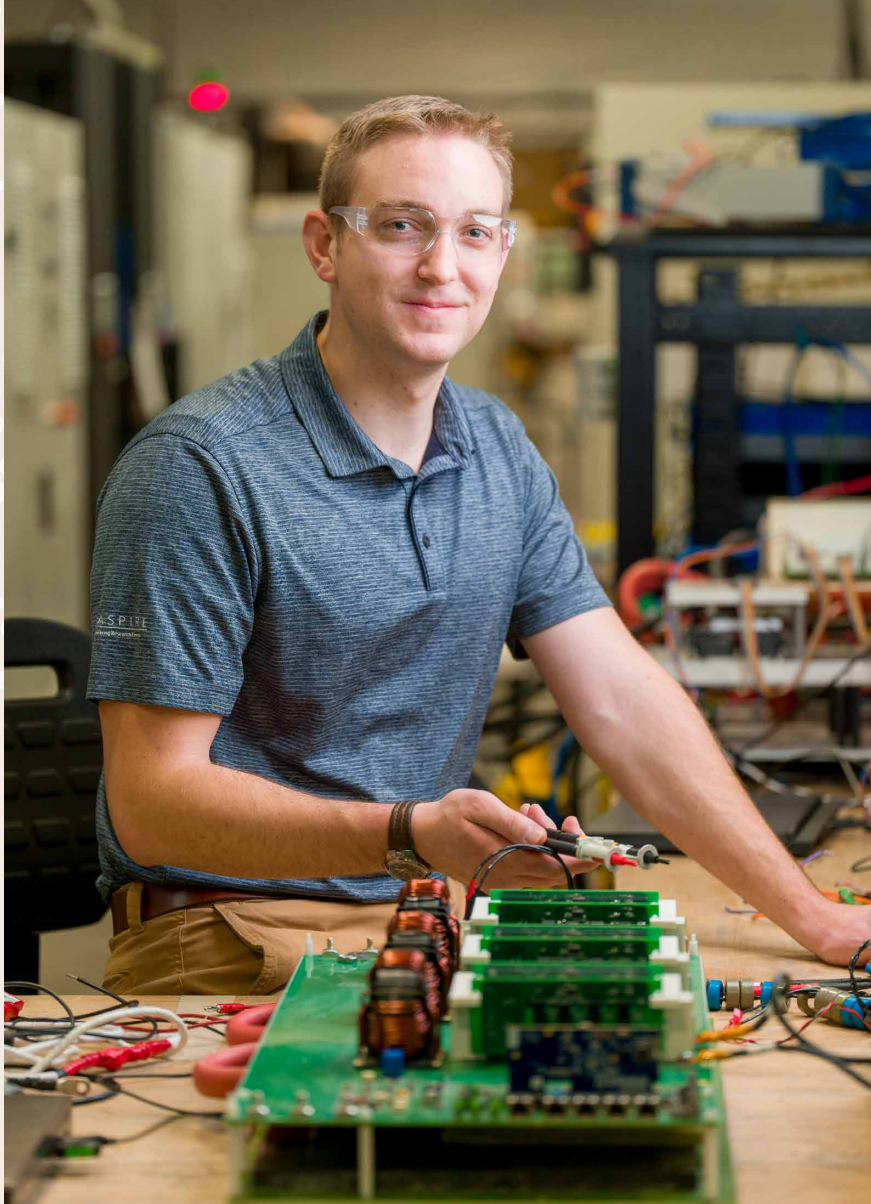
CRISPR Breakthrough

Doctoral student Thomson Hallmark and faculty mentor Ryan Jackson discovered a CRISPR system that can target and destroy cells with specific RNA sequences — an ability that could revolutionize medicine and other fields. Ryan Jackson was also selected this year as the USU Department of Chemistry and Biochemistry's R. Gaurth Hansen Professor.



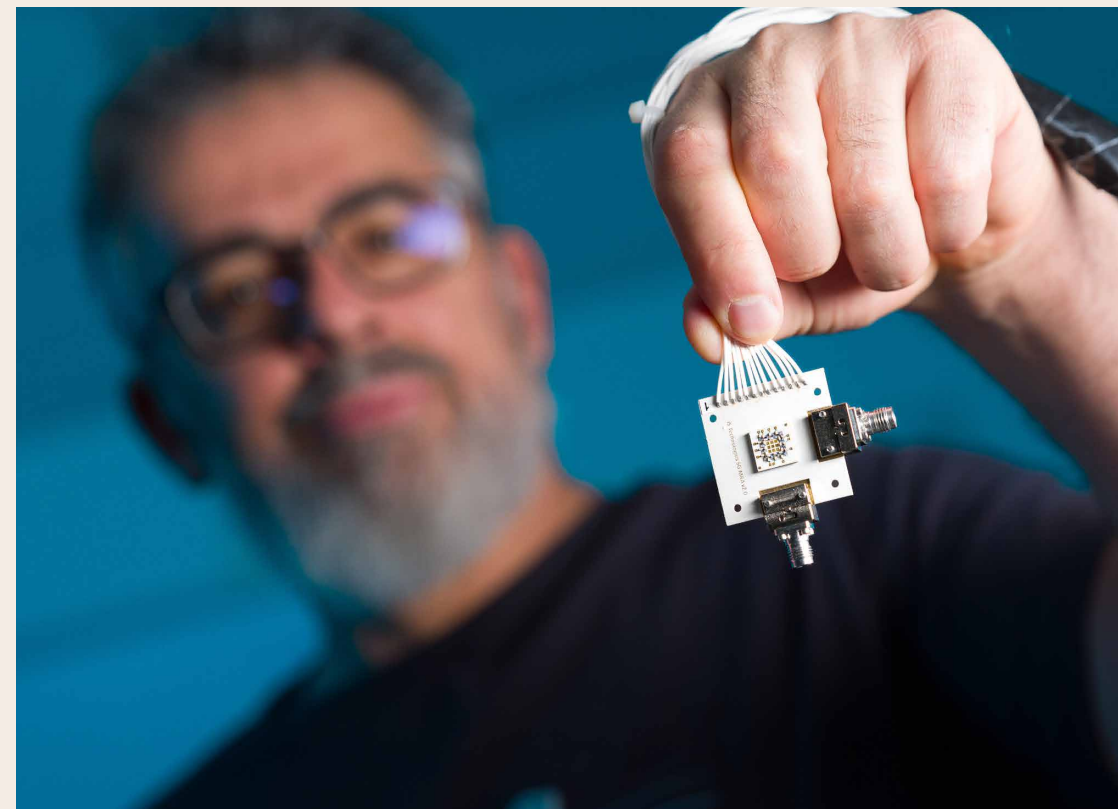
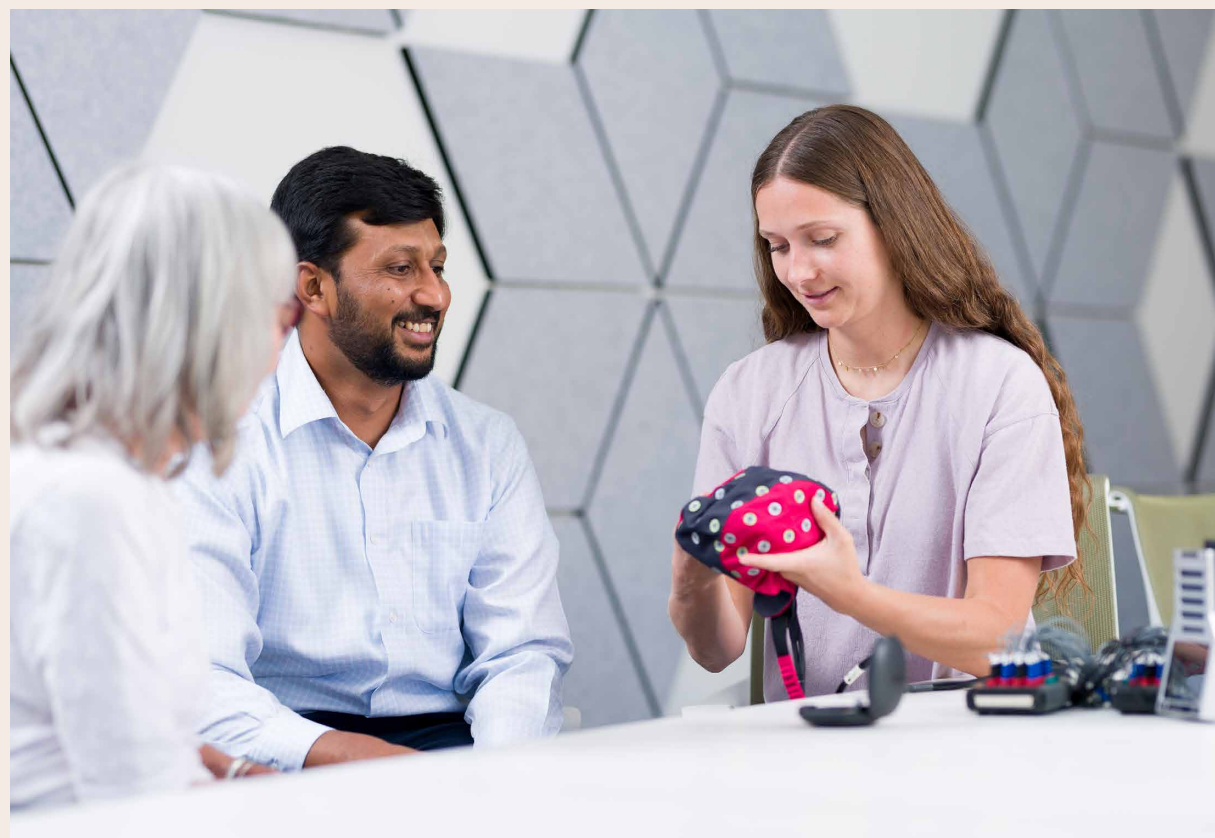
VIDEO: USU biochemists describe structure, function of newly discovered CRISPR immune system.





◀ Improving Electric Transportation

USU's ASPIRE Research Center brought in more than \$3 million in grants to build pilot highways that can wirelessly charge electric cars in multiple states and bring battery-powered passenger trains to North America.



VIDEO: New directions in wireless communication.

◀ Clearing the Airwaves

Engineering Professor Bedri Cetiner patented a new antenna that can adapt to send and receive signals in particular shapes and directions, reducing noise on today's crowded airwaves.

◀ Alzheimer's Disease & Dementia Research Center

USU's ADRC reached its first anniversary with impressive accomplishments: Building a solid team, funding Alzheimer's research across multiple disciplines, and sharing research via scientific journals and presentations to national societies and state nonprofits.



MAKING EDUCATION AVAILABLE TO ALL

Native Americans in Utah Attend Free

USU's Native American Student Scholarship ensures that all tuition and student body fees are covered for Aggies who are enrolled in federally recognized tribal nations in the region.



◀ Strengthening Society

To ensure strong communities, there's a growing need for social work professionals nationwide. USU is meeting that need with programs around the state.

Native Teaching Methods ▶

USU Social Work professors are researching Indigenous methods of imparting knowledge that may better match with Indigenous students' learning styles.



▲ Blue Skies

A new hangar and technician training facility is on its way to the Carbon County Airport, turbo-charging USU Eastern's aviation maintenance offerings, thanks to a \$1.4 million grant.

OUR LAND, WATER, AIR

Report to the Governor

The Janet Quinney Lawson Institute for Land, Water, and Air released its 2023 report, highlighting key issues and concerns in Utah's land, water, and air, with additional special sections highlighting the Colorado River and Utah's energy. The report offers expert insights to help guide and inform policy decisions for the state's future.



READ MORE:
Report to the
legislature on
Utah's land,
water, and air
released.



Dust Diagnostics

USU's Randy Martin is working with the Utah Division of Air Quality to determine which halogens are coming off the lakebed and in what amounts to better understand chemical reactions that could exacerbate pollution.



VIDEO: What's in our air? USU researchers investigating halogen concentrations around the Great Salt Lake.



Website for the Wetlands

Utah Public Radio has created an interactive website to demonstrate the importance of Great Salt Lake wetlands to more than 10 million birds.



Guarding the Great Salt Lake

USU, University of Utah, and state agencies teamed up to offer solutions to return the Great Salt Lake to **healthy water levels**. They helped form and lead the Great Salt Lake Strike Team to engage experts in public policy, hydrology, water management, climatology, and dust.

UTAH SPACE UNIVERSITY

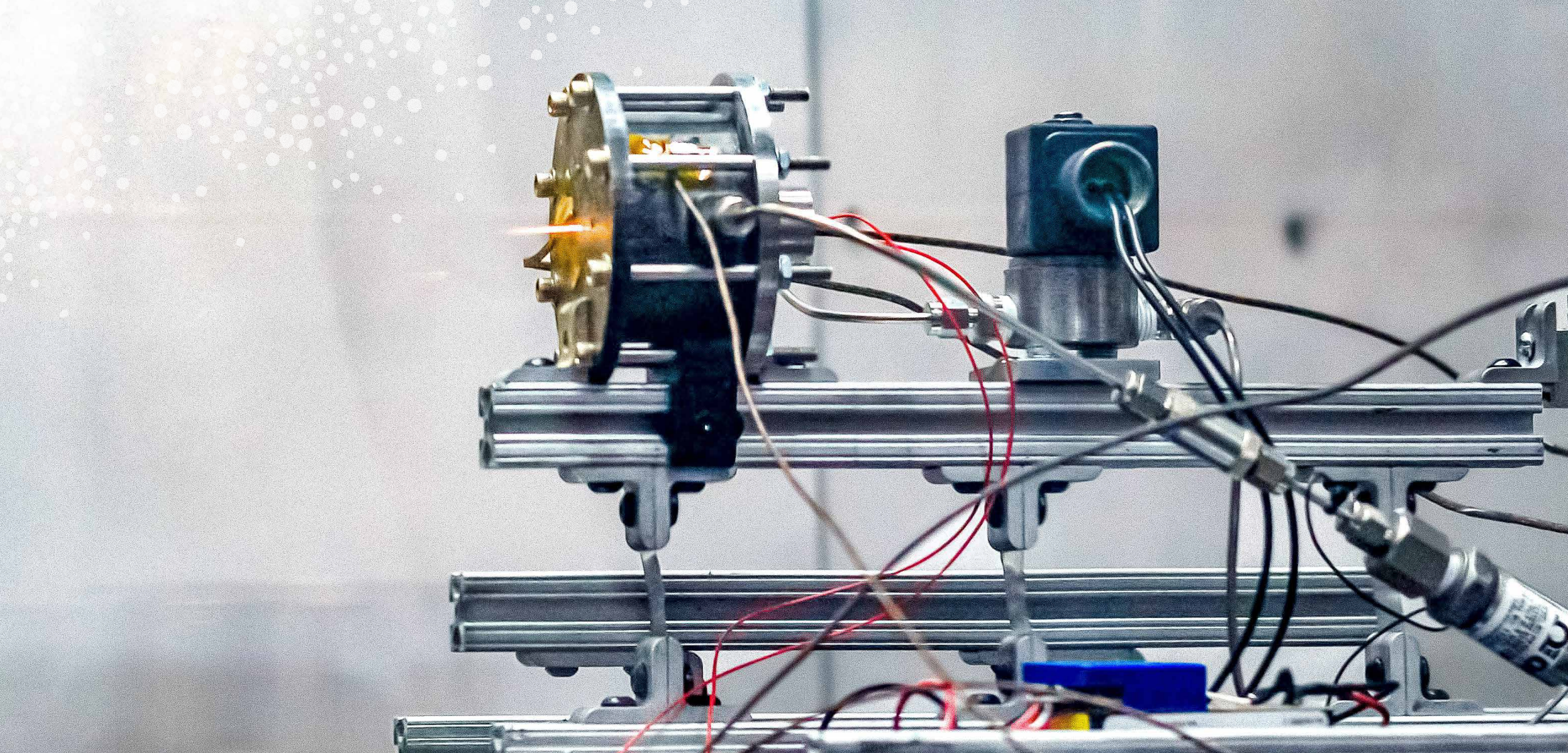
Atmospheric Waves Experiment

USU physicists and the Space Dynamics Lab have joined forces with NASA to create a unique instrument to collect data on atmospheric gravity waves, which can interfere with communication, navigation, and spacecraft systems. By decoding the physics and characteristics of atmospheric gravity waves, scientists will gain valuable insights into how Earth's weather shapes the properties of the upper atmosphere.



VIDEO: New frontier: with NASA-funded mission, USU physicists seek novel discoveries.





▲ Boosting Small Satellites

SDL was awarded a patent for tech that lets CubeSats — no bigger than 10 centimeters on any side — maneuver in orbit, enhancing mission flexibility and avoiding space-junk collisions.

▼ OSIRIS-REx

OSIRIS-REx, a spacecraft that used an SDL camera suite to help it collect a sample from a near-Earth asteroid, landed in Utah in September after a successful seven-year mission.



VIDEO: Space Dynamics Lab imaging tech plays key role in historic asteroid sample return mission.



GROWING CAMPUSES FOR A GROWING STATE

Heravi Global Teaching & Learning Center

A new building on USU's historic Quad will house programs for global teaching and learning, including the study of languages, peace leadership, and world cultures.





USU Blanding Technical Education Building

A former Shopko on Main Street in Blanding has taken on new life as the home to trucking and welding programs for statewide campus students.



VIDEO: Next chapter for NEHMA: USU breaks ground on the Wanlass Center for Art Education and Research.

Wanlass Center for Art Education & Research

USU broke ground on the Wanlass Center for Art Education and Research, which will incorporate hands-on art education for Aggies, K-12 students, and other community members.



Kem & Carolyn Gardner Learning & Leadership Building

A new building on the Logan campus will house much of the experiential learning programs of the Jon M. Huntsman School of Business and honor prominent business leaders and philanthropists Kem and Carolyn Gardner.



PLANETARY STEWARDSHIP

Greenland Was Greener Than We Thought

Soil samples taken during a Cold War cover operation revealed something shocking: Greenland hosted green life as little as 400,000 years ago, meaning ice sheet melting and ocean rise may happen much faster than previously thought.



▼ Juniper Jet Fuel

After a decade of work, USU bioengineer Foster Agblevor has developed a way to make clean-burning jet fuel from invasive juniper trees.



▼ Capturing Carbon as Charcoal

USU's Darren McAvoy has developed a portable kiln to convert slash piles into biochar, which contains carbon in a useful product instead of releasing it into the atmosphere.



VIDEO: Black Is the new green: exploring biochar's potential to moderate wildfire, store carbon.



▼ Ozone Expertise

Seth Lyman, director of USU's Bingham Research Center, studies ozone in order to provide industry leaders, regulators, environmental groups, and regular citizens with courses of action to keep Utah air clean.



▼ Watermelon Snow

Pink-tinted algae blooms on glaciers have caught the public's attention. But they also catch solar energy, according to USU's Scott Hotaling, melting Utah's snow pack more quickly.



VIDEO: Snow algae: USU assistant professor investigating how algal blooms impact mountain snowpack.



AGGIE EXCELLENCE

Space Weather Forecaster

Aggie Computer Scientist Soukaina Filali Boubrahimi,
received the NSF CAREER Award for her work predicting space weather
events to protect defense, space exploration, and communications activities.





Utah's Top Vet

Dirk Vanderwall, interim dean of Utah's first college of veterinary medicine, was named top vet in the state by the Utah Veterinary Medical Association.

A+ in Reading Education

USU's elementary education programs earned an A+ from the National Council on Teacher Quality by preparing educators to apply the science of reading. Future teachers who are educated in the science of reading learn how to recognize and analyze trends in their own classrooms so they can apply evidence-based interventions to help their students excel.



Sacred Space

The Associated General Contractors of Utah recognized the Diné Hogan at Utah State University Blanding as Worship Project of the Year.



VIDEO: USU Blanding constructs Navajo Hogan, opening up a ceremonial and spiritual space for students.



BY THE NUMBERS

#1 Best Employer in Utah

Forbes, 2023

\$405.6M in Sponsored Research Awards

FY2023

USU Online in Top 25 for 9th Straight Year

US News and World Report, 2023

15.8% increase in USU Moab enrollment, fall 2023

FY2023

4,319 students received \$9,069,074 in donor-funded scholarship support.

LEADING THE WAY



VIDEO: Get to know the 17th President of USU as she answers questions and tours Utah State University.



Utah State Welcomes 17th President

Elizabeth R. Cantwell joined the university on the Logan campus in August.

Utah State welcomed talented individuals into major leadership roles in 2023.



Jason Brei
Chief of Police



Douglas Miller
Associate Vice President
for USU Eastern



Ellis Bruch
Executive Director
for Public Safety



Nicholas Morrison
Dean of Caine College
of the Arts



Cody Carmichael
Title IX Coordinator



Kristian Olsen
Associate Vice President for
USU Moab & USU Blanding



Pamela Dupin-Bryant
Vice Provost for
Statewide Campuses



Diana Sabau
Vice President and
Athletic Director



AGGIE PASSION

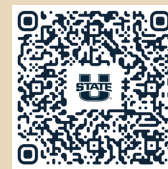
An Extra Scoop

The Aggie Creamery has been a cornerstone of Logan campus visits for decades, and in 2023, USU opened a second Aggie Ice Cream outlet.

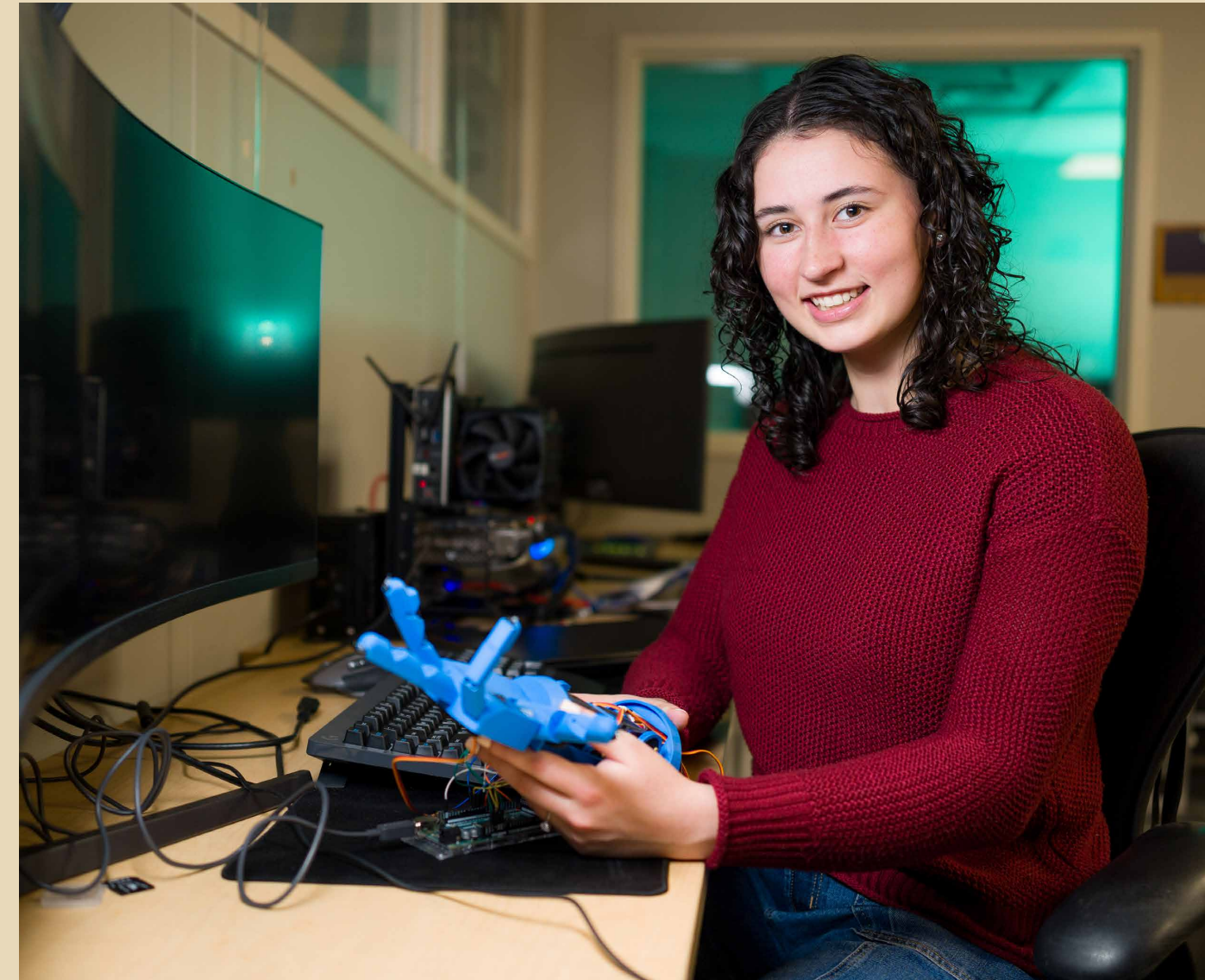


▲ New Roots

A partnership with the New Roots program helps refugees feed their families and adapt to their new homes by growing food from their homelands in the greenhouse at USU Salt Lake.



VIDEO: USU students helping refugees start anew with food from home.



◀ A Helping Hand

Undergraduate researcher Madison Patch has been designing a 3D-printed robotic hand that will be less costly and maximize human-like motion.

ATHLETICS

Aggies Set Academic Record

Utah State Athletics set the department's record for highest student-athlete GPA, with an overall 3.39 cumulative score and a 3.57 women's cumulative score.

USU student-athletes also boast a 90% graduation success rate.





▲ Triple Triumph

The women's volleyball team defeated Boise State 3-1 for their third consecutive Mountain West regular season championship.



▲ Mountain West Champs

The women's soccer team beat Colorado State to take home their first Mountain West championship in November.

BY THE NUMBERS

\$1 Million Gift

Anonymous donors gave Utah State Athletics \$1 million in May, helping fund scholarships, facility enhancements, and operational support.



1,591 Hours

Student-athletes volunteered 1,591 for service in the community during fall 2023.



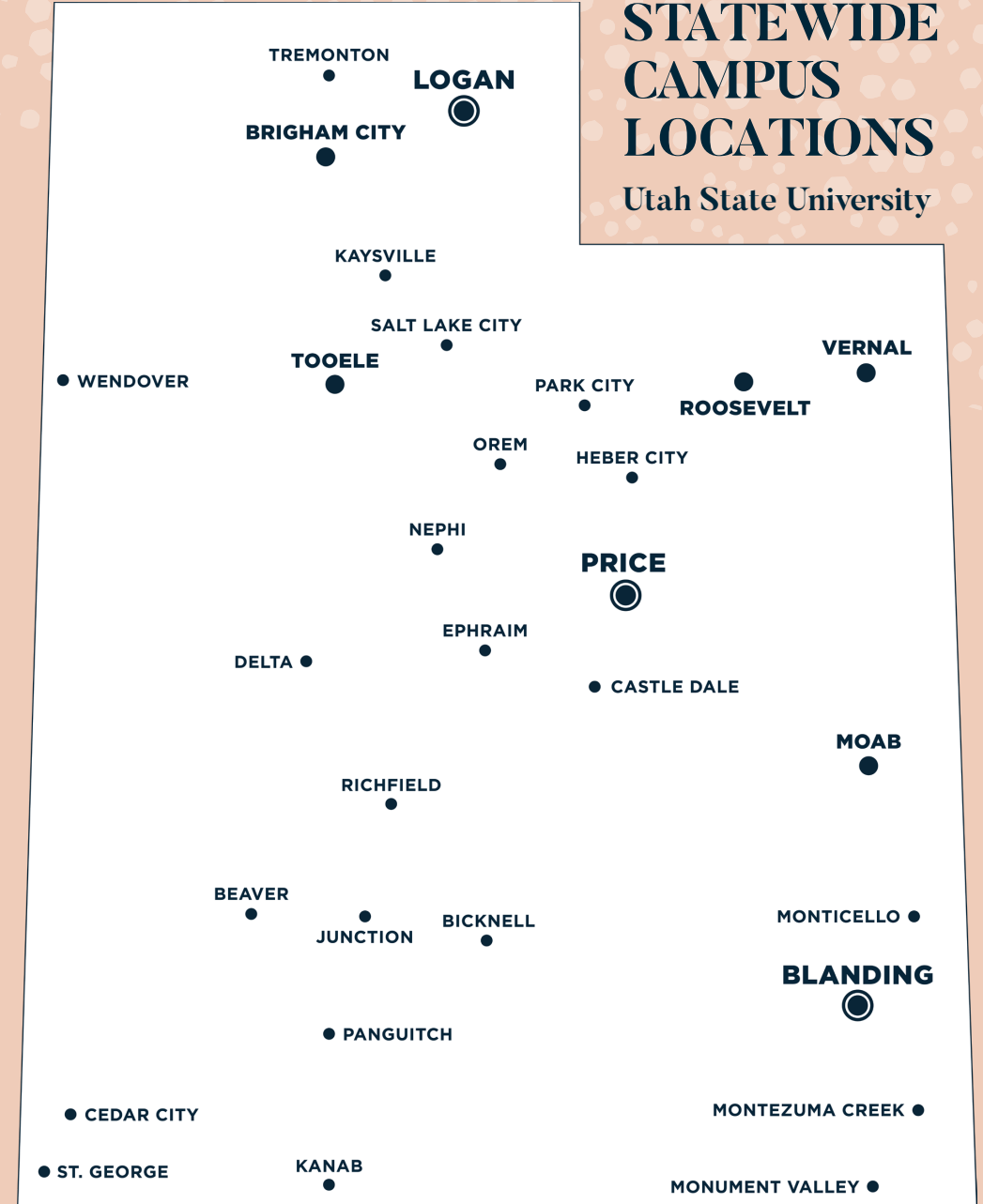
PRICE



BLANDING



UINTAH
BASIN



In its programs and activities, including in admissions and employment, Utah State University **does not discriminate or tolerate discrimination**, including harassment, based on race, color, religion, sex, national origin, age, genetic information, sexual orientation, gender identity or expression, disability, status as a protected veteran, or any other status protected by University policy, Title IX, or any other federal, state, or local law.

The following individuals have been designated to handle inquiries regarding the application of Title IX and its implementing regulations and/or USU's non-discrimination policies:

**Executive Director
of the Office of Equity**

Matthew Pinner
matthew.pinner@usu.edu
Distance Education Rm. 401
Logan, Utah, 84322-5100
435.7971266

**Title IX
Coordinator**

Cody Carmichael
titleix@usu.edu
Distance Education Rm. 404
Logan, Utah, 84322-5100
435.7971266

For further information regarding non-discrimination, please visit equity.usu.edu, or contact:

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OCR@ed.gov

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